Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part I: DESCRIPTION AND CLAIMS

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Chapter 1 Requirements for Description and Claims

1. Significance of the Description and Claims

The purpose of Patent System is to encourage inventions by promoting their protection and utilization so as to contribute to the development of industry (Patent Act Article 1).

The Patent System promotes protection of inventions by granting a patent right or exclusive right under certain conditions for a certain period of time to those who have developed and disclosed new technology, while it gives the public an opportunity to gain access to the invention by disclosing technical details of the invention. The protection and utilization of an invention as described above are promoted through a patent specification and drawings which serve both as a technical document disclosing technical details of an invention and as a document of title defining the technical scope of a patented invention accurately.

Requirements for description of the "detailed description of the invention" in a specification are provided under Patent Act Article 36(4), and requirements for description of the claims are provided under Patent Act Article 36(5) and (6). Only a specification that meets these requirements serves both as a technical document and as a document of title.

2. Description Requirements of the Claims

The description requirements of the claims have important significance in that the technical scope of the patented invention is determined on the basis of the statements of the claim. When the claims do not satisfy the description requirements of the claims, not only the third party may be unduly restricted by the patent right, but the right holder himself/herself also has to be involved in unnecessary disputes. Therefore, this point should be fully taken into account in examining whether or not the description requirements of the claims are complied with.

2.1 Patent Act Article 36(5)

Patent Act Article 36(5)

The scope of claims as provided in paragraph (2) shall state a claim or claims and state for each claim all matters necessary to specify the invention for which the applicant requests the grant of a patent. In such case, an invention specified by a statement in one claim may be the same invention specified by a statement in another claim.

(1) The first sentence of Article 36(5), therefore, provides that matters which the applicant deems necessary to define the invention for which a patent is sought should be stated in the claim without excess or shortage, so that he/she neither states unnecessary matters nor omits necessary matters.

Since it is the applicant who determines for what invention to seek a patent, this Article sets forth that the applicant shall state in the claim all matters the applicant himself/herself deems necessary to define the invention for which a patent is sought.

The second sentence is provided that the first sentence is not misunderstood that a single invention shall not be defined in more than a single claim.

(2) Article 36(5) also makes clear the nature of the claims. By clearly providing that it is in a claim that an applicant states matters which he/she deems necessary to define the invention for which a patent is sought, this Article makes clear that the technical scope of the patented invention is determined on the basis of the statements of the claim and that the subject of the examination is the invention identified based on the statements of the claim.

(3) The patent claim(s) must be separated into one or more claims each of which sets forth matters which the applicant deems necessary to define the invention for which a patent is sought. A claim constitutes a basic unit for the determination of patentability (Patent Act Articles 29, 29bis, 39 and 32), effect of a patent right (Article 68), abandonment of a patent right (Article 97), demanding of a trial for invalidation (Article 123), registration fees (Articles 107 and 195), etc.

2.2 Patent Act Article 36(6)

The statement of the scope of claims as provided in paragraph (2) shall comply with each of the following items:

(i) the invention for which a patent is sought is stated in the detailed explanation of the invention.

(ii) the invention for which a patent is sought is clear;

(iii) the statement for each claim is concise; and

(iv) the statement is composed in accordance with the relevant Ordinance of the Ministry of Economy, Trade and Industry.

2.2.1 Patent Act Article 36(6)(i)

(1) The claimed inventions should not exceed the scope described in the detail description of the invention. To state in a claim an invention that is not described in the detailed description of the invention means to seek a patent protection for an invention which is not disclosed to the public. Article 36(6)(i) is intended to prevent this happening.

(2) A determination on whether the statement of a claim complies with Patent Act Article 36(6)(i) shall be made based on comparison and review of the claimed invention and an invention described in the detailed description.

In performing the comparison and review, a substantial relationship shall be examined without being caught up by consistency of expression between the claimed invention and the statement as an invention in the detailed description of the invention. If it would be enough that there is at least consistency of expression, a patent right which has not substantially been disclosed to the public would be established, thus it is against the intention of this provision.

Examination for the substantial relationship is performed by looking into whether or not the claimed invention exceeds the scope which described in such a way a person skilled in the art could recognize that a problem would be solved by the invention in the detailed description of the invention. In case determining that the claimed invention exceeds the scope described in such a way a person skilled in the art could recognize that a problem is solved by the invention, the claimed invention and the statement as an invention in the detailed description of the invention are not corresponding each other and the application doesn't comply with the requirement under the Patent Act 36(6)(i).

(3) Typical cases exhibiting nonconformity to the provision of Article 36 (6) (i) are presented below:

- (i) the matter corresponding to claims is neither stated nor implied in a detailed description of an invention,
- (ii) the terms used in claims and those used in a detailed description of an invention are inconsistent, and as a result, the relationship between the claim and the detailed description of an invention is unclear,
- (iii) the matter disclosed in a detailed description of an invention cannot be extended and generalized to the scope of the matter in a claimed invention even if taking into account the common general knowledge as of the filing (Refer to 2.2.2(3)), or
- (iv) means for solving the problems described in a detailed description of an invention is not reflected in the claims, and as a result, an invention beyond the scope described in the detailed description would be claimed.

(Remarks)

(i) The requirement of Article 36 (6) (i) of the Patent Act is examined based on what is specified in a claim by an applicant as an invention for which a patent is sought.

(ii) A claim would be described with expansion or generalization based on one or more specific examples in a detailed description of an invention. Because the maximum expansion or generalization varies with characteristics of the each technical field, the proper expansion or generalization shall be set for each application. The judgment should be carefully done not to be too restrictive by the specific examples.

(iii) In case it is determined that the content disclosed in the detailed description of the invention can neither be expanded nor generalized to the scope of the claimed invention even in the light of the common general knowledge as of the filing, an examiner shall explain the reason why it can neither be expanded nor generalized by showing the ground of the determination.

(iv) In case a solution of a problem to be solved by the invention is not reflected in the claim and, as a result, it has been determined that a patent would be claimed beyond the scope described in the detailed description of the invention, an examiner shall explain the reason by showing the problem to be solved by the invention and its solution described in the detailed description of the invention, and make an applicant understand the direction of an amendment which an applicant makes in order to avoid reasons for refusal. It would be noted that if plural problems are mentioned in the detailed description of the invention, a technical feature for solving one of those problems must be reflected in claims.

2.2.1.1 Typical Examples of Violation of Article 36(6)(i)

(1) It is clear for a person skilled in the art that a matter corresponding to what is claimed is neither stated nor implied in the detailed description of the invention.

Example 1: A claim has a numerical limitation while any specific numerical value is neither stated nor implied in the detailed description of the invention.

Example 2: A claim is solely directed to an invention using an ultrasonic motor while the detailed description of the invention states only the embodiment of the invention using a D.C. motor and it neither states nor implies anything about using an ultrasonic motor.

(2) Terms used in the claims and those used in the detailed description of the invention are inconsistent for a person skilled in the art, and as a result, the relation between the claim and the detailed description of the invention is unclear.

Example 3: It is unclear whether the "data processing means" of a word processor stated in the claims corresponds to the "means for changing the size of characters" in the detailed description, or corresponds to the "means for changing line spacing" in the detailed description, or both of them.

(3) In case the content disclosed in the detailed description of the invention cannot always be expanded or generalized to the scope of the claimed invention even in the light of the common general knowledge as of the filing.

- Example 4: While R acceptor activation compounds which were obtained by the particular screening method are claimed comprehensively, there are no descriptions as to chemical structures or manufacturing methods of R acceptor activation compounds other than the newly obtained X, Y, and Z disclosed as concrete examples in the detailed description of the invention and no chemical structure nor manufacturing method other than the above are described, and the chemical structure etc could not be presumed in the light of the common general knowledge as of the filing.
- Example 5: While a claimed invention is going to be identified by a result which is brought in (e.g. a scope of desired energy efficiency), only concrete example of the invention by specified means is described in the detailed description of the invention, and in the light of the common general knowledge as of the filing it cannot be said that a person skilled in the art could expand or generalize the relevant specified teaching to the whole scope of the claim.
- Example 6: While only "DNA encoding a protein having an activity A", that is, DNA which is identified by only function are claimed, only one specified nucleotide sequence is described in the detailed description of the invention or drawings as the DNA encoding a protein having an activity A. In the light of the common general knowledge as of the filing, it could not be said that the claimed invention could be expanded or generalized to the DNA which both has low similarity with the specified sequence and encodes a protein having an activity A.
- Example 7: While therapeutic agent for a specified purpose with the compound defined by desired properties as effective ingredient is comprehensibly claimed, and in the detailed description of the invention usefulness as therapeutic agent for a specified purpose is verified for only a small part of detailed compound which is included in the claim, a person skilled in the art could not presume, beyond this, the usefulness

of chemical substances in general included in the claim as therapeutic agent in the light of the common general knowledge as of the filing.

- Example 8: While an invention of chemical substance is claimed and the chemical substance is defined in Markush-type formula which has multiple alternatives, only concrete manufacturing examples about the chemical substance having specified backbone structure included in the alternatives are described in the detailed description of the invention. For chemical compounds having other backbone structure, it could not be said that a person skilled in the art clearly understands the structure with the same level as described.
- Example 9: While an antiemetic drug having an ingredient A as an active ingredient is claimed, neither description about pharmacological test method nor pharmacological data are described in the detailed description of the invention, and furthermore it could not be said that it is possible to presume that the ingredient A is effective as an antiemetic drug in the light of the common general knowledge as of the filing.
- Example 10: In an invention which is going to specify a product (e.g., a polymer composition, a plastic film, a synthetic fiber or a tire) by limiting function and characteristic etc. numerically, sufficient numbers of concrete examples throughout the whole numerical range described in the claim are not shown, and furthermore by referring other description in the detailed description of the invention or in the light of the common general knowledge as of the filing, it could not be said that the relevant concrete examples could be expanded or generalized to the whole numerical range described in the claim.

(4) As a solution for the problem to be solved, which is described in the detailed description of the invention, is not reflected in the claim, a patent beyond the scope described in the detailed description of the invention comes to be claimed.

- Example 11: In the detailed description of the invention while only protocol conversion processing prior to data transfer is described as an invention in order to solve only a problem of inconvenience in the data transfer due to different data format depending on one information terminal to another mainly, the content regarding conversion of data format is not reflected in the claim.
- Example 12: As a problem to be solved how to prevent excessive automobile speed, while a mechanism which aggressively increases force to step on the accelerator pedal with increasing speed is disclosed in the detailed description of the invention, it only sets down that a means for variable operation force has been installed to vary the force required to operate a means of acceleration with increasing speed in the claim, and as it does not specify a matter to increase the force required to operate a means of acceleration with increasing speed.

2.2.2 Patent Act Article 36(6)(ii)

(1) The statement in the claim has significance to be used for the basis of the identifying

the claimed invention which is an object for judgment of requirements for patentability such as novelty and inventive step, etc., and also used to secure the mission for specifying the technical scope of the patented invention. Thus, it is necessary that an invention can be clearly identified from one claim.

This Article is intended to maintain these functions of claims and make it clear that claim statements should be such that an invention for which a patent is sought can be clearly identified. Where an invention for which a patent is sought cannot be clearly identified on the basis of statements of each claim, the claimed invention cannot be examined precisely on patentability such as novelty or inventive step, etc., and the technical scope of a patented invention cannot be understood.

For an invention for which a patent is sought being clearly identified, it is necessary that the scope of concrete things which pertain to an invention for which a patent is sought (hereinafter referred to "the scope of an invention") (see, Note 1), and, as a premise, matters stated to define an invention for which a patent is sought should be clearly understood.

(Note 1) The judgement of requirements for patentability such as novelty and inventive step and the understanding of the technical scope of the patented invention for which a patent is sought usually are made on the basis of concrete things which pertain to an invention for which a patent is sought as a clue.

(2) Considering that a claim constitutes a basic unit for the effect of a patent right and registration fees, etc., a single invention should be identified based on the statement of a single claim (Refer to 2.2.2.1(4)).

(3) Identification of a claimed invention should be made primarily based on the matters which an applicant for a patent considers necessary in defining the invention for which a patent is sought under Article 36(5) (hereinafter merely referred to "matters to define an invention" or "matters defining an invention"), not only the claim description but also the description in the description or drawings and common general knowledge as of the filing (see, Note 2) may be taken into consideration in interpreting the meanings or contents of matters (terms) defining the invention.

In the identification of a claimed invention, matters not stated in a claim should not be considered. On the contrary, the matters to define an invention as far as they are stated in the claim should be considered.

(Note 2) The common general knowledge means technologies generally known to a person skilled in the art including theories of a technology and empirical rules. Therefore, the common general knowledge includes method of experimentation, of analysis, of manufacture, etc., as far as they are generally known to a person skilled in the art. Whether or not a certain technical matter is generally known to a person skilled in the art should be determined based upon not only how many documents show the technical matter but also how much attention has been given to the technical matter by such a person.

The common general knowledge is a broader concept than the well-known art and the commonly used art.

("Well-known art" means technologies generally known in the relevant technical field, e.g., by many prior art documents, those widely known throughout the industry, or those well-known to the extent needless to present examples. "Commonly used art"

means well known art which is used widely.)

(4) Where the statement in a claim are deemed clear by itself, the examiner should examine whether a term in the claim is defined or explained in the description or drawings, and evaluate whether such definition or explanation, if any, makes the claim statements unclear. For example, if a clear definition of a term used in a claim, which is either completely inconsistent with or different from what it normally means, is placed in the detailed description of the invention, such a definition could make the invention unclear. This is because such a definition could raise confusion in interpretation of the term under the practice for identification of a claimed invention which is done by taking into consideration the description, drawings and common general knowledge as of the filing although the primary basis for the identification is statements of the claim.

Where the statement in a claim are deemed unclear by itself, the examiner should examine whether a term in the claim is defined or explained in the description or drawings, and should evaluate whether such definition or explanation, if any, makes the claim statements clear by considering the common general knowledge as of the filing. If the examiner deems that an invention can be clearly identified as a result of this evaluation, the requirement of Article 36(6)(ii) is met. It would be noted that it goes without saying that content of description of the claim by itself should not be made unclear particularly by using ambiguous or unclear terms and by using what can be made clear in a scope of claims which is merely described in the detailed description of the invention. (See: Tokyo High Court Decision dated on March. 3, 2003 (Hei 13 (Gyo Ke), No.346)

(Remarks)

① Article 36(5) provides that "In the patent claim(s), all matters necessary to specify the invention for which the applicant requests the grant of a patent, should be stated." Considering the spirit of this Article, various forms of expression can be used in the claim by the applicant to define an invention for which a patent is sought.

For example, in the case of "an invention of a product", various forms of expression such as operation, function, property, characteristics, method, usage and others can be used as matters to define an invention, in addition to the forms of expression such as combination of products or the structure of products. Similarly, in the case of "an invention of a process (a sequence of acts or operations connected in time series)", productions used therefore and others can be used as the forms of expression for defining an invention, in addition to such form of combination of processes (acts or operations).

② On the other hand, since a claim should be stated in such a manner that an invention for which a patent is sought can be clearly identified from a single claim according to the provision of Article 36(6)(ii). Therefore, it should be noted that such definition of an invention is allowed as far as the claimed invention can be clearly identified.

For example, in the technical field where the structure of a product can hardly be predicted from its operation, function, property or characteristics (hereinafter referred to "function or characteristics, etc."), it should be noted that the scope of an invention tends to be unclear in many cases as a result of defining the product by its function or characteristics, etc. (e.g. inventions of chemical substances). The same is applied to cases where a claim includes the definition of a product by a unique parameter (see, Note 3).

(Note 3) "Unique parameters" means those which fall under (i) or (ii) below:

(i) a case where the parameter is neither standard, commonly used by a person skilled in the art in the relevant technical field nor comprehensible of its relation to a commonly used parameter to a person skilled in the art if the parameter is not commonly used; or

(ii) a case where plural of parameters each of which is either standard, commonly used by a person skilled in the art in the relevant technical field or comprehensible of its relation to a commonly used parameter to a person skilled in the art if the parameter is not commonly used, are combined in a claim so that the claim statements as a whole fall under (i).

2.2.2.1 Typical Examples of Violation of Article 36(6)(ii)

Typical examples of statements in the specification violating Patent Act Article 36(6)(ii) are shown below.

(1) The invention for which a patent is sought is unclear resulting from the statement of the claim itself being unclear.

For example, in a case where a claim includes statements inadequate as Japanese language expression such as errors or ambiguous description, thereby a claimed invention is made unclear.

It is not a violation of Article 36(6)(ii), however, if defects in the claim statements are minor and do not place the claimed invention unclear to a person skilled in the art.

(2) The invention for which a patent is sought is unclear resulting from the technical defect existing in matters defining the invention or from the technical meaning or technical relation of matters defining the invention being not comprehensible.

① Claim states technically incorrect matters.

Example 1:"Alloy composed of 40 to 60wt% A, 30 to 50wt% B, and 20 to 30wt% C"

(In this claim statement, the total sum of the maximum amount of component A and the minimum amounts of components B and C exceeds 100wt%.)

2 Technical meaning of matters defining the invention can not be understood.

When the technical meaning of the matters defining the invention can not be understood, the finding of a claimed invention, which is the premise of judgment of requirements for patentability such as novelty and inventive step, etc., can not be performed. Thus It constitutes the violation of Article 36(6)(ii).

Example 1: "Dying powder defined in a specific numerical limitation of a specific formula X"

(The specific formula X is shown only as a result to be obtained and its technical meaning can not be understood even when taking into consideration the description, drawings, and the common general knowledge as of the filing. However, when the process that leads to the formula or the reason to determine the numerical limitation of the formula, etc., (including the case where the numerical limitation is obtained from the result of the experimentation) is described in the description, the technical meaning may be understood in most cases.)

- Example 2: "Composition for adhesion including component Y of which viscosity is measured in accordance with the test method in X laboratory is a b Pascal second."
 (The technical definition or test method in X laboratory is not shown in the detailed description of the invention, and it is not the common general knowledge as of the filing.)
- ③ Matters defining the invention are inconsistent.
- Example 1:A claim is directed to "a method for producing a final product D comprising the first step for producing an intermediate product B from a starting material A, and the second step for producing the said final product D from an intermediate product C" in which the intermediate product produced by the first step is different from the starting material in the second step, and the relation between the first step and the second step is not clear to a person skilled in the art even if interpreting the meaning of "the first step" and "the second step" stated in the claim by taking into consideration the description, drawings and the common general knowledge as of the filing.
- ④ Matters defining the invention are not related technically.

Example 1: "A road on which automobiles mounting a specific engine are traveling."

Example 2: "An information transmission media transmitting a specific computer program." The transmission of information is a function inherent to the transmission media. To define the invention to be "an information transmission media transmitting a specific computer program" only means that a specific computer program is being transmitted at any time and to any place on the information transmission media. It defines the only inherent function of the transmission media, and does not specify any relation between the information transmission media and the computer program.

(5) Non-technical matter is stated in a claim as a whole, as a result of existence of such statements as sales area or distributors.

(Note) Where a claim includes a statement to define a product by means of a trademark, such a statement is deemed as making unclear the claimed invention unless it is clear to a person skilled in the art that the product had been maintained a certain quality, composition and structure, etc., at least for a certain period of time to the filing date.

(3) The category of an invention (an invention of a product, an invention of a process, an invention of a process of manufacturing a product) for which a patent is sought is unclear, or something that does not fall in any category is stated in a claim.

Patent Act provides that "a patentee shall have an exclusive right to commercially work the patented invention" (Article 68), and gives definitions to the term "working of an invention" by categorizing inventions into an "invention of a product", an "invention of a process," and an "invention of a process of manufacturing a product" (Article 2(3)). In considering them, it is inadequate to grant a patent to the claimed invention in the

below-mentioned examples because it makes unclear the extent of protection.

Example 1: A claim reading as "A method or apparatus comprising "

Example 2: A claim reading as "A method and apparatus comprising"

Example 3: A claim which cannot be determined whether it is directed to a product or a process as a result that the claim states only operation, function, property, objective or effect of things. An example is a claim directed to "an anti-cancer effect of chemical compound A."

Such term in a claim as "system" (e.g., "telephone system") is interpreted as those meaning the category of a product. "Use" is interpreted as a term meaning a method for using things which is categorized into "a process." "Use of substance X as an insecticide" is interpreted as terms meaning "method for using substance X as an insecticide." "Use of substance X for the manufacture of a medicament for therapeutic application Y" is interpreted as terms meaning "method for using substance X for the manufacture of a medicament for therapeutic application Y."

(4) Matters to define the invention are expressed in alternatives and the alternatives have no similar characteristics or function with one another.

① In the light of the spirit of Article 36(6)(ii), one invention must be clearly identified from one claim by a person skilled in the art. Also, in the light of the spirit of the system of the claim, one invention must be identified based on the matter described in one claim.

2 Therefore, when there exist alternatives related to matters to define an invention for which a patent is sought, it shall be a violation of Article 36(6)(ii) unless these alternatives have a similar characteristics or function with one another.

The following examples constitute violation of Article 36(6)(ii).

Example 1: A claim is directed to "specific parts or an apparatus including the said parts."

- Example 2: A claim is directed to "a transmitter or a receiver which has a specific power supply."
- Example 3: In a claim, an intermediate and a final product of a chemical compound are defined in an alternative form. It is not a violation of the requirements, however, if the intermediate per se is a final product and the intermediate and other final products meet requirements for description of Markush-type formula (See ③ below).

③ Where the claim statements in an alternative form such as Markush-type formula are directed to chemical substances, they are considered to have a similar characteristics or function if the following criteria are fulfilled:

- (i) all alternatives have a common property or activity; and either
- (ii) (a) a common chemical structure is present, i.e., a significant structural element is shared by all of the alternatives, or
 - (b) if the common chemical structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical substances in the art to which the invention pertains.

That "significant structural element is shared by all of the alternatives" in (ii)(a) above refers to cases where the compounds share a common chemical structure which occupies a large portion of their structures, or if the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The chemical structural element may be a single component or a combination of individual components linked together.

Further, "recognized class of chemical compounds" in (ii)(b) above means that there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention. In other words, each member could be substituted one for the other, with the expectation that the same intended result would be achieved.

(5) When the scope of the invention is unclear as a result of the following expression:

① Negative expressions such as "except..." and "not..." in claims, and as a result, the extent of the invention for which a patent is sought is unclear.

2 Expressions using a numerical limitation which only indicates either a minimum or a maximum such as "more than... " and "less than... ", and as a result, the extent of the invention for which a patent is sought is unclear.

③ Expressions where the standard or degree of comparison is unclear such as "with slightly greater specific gravity," "much bigger," "low temperature," "high temperature," "hard to slip," "easy to slip" or where the meaning of the term is unclear, and as a result, the extent of the invention for which a patent is sought is unclear.

(4) Expressions where optionally added items or selective items are described along with such words as "when desired," "if necessary," etc., or expressions including such words as "especially," "for example," "etc.," "desirably," and "suitably."

Such expressions would leave unclear the condition on which of the optionally added or selective items are chosen, thus allow the claim statements to be interpreted in many ways.

5 A numerical limitation which includes zero (0) such as "from 0% to 10%," and as a result, the extent of the invention for which a patent is sought is unclear.

When it is clearly stated in the detailed description of the invention that the component defined by the numerical limitation is indispensable in the above-mentioned example, such statement is inconsistent with the claim statement "from 0 to 10%" which would be interpreted as the component being discretionary and also interpreted in many ways, and the scope of the invention is deemed unclear. Conversely, if it is clearly stated in the detailed description of the invention that the component defined by the numerical limitation is discretionary, the numerical limitation including zero (0) is permissible.

6 A statement of a claim is made by a reference to the detailed description of the invention or drawings, and as a result, the extent of the invention for which a patent is sought is unclear.

Example 1: A claim which includes such statement made by a reference as "an automatic drill

machine as shown in Figure 1."

(It is inadequate to refer to drawings because drawings generally have ambiguous meanings and could be interpreted in many ways.)

Example 2: A claim which includes statements made by a reference to a portion that cannot be clearly pointed out in the detailed description of the invention or drawings.

Note that, even by referring to the detailed description of the invention or drawings, an invention can be stated clearly in a claim as in the following case.

Example: In an invention related to an alloy, there is a specific relation among components of the alloy and the relation can be defined by reference to the drawings as clearly as by a numerical or other literal expression.

"Heat-resisting Fe \cdot Cr \cdot Al alloy for electric-heating composed of Fe, Cr, Al within the scope circumscribed by points A(), B(), C(), and D() shown in the Figure 1 and impurities less than X%."

(6) A claim includes statements defining the product by its function or characteristics, etc., so that the scope of the invention is unclear. (see, Note 1) (Refer to "examples of examinations" for concrete cases).

① When all of the matters to define the invention relate to concrete structures or concrete means, etc., the scope of the invention is usually clear and an invention for which a patent is sought can be clearly identified from the statements of the claim. On the other hand, when the claim includes matters defining a product by its function or characteristics, etc., (see, Note 2) the scope of the invention cannot necessarily be clear and an invention for which a patent is sought may not be clearly identified.

Where a claim includes the definition of a product by its function or characteristics, etc., if a person skilled in the art can conceive a concrete product with such function or characteristics, etc. from matters to define the product stated in the claim by taking into consideration the common general knowledge as of the filing, the scope of the invention is clear and the claimed invention would be clearly understood because the concrete matters belong to the invention would be understood, as the clue for judging requirements for patentability such as novelty and inventive step, etc., and for understanding the technical scope of the patented invention.

On the contrary, when a person skilled in the art cannot conceive a concrete product with such function or characteristics, etc., even by taking into consideration the common general knowledge as of the filing, since the concrete matters pertaining to the invention cannot be understood, the scope of the invention usually cannot be deemed clear.

However, even when a concrete product can not be conceived, if the invention disclosed in the description or the drawings cannot be properly identified unless defining the product by its function or characteristics, etc., it is not appropriate to determine that the scope of the invention is unclear only on the basis of the ground that a concrete product can not be conceived. In this case, if the relation between the product with the function or characteristic, etc., and the technical standard as of the filing can be understood, the scope of the invention should be treated as being clear (see, Note 3).

(Note 1) Although this paragraph deals with the treatment of the claim including statements defining a "product" by its function or characteristic, etc., the same treatment is

applied to the claim including statements defining a method or a process, etc., by its function or characteristic, etc.

(Note 2) In principle, a function or characteristics, etc., to define a product shall be standard one. Namely, it should be either one which is defined by JIS (Japan Industrial Standard), ISO (International Standardization Organization) -standard or IEC (International Electrical Committee) -standard, or one which can be determined by a method for testing or measuring provided in these standards. (For example, "specific gravity" or "boiling-point.").

When a function or characteristics, etc., to define a product is not standard one, the definition or method for testing or measuring thereof should be explicitly described in the detailed description of the invention and it should be made clear that such function, etc., stated in a claim is to be defined and tested by such definition or method except where it is either one which is commonly used by a person skilled in the art or one which a person skilled in the art can understand the definition or method for testing or measuring thereof.

(Note 3) Where a concrete product pertaining to the invention for which a patent is sought cannot be conceived, there may be cases where the claimed invention disclosed in the description or the drawings cannot be properly identified unless defining the product by a unique parameter or its manufacturing process. It is not appropriate to regard such an invention as unclear only on the basis of the ground that a concrete product cannot be conceived, in the light of the purpose of the Patent Act to protect the invention contributing to the industrial development.

However, even in such cases, if the relation between the product defined by such function or characteristics, etc., and the technical standard as of the filing cannot be understood, since the clue for judging requirements for patentability such as novelty and inventive step, etc., and for understanding the technical scope of the patented invention cannot be obtained, the mission conferred to the claim cannot be said to be fulfilled. Accordingly, the scope of the invention is dealt to be clear only when the relation between the product defined by its function or characteristics, etc., and the technical standard as of the filing can be understood.

② Accordingly, where the claim includes the definition of a product by its function or characteristic, etc, whether or not the scope of the invention is clear should be determined as follows.

When a person skilled in the art can conceive a concrete product with such function, etc., (for example, well-known concrete products with such function or characteristics, etc., can be illustrated, concrete products with such function, etc., can be easily arrived at, or such definition is commonly used to define the product in the relevant technical field, etc.,) from the statements in a claim defining the product by its function or characteristics, etc., by taking into the common general knowledge as of the filing (including those which can be recognized to be the common general knowledge as of the filing from the description in the specification or drawings), the scope of the invention is deemed clear.

On the contrary, even when a concrete product with such function or characteristics, etc., cannot be conceived, it cannot be said that the scope of the invention is unclear in the following conditions:

(i) it is understood that the invention disclosed in the description or the drawings cannot be defined unless defining the product by its function or characteristic, etc.,

and

(ii) the relation between the product with such function or characteristic, etc., and the technical standard as of the filing can be understood.

For example, when the relation (difference) between the product with such function or characteristics, etc., and the known products are shown with the experimental result or theoretical explanation, etc., the relation with the technical standard can be understood. In cases where either (i) or (ii) is not satisfied, the scope of an invention is deemed unclear.

- 3 Examples where the scope of the invention is deemed unclear
 - (i) In the technical field where it is difficult to predict the structure of the product from its function or characteristic, etc., the concrete product with such function or characteristics, etc., cannot be conceived in many cases (Example: Invention of a chemical compound). When the structure of a certain concrete product with such function or characteristics, etc., is disclosed in the description or drawings and it is also recognized that only the said concrete product is substantially disclosed, the scope of the invention is deemed unclear, since it usually cannot be said that the invention disclosed in the description or drawings can not be properly identified unless defining the product by its function or characteristics, etc., and it is also difficult to show its relation with the technical standard as of the filing.
 - (ii) Where the claim includes the definition of a product by the result to be achieved, there may be cases where concrete products which can obtain such result can not be conceived. When a certain concrete means which can obtain such result is disclosed in the description or drawings and it is also recognized that only the said concrete means is substantially disclosed, the scope of the invention is deemed unclear, since it usually cannot be said that the invention disclosed in the specification or drawings can not be properly identified unless defining the product by the said result to be achieved.
 - (iii) Where the claim includes the definition of a product by a unique parameter, there are many cases where concrete products which are expressed by the said parameter cannot be conceived. The scope of the invention is deemed unclear except where it is understood that the invention disclosed in the specification or drawings cannot be properly identified unless defining the product by such unique parameter and its relation with the technical standard as of the filing can be understood. (For example, where comparison with the known product which has identical or similar effect, or comparison with the known product with similar structure, or comparison with the known product to be manufactured by the similar manufacturing process is shown, etc.).

(7) A claim includes statements defining a product by its manufacturing process so that the scope of the invention is unclear.

① The claimed product itself may be identified by the manufacturing process (product-by-process claim) when it is impossible, difficult or inappropriate for the product structure of the invention to be directly identified by the characteristics or others independently of the manufacturing process. (For example, it would be considered the inappropriate case

that it would not be impossible or difficult to identify the product directly by the characteristics but be wider the extent of the difficulty for understanding.)

(See: Tokyo High Court Decision dated on June. 11, 2002 (Hei 11 (Gyo Ke), No.437)

However, in case the claim includes identification of a product by manufacturing process, in the same way where it includes identification of a product by function or characteristics, etc., the scope of the invention cannot be said to be necessarily clear and the invention may not be clearly identified.

Where the claim includes identification of a product by manufacturing process, when a person skilled in the art can conceive a concrete product from the statements in a claim defining the product by its manufacturing process by taking into consideration the common general knowledge as of the filing, the scope of the invention usually can be said to be clear, and the invention can be clearly understood.

On the contrary, when a person skilled in the art cannot conceive a concrete product from the statements in a claim defining the product by its manufacturing process by taking into consideration the common general knowledge as of the filing, since a concrete matters pertaining to the invention for which a patent is sought cannot be understood, the scope of the invention usually cannot be said to be clear.

However, even when a concrete product cannot be conceived, if the invention disclosed in the specification or drawings cannot be properly identified unless defining the product by its manufacturing process, it is not appropriate to determine that the scope of the invention is unclear only on the basis of the ground that a concrete product cannot be conceived. In this case, if the relation between the product to be manufactured by such manufacturing process and the technical standard as of the filing can be understood, the scope of the invention is deemed clear (Refer to (6)()(see, Note 3)).

② Accordingly, when the claim includes the definition of a product by its manufacturing process, whether or not the scope of the invention is clear should be determined as follows.

When a person skilled in the art can conceive a concrete product from such manufacturing process from the statements in a claim defining the product by taking into consideration the common general knowledge as of the filing (including those which can be recognized to be the common general knowledge as of the filing from the description in the specification or drawings), the scope of the invention is deemed clear.

On the contrary, even when a concrete product to be manufactured by such manufacturing process cannot be conceived, it cannot be said that the scope of the invention is unclear in the following conditions:

- (i) it is understood that the invention disclosed in the specification or the drawings cannot be defined unless defining the product by its manufacturing process; and
- (ii) the relation between the product to be manufactured by such manufacturing process and the technical standard as of the filing can be understood.

For example, when the relation (difference) between the product to be manufactured by such manufacturing process and similar known products are shown with the experimental result or theoretical explanation, etc. (for example, showing comparison the claimed products and the known products produced by the similar manufacturing process), the relation with the technical standard can be understood.

In cases where either (i) or (ii) is not satisfied, the scope of invention is deemed unclear.

2.2.2.2 Other Matters to be Noted

In case that the statement of the claim does not express a specific use but a general use, where a claim directed to a use invention (Refer to Part II : Chapter 2. 1.5.2(2)), it should not be deemed a violation of Article 36(6)(ii) merely because the statement expresses a general use (i.e., merely because the scope of the claim is relatively broad) unless the expression makes unclear the invention for which a patent is sought. (For example, not a "pharmaceutical/agrochemical agent for disease X comprising..." but a "pharmaceutical/agrochemical agent comprising...")

The detailed description of the invention, however, shall comply with the provision of Article 36(4)(i).

Where a claim is directed to a composition and dose not include any statement to define the use of the composition or the property of the composition, it shall not be deemed a violation of Article 36(6)(ii) merely because the claim does not include any definition by the use or property of the composition.

2.2.3 Patent Act Article 36(6)(iii)

A claim is to be used for the basis of identifying the claimed invention which is a subject of examination of the patentability requirements such as novelty or inventive step, etc., and the description requirements. A claim also ensures the role of the specification which serves as a document of title defining the technical scope of a patented invention accurately. Therefore, it is adequate that claim statements are concise as well as comply with Article 36(6)(ii) in order for the third parties to understand the claimed invention as easily as possible. This is the purpose of Article 36(6)(iii).

Article 36(6)(iii) does not deal with the inventive concept defined by claim statement but deals with the conciseness of the statement itself. Also, it does not require plural claims as a whole be concise when an application contains two or more claims. Rather, it requires each claim be stated concisely.

2.2.3.1 Typical Examples of Violation of Article 36(6)(iii)

The typical examples violating Article 36(6)(iii) are shown below.

(1) A claim includes statements with same contents in such a duplicated manner that it is unduly redundant.

In the light of the purpose of Article 36(5) that a claim shall state the matters an applicant himself/herself deems necessary to define the invention, however, it should be deemed "unduly redundant" only if the duplication is excessive, even where claim statements having the same contents are included in a claim. It should not be deemed "unduly redundant" merely because a matter defining a claimed invention is an obvious limitation to a person skilled in the art or is a dispensable limitation for meeting the patentability requirements or the description requirements (excluding Article 36(6)(iii)).

When a claim statement is made by a reference to the description in the detailed description of the invention or drawings, the claim statement and the corresponding descriptions in the detailed description of the invention or the drawings should not be redundant as a whole.

(2) A claim is expressed in alternatives (e.g., Markush-type claim for chemical compounds) and the number of alternatives is so large that the conciseness is extremely damaged.

Determining whether the conciseness is extremely damaged or not, it should be taken into consideration the followings.

① In a case where a significant structural element is not shared by the alternatives, less number of alternatives should be deemed so large that the conciseness is extremely damaged than in a case where a significant structural element is shared by the alternatives.

2 In a case where the alternatives are expressed in a complicated way, such as the conditional options, less number of alternatives should be deemed so large that the conciseness is extremely damaged than otherwise.

Even in the case of (2) above, the examiner should choose at least one group of chemical compounds which is expressed as alternatives in the claim and which involves a chemical compound indicated as a working example ("a group of chemical compounds expressed as specific alternatives corresponding to a working example"), and should examine the patentability of those chemical compounds. Regardless of existence or nonexistence of reason for refusal under patentability requirements, the examiner should point out in the notice of reasons for refusal, if any, the group of chemical compounds which is examined on patentability.

2.2.4 Patent Act Article 36(6)(iv)

This provision refers the legal requirements regarding technical rules of claim drafting to an ordinance of the Ministry of Economy, Trade and Industry. Regulations under the Patent Act Article 24ter

Statements of the scope of claim under Article 36(6)(iv) of the Patent Act which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry shall be as provided in each of the following items:

- (i) for each claim, the statements shall start on a new line with one number being assigned thereto;
- (ii) claims shall be numbered consecutively;
- (iii) in the statements in a claim, reference to other claims shall be made by the numbers assigned thereto;
- (iv) when a claim refers to another claim, the claim shall not precede the other claim to which it refers.

Claims are classified into independent form claims and dependent form claims roughly.

Independent form claims are those defined without referring to other claims, while dependent form claims are those which refer to other preceding claims. The two types of claims differ only in the form of description, and are treated in the same manner.

2.2.4.1 Typical Examples of Violation of Article 36(6)(iv)

(1) Reference in a dependent form claim is not made to a preceding claim or claims, or

(2) Reference to other claim or claims is not made by the number assigned to the claim(s) referred to.

Example 1:

- 1. A ball bearing as defined in claim 2 that is provided with an annular cushion around the outer race.
- 2. A ball bearing having a specific structure.
- 3. A process for producing the aforementioned ball bearing by use of a specific method.

2.2.4.2 Descriptive Form of Claims - Independent Form or Dependent Form -

(1) Independent form claims

It is permissible to define an invention by using an independent form claim regardless of whether or not the invention defined in the independent form claim is identical with the invention defined in any other claim.

- (2) Dependent form claims
- ① Typical dependent form claims

Dependent form claims may be utilized to simplify the statements of claims by avoiding repetition of the same expressions and phrases. It is permissible to define an invention by use of a dependent form claim regardless of whether or not the invention defined in the dependent form claim is identical with the invention defined in the claims referred to.

In a typical case, a dependent form claim can be used when a claim includes all the features of another preceding claim.

By using the dependent form claims in such cases, repetition of the same expressions can be avoided, while enabling clearer distinction between the dependent form claim and the claim referred to, thus there would be advantageous that of reducing the applicant's workload and at the same time facilitating interpretation of claims by other parties.

Example 1: Typical dependent form claims

- 1. A building wall material incorporating heat insulator.
- 2. A building wall material as defined in Claim 1 wherein the heat insulator consists of polystyrene form.

2 Dependent form claims other than described above

Claims may be written in dependent form to simplify the statements of claims by making reference to other claims, when writing claims which substitute a part of the matters defining invention of other preceding claims or when writing claims in a different category from that of other preceding claims, as far as the statements of the claims do not become unclear.

Example 2: Dependent form claim substituting a part of matters defining invention of the claim referred to

- 1. A transmission of specific construction provided with a gear drive mechanism.
- 2. A transmission as defined in claim 1 provided with a belt drive mechanism in place of said gear drive mechanism.

Example 3: Dependent form claim referring to another claim expressed in a different category

- 1. A ball bearing with specific construction.
- 2. A process for producing the ball bearing as defined in claim 1 by use of a specific method.

Example 4: Dependent form claim referring to a sub-combination

- 1. A bolt with a male thread of specific configuration.
- 2. A nut with a female thread of certain configuration that matches the bolt as defined in claim 1.
- (Note) A "sub-combination" refers to an invention of each device or step of the "combination" thereof while an invention of a "combination" refers to an invention of a whole device combining two or more devices or of a manufacturing process combining two or more steps.

③ Multiple dependent form claim

Multiple dependent form claims are claims defined by making reference to two or more claims (regardless of independent or dependent), and are utilized in simplifying the statements of the claim.

Claims of this form have advantage over the case claiming separately plural simple dependent form claims, in terms of the workload and fees, but also have such disadvantages as being subject to abandonment or invalidation collectively as a package. The choice between the simple dependent form claims and the multiple dependent form claims should therefore be made by weighing the merits and demerits of the respective claiming practice, and is left to the applicant's discretion.

In the light of conciseness and clearness, multiple dependent form claims preferably refer to two or more claims in alternative form, and impose an identical technical limitation on the respective claims referred to. (See Note 14d of Form 29bis, Regulations under the Patent Act)

Example 5: Multiple dependent form claims

- 1. An air conditioner of specific construction.
- 2. An air conditioner as defined in claim 1 provided with a wind direction regulating means.
- 3. An air conditioner as defined in claim 1 or 2 provided with a flow regulating means.

Claiming in multiple dependent forms is permissible in the following case because the claim statement is concise and the claimed invention is clear, even though reference is made to two or more claims in non-alternative form, and an identical technical limitation is not imposed on the respective claims referred to.

Example 6:

- 1. A bolt provided with a male thread of specific configuration.
- 2. A nut provided with a female thread of specific configuration.
- 3. A fastening apparatus comprising the bolt as defined in claim 1 and the nut as defined in claim 2.

(3) Relation between the Note of Form, Regulations under the Patent Act on descriptive form of claims and the reason for refusal.

If a multiple dependent form claim refers to two or more claims in non-alternative form or if it does not impose an identical technical limitation on the respective claims referred to, it does not comply with the instruction on claiming practice which is provided in Note 14d of Form 29 of Regulations under Patent Act. This instruction, however, is not one of the legal requirements provided in the Act as a basis of a decision of refusal. Therefore, mere non-compliance with the instruction does not constitute a reason for refusal of an application (See Example 3). On the other hand, such a case as Example 1 or 2 should be determined as violating Article 36(6)(ii) because it make a claimed invention unclear.

Example 1: The claimed invention becomes unclear due to the unclear description caused by non-alternative reference to other claims. (Violation of 2.2.2.1(1))

1. An air conditioner with specific construction.

2. An air conditioner as defined in claim 1 provided with a wind direction regulating means.

3. An air conditioner as defined in claims 1 and 2 provided with a flow regulating means.

Example 2: The category of the claimed invention becomes unclear due to the reference being made to claims of different subjects (categories), although an identical technical limitation is imposed on the claims referred to. (Violation of 2.2.2.1(3))

1. An artificial heart with specific structure.

2. A process for producing an artificial heart of specific construction, comprising specific methods.

3. An artificial heart as defined in claim 1 provided with a safety device, or a process for producing the artificial heart as defined in claim 2 provided with a safety device.

Example 3: Although not complying with the instructions in the Note of Form, Regulations under the Patent Act in that an identical technical limitation is not imposed on the respective claims referred to, the alternatives in the claim have a similar characteristics or function and it does not violate 2.2.2.1(4).

1. An air conditioner with specific structure.

2. An air conditioner as defined in claim 1 provided with a wind direction regulating means.

3. An air conditioner as defined in claim 1 provided with a flow regulating means, or air conditioner as defined in claim 2 provided with a timer means.

2.2.5 Notice of Reason for Refusal on Violation of Article 36(6)

(1) When notifying the reason for refusal on the ground of violation of Article 36(6), the examiner should identify the claim violating the provision and the Item (i.e., any of (i) to (iv) of Article 36(6)) constituting the ground of a decision of refusal, and should state the reason thereof along with pointing out the particular portion of the specification and drawings which (s)he deems as the basis of the judgment.

(2) An applicant may make an argument or clarification against the notice of reason for

refusal by submitting written arguments or certificates of experimental result, etc (see, Note). Where the applicant's arguments are confirmed to be adequate by examining the submitted evidence, the reasons for refusal shall be deemed overcome. Where the applicant's argument does not change the examiner's conviction at all or where it succeeds in denying the examiner's conviction only to the extent that truth or falsity becomes unclear, the examiner makes a decision of refusal on the ground which is earlier notified by the notice of reason for refusal.

(Note) For example, the applicants may explain that the words described in the claim which were judged not to be understood by the examiner could be included in the common general knowledge. When the claim includes the product that is defined by unique parameters, the applicants may explain the relation between that product and the technical standard as of the filing by showing the comparison with the publicly known products which have identical or similar effect.

3. Description Requirements of the Detailed Description of the Invention

3.1 Patent Act Article 36(4)(i)

Patent Act Article 36(4)(i)

The statement of the detailed explanation of the invention as provided in item (iii) of the preceding Paragraph shall comply with each of the following items:

(i) in accordance with the relevant Ordinance of the Ministry of Economy, Trade and Industry, the statement shall be clear and sufficient as to enable any person ordinarily skilled in the art to which the invention pertains to work the invention

Regulations under the Patent Act Article 24bis (Ministerial Ordinance)

Statements of the detailed description of the invention which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry under Article 36(4)(i) shall state the problem to be solved by the invention and its solution, or other matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention.

3.2 Enablement Requirement

"The statement of the detailed explanation of the invention as provided in item (iii) of the preceding Paragraph shall comply with each of the following items:

(i) in accordance with the relevant Ordinance of the Ministry of Economy, Trade and Industry, the statement shall be clear and sufficient as to enable any person ordinarily skilled in the art to which the invention pertains to work the invention" (Article 36(4)(i)).

[Provisions applied to applications filed on and before August 31, 2002]

"The detailed description of the invention ...should be described in a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains." (Article 36(4)).

(1) This provision means that the detailed description of the invention shall be described in such a manner that a person who has ability to use ordinary technical means for research and development (including comprehension of document, experimentation, analysis and manufacture) and to exercise ordinary creativity in the art (a person skilled in the art) to which the invention pertains can carry out the claimed invention on the basis of matters described in the specification (excluding claims) and drawings taking into consideration the common general knowledge as of the filing (hereinafter referred to "enablement requirement").

(2) Therefore, if "a person skilled in the art" cannot understand how to carry out the invention on the basis of teachings in the specification (excluding claims) and drawings, taking into consideration the common general knowledge as of the filing, then, such a description of the invention should be deemed insufficient for enabling such a person to carry out the invention. For example, if a large amount of trials and errors or complicated experimentation is needed to find a way to carry out the invention beyond the reasonable extent that can be expected from a person skilled in the art, such a description should not be deemed sufficient.

(3) "To be carried out" in Article 36(4)(i) is interpreted as meaning that "the claimed invention can be carried out." Therefore, the detailed description of the invention must be described in such a manner sufficiently clear and complete for a person skilled in the art to carry out the claimed invention i.e., "an invention identified based on the claim statements according to the handling shown in Part II Chapter 2, 1.5.1 and 1.5.2."

However, it is not a violation of Article 36(4)(i) that inventions, which are not claimed, are not described sufficiently to meet the enablement requirement, or those extra matters, which are unnecessary for carrying out the claimed invention, are described.

Where the descriptions supporting two or more claimed inventions would overlap, such overlapped descriptions may be omitted, provided that their relation to the claims remains clear.

(4) "To be carried out" in the provision implies being able to make and use the product in the case of an invention of a product, being able to use the process in the case of an invention of a process and being able to make a product by the process in the case of an invention of a process for manufacturing a product.

3.2.1 Practices in Enablement Requirement

(1) Mode for carrying out the invention

It is necessary to describe in the detailed description of the invention at least one mode that an applicant considers to be the best (see, Note) among the "modes for carrying out the invention" showing how to carry out the claimed invention in compliance with the requirements in Article 36(4)(i).

- (Note) The "mode for carrying out the invention" referred to in this Guideline is the same as prescribed in the Regulation 5.1-(a)(v) under PCT (Patent Cooperation Treaty). Hereinafter it is accordingly referred to as the "mode for carrying out" as well. It would be noted that regarding a point to describe what the applicant considers to be the best, it is not required as a requirement base on Article 36(4). Therefore it does not constitute reasons for refusal even if it is clear that what an applicant for patent considers to be the best has not been described.
- (2) "Mode for carrying out the invention" in the case of an invention of a productFor an invention of a product, the definition of carrying out the invention is to make

and use the product as mentioned above. Therefore, the "mode for carrying out the invention" also needs to be described so as to enable a person skilled in the art to make and use the product.

① "Invention of a product" is clearly explained

If an invention of a product can be recognized by a person skilled in the art based on the claim statements (i.e., the claimed invention can be identified) and can be understood from the description in the detailed description of the invention, the invention is deemed as being clearly explained.

In the case of an invention of a chemical compound, for instance, the invention should be deemed as clearly explained if the chemical compound is expressed either by name or by chemical structural formula.

A matter defining an invention of a product stated in a claim and a corresponding description in the detailed description of the invention should be consistent with each other in such a manner that the claimed invention can be understood as a whole from the detailed description of the invention.

② "Can be made"

For an invention of a product, the description shall be stated so as to enable a person skilled in the art to make the product. For that purpose, the manufacturing method must be concretely described, except the case where a person skilled in the art can manufacture the product based on the description in the specification (excluding claims) and the drawings, and the common general technical knowledge as of the filing.

Where a claim includes statements defining a product by its function or characteristics, etc. and where such function or characteristics, etc. are neither standard nor commonly used by a person skilled in the art, the detailed description of the invention shall state the definition of such function or characteristics, etc. or the method for testing or measuring such function or characteristics, etc. in order for the claimed invention to satisfy the enablement requirement for the claimed invention.

In the technical field where it is difficult to predict the structure, etc. of a product from the function or characteristic, etc. of the product (e.g. chemical compounds), if a person skilled in the art cannot understand how to make another product defined by its function or characteristic, etc. other than products of which manufacturing method is concretely described in the detailed description of the invention (or those which can be made from these products taking into consideration the common general knowledge), the description of the detailed description of the invention is violating the enablement requirement. (For example, where a large amount of trials and errors or complicated experimentation are needed to find a way to carry out the invention beyond the reasonable extent that can be expected from a person skilled in the art.)

Example violating the enablement requirement:

R-acceptor activating compounds obtained by a specific screening method.

There are no descriptions as to chemical structures or manufacturing methods of R-receptor activating compounds other than the newly obtained X, Y, and Z disclosed as working examples, and there is no other clue to infer the chemical structure, etc.

Also, it is required to describe how each matter defining the invention of the product works (role of each matter) (namely, "operation" of each matter) if a person skilled in the art

needs it for manufacturing the product of an invention.

On the other hand, when a person skilled in the art can manufacture the product from the statements on the structure shown as a working example or from the common general knowledge as of the filing, it does not constitute violation of the enablement requirement even though there is no statement as to manufacturing method thereof.

③ "Can be used"

For an invention of a product, the description shall be stated in the detailed description of the invention so as to enable a person skilled in the art to use the product. To meet this, the way of using the product shall be concretely described except where the product could be used by a person skilled in the art without such explicit description when taking into account the overall descriptions of the specification (excluding claims), drawings and the common general knowledge as of the filing.

For example, in the case of the invention of a chemical compound, it is necessary to describe more than one specific use with technical significance in order to show that the chemical compound concerned can be used.

Also, it is required to describe how each matter defining the invention of the product works (role of each matter) (namely, "operation" of each matter) if a person skilled in the art needs it for using the product of an invention.

On the other hand, the usage of the product need not be explicitly described in the detailed description of the invention where a person skilled in the art can use it by taking into account, for example, descriptions for the structure of the invention disclosed as a working example or the common general knowledge as of the filing.

(3) "Mode for carrying out the invention" in the case of an invention of a process

For an invention of a process, the definition of carrying out the invention is to use the process as mentioned above. Therefore, a "mode for carrying out the invention" for an invention of a process also needs to be described so as to enable a person skilled in the art to use the process.

① "Invention of a process" is clearly explained

If an invention of a process can be recognized by a person skilled in the art based on the claim statements (i.e., a claimed invention can be identified) and can be understood from the description in the detailed description of the invention, the invention is deemed as being clearly explained.

2 "Process can be used"

There are various types of process inventions other than those for manufacturing a product (so-called "pure process") such as a process of using a product, a process for measuring or process for controlling, etc. For any type of process inventions, the description of the invention shall be stated so as to enable a person skilled in the art to use the process by taking into account the overall descriptions of the specification (excluding claims), drawings and the common general knowledge as of the filing.

(4) "Mode for carrying out the invention" in the case of an invention of a process for manufacturing a product

Where an invention of a process is directed to "a process for manufacturing a

product," the definition of "the process can be used" means that the product can be manufactured by the process. Therefore, a "mode for carrying out the invention" for an invention of a process for manufacturing a product also needs to be described so as to enable a person skilled in the art to manufacture the product.

① "Invention of a process for manufacturing a product" is clearly explained

If an invention of a process for manufacturing a product can be recognized by a person skilled in the art based on the claim statements (i.e., a claimed invention can be identified) and can be understood from the description in the detailed description of the invention, the invention is deemed as clearly explained.

2 "Product can be manufactured by the process"

For an invention of a process for manufacturing a product, various types exist including a process for producing goods, a process for assembling a product, a method for processing a material, etc. Any of these consists of such three factors as i) materials, ii) process steps and iii) final products. For an invention of a process for manufacturing a product, the description shall be stated so as to enable a person skilled in the art to manufacture the product by using the process. Thus, these three factors shall in principle be described in such a manner that a person skilled in the art can manufacture the product when taking into account the overall descriptions of the specification (excluding claims), drawings and the common general knowledge as of the filing.

Of these three factors, however, the final products may be understood from descriptions of materials and process steps. (For instance, a process for assembling a simple device where structures of parts are not subject to any change during the process steps.) In such a case, descriptions on the final products may be omitted.

(5) How specifically the detailed description of the invention must be described.

When embodiments or working examples are necessary in order to explain the invention in such a way that a person skilled in the art can carry out the invention, "the mode for carrying out the invention" should be described in terms of embodiments or working examples (see, Note Article 24, Form 29, Regulations under the Patent Act). The explanation should be done by citing drawings, if any. Embodiments or working examples specifically show the mode for carrying out the invention. (Regarding an invention of a product, for instance, those, which specifically show how to make it, what structure it has, how to use it, etc.)

In cases where it is possible to explain the invention so as to enable a person skilled in the art to carry out the invention, neither embodiments nor working examples are necessary. Where an invention of a product is not defined by such specific means as its structure but defined by its function, character, etc., a specific means which is capable of performing the function or character shall be explicitly described in the detailed description of the invention, except where it could be understood by a person skilled in the art without such explicit descriptions taking into account the overall descriptions of the specification (excluding claims), drawings and the common general knowledge as of the filing.

In the case of inventions in technical fields where it is generally difficult to infer how to make and use a product on the basis of its structure (e.g., chemical compounds), normally one or more representative embodiments or working examples are necessary which enable a person skilled in the art to carry out the invention. Also, in the case of use inventions (e.g., medicine) using the character of a product etc., the working examples supporting the use are usually required.

(6) Relation between statements in the claim and description in the detailed description of the invention

① As mentioned in (1) above, at least one mode for carrying out the invention needs to be described in terms of "claimed invention." For not all embodiments nor all alternatives within the extent of the claimed invention, the mode for carrying out the invention needs to be described.

However, when the examiner can show well-founded reasons that a person skilled in the art would be unable to extend the particular mode for carrying out the invention in the detailed description of the invention to the whole of the field within the extent of the claimed invention, the examiner should determine that the claimed invention is not described in such a manner sufficiently clear and complete to be carried out by a person skilled in the art.

2 For example, if a claim is directed to a generic concept with only a mode for carrying out a more specific concept being described in the detailed description of the invention, and if there is a concrete reason that the description of the mode for carrying out the specific concept does not make another specific concept (*) covered by the claimed generic concept to be carried out by a person skilled in the art even taking into consideration the common general knowledge as of the filing, then, such descriptions of the particular mode should not be deemed sufficiently clear and complete for the claimed invention to be carried out by a person skilled in the art.

(*): "Another specific concept" must be one that a person skilled in the art can recognize as of the filing. The same will apply hereinafter in 3.2.1 to 3.2.3.

③ If a claim is defined in an alternative way by Markush-type formula with only a mode for carrying out a part of the claimed alternatives being described in the detailed description of the invention, and if there is a concrete reason that the descriptions of the mode for carrying out the part of alternatives does not make the rest of the alternatives to be carried out by a person skilled in the art even taking into consideration the common general knowledge as of the filing, then, such descriptions of the particular mode should not be deemed sufficiently clear and complete for the claimed invention to be carried out by a person skilled in the art.

④ If claim statements defining the product by a result to be achieved, it should be noted that such a claim may be so broad that a person skilled in the art would be unable to extend the particular mode for carrying out the invention in the detailed description of the invention to the whole of the field within the extent of the claimed invention.

3.2.2 Types of Violation of Enablement Requirement

3.2.2.1 Improper Description of Modes for Carrying Out the Invention

(1) A person skilled in the art cannot carry out the claimed invention because a technical means corresponding to a matter defining the claimed invention is described in a merely functional or abstract way in the mode for carrying out the invention and in such a manner that it is unclear and incomprehensible how the technical means should be embodied into a material, apparatus or process, even taking into consideration the common general knowledge

as of the filing.

(2) A person skilled in the art cannot carry out the claimed invention because the relation between each technical means corresponding to a matter defining the claimed invention is unclear and incomprehensible in the mode for carrying out the invention, even taking into consideration the common general knowledge as of the filing.

(3) A person skilled in the art cannot carry out the claimed invention because specific numerical values such as manufacturing conditions are neither described in the mode for carrying out the invention nor can be understood by a person skilled in the art when taking into consideration the common general knowledge as of the filing.

3.2.2.2 Part of Claim Not Supported by the Mode for Carrying Out the Invention

(1) A claim is directed to a generic concept with only a more specific concept of the generic concept being described enablingly in the detailed description of the invention, and there is a concrete reason that the description of the mode for carrying out the specific concept does not make another specific concept covered by the claim to be carried out by a person skilled in the art, even taking into consideration the common general knowledge as of the filing. (Note that methods of experimentation and analysis may be among the common general knowledge as of the filing.)

Example: A claim is directed to a process for manufacturing a molded plastics consisting of the first step to form the plastics and the second step to correct strain of the formed plastics. The detailed description of the invention discloses, as a working example, only a process wherein the plastics being thermoplastic resin is formed by an extrusion molding and then the strain is corrected by heat-softening the molded plastics. The process for the strain correction by heat softening deems inappropriate for the case where the plastics being thermosetting resin. (A rational reasoning can be made that the strain-correction of the working example is inappropriate for thermosetting resin in view of the fact that thermosetting resin can not be soften by heating which is generally accepted as scientifically or technically correct.)

(2) A claim is defined in an alternative way by Markush-type formula with only a mode for carrying out a part of the claimed alternatives being described enablingly in the detailed description of the invention, and there is a concrete reason that the description of the mode for carrying out the part of the alternatives does not make the rest of the alternatives to be carried out by a person skilled in the art, even taking into consideration the common general knowledge as of the filing. (Note that methods of experimentation and analysis may be among the common general knowledge as of the filing.)

Example: A claim is directed to a process for manufacturing para-nitro substituted benzene by nitrating the substituted benzene where the substituent group (X) is CH3, OH, or COOH. The detailed description of the invention discloses, as a working example, only a case where the starting material being toluene (i.e., a case where X being CH3). A rational reasoning can be made that such a process is inappropriate when the starting material is benzoic acid (i.e., when X is COOH) in view of very large difference in the orientation between CH3 and COOH.

(3) A mode for carrying out the invention is described enablingly in the detailed description of the invention. For example, however, the particular mode is idiosyncratic within the extent of the claimed invention, and therefore, there is a well-founded reason that a person skilled in the art would be unable to extend the particular mode for carrying out the invention to the whole of the field within the extent of the claimed invention, even taking into consideration the common general knowledge as of the filing. (Note that methods of experimentation and analysis may be among the common general knowledge as of the filing.)

Example: A claim is directed to "a lens system for a single-lens reflex camera consisting of three lenses, wherein the lenses are placed in order of a positive, a negative and a positive lens from the object side to the film side, wherein optical aberration of the lens system is corrected so as to be less than X % in image height H." The detailed description of the invention discloses, as a mode for carrying out the invention, an example of specific combination of refractive indices of three lenses, or in addition, a specific conditional formula for them so that the particular optical aberration can be done.

In the filed of optical lenses, it is generally accepted as scientifically or technically correct that an example of specific combination of refractive indices which can embody a particular optical aberration is of idiosyncratic nature. In addition, that particular disclosure such as the example of refractive indices or conditional formula does not teach any generalized conditions for manufacturing the corrected lens system. Thus, a rational reasoning can be made that a person skilled in the art would be unable to understand how to extend the particular mode for carrying out the invention to the whole of the field within the extent of the claimed invention even taking into consideration the methods of experimentation, analysis and manufacture which are generally known to a person skilled in the art as of the filing.

(4) A claim includes the product defined by the result to be achieved and only the specific working mode is described in the detailed description of the invention so as to be carried out, and therefore, there is a well-founded reason that a person skilled in the art would be unable to extend the particular mode for carrying out the invention to the whole of the field within the extent of the claimed invention, even taking into consideration the common general knowledge as of the filing. (Note that methods of experimentation and analysis may be among the common general knowledge as of the filing.)

Example: "A hybrid car of which energy efficiency during traveling by electricity is a – b%" is stated in the claims. And only a hybrid car equipped with specific power transmission control means to obtain the energy efficiency concerned is described in the detailed description of the invention as a working mode.

And in the technical field of the hybrid car, normally, the fact that the aforesaid energy efficiency is about X% which is far lower than a% and it is difficult to realize higher energy efficiency such as a - b%, is the common general technical knowledge as of the filing. In addition, the description on the hybrid car equipped with aforesaid specific power transmission control means do not show the common solving means for realizing the aforesaid high energy efficiency. Accordingly, the rational reason can be made that a person skilled in the art would not be able to understand another hybrid car which brings the aforesaid result described in the claim even though taking into consideration the common art in the relevant technical field.

3.2.3 Notice of Reason for Refusal Violating Enablement Requirement

(1) Where the examiner makes a notice of reason for refusal on the ground of violation of enablement requirement under Article 36(4)(i), (s)he shall identify the claim which violates the requirement, make clear that the ground of refusal is not a violation of Ministerial Ordinance requirement but a violation of enablement requirement under Article 36(4)(i), and point out particular descriptions, if any, which mainly constitute the violation. When sending a notice of reason for refusal, the examiner should specifically point out a concrete reason why the application violates the enablement requirement.

It is recommended that the reason above should be supported by reference document. Such documents are, in principle, limited to those that are known to a person skilled in the art as of the filing. However, specifications of later applications, certificates of experimental result, written oppositions to the grant of a patent, and written arguments submitted by the applicant for another application etc. can be referred to for the purpose of pointing out that the violation stems from the descriptions in the specification and drawings being inconsistent with a fact generally accepted as scientifically or technically correct by a person skilled in the art.

(2) Against the notice of reason for refusal, an applicant may argue or clarify by putting forth written arguments or experimental results, etc (see, Note). Where the applicant's argument is confirmed to be adequate by examining the submitted evidence, the reason for refusal shall be deemed overcome. Where the applicant's argument does not change the examiner's conviction at all or where it succeeds in denying the examiner's conviction only to the extent that truth or falsity becomes unclear, the examiner makes a decision of refusal on the ground of the notice of reasons for refusal which is earlier notified.

(Note) For example, through a written opinion or a certified experiment result, etc., the applicant may clarify that the experiment or the method of analysis not considered by the examiner is actually pertaining to the common general knowledge as of the filing, and that a person skilled in the art can carry out the claimed invention based on such an experiment or method for analysis as well as the description in the specification and the drawings. However, it must be noted that the evidence etc which have been submitted later does not supplement an improper description about the matter which has not been described in the specification etc.

(See: Tokyo High Court Decision dated on October. 31, 2001 (Hei 12 (Gyo Ke), No.354)

3.3 Ministerial Ordinance Requirements

3.3.1 Ministerial Ordinance under Article 36(4)(i)

"The statement of the detailed explanation of the invention as provided in item (iii) of the preceding Paragraph shall comply with each of the following items:

(i) in accordance with the relevant Ordinance of the Ministry of Economy, Trade and Industry,

the statement shall be clear and sufficient as to enable any person ordinarily skilled in the art to which the invention pertains to work the invention" (Article 36(4)(i)).

"Statements of the detailed description of the invention which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry under Article 36(4)(i) shall state the problem to be solved by the invention and its solution, or other matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention." (Article 24bis of Regulation under Patent Act)

[The followings applied to applications filed on or before August 31, 2002]

"The detailed description of the invention under the preceding Paragraph (iii) shall state the invention, as provided for in an ordinance of the Ministry of Economy, Trade and Industry, in a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains." (Article 36(4)).

"Statements of the detailed description of the invention which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry under Article 36(4) shall state the problem to be solved by the invention and its solution, or other matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention." (Article 24bis of Regulation under Patent Act)

(1) Purpose of the Ministerial Ordinance

Since an invention is a creation of new technical idea, it is important that a patent application is described so as to make a person skilled in the art understand the technical significance of the invention (i.e., the technical contribution which the invention brought up) in the light of the state of the art as of the filing. A conventional way of description in the detailed description of the invention is what is an unsolved problem, in which technical field such a problem resides, and how such a problem has been solved by the invention. This way of description is convenient, as well, for understanding the technical significance of the invention.

One who wishes to obtain a hint for research and development from patent documents or to utilize useful patented invention can easily conduct a search of patent documents by paying attention to the technical problems described in the patent documents.

In determining inventive step of an invention under Article 29(2), a prior art document showing a technical problem common to the invention in question can be a ground for a decision of refusal. Therefore, judgment of inventive step is easier for applicants and third parties if both a patent application under examination and a prior art document contain descriptions of technical problems to be solved.

For these reasons, Article 24bis of the Regulation under Patent Act (Ministerial Ordinance) requires to state in the detailed description of the invention "matters necessary to understand the technical significance of the invention," and exemplifies such matters as the problem to be solved and its solution.

3.3.2 Practical Application of Ministerial Ordinance Requirements

(1) In the light of above-mentioned purposes, matters required under the Ministerial Ordinance shall be deemed as the followings in practice.

① Technical field to which an invention pertains

As "technical field to which an invention pertains," at least one technical field to which a claimed invention pertains shall be stated in a specification.

However, the "technical field to which an invention pertains" is not required to be explicitly stated if a person skilled in the art can understand it without such explicit statements when looking into overall descriptions in the specification (excluding claims) and drawings taking into consideration the common general knowledge as of the filing.

Further, in cases where an invention is deemed not to pertain to existing technical fields like an invention developed based on an entirely new conception which is completely different from prior art, an application for such an invention need not to state existing technical fields, and statements of the new technical field developed by the invention suffices the requirement.

2 Problem to be solved by the invention and its solution

(i) As "problem to be solved by the invention," an application shall state at least one technical problem to be solved by a claimed invention.

As "its solution," an application shall explain how the technical problem has been solved by the claimed invention.

(ii) However, the "problem to be solved by the invention" is not required to be explicitly stated if a person skilled in the art can understand it without such an explicit statement, when looking into overall descriptions in the description and drawings including statements of prior art or advantageous effects of the invention, taking into consideration the common general knowledge as of the filing. (Note that a person skilled in the art could comprehend the technical problem when considering prior art which falls within the common general knowledge as of the filing.) Also, in cases where a person skilled in the art would understand how a technical problem has been solved by a claimed invention by examining the claimed invention in the light of the technical problem which has been found in above-mentioned way, and taking into consideration the descriptions of a working example, an application for such an invention is not required an explicit statement of problem-solution form.

(iii) Further, in cases where an invention is deemed not based upon recognition of a problem to be solved like an invention developed based on an entirely new conception which is completely different from prior art or an invention which is based on a fortuitous discovery resulting from trials and errors (e.g., chemical compounds), an application for such an invention is not required to state a problem to be solved.

It is in connection with "a problem to be solved by the invention" that "its solution" is meaningful. In another word, if one does not recognize a problem, one cannot recognize how an invention has solved a problem. (As opposed to this, if one can once recognize a problem, one might recognize how an invention has solved the problem.) Therefore, in cases where an invention is deemed not based upon recognition of a problem to be solved as mentioned above, an application for such an invention is not required to state how the invention has solved a problem (i.e., statements of solution). (It is needless to say, however, that even such an application is required sufficient disclosure meeting the enablement requirement.)

(Remarks)

Where descriptions of a technical field, a problem to be solved and its solution for two or more claims would overlap, such overlapped descriptions may be omitted, provided that the relation of each claim remains clear.

(2) The enablement requirement ensures an applicant to disclose to the public how to carry out the invention in return for granting a patent. Therefore, to grant a patent to an application dissatisfying the requirement would lead to an extreme imbalance between a patentee and the public.

The Ministerial Ordinance requirement, on the other hand, aims at clarifying the technical significance of an invention, and thereby, contributes to patent examinations and searches.

Accordingly, the requirements should be treated as follows.

① Where an invention is determined the one which, if being required to state a problem to be solved, would rather result in hampering correct understanding of technical significance of the invention as mentioned in (1) above, a patent application for such an invention may omit statements of a problem to be solved and its solution. Also, where an invention is determined that it would not pertain to existing technical fields, a patent application for such an invention is deemed to meet the requirement by stating the new technical field to which the claimed invention pertains.

② A patent application for an invention not falling in (1) is deemed to violate the requirement when a person skilled in the art cannot understand the technical field to which the invention pertains, the problem to be solved by the invention and its solution even by looking into overall descriptions in the specification (excluding claims) and drawings, taking into consideration the common general knowledge as of the filing.

Also, the application which includes a unique parameter in matters defining the invention and does not show the comparison with the prior art sufficiently shall be fallen under the category of application that a person skilled in the art cannot understand the problems and the solving means in 2) above.

(3) Prior art and advantageous effect

[The followings applied to applications filed on or after September 1, 2002. Refer to Chapter 3 about requirements for disclosure of information on prior art document in an application on or after September 1, 2002.]

① Prior art

Descriptions of prior art are not required under the Ministerial Ordinance requirement. However, an applicant should describe background prior art, as far as (s)he knows, which is deemed to contribute to understanding the technical significance of the claimed invention and examination of patentability of the claimed invention because such descriptions of prior art could teach the problem to be solved and could substitute the descriptions of the problems.

[The followings applied to applications filed on or before August 31, 2002]

① Prior art

Descriptions of prior art are not required under the Ministerial Ordinance requirement. However, an applicant should describe background prior art, as far as (s)he knows, which is deemed to contribute to understanding the technical significance of the claimed invention and examination of patentability of the claimed invention because such descriptions of prior art could teach the problem to be solved and could substitute the descriptions of the problems.

Also, documents related to prior art are one of the important means for evaluating the patentability of the claimed invention. Therefore, when there exist any documents relevant to the claimed invention, it is strongly recommended to cite such documents.

2 Advantageous effects over prior art

It is not required under the Ministerial ordinance requirement to state an advantageous effect of a claimed invention over the relevant prior art. However, it is an applicant's advantage to describe an advantageous effect of a claimed invention over the relevant prior art because such advantageous effect, if any, is taken into consideration as a fact to support to affirmatively infer the existence of inventive step (Refer to Part II, Chapter 2. 2.5(3)). Also, descriptions of advantageous effects could teach the problem to be solved and could substitute the descriptions of the problem to be solved.

Therefore, an applicant should describe an advantageous effect of a claimed invention over the relevant prior art, if any, as far as (s)he knows.

(4) Industrially applicability

To describe an industrially applicability is not treated as the requirements of Ministerial Ordinance. The industrially applicability is described in case only it is unclear even if taking into consideration the characteristics of the invention or the description. The industrially applicability is obvious in many cases from the characteristics of the invention or the description, and in such a case, the industrially applicability is not required to be explicitly described.

3.3.3 Notice of Reason for Refusal on Violation of Ministerial Ordinance Requirements

(1) Where the examiner is convinced that it is more probable than not that an application constitutes a violation of Ministerial Ordinance requirement, (s)he shall make a notice of reasons for refusal stating to the effect that the ground of a decision of refusal is a violation of the Ministerial Ordinance requirement under Article 36(4)(i) together with pointing out which of the matters necessary to understand the technical significance of the invention is defective.

(2) Against the notice of reasons for refusal, an applicant may argue that a person skilled in the art could have understood the technical field of the claimed invention, the problem to be solved and its solution when looking into overall descriptions of the specification (excluding claims), drawings and the common general knowledge as of the filing. This rebuttal may be made by means of submission of written arguments, of a certificate experimental result or of amendments introducing no new matter, etc. aiming at clarifying relevant prior art as of the filing which the examiner would not have recognized, provided that the relevant prior art is among the common general knowledge such as well-known or commonly used art.

Where the applicant's argument is confirmed to be adequate by examining the submitted evidence, the reasons for refusal shall be deemed overcome. Where the applicant's argument does not change the examiner's conviction at all or where it succeeds in denying the examiner's conviction only to the extent that truth or falsity becomes unclear, the examiner makes a decision of refusal on the ground of the notice of reasons for refusal which is earlier notified.

4. Improper Descriptions of the Specification in General

The requirements under Patent Act Article 36(4)(i) or (6) are not met in the following cases if the detailed description of the invention is not described in such a manner sufficiently clear and complete for the claimed invention to be carried out by a person skilled in the art or if an invention for which a patent is sought is unclear because the matters stated in the claim cannot be accurately understood by such a person. (Whether or not an application violates the requirements is determined on a case-by-case basis by above-mentioned handling.)

(1) Content of the detailed description of the invention or of the claim is unclear because they are not accurately described in the Japanese language (including improper translation).

This includes the followings: unclear relation between the subject and the predicate, unclear relation between the modifier and the modified word, errors in punctuation, errors in characters (wrong character, omitted character, false substitute character), and errors in sign.

(2) Terms are not used consistently throughout the whole specification.

(3) A term used in the specification is neither an academic term nor a technical term that is commonly used in academic or technical documents and has no definition in the detailed description of the invention.

(4) Trademarks are used for what can be indicated otherwise.

(5) The amount or extent of a state of things or phenomena is not described in a specification by use of units provided for by the Measurement Act.

(6) The brief description of the drawings (explanation of the drawings and marks) is defective in relation to the detailed description of the invention, claims, or drawings.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part I: DESCRIPTION AND CLAIMS

Chapter 2 Requirements of Unity of Invention

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Chapter 2 Requirements of Unity of Invention

Patent Act Article 37 reads:

Two or more inventions may be the subject of a single patent application in the same application provided that, these inventions are of a group of inventions recognized as fulfilling the requirements of unity of invention based on their technical relationship designated in the relevant Ordinance of the Ministry of Economy, Trade and Industry.

Regulations under the Patent Act Article 25octies reads:

(1) The technical relationship defined by Ordinance of the Ministry of Economy, Trade and Industry under Patent Act Article 37 means a technical relationship in which two or more inventions must be linked so as to form a single general inventive concept by having the same or corresponding special technical features among them.

(2) The special technical feature provided in the former paragraph stands for a technical feature defining a contribution made by an invention over the prior art.

(3) The technical relationship provided in the first paragraph shall be examined, irrespective of whether two or more inventions are described in separate claims or in a single claim written in an alternative form.

(Explanation)

Patent Act Article 37 and Regulations under the Act Article 25octies are defined in line with the provisions of Rule 13 of the Patent Cooperation Treaty, which defines requirements of unity of invention (hereinafter referred to as "Rule 13 of the PCT").

1. Requirements of Unity of Invention

1.1 Purport of Patent Act Article 37

If two or more inventions that are technically closely interrelated can be filed for patents in a single application, the application procedures will be simplified and rationalized and it will become easier for third parties to use patent information and transact rights. In addition, it will allow the Patent Office to examine such inventions together in an efficient way. In light of these points, Article 37 provides for the scope of cases where two or more inventions that could also be separately filed for patent may be filed in a single application.

1.2 Explanation of Relevant Provisions

(1) Patent Act Article 37

Article 37 provides that two or more inventions complying with the requirement of unity of invention may be filed for a patent in a single patent application. Furthermore, it also states as the requirement that two or more inventions must have a certain technical relationship among them. The requirement in detail for the said "technical relationships" is defined by an ordinance of the Ministry of Economy, Trade and Industry (see, Regulations under the Patent Act Article 25octies).

(2) Regulations under the Patent Act Article 25octies(1)

The Article 25octies(1) defines the word "technical relationship" as a technical

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relationship that two or more inventions are "linked so as to form a single general inventive concept."

Here, the word a "single general inventive concept" corresponds to "a single general inventive concept" originally defined in Rule 13 of the PCT.

Furthermore, the Regulation provides that the technical relationship, which forms a single inventive concept, is established, when two or more inventions have the same or corresponding special technical features. It indicates that whether or not two or more inventions are linked so as to form a single general inventive concept should be examined by whether those inventions have the same or corresponding special technical features.

(3) Regulations under the Patent Act Article 25octies(2)

Article 25octies(2) provides that the word "special technical feature" stipulated in the Article 25octies(1) means "a technical feature defining a contribution made by an invention over the prior art." In other words, the "technical feature" must create a contribution over the prior art in order to be recognized as a special one.

In this regard, the "technical feature" is determined by an examiner based on the "claimed matter technically specifying an invention," among all claimed matters added by the applicant as necessary matters in order to specify the invention (hereinafter referred to as "matters specifying the invention").

The language "the contribution made by an invention over the prior art" means technical significance of an invention in comparison to the prior art.

(4) Regulations under the Patent Act Article 25octies(3)

The Article 25octies(3) clarifies that an examination for unity of invention shall be conducted, irrespective of whether the inventions are described in separate claims or in a single claim described in an alternative form.

2. Basic Approach for Examining Unity of Invention

2.1 Subjects of Examination for Unity of Invention

The requirement of unity of invention shall be examined by a technical relationship among inventions described in claims.

Usually, it is examined based on relationships among claimed inventions.

If matters specifying the invention in a claim is expressed by proforma or de facto alternatives (hereinafter referred to as "alternatives"), an examination for unity of invention is also carried out in respect of relationships among the alternatives.

2.2 Basic Approach

An examination for unity of invention is carried out by determining whether two or more inventions have the same or corresponding special technical features among them, in other words, whether one special technical feature of one invention is the same or corresponding special technical features of all other inventions (see, Note 1 and Note 2). Here, it is unnecessary to clearly determine whether "the same" or "corresponding" is applicable to the special technical feature.

- (Note 1) Whether the special technical feature is regarded as the same or corresponding should be practically determined, and examiners should keep in mind that they must not be particular about the mere difference in expression of words.
- (Note 2) The combination of a bolt and a nut with screw threads having the same specific structure is a typical example of a case where two or more inventions are sharing corresponding special technical features.

The requirement of unity of invention is examined in detail as follows;

First, special technical features of an invention are identified on the basis of a description, claims and drawings (hereinafter referred to as "description, etc."). Then, it is examined if these features are either the same or corresponding ones. The requirement of unity of invention is not satisfied, unless the same or corresponding special technical feature is present.

Even though the requirements of unity of invention are deemed to have been met through the above-mentioned determination process, if it becomes obvious that what was deemed to be a "special technical feature" does not contribute to the prior art of the relevant inventions, the application will fail to meet the requirements of unity of invention a posteriori unless the inventions have the same or a corresponding special technical feature other than said feature.

In this context, cases "where it becomes obvious ... does not contribute to the prior art of the relevant inventions" are the cases that fall under any of the following to :

where what was deemed to be a "special technical feature" is found in the prior art (see, Note 3);

where what was deemed to be a "special technical feature" is an addition to a prior art, deletion, or replacement of well-known or commonly used art, which does not produce any new effects; or

where what was deemed to be a "special technical feature" is a mere design variation of a prior art.

(Note 3) "Prior art" refers to inventions that fall under the paragraphs of Article 29(1), and does not include inventions that had not been published at the time of filing of the application concerned.

3. Typical Examples for Examining Unity of Invention

The following shows typical examples for an examination on unity of invention. These examples more practically demonstrate a basis for how to examine unity of invention based on the basic approach described above (see, Note).

These examples are explained under the presumption that each invention in claims has a contribution over the prior art.

(Note) Not only one of these examples but also two or more of them can be applicable to an actual case at the same time.

3.1 Basic Examples

3.1.1 The Same Special Technical Feature

If two or more inventions have the same special technical feature, the requirement of unity of invention is met.

Example 1:

Claim 1: Polymeric compound A. (transparent substance having improved oxygen barrier characteristics)

Claim 2: A food packaging container composed of polymeric compound A.

(Explanation)

Since polymeric compound A itself has a contribution over the prior art, claims 1 and 2 have the same special technical feature.

Example 2:

- Claim 1: A method of lighting comprising shielding a part of illumination light from the light source.
- Claim 2: A lighting system with a light source and a light shielding part that partially shields against illumination light from the light source

(Explanation)

Because shielding a part of illumination light brings a contribution over the prior art, claims 1 and 2 have the same special technical feature.

3.1.2 Corresponding Special Technical Feature

If the technical significance existing in two or more inventions in comparison with the prior art is common or closely related, or if the special technical feature in two or more inventions is related to each other in a mutually complementary manner, the requirement of unity of invention is met, because it is deemed that each invention has corresponding special technical feature.

Example 1:

Claim 1: Conductive ceramics made by adding titanium carbide in silicon nitride. Claim 2: Conductive ceramics made by adding titanium nitride in silicon nitride.

(Explanation)

Special technical features of claims 1 and 2 are titanium carbide and titanium nitride respectively. They are recognized to have common technical significance, which these inventions have in comparison to the prior art in terms of giving conductivity to ceramics composed of silicon nitride. In this case, if technical significance existing in these inventions in comparison with the prior art is considered no longer to be common or closely related, a posteriori, the requirement of unity of invention comes to be unsatisfied.

Example 2:

- Claim 1: A transmitter with a time axis extender for a video signal.
- Claim 2: A receiver with a time axis compressor for a received video signal.
- Claim 3: A device for transmitting a video signal with a transmitter with a time axis extender for a video signal and a receiver with a time axis compressor for a received video signal.

(Explanation)

The special technical features of claims 1 and 2 are equipping a time axis extender and a time axis compressor respectively. Both functions lie in extension of the time axis to transmit a video signal and compression of the time axis to receive a video signal respectively. Therefore, they are deemed to be related complementarily. Moreover, claim 3 includes both a time axis extender and a time axis compressor, which are special technical features of claims 1 and 2, and therefore claim 3 is considered to be closely related to inventions cited in claims 1 and 2.

3.2 Examples with a Specific Relation

3.2.1 Product and Method of Producing it, and Product and Machine, Instrument, Device, the Other Means for Producing it

If a method of producing a product, or a machine, instrument, device, the other means for producing a product (hereinafter referred to as "production method or production device, etc.") is suitable for producing "the product," the requirement of unity of invention is met.

The case where a "production method or production device, etc." is "suitable" for producing "the product" includes, for example, a case where a special technical feature of "production method or production device, etc." necessarily causes conversion of raw material into a special technical feature of "the product" (including the product itself).

Since a contribution over the prior art made by the special technical feature of "production method or production device, etc." gives special technical features of "the product," the said contributions are closely related, and thereby they are deemed to have the same or corresponding special technical features.

Even if something other than "the product" is produced by "production method or production device, etc.," the requirement is met, if the "production method or production device, etc." is suitable for producing "the product."

The word, "the other means" in the above "a machine, instrument, device, the other means for producing a product" is not limited to a machine, instrument and device, but encompasses a catalyst, microorganism and anything else, which acts on other materials, work pieces, etc., and turns them into a product.

Example 1:

Claim 1: A foundation pile having a bulbous enlargement at its base.

Claim 2: A method of forming a bulbous enlargement comprising the steps of: forming a cavity in the ground by using explosives; and pouring a concrete into the cavity.

(Explanation)

Forming a cavity by using an explosive and pouring a concrete into the cavity is a special technical feature of claim 2. And it necessarily causes a bulbous enlargement which is a special technical feature of claim 1. Hence, the method described in claim 2 is suitable for producing the foundation pile recited in claim 1.

Example 2:

Claim 1: A clutch plate having a specific structure. Claim 2: A method for producing a friction plate having the specific structure.

(Explanation)

The process described in claim 2 necessarily provides a specific structure, which is a special technical feature of claim 1. The process described in claim 2 is therefore suitable for producing the clutch plate mentioned in claim 1.

Example 3:

Claim 1: An eyeglass frame composed of a titanium alloy X.

- Claim 2: An eyeglass frame composed of a titanium alloy X coated with nitrides Y.
- Claim 3: A method for producing an eyeglass frame by molding titanium alloy X into the frame in one-piece.
- Claim 4: A method of producing an eyeglass frame comprising the steps of: molding titanium alloy X into the frame in one-piece; and depositing the frame in nitrides Y.

(Explanation)

A special technical feature of claims 1 and 2 is an eyeglass frame composed of a titanium alloy X. The production method described in claims 3 and 4 necessarily provides an eyeglass frame composed of a titanium alloy X, which is a special technical feature of claims 1 and 2. The production method described in claims 3 and 4 is therefore suitable for producing the eyeglass frame described in claims 1 and 2.

3.2.2 Product and Method of Using it, and Product and Another Product Solely Utilizing Specific Properties of the Product

If a "method of using a product" is suitable for use of "that product," the requirement of unity of invention is met.

The case where a "method of using a product" is considered to be "suitable" for use of "that product" is, for example, a case where a special technical feature of the "method of using the product" utilizes properties and/or functions particular to a special technical feature of "the product."

In this case, the contribution over the prior art, which is made by the special technical feature of "method of using a product," lies in the utilization of the properties and/or

functions of the special technical feature of "the product." Therefore, the contribution over the prior art which is made by each of the special technical features is closely related and both "product" and "the method of using it" have the same or corresponding special technical features.

Accordingly, if a special technical feature of "a product solely utilizing the specific properties of another product" solely utilizes the special technical feature of "another product," the requirement of unity of invention is satisfied.

In this case, the contribution over the prior art, which is made by the special technical feature of "a product solely utilizing the specific properties of another product," lies in the sole utilization of the specific properties of the special technical feature of "another product." Therefore, the contribution over the prior art which is made by each of the special technical features is closely related and both "a product" and "another product" have the same or corresponding special technical features.

Example 1:

Claim 1: Substance A. Claim 2: A method of killing insects with substance A.

(Explanation)

Since the method of killing insects described in claim 2 utilizes the insecticidal property of substance A described in claim 1, the method of killing insects described in claim 2 is suitable for using substance A described in claim 1.

Example 2:

Claim 1: Substance A.

Claim 2: A herbicide composed of substance A.

(Explanation)

The herbicide composed of substance A, which is the special technical feature of claim 2, solely utilizes the herbicidal property of substance A described in claim 1. (see, Note).

(Note) The special technical feature of claim 2 can be regarded as substance A. If the feature is viewed in this way, it can be also concluded that claims 1 and 2 have the same special technical feature mentioned above in 3.1.1.

Example 3:

Claim 1: Compound A. (useful as an intermediate of compound B)

- Claim 2: A method of manufacturing compound B by reacting compound A with another compound.
- Claim 3: A method of manufacturing compound A.

(Explanation)

The method of manufacturing cited in claim 2 utilizes the particular property of the compound A of claim 1 that it prepares compound B by reacting with another compound. Hence, the method for manufacturing of claim 2 is suitable for using compound A of claim 1. The method of claim 3 is also suitable for producing

compound A of claim 1. Therefore, all claims 1-3 meet the requirement of unity of invention.

Example 4:

Claim 1: A recombinant microorganism containing polynucleotide X.

Claim 2: Polynucleotide X.

Claim 3: A method of manufacturing polypeptide A by culturing a recombinant microorganism containing polynucleotide X.

(Explanation)

Polynucleotide X is the special technical feature common to both claims 1 and 2. The method of claim 3 utilizes the peculiar property of polynucleotide X of generating polypeptide A. Hence, the method of claim 3 is suitable for using polynucleotide X in claims 1 and 2.

Example 5:

- Claim 1: A fuel burner A with a fuel inlet in the direction tangent to a mixing chamber.
- Claim 2: A method for manufacturing carbon black allowing a fuel to flow in a direction tangential to the mixing chamber of the fuel burner A.
- Claim 3: A method for manufacturing fuel burner A forming a fuel inlet in the direction tangent to a mixing chamber.

(Explanation)

The method of manufacturing carbon black of claim 2 utilizes a particular function of the fuel inlet located tangentially to the mixing chamber, which is the special technical feature of claim 1. Hence, the method of claim 2 is suitable for using fuel burner A of claim 1. The method of manufacturing fuel burner A of claim 3 necessarily provides a fuel inlet placed tangentially to the mixing chamber, which is the special technical feature of claim 1. The method of claim 3 is suitable for the purpose of manufacturing fuel burner A of claim 1. Therefore, claims 1-3 meet the requirement of unity of invention.

3.2.3 Product, and Handling Method or Another Handling Product

If a method of handling the product or another product handling the product (hereinafter referred to as "a handling method or another handling product") is suitable for handling "the product," the requirement of unity of invention is satisfied.

The case where "a handling method or another handling product" is "suitable" for handling "the product" is a case, for example, where the special technical feature of "a handling method or another handling product" necessarily maintains or exercises the function by external action on the special technical feature of "the product" and does not basically give substantial changes to "the product."

In this case the contribution over the prior art, which is made by the special technical feature of "a handling method or another handling product," is to maintain and exercise the function of a special technical feature of "the product." Therefore, the contribution over the prior art which is made by each of the special technical features are

closely related and both the "handling method or another handling product" and "the product" have the same or corresponding special technical features.

Even if "a handling method or another handling product" is applicable to handling something other than the product, the requirement of the unity of invention is still satisfied if they are suitable for handling the said product.

Example 1:

Claim 1: A prefabricated house having a specific structure. Claim 2: A method of storing a prefabricated house having a special structure.

(Explanation)

The method of claim 2 necessarily results in exercise of the function of the specific structure recited in claim 1 that it improves the accommodation capability, by external action on the special structure which is the special technical feature of claim 1. Therefore, the method of claim 2 is suitable for handling the prefabricated house of claim 1.

Example 2:

Claim 1: Substance A.

Claim 2: A method of preserving substance A under specified pressure, at a specified temperature and at a specified gas component ratio.

(Substance A possesses peculiar properties, but it is very unstable and easily breaks up.)

(Explanation)

The method of claim 2 necessarily maintains the properties particular to substance A of claim 1 and is therefore suitable for handling substance A of claim 1.

3.2.4 Method and Machine, Instrument, Device, the Other Means Directly Used to Carry Out the Method

If a machine, instrument, device, and the other means directly used to carry out a method (hereinafter referred to as "device directly used to carry out a method") is suitable for direct use to carry out "the method," the requirement of the unity of invention is met.

The case where a "device directly used to carry out a method" is "suitable" for direct use to carry out "the method" is, for example, a case where a special technical feature of a "device directly used to carry out a method" is directly used to carry out a special technical feature of "the method."

In this case, the contribution over the prior art, which is made by the special technical feature of a "device directly used to implement a method," is to carry out the special technical feature of "the method." Therefore, the contribution over the prior art which is made by each of the special technical features are closely related and both the "device directly used to implement a method" and "the method" have the same or corresponding special technical features.

Even if the "device directly used to implement a method" can be directly used to carry out a method other than "the method," the requirement of unity of invention is still satisfied, if the "device directly used to carry out a method" is suitable for directly carrying out "the method."

The phrase "the other means" is not limited to a sort of device, but encompasses catalysts, microorganisms, raw materials, work pieces and all other items directly used to carry out the method.

Example 1:

- Claim 1: A method of producing concrete products comprising the steps of (1) mixing ice granules with cement together with aggregate; and (2) pouring the mixture into a mold.
- Claim 2: A device having a specific structure comprising (1) an ice crushing section and (2) a mixing unit of a crushed ice, cement and aggregate.

(Explanation)

The device of claim 2 is directly used for carrying out the method of mixing ice granules and aggregate with cement, which is the special technical feature of claim 1. Hence, the device of claim 2 is suitable for direct use to carry out the method of claim 1.

Example 2:

Claim 1: A method of measuring the depth of water through specific procedures.

Claim 2: A device having a specific structure for measuring a distance to an object.

(Explanation)

The device in claim 2 can be applied in uses other than carrying out the process in claim 1. However, it is suited for direct use in carrying out the method of claim 1 since it is directly used in carrying out a method of measuring the depth of water comprising a specific procedure that is a special technical feature of claim 1.

Example 3:

Claim 1: A method of preparing final product Z by oxidizing intermediate product A.

Claim 2: A method of preparing final product Z comprising the steps of (1) reacting compound X and compound Y to produce intermediate product A and (2) oxidizing intermediate product A.

Claim 3: Intermediate product A.

(Explanation)

The special technical feature of both claims 1 and 2 lies in the method of preparing the final product Z by oxidizing the intermediate product A.

Intermediate product A of claim 3 is directly used to carry out the above method, which is the special technical feature of claims 1 and 2. Therefore, intermediate product A of claim 3 is suitable for directly carrying out the method of claims 1 and 2.

3.3 Markush-Type

Even for a claim described in the Markush-Type, unity of invention is examined by finding out whether its alternatives have the same or corresponding special technical features.

Especially, where a claim described in the Markush-Type is related to a compound written in an alternative form, each alternative has the same or corresponding special technical features, if the following (i) and (ii) are satisfied:

- (i) All alternatives have a common property or activity; and
- (ii) (a) a common chemical structure is present, i.e., a significant structural element is shared by all of the alternatives, or
 - (b) in cases where the common chemical structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.

In paragraph (ii)(a) above, "a significant chemical structure element is shared by all of the alternatives" refers to cases where the chemical compounds share a common chemical structure which occupies a large portion of their structures, or if the compounds have in common only a small portion of their structures, cases where the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The structural element may be a single component or a combination of individual components linked together.

When dealing with alternatives in the Markush-Type, if at least one of the Markush alternatives is found in the prior art, the question of unity of invention shall be reconsidered. In paragraph (ii)(b) above, the word "a recognized class of chemical compounds" means that there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention. In other words, each member could be substituted for the other, with the expectation that the similar intended result would be achieved.

3.4 Intermediate and Final Product

In order that an invention related to an intermediate product and another related to the final product meets the requirement of unity of invention, the following requirements (i) and (ii) must be satisfied:

- (i) An intermediate and a final product have the same or technically closely related structural element, namely;
 - (a) the new fundamental form in chemical structure of the intermediate product is common to that of the final product; or
 - (b) the chemical structures of both products are technically closely related to each other.
- (ii) The intermediate product and the final product are technically related to each other. In other words, the final product is prepared directly from an intermediate product or prepared through a small number of the other new intermediate products

including the same substantial structural element.

Even if the structure is unclear, an intermediate product and a final product may meet the requirement in some cases. For example, an intermediate with a clear structure and a final product with an unclear constitution structure or an intermediate product with an unclear constitution structure and a final product with an unclear constitution structure sometimes may meet the requirement of unity of invention.

In this case, in order to meet the requirement, there must be sufficient evidence showing that the structures of the intermediate product and the final product are technically closely related to each other; for example, the intermediate product includes the same substantial component as that of the final product or the intermediate product incorporates the substantial component in the final product.

In the case where the individual intermediate products are used in different processes to prepare one final product include the same substantial component, the inventions related to the final product and the individual intermediates meet the requirement of unity of invention because the substantial structural elements are the same or corresponding special technical features.

In cases where the intermediate products and the final products are defined in claims so as to constitute a group of chemical compounds, the respective intermediate compounds must correspond to one of the final products defined in the claims. However, since some of the final products may not have a corresponding intermediate compound, the two groups do not necessarily correspond to each other.

Showing that the intermediate products has other effects or exhibits other activities in addition to being used to prepare the final product does not affect the examination of unity of invention.

4. Procedure of Examination

4.1 Basic Approach

(1) Whether the application meets the requirement of unity of invention shall be determined based on the relationship between the invention first mentioned in the claims (see, Note) and other inventions. The invention first mentioned in the claims and a group of inventions that meet the requirements of unity of invention in the relations with the first invention shall be the subject of the examination on the requirements other than the requirements other than the requirements other than the requirements other than the requirements of unity of invention. (Hereinafter "subject of the examination on the subject of the examination on the requirements other than the requirements of unity of invention.)

Inventions that do not meet the requirement of unity of invention in the relations with the invention first mentioned in the claims will not be the subject of the examination. For such inventions, a notice of reasons for refusal will be given on the grounds of violation of the requirements of unity of invention.

Where the invention first mentioned in the claims does not have any special technical feature, the subject of the examination shall be decided pursuant to 4.2 below.

(Note) Invention in claim 1. If matters specifying the invention of claim 1 are expressed by alternatives, it is, in principle, the invention understood by choosing the first alternative. However, for an invention pertaining to a chemical substance that is described by Markush-type, etc., the invention that is understood by choosing an appropriate alternative in consideration of the description of working examples, etc. shall be deemed to be the invention first mentioned.

(2) Where the requirements of unity of invention are met between independent claims, the inventions claimed in these independent claims have a special technical feature. Therefore, inventions claimed in dependent claims citing these independent claims also ordinarily have the same special technical feature. Thus, it seems rare for dependent claims to be the cause of a lack of unity. Consequently, it is generally efficient to start examining unity of invention through comparison among independent claims.

However, some dependent claims may affect examination on unity of invention (for example, a dependent claim in which one of the matters specifying the invention is replaced), and such dependent claims require attention.

4.2 Subject of the Examination in the Case where the Invention First Mentioned in the Claims Does Not Have Any Special Technical Feature

Where the invention first mentioned in the claims does not have any special technical feature, it cannot be said that the requirement of unity of invention is met since the same or corresponding special technical features cannot be found between the first invention and other inventions. However, even in such cases, the requirement of unity of invention will not be questioned exceptionally for inventions that become the subject of the examination through the following procedure, taking into consideration that Article 37 is a provision established for the convenience of applicants, etc. If some inventions are not the subject of the examination, a notice of reasons for refusal shall be given on the grounds of violation of the requirement of unity of invention.

[Procedure for deciding the subject of the examination]

The existence of a special technical feature is assessed in terms of an invention to which the smallest claim number is attached out of inventions in claims in the same category that include all matters specifying the invention first mentioned in the claims (see, Note).

(Note) The cases where an invention "includes all matters specifying the invention" includes cases of making some or all of the matters specifying the invention into a subordinate concept and cases of further limiting numerical ranges when some of the matters specifying the invention are numerical ranges, in addition to the cases of adding another matter specifying an invention to the invention.

Where there is no special technical feature in the inventions in the claims for which the existence of a special technical character have already been assessed, the existence of a special technical feature will be assessed by selecting an invention to which the smallest claim number is attached out of inventions in the claims in the same category, which include all matters specifying the invention in the claim for which the existence of a specific technical feature was just assessed.

The procedure mentioned in is repeated until an invention with a special

technical feature is found. If an invention with a special technical feature is found, (a) inventions for which the existence of a special technical feature has been assessed until then and (b) inventions in the same category that include all matters specifying the invention with said special technical feature will be the subject of the examination.

In the procedure mentioned in , where the invention in a claim for which the existence of a special technical feature is to be assessed next is an invention that was made by adding a technical feature that has little technical relationship to the invention for which the existence of a special technical feature has been just assessed, and the specific problem to be solved by the invention, which is understood from said technical feature, also has little relevance, the inventions for which the existence of a special technical feature of a special technical feature has been assessed until then will be the subject of the examination without further assessing the existence of a special technical future.

Other inventions of which examination has substantially been completed as a result of examination on inventions that were the subject of the examination in or (for example, inventions that differ only in terms of category expression) will also be added to the subject of the examination.

In the above procedure, where a matter specifying an invention is expressed by alternatives in a claim (including multiple dependent claims), such a claim is treated as if each invention understood by choosing each alternative is described as a separate claim in the order of said alternatives. In determining if the claim includes all matters specifying an invention, it doesn't mater whether a claim is formally an independent claim or a dependent claim.



Claims in shaded boxes are those in the same category, which include all matters specifying the invention of claim 3 with a special technical feature.

4.3 Examples of Procedure of Examination in the Case Where the Invention First Mentioned in the Claims Does Not Have Any Special Technical Feature

Example 1:

- Claim 1: A process for cooling a superconductive coil by soaking it in a cooling medium.
- Claim 2: A process for cooling a superconductive coil described in claim 1, wherein said cooling medium is liquid helium.
- Claim 3: A process for cooling a superconductive coil described in claim 2, wherein the superconductive coil is further cooled using a refrigerating machine.

- Claim 4: A process for cooling a superconductive coil described in claim 3, wherein the cooling stage of the refrigerating machine and the superconductive coil are thermally connected via a copper plate.
- Claim 5: A process for cooling a superconductive coil described in claim 3, wherein the superconductive coil is brought into direct contact with the cooling stage of the refrigerating machine.



(Explanation)

The subject of the examination is decided following the procedure mentioned in 4.2 since the invention in claim 1 does not have any special technical feature.

"Liquid helium," added to the invention in claim 2 that includes all matters specifying the invention in claim 1, is a subordinate concept of "cooling medium," which is the technical feature of the invention in claim 1. Thus, the technical features of these claims are closely related to each other. Therefore, the existence of a special technical feature is assessed with respect to the invention in claim 2. In this example, as the invention in claim 2 also does not have any special technical feature, the procedure proceeds to claim 3, which includes all matters specifying the invention in claim 2. The specific problem to be solved, which is understood from "refrigerating machine" added to the invention in claim 3, relates to the cooling of a superconductive coil, and it is closely related to the problem to be solved by the invention in claim 2. Therefore, the existence of a specific technical feature is assessed with respect to the invention in claim 3.

- (i) Where the invention in claim 3 has a special technical feature, inventions in claims 1 to 3 for which the existence of a special technical feature has been assessed until then and inventions in claims 4 and 5, which include all matters specifying the invention in claim 3, are the subject of the examination without questioning the requirement of unity of invention.
- (ii) On the other hand, where the invention in claim 3 does not have any special technical feature, the procedure proceeds to claim 4, which is the claim to which the smallest claim number is attached out of claims that include all matters specifying said invention. The specific problem to be solved, which is understood from "copper plate" added to claim 4, is an increase in the efficiency of cooling a superconductive coil, and it is closely related to the problem to be solved by the invention in claim 3. Therefore, after determining the existence of a special technical feature in the invention in claim 4, inventions in claims 1 to 4 for which the existence of a special technical feature has been assessed until then are the subject of the examination. The invention in claim 5 is not the subject of the examination since it is not a claim to which the smallest claim number is attached out of claims that include all matters

specifying the invention in claim 3, which does not have any special technical feature. A reason for refusal on the grounds of violation of the requirement of unity of invention is notified along with the result of examination on the inventions in claims 1 to 4.

Example 2:

Claim 1: Glasses frames characterized by weight-saving using titanium alloy.

Claim 2: Glasses frames characterized by weight-saving using β titanium alloy.

Claim 3: Glasses with glasses frames described in claim 2 and lenses of which impact resistance is improved using plastic material Y.



Inventions in claims 1 and 2 do not have any special technical feature.

The subject of the examination is decided following the procedure mentioned in 4.2 since the invention in claim 1 does not have any special technical feature.

"Glasses frames using β titanium alloy," added in the invention in claim 2, which includes all matters specifying the invention in claim 1, is a subordinate concept of "glasses frame using titanium alloy," which is the technical feature of the invention in claim 1. Thus, the technical features of these inventions are closely related to each other. Therefore, the existence of a special technical feature is assessed with respect to the invention in claim 2. In this example, the procedure proceeds to claim 3, which includes all matters specifying the invention in claim 2, since the invention in claim 2 also does not have any special technical feature. "Lenses using plastic material Y," added to the invention in claim 3, constitute a technical feature that has little relevance to the invention in claim 2; and the problem to be solved by the invention in claim 2. Therefore, the invention in claim 3 is not the subject of the examination, and a reason for refusal on the grounds of violation of the requirement of unity of invention is notified along with the result of examination on inventions in claims 1 and 2, for which the existence of a special technical feature has been assessed.

4.4 Remarks

(1) In light of what is indicated in 4.1 and 4.2 above, if there is a claimed invention that does not become the subject of the examination, the invention shall be clearly indicated in a notice of reasons for refusal along with reasons thereof.

(2) Failure to meet the requirement of unity of invention (Patent Act Article 37) constitutes a reason for refusal (Patent Act Article 49), but does not constitute a reason for invalidation (Patent Act Article 123). Article 37 is a provision established for convenience of a third party and the Patent Office. Unlike other reasons for refusal, lack of unity of invention does not mean a substantive defect of patented inventions but a formal defect that the single application should have been split into two or more applications. Moreover, even if a patent is maintained, it does not directly inflict serious damages on third parties' interests.

Considering such circumstances, the requirement of unity of invention shall not be applied in

an unnecessarily strict manner to other inventions of which examination has been substantially completed as a result of examination on inventions that become the subject of the examination in light of basic concept which is indicated in 4.1, and inventions for which it is not easy to determine whether the requirement of unity of invention is met in relations with the invention first mentioned in the claims. Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part I: SPECIFICATION

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Chapter 2 Requirements for Unity of Application

Patent Law Section 37

Where there are two or more inventions, they may be the subject of a patent application in the same request provided that these inventions are of an invention claimed in one claim (hereinafter referred to as "the specified invention") and of another or other inventions having the relationship as indicated below with respect to such specified invention:

- (i) inventions of which the industrial applicability and the problem to be solved are the same as those of the specified invention;
- (ii) inventions of which the industrial applicability and the substantial part of the features stated in the claim are the same as those of the specified invention;
- (iii) where the specified invention relates to a product, inventions of process of manufacturing the product, inventions of process of using the product, inventions of process used for handling the product, inventions of machines, instruments, equipments or other things used for manufacturing the product, inventions of products solely utilizing the specific properties of the product, or inventions of things used for handling the product;
- (iv) where the specified invention relates to a process, inventions of machines, instruments, equipments or other things used directly in the working of the specified invention;
- (v) inventions having a relationship as provided for in Cabinet Order.

1. Requirements for Unity of Application

(1) Meaning of the term of "unity of application"

"Unity of application" refers to the scope of inventions that could be filed for patent in a single application, and is synonymous to the "unity of invention" in Western counterparts.

(2) Purport of requirements for unity of application

The provision concerning unity of application (Patent Law section 37) is designed to provide for convenience of applicants, third parties and the Patent Office, by allowing two or more inventions which are technically closely interrelated to be filed for patent in a single application. In other words, the requirements for unity of application prescribe cases where two or more inventions which could also be separately filed for patent, may be filed in a single application.

(3) Principle of requirements for unity of application

Requirements for unity of application are met when the invention defined in each claim of an application is associated with a specified invention in a relation prescribed under any one subparagraph of Patent Law section 37. (inventions satisfying such conditions are hereafter referred to as "related inventions.") The term "specified invention" herein stands for an invention described in a particular claim, in a patent application containing two or more claims. (See "2.3").

A single patent application may contain no more than one specified invention, the reason for which is to preclude infinite expansion of the scope of unity of application by serially linking the relationships between specified and related inventions.

1.1 Relationship under Section 37(i)

Patent Law section 37(i) provides for unity of application between specified invention and related inventions for which the industrial fields of application and the problems to be solved are both the same.

Specified and related inventions falling under this relationship must be expressed in the same category, i.e. "product and product" or "process and process."

(Note) The following examples of cases falling under Patent Law section 37(i) may also fall under section 37(ii).

1.1.1 Same Industrial Field of Application

By "industrial field of application" is meant the technical field to which the invention belongs, and technical fields directly associated with said field. "Same industrial field of application" refers to cases wherein the specified and related inventions share a common "industrial field of application," which may be typified as follows:

(1) When the technical fields of the specified and related inventions are identical

(2) When the technical fields of the specified and related inventions overlap one another

(3) When the technical fields of the specified and related inventions have direct technical interrelationship

In applying Ministerial Ordinance under Section 36(iv), when, as in the invention developed based on a new idea completely different from the prior art, it is considered that the existing technical field to which the invention pertains is not envisaged, the description of the new technical field developed by the invention may be enough and the description of the existing technical field must not be mandatory. Thus, in this case, the new technical field and the technical field bearing a direct relationship to the field thereof shall be deemed as the field of industrial application under Section 37.

(1) When technical fields are identical

When the technical fields for the specified and related inventions are identical, their industrial fields of application are considered to be the same.

(Example 1)

Specified invention:

Automatic transmission using fluid coupling.

Related invention: 1

Automatic transmission using metallic belt.

Both inventions belong to the same technical field of "automatic transmissions." Hence, their industrial fields of application are the same.

(Note) The examples presented are hypothetical examples designed to facilitate understanding. Assumption is made that the inventions presented in the examples are not identical to one another. The same applies hereafter.

(2) When technical fields overlap

When the technical fields of the specified and related inventions are related to each other as generic and specific concepts, and hence overlap one another, their industrial fields of application are considered to be the same.

(Example 2)

Specified invention:

Magnetic recording medium coated with a double layer of magnetic substances X and Y. <u>Related invention:</u>

Floppy disc comprising a magnetic disc coated with a double layer of magnetic substances X

and Y, and contained in a jacket of certain construction.

The technical fields of both inventions are "magnetic recording medium" and "floppy disk," respectively, and have the relationship of a generic and a more specific concept, thus the technical fields are overlapping with each other. Therefore, the field of industrial application of both inventions is deemed to be the same.

(3) When technical fields have direct technical relationship

The following examples are the cases where "the technical fields technically have a direct relationship to each other." In this case, the fields of industrial application of both inventions are the same.

(Example 3)

Specified invention:

Driving means for automatic doors powered by linear motor.

Related invention:

Automatic door of certain construction provided with driving means powered by linear motor.

These inventions each belong to the technical fields of "driving means" and "automatic doom." Since it is mentioned in the first claim that the driving means is intended for use in the field of automatic doors, the technical fields of the two inventions have direct technical interrelationship, and hence their industrial fields of application are considered to be the same.

(Note) The technical fields of two inventions may be found to have direct technical interrelationship, by describing the inventions as in the present example, though application to automatic doors of the driving means of the specified invention may not immediately be considered as being appropriate, supposing there had been no mention of application to automatic doors of the driving means of the specified invention.

(Example 4)

Specified invention:

Fiber A (incombustible fiber) composed of certain substances.

Related invention:

Nonflammable curtain made of fiber A composed of certain substances.

The two inventions each belong to the technical fields of "fiber A" and "nonflammable curtains," wherein the application of technology related to fiber A to the field of nonflammable curtains is considered quite appropriate. The technical fields for the two inventions therefore have direct technical interrelationship, and their industrial fields of application are considered to be the same.

(Example 5)

Specified invention:

Bolt provided with male thread of certain configuration.

Related invention:

Nut provided with female thread of certain configuration.

The two inventions each belong to the technical fields of "bolts" and "nuts," whereas bolts and nuts are commonly used in combination. The technical fields of the two inventions therefore have direct technical interrelationship, and hence their industrial fields of application are considered to be the same.

1.1.2 Same Problems to be Solved by Inventions

By "problems to be solved by the invention" is meant problems having been unsolved prior to application which the invention is intended to solve. The problem to be solved therefore must be objectively grasped from the description in the entire specification in relation to prior arts.

In application of Ministerial Ordinance under Section 36(4), on the other hand, the "problem to be solved" is deemed to be those by the claimed invention regardless of whether the problem had been unsolved or not by the time of filing the application, and this constitutes a difference between "problem to be solved" under Section 37(i) and that of Ministerial Ordinance mentioned above. Furthermore, in application of above-mentioned Ministerial Ordinance, if it is recognized that the problem to be solved was not envisaged as in case of an invention developed based on a new idea completely different from the prior art or based on the discovery resulted from try and error, the description of the problem to be solved by the invention as of the filing can be conceived based on the entire description of the specification and drawings taking into consideration the common general knowledge as of the filing, it is deemed that there is no relationship under Section 37(i) due to the lack of a problem to be solved.

"Same problems to be solved by the inventions" refers to problems to be solved that are common to the specified and related inventions. Cases where one or more of the problems to be solved by the inventions are identical, or where they overlap, fall under this condition.

(Example 6)

Specified invention:

Electroconductive ceramic composed of silicone nitride and titanium carbide.

Related invention:

Electroconductive ceramic composed of silicone nitride and titanium nitride.

The common unresolved problem prior to application of the two inventions is to provide electroconductivity to ceramics comprising silicone carbide as the main ingredient, in order to enable electrodischarge machining.

(Example 7)

Specified invention:

Electroconductive ceramic composed of silicone nitride and titanium carbide.

Related invention:

Electroconductive ceramic composed of silicone nitride and titanium nitride with ceramic fibers further added.

The problem to be solved by the specified invention is to enable electrodischarge machining, while the problem to be solved by the related invention is to enable electrodischarge machining while reinforcing the ceramic. The problems that the inventions are to solve therefore overlap, in enabling electrodischarge machining, and are common to both inventions.

1.1.3 Examples

(Example 8) <u>Specified invention:</u> Electroconductive ceramic composed of silicone nitride and titanium carbide. <u>Related invention:</u> Electroconductive ceramic composed of silicone nitride and titanium nitride.

Both inventions belong to the technical field of electroconductive ceramics, and hence share the same industrial field of application. The problems to be solved by the inventions are also the same, as explained in 1.1.2 (Example 6). The two inventions therefore satisfy the conditions prescribed under Patent Law section 37(i).

(Example 9)

Specified invention:

Transmitter provided with time axis expander for video signals.

Related invention:

Receiver provided with time axis compressor for video signals received.

Related invention:

Transmission equipments for video signals comprising a transmitter provided with time axis expander for video signals and a receiver provided with time axis compressor for video signals received.

The inventions of this example constitute so-called subcombinations and combination." Subcombinations" refer to inventions of equipments or subprocesses, which when combined, make up inventions of combined equipments comprising combinations of two or more equipments, or combined processes comprising combinations of two or more subprocesses (hereafter referred to as "combinations").

In this example, the specified invention relates to the technical field of transmitters for video signals, while the related inventions each relate to technical fields of receivers for video signals and transmission equipments for video signals. It is considered that combination of technology in the field of transmitters for video signals with technology in the field of receivers for video signals, or application of said technology to the field of transmission equipments for video signals, is quite appropriate, and that the industrial fields of application for these inventions are therefore the same. Meanwhile, the problem to be solved by these inventions is common, which lies in enabling transmission of video signals through a narrow frequency band. The three inventions therefore satisfy the conditions prescribed under Patent Law section 37(i). According to the concept described above, the requirement of Patent Law section 37(i) would still be met even in the absence of the combination claim.

1.2 Relationship under Section 37(ii)

Patent Law section 37(ii) provides for unity of application between specified and related inventions for which the industrial fields of application and the substantial parts of the matters defining the inventions are both the same. Specified and related inventions falling under this relationship must be expressed in the same category, i.e. "product and product" or "process and process."

1.2.1 Same Industrial Field of Application

The determination for identity of industrial fields of application is similar to that described in "the relationship under Section 37(i) (refer to 1.1.1)."

1.2.2 Same Substantial Parts of Matters defining Inventions

The substantial parts of the matters defining the inventions in claims refer to new matter corresponding to the problems to be solved by the invention. "Same substantial parts of the matters defining the inventions in the claims" refers to cases wherein the specified

inventions and related inventions share common new matter corresponding to the problems they are to solve. The identity of substantial parts here holds not only in cases where the substantial part of the matter defining the specified invention serves as the substantial part of the matters defining the related invention, but also in cases where the related invention has, as its substantial part, the entire part thereof or has, as its entire part, the substantial part thereof.

In applying Ministerial Ordinance under Section 36(iv), as in an invention developed based on a new idea completely different from the prior art or an invention developed from discoveries resulted from the trail and error, where it is recognized that the problem to be solved is not envisaged, description of the problem must not be mandatory. In this case, when the matters defining the inventions in the claims are new, the above-mentioned matters shall be deemed to be the substantial part.

1.2.3 Intermediate and Final Product

In order that an invention related to an intermediate and an invention related to a final product meet the relationship under Section 37(ii), the following requirements (a) and (b) must be satisfied.

(a) An intermediate and a final product have the same substantial structural element.

(i) The new fundamental form in chemical structure of the intermediate is common to that of the final product; or

(ii) The chemical structures of both products are technically closely related to each other.

(b) The intermediate and the final product are technically related to each other, in other words, the final product is manufactured directly from the intermediate, or manufactured through a small number of the other new intermediates including the same substantial structural element.

When either the requirement of (a)(i) or (a)(i) is met, the requirement of the sameness of the substantial part of the matters defining the inventions in claims under Section 37(ii) is satisfied with. When the requirement of (b) is met, the requirement of the sameness of the field of industrial application is satisfied with.

Even when the structure is unclear, the intermediate and the final product may meet the relationship under Section 37(ii). For example, the intermediate with clear structure and the final product with unclear structure, or the intermediate with unclear structure and the final product with unclear structure may meet the relationship under Section 37(ii).

In this case, in order to meet the relationship under Section 37(ii), there must be sufficient evidence showing that the structures of the intermediate and the final product are technically closely related to each other, for example, to such a degree that the intermediate includes the same substantial component as that of the final product, or the intermediate incorporates the substantial component into the final product.

In cases where the individual intermediates used in different processes to manufacture one final product include the same substantial component, the inventions related to the final product and the individual intermediates can be included in one application since both the field of industrial application and the substantial part of the matters defining the inventions in claims are the same.

In cases where the intermediate and the final product are defined in claims so as to comprise a compound group, the respective intermediate compounds must correspond to one of the final products defined in the claims. However, since some of the final products may not have a corresponding intermediate compound, the two groups do not necessarily correspond to each other.

The showing that the intermediate has the other effects or exhibits other activity in addition to being used to manufacture the final product does not affect the judgment on Section 37(ii).

1.2.4 Examples

(Example 1)

Specified invention:

Polymeric compound A (transparent substance with improved oxygen barrier characteristics).

Related invention:

Food packaging container composed of polymeric compound A.

The specified invention relates to the field of transparent substance with oxygen barrier characteristics, while the related invention relates to the field of food packaging containers. Application of technology in the field of transparent substances with oxygen barrier characteristics to the field of food packaging containers is found to be quite appropriate, and hence the industrial fields of application for these two inventions are the same. Meanwhile, the related invention has, as the substantial pat of its matters defining the invention, polymeric compound A which is also the novel matters of the specified invention, and the substantial pats of the two inventions are therefore the same.

In conclusion the two inventions satisfy the conditions prescribed under Patent Law section 37(ii).

(Example 2)

Specified invention:

Compound (herbicidal) identified by the following general formula:



Fundamental form (X)

Related invention:

Compound (herbicidal) identified by the following general formula:



Fundamental form (X)

The two inventions relate to chemical substances. As an invention of chemical substance is considered to belong to the field of "substance of specific utility," the industrial fields of application would be the same if the two substances have common utility.

The constitution of a chemical substance is considered to be the chemical substance

itself, and its matters defining the invention are generally represented by the chemical structure of the substance. Therefore, the substantial parts of the matters defining the two inventions of chemical substances would be the same, if the novel basic structure in the chemical structures of the chemical substances is in common. Also, for inventions of chemical substances whose novel basic structures are not considered the same, the substantial part of the matters defining the invention would still be deemed the same if the chemical structures of the two substances are considered to be technically closely related with each other (e.g. chain and ring compounds closed by method of ring closure commonly used in synthesizing ring compounds).

In the present example, the industrial fields of application are the same, since the utility of chemical substances of the two inventions is in common in that they both possess herbicidal property.

Also, the two substances have the same substantial parts of indispensable constituent features, since they share a common novel basic structure (X).

The two inventions therefore satisfy the conditions prescribed under Patent Law section 37(ii).

(Example 3)

Specified invention:

Polymeric compound A identified by the following general formula wherein unit (X) is repeated: (useful as fiber material)



Related invention:

Compound B identified by the following general formula wherein unit (X) is repeated: (useful as intermediate for polymer compound A)



The two inventions relate to so-called intermediate and final chemical product. An intermediate is a substance which is useful as raw material for the final product, and belongs to the technical field of "substance for producing another substance having specific utility." The substantial part of the matters defining the intermediate is grasped as mentioned in example 2, since an invention of intermediate is also an invention of chemical substance.

In the present example, application of technology in the field of substance B to the field of substance A is considered to be quite appropriate, since the principal use for substance B is found in being raw material for substance A. The industrial fields of application are therefore considered the same.

Meanwhile, the matters defining the two substances also are the same, as they share a common novel basic structure (repeating unit (x)).

The two inventions therefore satisfy the conditions prescribed under Patent Law section 37(ii).

1.3 Relationship under Section 37(iii)

Patent Law section 37(iii) provides for unity of application between the specified invention of a "product" and related inventions of "processes for manufacturing said product, processes for using said product, processes for handling said product, machines, instruments, equipments or other means for producing said product, products solely utilizing specific properties of said product, or products for handling said product."

1.3.1 Processes for Manufacturing the Product, and Machines, Instruments, Equipments or Other Things for Manufacturing the Product

The processes or means pertaining to related inventions are those which, on their own merits, cause the raw material or work to be transformed into a product pertaining to the specified invention.

"Other things" of "machines, instruments, equipments or other things" are not limited to "equipments and the like," and include all of other things that act on other materials etc. such as a catalyst or microorganism to change them into the given product.

Furthermore, unity of application shall be recognized if the "processes for manufacturing..." or "machines, instruments, equipments or other things for manufacturing..." are suited to producing the product of the specified invention, even if the same processes or means could be used in producing products other than that of specified invention.

(Example 1) Specified invention:

Substance A.

Related invention:

Catalyst X for producing substance A.

Although catalyst X of the related invention does not fall under "equipments and the like," it does fall under "other thing."

(Example 2)

Specified invention:

Foundation pile provided with a bulbous enlargement at its base.

Related invention:

Process for the formation of bulbous enlargement wherein a cavity is formed in the ground using explosives, into which cavity concrete is poured.

The related invention of a process for forming a bulbous enlargement is suited to producing the foundation pile of the specified invention.

(Example 3)

Specified invention:

Clutch of specific construction

Related invention:

Process of manufacturing friction clutch of specific construction

The process of manufacturing the friction clutch of the related invention is suitable for manufacturing the clutch of the specified invention.

1.3.2 Process of using the Product and Product for Exclusively Using the Specific Characteristic of the Product

"Processes of using the product" refers to processes utilizing the characteristics or

functions of the product, while "products for exclusively using the specific characteristic of the product" refers to products for exclusively using the attribute of a certain product.

The invention of a process of using a "product" to manufacture "another product," in cases where it is extremely appropriate that the "product" is used for manufacturing "another product" in view of the characteristic and function of the "product", can be included in an invention of a process for using the characteristic and function of the "product".

(Example 4) <u>Specified Invention:</u> Substance A. <u>Related invention:</u> Process for killing insects using substance A.

(Example 5) <u>Specified Invention:</u> Substance A. <u>Related invention:</u> Insecticide composed of substance A. Specified invention: Substance A

(Example 6) <u>Specified invention:</u> Compound A (useful as the intermediate of compound B) <u>Related invention:</u> Process of manufacturing compound B by reacting compound A with another compound Related invention:

Process of manufacturing compound A

The relation between the specified invention and the first related invention is the socalled process of manufacturing an intermediate and a final product. Compound A is mainly used for the material of compound B of the first related invention. Manufacture of compound B by reacting compound A of the specified invention with another compound is extremely appropriate in view of the characteristic and function of compound A. The process of the first related invention is the process of using the characteristic and function of compound A of the specified invention. Thus, both inventions correspond to a product and a process for using the product. The second related invention corresponds to a process of manufacturing compound A of the specified invention. Three inventions in this example meet the requirements for unity of application.

(Example 7) <u>Specified invention:</u> A recombinant microorganism including DNA X <u>Related invention:</u> DNA X <u>Related invention:</u>

Process of manufacturing polypeptide A by culturing recombinant microorganism including DNA X

The first related invention bears the relationship under Section 37(i) and (ii) with respect to the specified invention. Use of the recombinant microorganism of the specified invention for manufacturing polypeptide A is extremely appropriate in view of polypeptide A producing function of the recombinant microorganism. The second related invention is a process of using the characteristic and function of the recombinant microorganism of the

specified invention. Thus, both inventions correspond to a product and process of using the product. Three inventions, of this example, meet the requirements for unity of application.

(Example 8)

Specified invention:

Fuel burner A provided with a fuel inlet in the direction tangent to a mixing chamber <u>Related invention:</u>

Process of manufacturing carbon black including a step for allowing a fuel to flow in the direction tangent to a mixing chamber of fuel burner A

Related invention:

Process of manufacturing fuel burner A including a step for forming a fuel inlet in the direction tangent to a mixing chamber

The fuel burner A of the specified invention is suitable for efficiently manufacturing carbon black. It is extremely appropriate that the fuel burner A is used for manufacturing carbon black. The process of the first related invention is a process of using the function of the fuel burner A of the specified invention. Thus, both inventions correspond to a product and process of using the product. The second related invention corresponds to a process of manufacturing the fuel burner A of the specified invention. Three inventions in this example meet the requirements for unity of application.

1.3.3 Handling Process for the Product, and Product for Handling the Product

"Handling a product" refers to the maintenance and/or extraction of the function of the product, by externally acting on the product, in principle without causing change to the essence of the product. Transportation and storage of the product, for example, fall under this category.

Unity of application shall be recognized if the "handling process for the product" or "product for handling the product" of the related invention is suited to handling the product of the specified invention, even if the same process or product could also be applied to handling products other than the product of specified invention.

(Example 9)

Specified invention:

Prefabricated house of certain construction.

Related invention:

Process for storing and transporting prefabricated houses of certain construction.

The storage and transportation process of the related invention maintains and extracts the function of the prefabricated house of the specified invention. The two inventions therefore relate to a product and a process for handling said product.

(Example 10) <u>Specified Invention:</u> Unstable chemical compound A. <u>Related invention:</u> Storage means for unstable chemic

Storage means for unstable chemical compound A.

The storage means of the related invention is for the maintenance of the functions of substance A of the specified invention. The two inventions therefore relate to a product and a product for handling the same.

1.4 Relationship under Section 37(iv)

Patent Law section 37(iv) provides for unity of application between a specified invention pertaining to a "process" and related inventions pertaining to "machines, instruments, equipments or other things" directly used in working of the invention of the process."

1.4.1 Machines, Instruments, Equipments or Other Things Directly Used in the Working of Invention of Process

It is sufficient for the means of related inventions to be used directly in carrying out the process of the specified invention. In addition to machines, instruments and equipments, other things including catalysts, microorganisms, materials and matters to be processed are allowed to become related inventions. (See 1.3.1)

Unity of application shall be recognized even if the product of the related inventions could also be applied to carrying out processes other than the process of the specified invention, if they are suited to carrying out the process of the specified invention.

(Example 1)

Specified invention:

Process for producing antibiotic A by cultivating microorganism X.

Related invention:

Microorganism X.

Although microorganism X of the related invention does not fall under "equipments and the like" for carrying out the process of the specified invention, it does fall under "other things."

(Example 2)

Specified invention:

Process for producing concrete products wherein ice granules are mixed into the cement together with aggregate, and then poured into molds.

Related invention:

Equipments of certain construction provided with an ice crushing unit and a mixing unit for mixing the crushed ice with cement and aggregate.

The equipments of the related invention comprising an ice crushing unit and a mixing unit is suited to carrying out the process of the specified invention for producing concrete products.

(Example 3)

Specified invention:

Method for measuring water depth comprising certain procedures.

Related Invention:

Distance measuring equipment of certain construction.

The equipment of the related invention is suited to measuring water depth, though it could be applied to making other forms of measurements also.

(Example 4)

Specified invention:

Process of preparing final product Z by oxidizing intermediate A

Related invention:

Process of preparing final product Z by reacting compound X and compound Y to prepare intermediate A and oxidizing the intermediate A

Related invention:

Intermediate A

The first related invention bears the relationships under Section 37(i) and (ii) with respect to the specified invention. The intermediate of the second related invention does not correspond to "apparatuses" directly used in working of the preparing method of the specified invention, but corresponds to "other things." Three inventions of this example meet the requirements for unity of application.

1.5 Relationship under Section 37(v)

Section 37(v) of Patent Law is a provision left to Cabinet Order. Specifically, it recognizes unity of application for related inventions satisfying the provisions of Patent Law section 37(iii) or (iv) in relation to other related inventions, claimed in the Scope of Claims, which in turn satisfy the provisions of Patent Law section 37(i) or (ii) in relation to a specified invention. (Section 2 of Enforcement Orders for Patent Law)

In the above-mentioned case, if neither invention having one of the relationships under Section 37(i) or (ii) with respect to the specified invention is not stated in claims, the application does not comply with the requirement under Section 37.

(Example 1)



falls under Patent Law section 37(ii), whereas the invention of process for producing intermediate B falls under Patent Law section 37(iii) in relation to the invention of intermediate B. The process for producing intermediate B therefore satisfies the provision of Patent Law section 37(v).

1.5.1 Product, Improved Product, and Process of Manufacturing the Improved Product

When the invention of improvement satisfies the provision of Patent Law section 37(i) or (ii) in relation to the specified invention of product, unity of application shall be recognized also for the invention of process for manufacturing said improved product, since the improved product and the process for manufacturing said improved product satisfy the provision of Patent Law 37(iii) (product and process for producing said product).

(Example 2) <u>Specified invention:</u> Spectacle frame made of titanium alloy. <u>Related invention:</u> Spectacle frame made of nitride coated titanium alloy. <u>Related invention:</u> Process for producing spectacle frames wherein titanium alloy is formed in one piece. <u>Related invention:</u>

Process for producing spectacle frames wherein titanium alloy is formed in one piece, and then deposited with nitride by vacuum evaporation.

In relation to the specified invention, the first and second related inventions satisfy the provisions of Patent Law section 37(ii) and (iii) respectively. The third related invention relates to a process for manufacturing the product of the first related invention, and hence satisfies the provision of Patent Law section 37(v) in relation to the specified invention.

2. Examination on Requirements for Unity of Application

2.1 Basic Attitude

Failure to meet the requirements for unity of application (Patent Law section 37) constitutes a reason for refusal (Patent Law section 49), but does not constitute reason for opposition (Patent Law section 55) or reason for invalidation (Patent Law section 123). This is because Patent Law section 37 is a provision established for the convenience of applicants, third parties and the Patent Office, and unlike other reasons for refusal, does not directly inflict serious damage to third parties if overlooked, as it concerns minor procedural deficiency in that the application should have been divided into two or more, rather than substantive faults in the invention.

Accordingly, considering the purport of Patent Law section 37, it would be improper to make unnecessarily strict examination on the requirements for unity of application.

2.2 Notice of Reason for Refusal

Reasons for refusal concerning unity of application would occur when two or more separate inventions do not fall under the provisions of any subparagraph under Patent Law section 37. The reasons by which the inventions do not meet the requirements shall be indicated as concretely as possible.

In such instances, suggestions should be made on the division of application if it is expected to facilitate response by the applicant, and thereby contribute to expediting accurate examination. It should be noted however, that such suggestions are not legally binding.

When a divisional application is made on claims violating requirements for unity of application as a result of notice of reasons for refusal concerning unity of application, disallowing the divisional application on grounds of identity of inventions between the original and divisional applications (against section 39) would be contrary to the purport of Patent Law section 37. Therefore, notice of reasons for refusal that may lead to such results shall not be made.

2.3 Identification of the Specified Invention

The claim corresponding to the specified invention shall be chosen to maximize the benefit to applicants, or in other words so as to recognize unity of application as broadly as possible.

When there are two or more claims in the Scope of Claims, the invention described in one of the claims would be provisionally selected as the specified invention, in relation to which examination on the requirements for unity of application is to be made. If there is found as a result of the examination any claim which does not meet the requirements of the subparagraphs under Patent Law section 37, one of the other claims shall be selected one by one as the new provisional specified invention in relation to which examination on the requirements of unity of application is to be made.

For example, it is considered more efficient to perform examination on requirements under Patent Law section 37 by first selecting the invention described in a "product" claim as the specified invention if there is one among two or more claims, and by first selecting the invention described in a "process" claim as the specified invention if there is no "product" claim.

Normally, for inventions satisfying the requirements prescribed in Patent Law section 37 (i) or (ii), no difference should occur in the outcome of examination on requirements under Patent Law 37 whichever claim is selected as the specified invention.

2.4 Examination on Related Inventions

When the requirements for unity of application are met among inventions described in independent form, lack of unity for inventions described in dependent form is expected to be rare. Therefore, it would normally suffice to examine the relationships between specified and related inventions only for claims written in independent form.

However, attention may be necessary in cases such as claims referring to other claims expressed in different categories, as these may affect the outcome of examination on the requirements for unity of application.

2.5 Relationship between the Provisions of Section 37 and Section 36(5), and Manner of Examination

Patent Law section 37 provides that two or more separate inventions in particular relationships may be filed in a single application, whereas Patent Law section 36(5) provides that identical inventions may be described in separate claims. This implies that a claimed invention would be in violation of the requirements of Patent Law section 37 only if it is neither identical to the specified invention or another related invention, nor in compliance with the provisions of any subparagraph under Patent Law section 37.

Therefore, in examination practice related to unity of application, examination as to whether each claim satisfies the requirements under Patent Law section 37 shall be made by first assuming that every claimed invention is different from one another, and then determining whether the claimed inventions that do not meet the requirements are identical to other claimed inventions.

If, as a result of such examination, a claimed invention is found to be identical to another claimed invention, its description in a single claim would be allowed under the provisions of Patent Law section 36(5). Notice of reasons for refusal on grounds of violation of the provisions under Patent Law section 37 would therefore be made only for those which are found to be different from any other claimed invention.

3. Examples

Matters that require attention for the use of examples

- (1) These examples are prepared for demonstrating the Unity of Application based on the provisions of the Patent Law Section 37. It should be kept in mind that the details of statement are not complete, because descriptions of clams in each example include some simplifications in order to simplify the explanatory process of the Unity of Application in multiple applications.
- (2) Each example shows requirements for the Unity of Application alone, under the assumption that an invention described in each claim constitutes a different invention and also includes novelty and inventive step. In addition, describing several claims of an invention, which can be considered the same invention, are allowed according to the provisions of Patent Law Section 36(5).
- (3) Some examples satisfy multiple relationships indicated in each item of Patent Law Section 37 at the same time. In such a case, one of the principal relationships is explained.

3.1 The requirements for Unity of Application

3.1.1 The meaning of the term "Unity of Application"

The term "Unity of Application" indicates the range of inventions and devices, which can be filed in one application. This is a term synonymous with "Unity of Invention" in western countries.

3.1.2 The purport of the requirements for Unity of Application

The provisions of Unity of Application (Patent Law Section 37 and Utility Model Law Section 6) are meant to reduce the demand on applicants, a third party and the Patent Office, for the sake of convenience, by allowing the inventions and devices that are technically close to each other to be filed in one application. In another word, the requirements for Unity of Application provide the cases that two and more inventions and devices, which might be filed in different applications, can be filed in one application.

3.1.3 A general rule of the requirements for Unity of Application

Unity of Application satisfies the requirements, when inventions or device described in each claim included in one application for patent or one application for utility model registration meet any of the relationships provided by each item of Patent Law Section 37 or Utility Model Law Section 6 for the specified invention and device (the invention and device which satisfy such relationship are called related invention and device). The specified invention and device described here indicate the invention and device mentioned in a specified claim in an application for patent or an application for utility model registration including two and more claims.

3.2 Relationship under Patent Law Section 37(i)(ii)

The specified invention and related inventions should belong to the same category "a product and a product," or " a process and a process" to meet the provisions of Patent Law Section 37(i)(ii).

Judgement is made as to whether two or more inventions satisfy the relationship of (i) or (ii) of this section according to the industrial field of application and the problem to be solved or the substantial parts of matters in the claim. The requirement, the same industrial field of application, is common to Patent Law Section 37(i)(ii). In addition, the same industrial field of application indicates the case that the specified invention and related invention are in a common industrial field of application. The types are as follows:

(1) Where the specified invention and related invention have same technical field;

(2) Where the technical fields of the specified invention and related invention overlaps; and

(3) Where the technical fields of the specified invention and related invention are technically and directly related.

3.2.1 Relationship under Patent Law Section 37(i)

To judge as to whether or not the relationship prescribed under Patent Law Section 37(i) is satisfied, it is judged whether the specified invention and related invention have the same industrial field of application and deals with the same problem to be solved. The problems to be solved are technical problems to be solved that have not been solved at the filing time and would be solved by the invention.

The same problem to be solved denotes that the specified invention and related invention have a common problem to be solved, and it is considered whether one or more problems to
be solved in both inventions are the same or overlapped.

The following examples exemplify Patent Law Section 37(i) and may include the examples that meet the relationship prescribed under Item (ii) of the section at the same time; however, the explanation about same problems to be solved is given here.

[Example 1]

[Title of the Invention]

Flipper and shoe that is fitted to the flipper

[Claims]

- 1. A flipper comprising a flexible fin area (12) and a practically flat mounting area for shoe, and having a hole which an attaching screw for fitting the flipper to the shoe can go through in the area for mounting. (See Figure 1 and 2)
- 2. A shoe, which is fitted to the flipper and has a hole that an attaching screw for mounting the flipper can go through in the bottom. (See Figure 1 and 2)

[Excerpt from Detailed Description of the Inventions and Drawings]

This is the invention concerning a flipper and a shoe that is mounted to the flipper for underwater usage.

In this invention, the section of a shoe is made separately from the flipper for fitting any size of the foot, and the shoe can be attached to and removed from the flipper.



[Explanation]

The technical fields of the specified invention (claim 1) and related invention (claim 2) are flipper and shoe, respectively. However, the technical field of both inventions has direct relationship and the same industrial field of application since the shoe of related invention is used while fitted to the flipper. In addition, both inventions have the same problem to be solved: a flipper can be used for any foot.

[Concerned Section]

[Example 2]

[Title of the Invention]

Multi shaft cooling system

[Claims]

- Multi shaft cooling system comprising first and second main shafts with hollow chambers (1, 2) and the first and second radiators (81, 8) for diffusing the heat generated in this first and second main shafts (1, 2), characterized in that the first and second main shafts (1, 2) and said first and second radiators (81, 8) are serialized each other through the steam pipe (10, 101) rendering the steam of working fluid to be vaporized in the chamber of each of said second and first radiators (8, 81) and a fluid pipe (12, 121). rendering the working fluid to be condensed in the first and second radiators (81, 8) to each chamber of the first and second main shafts. (See Figure 1)
- 2. Multi shaft cooling system, which has following features; It is equipped with first and second main shafts with chambers (1, 11) and a single radiator (8) for diffusing the heat generated in this first and second main shafts (1, 11). The first and second main shafts (1, 11) mentioned above are connected to a radiator (8) mentioned above through a steam pipe (10,101) rendering the steam of working fluid to be vaporized in the chamber to the radiator (8), and a fluid pipe (12, 121) rendering the working fluid to be condensed in the radiator (8) of the chamber. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This is an invention concerning a multi shaft cooling system for cooling bearing part of more than one main shaft in machine tooling. The type in which a device for radiation is equipped to each main shaft has been used as this kind of machine tool. However, it has a problem to be solved that the accuracy is sacrificed by mutual positioning fluctuation of main shaft because of different thermal deformation of each main shaft.



Figure 1



[Explanation]

Each technical field of the specified invention (claim1) and related invention (claim 2) is a multi shaft cooling system in a machine tool; therefore, the industrial fields of application are the same. In addition, both inventions have same problems to be solved: to control mutual positioning fluctuation of main shaft to a minimum and to improve processing accuracy of machine tool by equally cooling the bearings.

[Concerned Section]

[Example 3]

[Title of the Invention]

Application device for corrugated board web

[Claims]

- 1. An application device for applying corrugated board web (1, 2) to a fixed back face (5) as a heating unit, comprising more than one application roller (7) and guides, characterized in that corrugated board web moves on the fixed back face (5) by leading, said application roller (7) applies corrugated board web (1, 2) at the working position of said fixed back face (5), said guides have endless chain (8) to which said application roller is supported and a sprocket to drive said endless chain (8) in an application device of corrugated board web to move the application roller (7) between a working position and an idle position, and the number of rollers in the working position can be changed corresponding to the desired face for application (B) by driving the endless chain (8) since said application roller is continuously positioned at a fixed length of the endless chain. (See Figure 1)
- 2. The application device for corrugated board web having said guides comprising endless chain (24) to which a forcing support member (27) that moves and supports the application roller (7) to the idle position in the upper part and supports are applied, and a sprocket (9) for driving the endless chain in the application device for corrugated board web. (See Figure 2 and 3).

[Excerpt from Detailed Description of the Invention and Drawings]

This invention is related to an application device for corrugated board web (double feathers device) for heating and adhering single faced corrugated board (2) to the liner (2) in a corrugated board manufacturing system.

The existing application device has such faults that cost of removing a roller is expensive, because, out of the rollers installed vertically, a desired number of rollers must be removed to change the adhesive strength and a large number of parts must be removed.







[Explanation]

The technical fields of the specified invention (claim1) and related invention (claim 2) are the

same; i. e., application device for web for corrugated board. Therefore, the industrial fields of application are the same.

In addition, both invention have the same problem to be solved; It makes possible that the number of application roller on working position is changed continuously for the desired face for application by a relatively simple mechanism.

[Concerned Section]

[Example 4]

[Title of the Invention]

Thermal head driving circuit

[Claims]

1. A thermal driving circuit for the thermal head comprising:

A memory circuit (F1) for high or low memory signal outputs (1) upon clock countdown that stores and updates the dot information (DATA);

a gate (G1) which outputs chopped signals synchronizing with clock signals when the memory signal (1) is high and always outputs high signals when the memory signal (1) is low; and an AND gate (G2) which outputs the AND signal to heating element (H) of the thermal head as driving signals for heating element (H) of the thermal head by inputting output of this gate, clock signals and dot information data (DATA). (See Figure 1, 2)

2. Thermal head driving circuit comprising:

A means for memory (F2) to store and update dot information data (DATA) upon clock countdown and to output high and low signals (1) for this dot information data;

A gate (G3) synchronizes with clock signals to output control signals (4) which divide the power source voltage (Q1, Q2, Z1, Z2) to a power source circuit applying pressure (a) to the heating element (H) of the thermal head when memory signals (1) for this memory measure (F2) are high; and

an AND gate (G4) to output driving signals (5) according to dot information data (DATA) to heating element of the thermal head by inputting clock signals and dot information data (DATA). (See Figure 3,4)

[Excerpt from Detailed Description of the invention and Drawings]

This invention is designed to stabilize the rise of the temperature of the thermal head in a thermal printer. The thermal printer with thermal head containing dot-heating elements has such problems to be solved that when continuous printing is done by applying fixed tension and signals at a regular interval to the dot-heating element, the next printing is done before the temperature goes down, and consequently the temperature of the head gradually rises. This situation causes unevenness in printing and finally eventually the head is damaged because the temperature goes up beyond the tolerance limit. This invention controls the operating power supply to the head by storing dot information and comparing with new information. Therefore, the invention has remarkable effects of keeping the temperature of the head face stable, resulting in stable printing density and preventing the damage to the head.





[Explanation]

Both technical fields of the specified invention (claim1) and related invention (claim 2) are the same thermal head driving circuit. Therefore, the industrial fields of application are the same. In addition, both inventions deal with the same problem to be solved: to keep the rise of temperature of the thermal head stable and keep the printing density stable in spite of that the temperature goes up unevenly by inputting information data applied to the thermal head at random.

[Concerned Section]

[Example 5]

[Title of the Invention]

Transmission belt and Pulley

[Claims]

- A belt with teeth having a concave and cylindrical stress release (23) at the connecting point, and the fringe of the stress release (23) that is 40-60% of half of entire fringe of the tooth (14) mentioned above. (See Figure 1)
- 2. Pulley with teeth having convex and cylindrical face on its shoulder (33), and entire fringe accounting for 40-60% of half of entire fringe of the tooth (16).

[Excerpt from Detailed Description of the invention and Drawings]

This invention relates to a belt transmission device consisting of a belt with teeth and a pulley with teeth. Shear fraction of a belt tooth with pulley tooth is prevented by making the connection of the tooth face and the bottom of tooth face of this belt tooth the specific size of cylindrical face, and making the shoulder of the tip of tooth biting this belt with tooth said cylindrical face as well. As a result, sear strength of this belt with teeth is improved. Trapezoid shaped belt tooth is known as this kind of a belt transmission device, but it has a fault of shear fracture of the belt tooth because of concentrated stress in the base of the tooth.



Figure 1

Figure 2

[Explanation]

The technical fields of the specified invention (claim1) and related invention (claim 2) are a belt with teeth and a pulley with teeth. A belt with teeth and a pulley with teeth are commonly used together as a construction element. Therefore, the technical fields of both inventions have a direct relationship and the industrial fields of application are the same. In addition, the problem to be solved is the same: to reduce the stress which is generated when the belt bites pulley in the base of tooth of the belt tooth, by specifying the shape of the bitten part of the belt tooth and pulley tooth.

[Concerned Section]

[Example 6]

[Title of the Invention]

Gas automatic cut out gear

[Claims]

- 1. Gas automatic cut out gear comprising a bimetal (4) engaged with a bulb (3) and an incoming radiation plate (14) for transmitting the temperature of the burner to the bimetal, characterized in that the bulb (3) is closed by the deformation of said bimetal (4) when the temperature of the bimetal is lowered. (See Figure 1)
- 2. A gas automatic cut out gear having a permanent magnet (19, 21), at least two thermo-ferrites (20, 22, 23) which magnet line of this permanent magnet (19,21) goes through, a bulb (25) of which the switching position is kept by the magnetic attraction of these thermo-ferrites (20, 22, 23) and a incoming radiation plate which transmits the temperature of the burner to said thermo-ferrites (20, 22, 23), characterized in that said thermo-ferrites (20, 22, 23) have the different temperature of magnetism elimination. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention relates to a safety device in gas fittings for gaseous fuel to sense the temperature dropping by wind or boil off during burning and to automatically cut out the gas. A device using a complex electronic circuit and operated by commercial power is publicly known as this kind of a system. However it has a fear of secondary disaster such as fault current.



Figure 2

[Explanation]

Both technical fields of the specified invention (claim 1) and related invention (claim 2) are "gas automatic cut off device", and the industrial fields of application are the same.

In addition, both of them try to solve the same problems to be solved: to prevent secondary damage such as fault current, excluding an electronic element.

[Concerned Section]

[Example 7]

[Title of the Invention]

A part of male and female couplers comprising a quick releasing coupler [Claims]

- A part of the female coupler that composes a quick releasing coupler with a part of male coupler (12), comprising a roughly circular external cylinder (13) with a space (14) extended in axial direction for accepting a part of male coupler (12) in one of the edges, a lid to compose inside pass (16), a slidable poppet valve (39) included in the inside pass, a guiding part (41) formed next to the open space around outside of said poppet valve. (See Figure 1)
- 2. A part of a male coupler to compose a quick releasing coupler with a part of a female coupler which comprises: having space extending in axial direction (18) and a circular external cylinder with spherical seat (71) formed in the edge of said space, forming an inside pass in the space by fixing the cap body (20) and a cone with a head (57) next to the spherical seat (71) by fixing the cap body (20), and having a spring (72) to press a spherical valve (19) that is inserted in the cap body (20). (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

Both inventions are concerned with a female coupler and a male coupler in a quick releasing coupler. A female and male coupler only including a check valve or a quick releasing coupler combining them is publicly known as this kind of coupler. However, it has a fault of leaking fluid from the coupler because of the delay of activation in the check valve when the connection is released.



[Explanation]

The technical fields of the specified invention (claim 1) and related invention (claim 2) are female coupler and male coupler of quick releasing coupler. Since a female coupler and a male coupler are used together, the technical fields of both inventions are technically and directly related. The industrial fields of application are the same.

In addition, both inventions solve the same problem to be solved: to prevent fluid leaking from the coupler when the connection is released.

[Concerned Section]

[Example 8]

[Title of the Invention]

Headlamp

- 1. A headlamp having a reflecting mirror (6) and a DC-lighted high-tension electric discharge lamp (3) kept horizontally at almost the focal point of said reflecting mirror (6), means of applying magnetic field (4,5) applying magnetic field in a roughly right angle to ark of the high tension electric discharge lamp (3), and a means of switching electrical current, which switches the direction of ark electrical current (27,28) of said high-tension electrical discharge lamp (3). (See Figure 1, 2)
- 2. A headlamp comprising a reflecting mirror (6), a DC-lighted high-tension electric discharge lamp (3) kept horizontally at almost the focus point of said reflecting mirror (6), a means of applying magnetic field (4,5) applying magnetic field in a rough right angle to ark of said high tension electric discharge lamp (3), and a means of controlling (37, 38) which variably control vector quantity of the magnetic field applied by the step of the applying magnetic field (4, 5). (See Figure 1, 3)

[Excerpt from Detailed Description of the invention and Drawings]

This invention concerns a headlamp, which can switch the main beam for regular driving to the reduced low beam for an oncoming car.

As this kind, a type using both low beam lamp and main beam lamp and switching them is used generally. Recently, using high light conversion efficiency is expected for energy saving. For this reason, using a high-tension electric discharge lamp is considered. However, using a high-tension discharge lamp for the both high and low beams in the present condition results in bulkier and heavier lamps because of the structure of the electric discharge lamp than bulbs currently in use.



Figure 1





[Explanation]

Each technical field of the specified invention (claim1) and related invention (claim 2) is headlamp, and the industrial fields of application are the same.

In addition, they try to solve the same problems to be solved; to get low beam and main beam by bending the ark to upside and downside with just one high tension electric discharge lamp, and to make a headlight using a high tension electric discharge lamp of high light conversion efficiency smaller and lighter weigh.

[Concerned Section]

[Example 9]

[Title of the Invention]

Measuring instrument for traverse for vehicles

[Claims]

- A measuring instrument of traverse for vehicles to display the present position of a vehicle by calculating the travel bearing and mileage of vehicles, having an angle sensor (3) detecting the angle of steering wheel, a means of calculating the traveling bearing mentioned above according to the angle detected by the angle sensor (3) and the fixed initial value. (See Figure 1)
- 2. A measuring instrument of traverse for vehicles to display the present position of a vehicle by calculating according to traveling bearing and mileage of vehicles, having magnetic compass (1) detecting the traveling bearing of vehicles, a means of calculating traveling bearing (27) of vehicles according to the angle of a steering wheel detected by the angle sensor (3) and the fixed initial value, a means of calculating a position (5) which indicates the present position of a vehicle by switching the bearing detected by the magnetic compass to the traveling bearing according to the angle detected by the angle sensor when the error is more than the specified value. (See Figure 2)
- 3. A measuring instrument of traverse for vehicles having a means correcting the present position of a vehicle calculated according to the bearing detected by the magnetic compass to the position detected according to navigation radio, and a measuring instrument of traverse for vehicles which switches to the position calculated by the traveling bearing calculated according to the angle when the receiving level of the above navigational radio is below the specified value. (See Figure 3)

[Excerpt from Detailed Description of the invention and Drawings]

This invention related to a measuring instrument of traverse for vehicles, which indicates the present position of a vehicle by calculating according to traveling bearing and mileage. The traveling bearing of vehicles is calculated according to the angle of a steering wheel, and detecting the position according to navigational radio and detecting by magnetic compass are considered for indicating the position regardless of abnormal radio and magnetic activities.



Figure 1

Figure 2



- 1 magnetic compass
- 3 angle sensor
- 6 receiving antenna
- 8 calculator of receiving position
- 10, 33 switch
- 12 indicator
- 14 angle calculator
- 16, 16' right front wheel
- 28 integrator
- 30 AND gate
- 34 inverter

- 2 traverse sensor
- 4, 5 calculator
- 7 navigational receiver
- 9 low level receiver
- 11 DC power
- 13, 13' vehicle
- 15,15' left front wheel
- 27 travel bearing calculator
- 29, 32 timer
- 31 comparison
- 40 switch

[Explanation]

The technical fields of the specified invention (claim1) and related invention (claim 2, 3) are measuring instrument of traverse for vehicles; therefore, the industrial fields of application are the same.

In addition, the specified invention (claim1,) and related invention (claim 2,3) are dealing with the same problem to be solved: to indicate the position in case of abnormal magnetic activities and radio reception.

[Concerned Section]

[Example 10]

[Title of the Invention]

Dosimeter and reading device

[Claims]

- 1. A dosimeter comprising thermo-luminescence dust (2, 3) loaded in the base (1a, 1b) made of the material which can be heated by microwave radiation. (See Figure 1)
- 2. A reading device of a dosimeter comprising a reader consisting of a pair of coil (11) connected to microwave power source and a photo multiplier (12) placed by the side of each coil at right angle to the coil, and a means for arranging a dosimeter between the pair of coil (11) to detect a beam emitted by the thermo-luminescence dust with the photo multiplier (12). (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention related to a dosimeter, which uses light, emitted by the thermo-luminescence material mixed in the base as a beam by heating. In the prior art, it has been heated directly by a heater, the separation of the holder and base is needed to avoid heating the holder, which keeps the base including thermo-luminescence dust from being heated.

In this invention, it is heated by microwave instead of a heater, and the holder is not heated by microwave. As a result, it can be used without removing the base from the holder.



[Explanation]

A dosimeter of the specified invention (claim1) and a reading device of the related invention (claim 2) are used in combination, so that the technical fields of both inventions have a direct relationship. The industrial fields of application are the same.

In addition, they are dealing with the same problem to be solved: to avoid heating a holder when dosage is measured, using the technology of microwave heating.

[Concerned Section]

[Example 11]

[Title of the Invention]

Multiplex transmission circuit and receiver circuit [Claims]

- 1. A multiplex transmission circuit comprising an input register (304) storing a primary data character of start-stop system to be transmitted, an inputting process of a secondary data character (302) receiving the secondary data character such as status control signals, an output registers (305), a gate (330-332) transferring primary data characters to the output register (305) from the input register (304) when the output register is open and the input register is full, a transfer device (351) transferring a secondary data input system when the input register (304) is not full, a means to output data character in the output register to output line (110). (See Figure 1)
- 2. A distributing receiving circuit having input register (410) for storing the primary and secondary data characters received, an output registers (425) storing a primary data character and secondary data register (430) storing a secondary data character, and distributing data characters to an output register and secondary data register according to mark instruction bit. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

In data communication of computers, transmission of various secondary data such as supervisor, status control signals and channel confirmation signals is required. In the prior art, one of the channels is assigned specifically for transmission of secondary data when it is transmitted on time sharing multiplex.

This invention related to a multiplex transmission circuit in time sharing transmission in which control data are automatically inserted when the time slot assigned to each channel is open and setting the channel specified for the secondary data is not needed. This also concerns a distributing reception circuit, which is used for separating the secondary data from the signals transmitted by sharing time.



Figure 1 Multiplex transmission circuit



Figure 2 Distributing receiving circuit

[Explanation]

The technical field of the specified invention (claim 1) is the multiplex transmission circuit, and the technical field of related invention (claim 2) is the reception circuit. Since combining the technology of multiplex transmission circuit to the technology of reception circuit is extremely proper, the technical fields of both inventions have direct relationship technically, and the industrial fields of application are the same.

In addition, both inventions are aimed to enable transmission of a secondary data using the open slot when time slot is open for eliminating setting the channel specified to the secondary data. Therefore, the problems to be solved of the both inventions are the same. [Concerned Section]

[Example 12]

[Title of the Invention]

Magnetic card for learning and card type recorder [Claims]

- 1. A magnetic card for learning having magnetic track (5) which record or is able to record, whose upstream of the running direction of the card is a part for questions and downstream portion is a part for answers for the questions, forming a notch (7), which is formed to stop the card temporarily between parts for the questions and the answers mentioned above. (See Figure 1)
- A card type recorder with pausing system comprising a detector (45) for the card or a notch formed in the card concerning to the transfer route of the card, and a power switch (44) controlling the operation of the card relating to the action of the detector. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention concerns a card type magnetic recorder for learning, whose recording part is divided into two by means of a notch. It works as follows. The power switch (44) is turned on by the front edge of the card itself by the detector (45) when a card is inserted into the transfer route, and the card is transferred. When the notch (7) of the card comes to the detector (45), the power is turned off. The recorder is at a pause. Moreover, a pause can be released by pressing the back edge of the card.



Figure 2

[Explanation]

The technical field of the specified invention (claim1) is a magnetic card for learning, and the technical field of related invention (claim 2) is a card type recorder. Since combining the technology of the technical field of a magnetic card for learning to the technology of the technical field of a card type recorder is extremely proper, the technical fields of both inventions have direct relationship, and the industrial fields of application are the same. In addition, both inventions are dealing with the same problem to be solved: to enable pause while playing back the card.

[Concerned Section]

[Example 13]

[Title of the Invention]

Female connector and male connector

[Claims]

- A female connector comprising a socket (6) consisting of an extension spring (6B) with a diameter larger inside than the outside of the pin (17) of a male connector and a compression spring (6A) with a diameter smaller inside than the outside of the pin (17) of a male connector. (See Figure 1)
- 2. A male connector comprising a pin (17) set in the circumferential direction of the groove (69) engaging with the extension spring of the female connector (6B) described in claim 1. (See Figure 2)

[Excerpt from Detailed Description of the invention and Drawings]

This invention concerns the following. The extension spring (6B) is extended by compressing the compression spring (6A) of the socket (6) of the female connector with the tip of the pin (17) of the male connector into the axial direction. As a result, the pin (17) is held by compression inside of the compression spring (6A). Attrition is reduced when the male connector is connected to the female connector, and the connection is strongly maintained after the connection is made.

In the traditional multi polar connector, a fairly strong force has been needed to connect two parts of the connection.



[Explanation]

Both technical fields of the specified invention (claim1) and related invention (claim 2) are female connector and male connector. Since the female connector and the male connector are used in combination, the technical fields of both inventions have a direct relationship technically; therefore, the industrial fields of application are the same.

In addition, they are dealing with the same problem to be solved: to reduce the attrition when a male connector is connected to a female connector, to offer an electrical connection with the function of keeping the connection stable after connected.

[Concerned Section]

[Example 14]

[Title of the Invention]

Independent side band (IBS) AM sound multiplex transmission device [Claims]

1. A transmission device of independent side band (IBS) AM sound multiplex system with a transmitter and a receiver comprising:

Means (10,12, 14, 16) wherein said transmitter responds to a pair of audio frequency signals, L and R signals which express left and right multiplex sound information and generates sum and difference of the L and R signals;

Means (23) generating carrier signals modulated in phase, for expressing said difference signals modulated inversely by said sum signals according to the modulation function selected first and provided;

Means (22) for forming ISB AM sound multiplex signals, modulation with amplitude the above carrier signals, modulated with phase, by said sum signals;

Means (62, 63, 65, 67-70) for responding to the intermediate frequency (IF) ISB AM sound multiplex signals received by the above receiver, modulating inversely the difference signal component of the above mentioned signals by the above sum signal component according to the modulation function selected second, and inducing a pair of audio frequency output signals expressing respectively the original L and R input signals; characterized in that modulation function in said transmitter and receiver is selected appropriately, and linearity and independence of transmitted Land R signals are given, as a result, inter-modulation distortion is reduced.

- 2. A transmitter for independent side band (IBS) AM sound multiplex system comprising means (10, 12, 14, 16) for responding to a pair of audio frequency signals, L and R, expressing left and right multiplex sound information and sending sum and difference signals including the component of L and R signals, means (23) for sending carrier signals modulated in phase, for expressing the above difference signals, modulated inversely, by said sum signals according to the modulation function, and means (22) for forming ISB AM sound multiplex signals which has less inter-modulation distortion, by modulation with amplitude the above carrier signals, modulated in phase, (See Figure 1)
- 3. A receiver for independent side band (IBS) AM sound multiplex system comprising a means (62, 63, 65, 67-70) for modulating difference signal component inversely by sum signal component in the received intermediate frequency (IF) ISB AM sound multiplex signals according to the modulation function, and inducing a pair of audio frequency output signals expressing the original L and R signals. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention concerns an independent side band AM sound multiplex system, wherein the linearity and independence of stereo signals are improved by giving the second higher harmonics correction to the stereo difference signal component; as a result, inter-modulation distortion is reduced.



Figure 1

- 20 phase modulator
- 21 limiter
- 22 amplitude modulator
- 54 low pass filter
- 56 inverter



Figure 2

- 61 high/middle frequency amplifier
- 62 envelope detector
- 63 inverter
- 65 perpendicular synchronous detector
- 66 carrier 90° phase converter

[Explanation]

The technical field of the specified invention (claim1) is a transmission device in the independent side band (IBS) AM sound multiplex system, and the technical field of the related invention (claim 2, 3) is a transmitter for IBS AM sound multiplex system and a receiver for IBS AM sound multiplex system. Combining the technology of the technical field of the transmitter for IBS AM sound multiplex system to the technology of the technical field of the receiver for IBS AM sound multiplex system or applying it to the technology of the technical field of the transmission device of the independent side band (IBS) AM sound multiplex signals is considered to be extremely proper. Therefore, the technical fields of both inventions have direct relationship technically and the industrial fields of application are the same.

In addition, they are addressing the same problem to be solved; the independence of stereo signals is improved by giving the second higher harmonics correction to the stereo difference signal component; as a result, inter-modulation distortion is reduced. [Concerned Section] Patent Law Section 37(i)

40

[Example 15]

[Title of the Invention]

Picture signals transmission device and receiving device [Claims]

- Picture signals transmission device comprising more than one predictive encoder (12-1-12-N) encoding input picture signal with different predictive function, a run-length encoder run-length (17) encoding the most suitable predictive encoded signals of the highest hitting ratio selected from each predictive encoded signals gained, and a sending controlling circuit (19) adding discrimination decision signals expressing predictive function of the above mentioned the most suitable predictive encoded signals, which is output from a discrimination decision circuit (19), to the output signals from the said run-length encoder (17) and sending. (See Figure 1)
- 2. A picture signals receiving device comprising a receiving circuit (31) receiving predictive encoded and run-length encoded picture signals and discrimination decision signals expressing the predictive function at the above mentioned predictive encoding, a run-length decoder (33) run-length decoding the picture signals output from the circuit (31), encoders (35-1-35-N) for prediction decoding the output of said decoder (33) with different predictive functions, and a selective means (36) selecting and removing only decoding output for the above mentioned discrimination decision signals, out of the decoding output of the above mentioned each predictive decoder (35-1-35-N) (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention concerns a signal transmission system transmitting highly compressed signals. Since a public communication circuit is open, the development of a means sending picture signals highly efficiently such as facsimile in a limited zone is desired. Although a run length encoding system in which continuous length of 1 or 0 is encoded is general at present, high compressibility is not obtainable. In this invention, out of more than one predictive encoder used, the output of the predictive encoder of the highest hitting ratio is run-length encoded and transmitted, so the high compressibility can be obtained.



Figure 1



[Explanation]

The technical fields of the specified invention (claim 1) and related invention (claim 2) are a transmission device and a receiver of picture signals respectively, and the technologies of both technical fields are used in combination. As a result, the technical fields of both inventions have direct relationship technically, and the industrial fields of application are the same. In addition, since picture signals can be transmitted with extremely high compressibility in both inventions, they are dealing with the same problems to be solved.

[Concerned Section]

3.2.2 Relationship under Patent Law Section 37(ii)

It is judged whether the cases satisfy the conditions of Patent Law Section 37(ii) regarding "whether the industrial fields of application are the same" and "whether the substantial parts of matters in the claims are the same".

"The substantial parts of matters in the claim of the invention" refers to the matters concerning a new matter that corresponds to the problem to be solved. Also, the cases where "the substantial parts of matters in the claims are the same" indicate cases where the items concerning a new matter corresponding to the problems to be solved by the specified invention, and the matters concerning a new matter corresponding to the problems to be solved by the solved by the related invention, are common matters.

These cases where the substantial parts of matters in the claims are the same include not only the ones where the substantial part of matters in the claim of the related invention is equivalent to that of matters in the claim of the specified invention, but also those where that of the related invention are equivalent to all the matters of the specified invention, or where all the parts of the related invention are equivalent to the substantial parts of matters in the claim of the specified invention.

The following cases corresponding to Patent Law Section 37(ii) include the ones satisfying the conditions of Patent Law Section 37(i). A description will be given with attention to the way in which "the substantial parts of matters in the claims are the same".

[Example 16]

[Title of the Invention] Reverse osmosis membrane [Claims]

- 1. A reverse osmosis membrane (10) including an active layer (20) and physical backing (12) for active layers, wherein an active layer is a continuous non-porous homogeneous film made from an organic membranous polymer; and wherein said film is 50 or 1500 A in thickness and can thereof dissolve water corresponding to at least 2-wt% of weight.
- A reverse osmosis membrane described in Claim 1, wherein a continuous non-porous layer (16) made from irreversible hydro-gel composites containing hydro-gel polymer and water exists between an active layer (20) and a physical backing (12).

[Excerpt from Detailed Description of the Invention and Drawing]

This invention relates to a reverse osmosis membrane, which is especially useful for the purification of water.

The desirable reverse osmosis membrane offers as weak resistance as possible against water moving or flowing from one side or face to the other of such a membrane, and usually enables a great deal of water to pass through itself. Because of this, it is necessary that the membrane should have an active layer which is from 50 to 1500 A in thickness and able to dissolve water corresponding to at least 2 wt%.

The non-porous layer of the irreversible hydro-gel composites has the capacity to propagate or convey water from the active layers to the porosities of the backing.



Figure 1

[Explanation]

The technical fields of the specified invention (Claim 1) and the related invention (Claim 2) are related to a reverse osmosis membrane and correspond with each other; therefore the industrial fields of application of the two inventions are the same. The substantial parts of the matters in the claim of the related invention are the entire matters in the claim of the specified invention; therefore the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section] Patent Law Section 37(ii)

[Example 17]

[Title of the Invention]

Heat melting covering composite sand pressure-sensitive un-carbonated transfer paper [Claims]

- A heat melting covering composite, including microcapsules; inorganic pigment particles of about 0.1-20 wt% of weight of said microcapsules, heat melting suspension media, wherein the inorganic pigment particles are substantially deposited and accreted on the microcapsules.
- 2. Pressure-sensitive un-carbonated transfer paper, comprising a paper base and a layer of heat melting covering composites laid on said paper base, wherein said heat melting covering composites include microcapsules containing an oily solution of a chromogenic substance, about 0.1-20 wt% of weight of the microcapsules and heat melting suspension media, and characterized in that said inorganic pigment particles substantially deposited and accreted on said microcapsules.

[Excerpt from Detailed Description of the Invention]

This invention relates to a heat melting covering composite that contains inorganic pigment particles and pressure-sensitive un-carbonated transfer paper made from said heat melting covering composite. The article to which the composite is applied to the paper base can form a transparent or semi-transparent capsule, having a glossy surface from the effect of inorganic pigment particles. In addition, it can form pressure-sensitive un-carbonated transfer paper by having the microcapsules contain an oily solution of a chromogenic substance. [Explanation]

The technical field of the specified invention (Claim 1) is a heat melting covering composite containing Microcapsules, and that of the related invention (Claim 2) is pressure sensitive un-carbonated transfer paper. It proves to be highly appropriate that the technology of a heat melting covering composite should be applied to the technical field of pressure-sensitive un-carbonated transfer paper; therefore the technical fields of both inventions are technically and directly associated with each other, and the respective industrial fields of application are also the same.

In addition, the substantial parts of the matter in the claim of the related invention (Claim 2) are equivalent to the entire elements of the specified invention (Claim 1); therefore the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 18]

[Title of the Invention]

Bond for molding and coated sand for molding [Claims]

- 1. A bond for molding, wherein polyacrylamide is dissolved in water or quick-drying solvent.
- 2. Coated sand for molding, which is covered with the bond for molding whereby polyacrylamide is dissolved in water or quick-dry solvent.

[Excerpt from Detailed Description of the Invention]

This invention mainly relates to a bond for molding used for die-casting, like light alloy castings, where the temperature of the hot water for pouring is relatively low, and coated sand for molding which is covered with said bond.

Though a light alloy casting is generally manufactured by die-casting, the mold used for the core is manufactured by blowing sand usually coated with phenol resin and/or the like in a model die. In the case of the light alloy casting manufactured by using thermo-setting synthetic resin as a bond, due to the low temperature (e.g. about 700° C,) of the hot water for pouring, it is possible that the thermal dematter of the bond made from thermo-setting synthetic resin may be insufficient and that the core may also be hard or unable to be extruded because the polymerization of the bond is conversely accelerated. The advantage of the present invention, wherein poly-acrylamide is dissolved in the solvent, is excellent in a number of respects, including strength, heat resistance, disintegration characteristics and productivity. [Explanation]

Though the technical fields of the specified invention (Claim 1) and the related invention (Claim 2) are respectively "a bond for molding" and "coated sand for molding", it is highly appropriate that the art of the former should be applied to the technical field of the latter, because the sand for molding is covered with the bond. Accordingly, the technical fields of both inventions are technically and directly associated with each other, and the industrial fields of application of them are also the same.

In addition, a bond for molding which is a new matter corresponding to the problem to be solved of the specified invention is equivalent to the substantial part of the matter in the claim of the related invention; therefore the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 19]

[Title of the Invention]

Ceramic material and process of dissolving the core made of said material [Claims]

- A means of dissolving a ceramic material from an article vulnerable to attack by a caustic alkaline solution, characterized in that a substance containing hydrogen donors in the ceramic material is included, and the ceramic material is immersed in anhydrous caustic alkaline solution.
- 2. A means of dissolving a core made of a ceramic material of a light metal or a light alloy casting, wherein a light metal or a light alloy casting having a core consisting of a ceramic material including a substance with the hydrogen donors is contacted to anhydrous caustic alkali to be immersed in the anhydrous caustic alkali melted by the heat of a casting before said the casting gets cold.

[Excerpt from Detailed Description of the Invention]

This invention relates to the process of dissolving a ceramic material and the core made of said material of an article that is vulnerable to attack by a caustic alkaline solution.

Although the core made from a ceramic material of the alloy casting is mainly manufactured from nickel, and cobalt is fundamentally dissolved and extruded in a caustic alkaline solution, this process cannot be applied to light metals or light alloy castings because they are impinged on by a caustic alkaline solution. By making a ceramic material containing hydrogen donors, the present invention has made it possible to dissolve just a ceramic material selectively without light metals or light alloy castings being impinged on in the anhydrous alkaline solution. Furthermore, to "bring the casting into contact with an anhydrous alkali before the casting cools down", as described in Claim 2, aims at dissolving the anhydrous alkali by making use of the heat from a casting.

[Explanation]

The technical field of the specified invention (Claim 1) is "dissolving a ceramic material in an article which is vulnerable to attack by a caustic alkali solution ", whereas that of the related invention (Claim 2) is "dissolving the core made of a ceramics material of a light metal or a light alloy casting". Light metals or light alloys are vulnerable to attack by a caustic alkali solution, and it is highly appropriate that the technology of the specified invention should be applied to the dissolution of the core, which is made of a ceramic material, of said casting of the materials. Therefore, the technical fields of both inventions are technically and directly associated with each other and the industrial fields of application of the inventions are also the same.

On the other hand, the new matter corresponding to the problems to be solved of the specified invention, i.e. to "make a ceramic material include the substance containing hydrogen donors and make a ceramic material immerse in the anhydrous caustic alkaline solution", is equivalent to the substantial part of the matters in the claim of the related invention. Therefore, the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 20]

[Title of the Invention]

Magazine of workpieces (contact lens) and feeding device including the magazine [Claims]

- 1. A magazine holding many work pieces, comprising of an opening to take out work pieces (37) consecutively at one end; uncoupling-fastening devices (39, 40, 41, 42, 43, 44) set up close to the end, wherein the uncoupling-fastening devices engage with the work pieces at the point nearest to this end; wherein the work pieces consist of a fastening member (43) including a raised portion (39) which permits the work pieces in question to be uncoupled from this point and pass through the opening; wherein the raised portion matches an opening set up on the flank close to the end and can pass through the opening; wherein the free end of the raised portion is brought engages with the work pieces. (See Figure 1.)
- 2. A feeder(4) to supply work pieces to the collet (3), a machine tool, consisting of a magazine described in Claim 1 and a loader(12) which is

(See Figure 1, 2.)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention relates to an apparatus to supply the material for contact lenses to a machine tool, particularly an apparatus to supply work pieces to the collet, a machine tool with their positions set correctly.



[Explanation]

Though the technical fields of the specified invention and the related invention (Claim 2) are respectively "a magazine" and "a feeding device", it is highly appropriate that the art of the former should be applied to the technical field of the latter; therefore the technical fields of both inventions are technically and directly associated with each other, and the industrial fields of

application of them are also the same.

In addition, the magazine of the specified invention is equivalent to the substantial part of the related invention. Therefore, the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 21]

[Title of the Invention]

Folding seat for a vehicle and a vehicle for both passengers and goods with the folding seat. [Claims]

- A folding seat for a vehicle, wherein a seatback (1) foldable forward is attached to the top face of a seat cushion (2); wherein the first leg (8) supporting a seat cushion (2) which can be turned and moved laterally (21) and can be slid back and forth (11,12) is attached to the side portion of the reverse face of this seat cushion (2); and wherein the second leg (24), which is free in folding and supporting a seat cushion (2) when someone is seated, is attached to the other side portion of the reverse face of the seat cushion (2). (See Figure 1.)
- 2. A vehicle for both passenger and goods with a folding seat: whereby two rows of seats consisting of the second seat (42) and the third seat (50) in which a seat back (1, 43), which can be folded forward, is fixed on the top face of a seat cushion (2, 44) and is attached to the luggage compartment (40) in the rear of the driver's seat; wherein an entrance for getting in and out (48) is installed in the lateral direction of the second seat (42); wherein a rear wheel house (39) is attached to the rear of the third seat (50); wherein said third seat (50) is separated right and left into two parts (51, 52); wherein the first leg (8) supporting a seat cushion (2), which can be turned and moved in the direction of a car body panel and can be slid (11, 12) in the direction of a rear wheel house (39), is attached to a side portion of the reverse face of a seat cushion (2) of the part (52), on the side of the entrance for getting in and out (48), of the third seat; and wherein the second leg (24) which is free in folding and supporting a seat cushion (2) when someone is seated is attached to the other side portion of the reverse face. (See Figure 2 and 3)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention relates to folding seats and a vehicle, e.g. a station wagon or a van for both passengers and goods, which includes these folding seats.

Though it was publicly known that this type of vehicle has a seat back which can be folded forward on the top face of a seat cushion and which can turn and move the seat back forward, this type of vehicle had some disadvantages: it did not provide much room for luggage in the back and front, it was difficult to get in and out of, etc.



Figure 1





[Explanation]

Respective technical fields of the specified invention (Claim 1) and the related (Claim 2) are "a folding seat " and "a vehicle". As described in the Claims that a folding seat is applied to the technical field of a vehicle. Therefore the technical fields of the two inventions are technically and directly associated with each other and their industrial fields of application of them are also the same.

Additionally, a folding seat, a new matter corresponding to the problem to be solved of the specified invention, is equivalent to the substantial part of the matter in the claim of the related invention. Therefore, the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 22]

[Title of the Invention]

Chuck for web-fed apparatus and the web-fed apparatus [Claims]

- A chuck for a web-fed apparatus, comprising a housing (31) which is attached on a mandrel (33) so as to be rotated and where at least one circumferential groove is set up in its external surface; a spring (39) with multiple cantilever fingers (42) which is placed in said circumferential groove and is so formed that they are integrated with the bottom contacting the floor of the groove. (See Figure 3.)
- 2. A web-fed apparatus, comprising a chuck (19) as described in Claim 1 fixed at one end of an arm (18); a base (20) supporting the arm so it can oscillate it midway between a socket (22) fixed at the other end of said arm and said arm; a fluid cylinder (23) consisting of a piston rod (24) attached to said base so it can oscillate and a cylinder casing (25) brought into contact with the piston rod; a ball (26) supported on said casing and engaged with the socket, which freely connects the fluid cylinder to the arm. (See Figure 1, 2 and 3)

[Excerpt from Detailed Description of the Invention and Drawings]

This invention relates to a high-speed web-fed apparatus that works with fixed winding tension.

The conventional web-fed apparatus had several drawbacks, especially if it was applied at a high winding speed: it was apt to induce vibrations or chamfers and hard to apply at a fixed intension on account of combinations of its parts that were too loose or too tight; wound roll jounced or jumped on a winding drum, as a result causing flat spots and uneven hem.



[Explanation]

Though the respective technical fields of the specified invention (Claim 1) and the related invention (Claim 2) are "a chuck" and "a web-fed apparatus", it is mentioned in the Claims that a chuck is applied to the technical field of a web-fed apparatus. Therefore, technical fields of both

inventions are technically and directly associated with each other and the industrial fields of application are the same.

Also, a chuck that is a new matter corresponding to the problem to be solved of the specified invention is equivalent to the substantial part of the related invention, and so the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 23]

[Title of the Invention]

Manufacturing processes of silicon carbide powder for sintering silicon carbide sintered compact

[Claims]

- 1. A process for manufacturing a silicon carbide powder for sintering, comprising the steps of decomposing an organ silicon high molecular compound, whose main key components are silicon and carbon, at a temperature between 1600 °C and 2200 °C in the inert gas atmosphere and obtaining a powder whose main component is β -SiC; obtaining a power made from high-purity β -SiC treated with acids including a hydrofluoric acid after heating this powder to temperatures between 500°C and 800°C in the oxidative atmosphere.
- 2. A process for manufacturing silicon carbide sintered compact whose density is $2.60g/mg^3$ or above wherein a powder is manufactured from high-purity β -Sic by the process for manufacturing as described in Claim 1; wherein the powder is sintered in the inert gas atmosphere after the powder is in the prescribed shape.

[Excerpt of Detailed Description of the Invention]

This invention is a process for obtaining silicon carbide powder made from fine high-purity sintering β -SiC and a process for manufacturing high-density silicon carbide sintered compact, which is made from the powder, with high mechanical strength.

[Explanation]

Though the technical fields of the specified invention (Claim 1) and the related invention (Claim 2) are respectively "manufacturing silicon carbide powder" and "manufacturing silicon carbide sintered compact", as described in the Claims, that silicon carbide is applied to sintering. Therefore, the technical fields are technically and directly associated with each other and their industrial fields of application are the same.

Furthermore, a process for manufacturing high-purity β -SiC powder, a new matter corresponding to the problem to be solved of the specified invention, is equivalent to the substantial part of the matter in the claim of the related invention, so the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 24]

[Title of the Invention]

Zeolite

[Claims]

- 1. A zeolite comprising X-ray pattern of xxxx, whose formula is $[M_2O]_{0-9}[Al_2O_3]_{0.1-3}[SiO_2]_{100}[H_2O]_{0-35}$ wherein M in the formula is an alkali metal.
- A zeolite, including the X-ray pattern of xxxx, whose formula is [M₂ O]₀₋₉[Q⁺]₁₋₅₀[Al₂O₃]₁[SiO₂]₃₀₋₁₀₀₀[H₂O]₀₋₂₀₀₀, wherein M in the formula is an alkali metal and Q is tetraalkylethylenediamine.

[Excerpt of Detailed Description of the Invention]

This invention introduces a new kind of zeolite, which is used as a catalyst for such reactions as catalytic cracking or hydrodesulfurization.... A zeolite in this invention is synthesized by the hydrothermal crystallization process described later. Although the crystallized product synthesized by the hydrothermal crystallization process contains Q (tetraalkylethylenediamine), Q disappears if it is dehydrated and burned.

[Explanation]

It is recognized that a zeolite of the related invention (Claim 2) is mainly used as a raw material for a zeolite (a final substance) of the specified invention (Claim 1). Therefore the technical fields of both inventions are technically and directly associated with each other and their industrial fields of application are the same. In addition, because the X-ray patterns of both zeolite are the same, it is recognized that their structures of zeolite crystals composed of Si, Al and O are the same. Accordingly, the new fundamental structures of both substances are similar, and therefore the substantial parts of matters in the claims of both inventions are the same.

[Concerned Section]
[Example 25]

[Title of the Invention]

Thiazolo[2, 3-b]quinazoline derivative and intermediate for manufacturing the derivative [Claims]

1. A compound indicated by general formula [I]



(In this formula, R¹means a methylthio group or a methylsulfinyl group.)

2. A compound indicated by general formula [II]



(In this formula, R¹ means a methylthio or methylsulfinyl group, whereas R² means a lower alkyl group).

aikyi group).

[Excerpt of Detailed Description of the Invention]

This invention relates to a Thiazolo[2, 3-b]quinazoline derivative indicated by general formula[I], which has anti-allergic activity, and Thiazolo[2, 3-b]quinazoline derivative indicated by general formula[II], which is a useful intermediate for manufacturing the derivative indicated by general formula[I]. The compound indicated by general formula[I] is easily manufactured by hydrolyzing the compound indicated by general formula [II]. [Explanation]

It is recognized that the main use of a compound in the related invention (Claim 2) is a raw material (an intermediate) of a compound (a final compound) of the specified invention (Claim 1). Accordingly, it is highly appropriate that the art of the technical field of a compound of the related invention is applied to the technical field of a compound of the specified invention. The technical fields of both inventions are technically and directly associated with each other, and their industrial fields of application are also the same.

Additionally, such new fundamental structures



are common between both compounds, and so the substantial parts of matters in the claims of both inventions are the same.

[Concerned Section]

[Example 26]

[Title of the Invention]

16 α -substitution pregnen group, and an intermediate for manufacturing the 16 α -substitution pregnen group

[Claims]

1. A steroid compound indicated by Formula [I]



[In this formula, R1 means phenyl or naphthyl.]

2. A steroid compound indicated by Formula [II]



[In this formula, R₁ means a phenyl or naphthyl.] [Excerpt of Detailed Description of the Invention]

This invention relates to a 16 α -substitution pregnen group useful as an anti-inflammatory drug and an intermediate useful for manufacturing this 16 α -substitution pregnen group. The steroid compound indicated by Formula [I], which has anti-inflammatory properties, is easily manufactured by treating the steroid intermediate indicated by Formula [II]. [Explanation]

It is recognized that the main use of a compound of the related invention (Claim 2) is a raw material (an intermediate) of a compound (a final compound) of the specified invention (Claim 1). Therefore it is highly appropriate that the art of the technical field of a compound of the related invention is applied to the technical field of a compound of the specified invention. The technical fields of both inventions are technically and directly associated with each other and their industrial fields of application of them are the same.

In addition, both compounds have common fundamental structures



and the final compound indicated by Formula [I] is directly manufactured from an intermediate indicated by Formula [II]. Therefore, it is recognized that both compounds are closely and technically associated with each other, and the substantial parts of matters in the claims of both

inventions are the same. [Concerned Section] Patent Law Section 37(ii)

[Example 27]

[Title of the Invention] Polymer of 4-hydroxy-4'-vinyl biphenyl derivative and composite [Claims]



A polymer composed of a 4-hydroxy-4'-vinyl biphenyl derivative that has an Mn of 5,600 to 0,000 and is made according to the general formula indicating a repeated unit.



A polymer composite, comprising; a 100-weight part of a polymer composed of a 4-hydroxy-4'-vinyl biphenyl derivative that has an Mn of 5,600 to 60,000 and is made according to a general formula indicating a repeated unit; a 0.1-5-weight part of silica.

[Excerpt of Detailed Description of the Invention]

This invention relates to a new polymer, which is highly resistant to heat and useful for manufacturing various molded goods, and a composite thereof. Although or the like are publicly known types of this polymer, a polymer with enough heat-resistance could not be obtained. Additionally, a heat stable polymer composite with great mechanical strength is obtainable if a 0.1-5-weight part of silica is added to a 100-weight part of a polymer of a 4-hydroxy-4'-vinyl biphenyl derivative.

[Explanation]

The technical field of the specified invention (Claim 1) is that of formability polymer which has great heat-resistance, and the technical field of the related invention (Claim 2) is that of a formability polymer composite with great heat-resistance, whose principal component is this polymer, whereby mechanical properties are improved. Therefore, the technical fields of both inventions are technically and directly associated with each other and their industrial fields of application are the same. Furthermore, the polymer of a 4-hydroxy-4'-vinyl phenyl derivative of the specified invention is equivalent to the substantial part of the matter in the claim of the related invention, and therefore the substantial parts of matters in the claims of both inventions are the same.

[Concerned Section]

[Example 28]

[Title of the Invention]

New polymer and its derivative

[Claims]

1. A random copolymer represented by formula (I).



(M: 10 to 50, n: 10 to 50)

[Excerpt of Detailed Description of the Invention]

The copolymer represented by formula (I) is needed to make a side chain quaternary. The copolymer represented by formula (II), which is made quaternary by methylchloride, is also useful as a photographic material.

[Explanation]

It is recognized that the main use of a copolymer represented by formula (I) of the specified invention (Claim 1) is a raw material of a copolymer as represented by formula (II) of the related invention (Claim 2). Therefore, it is highly appropriate that the art of the technical field of a copolymer represented by Formula (I) is applied to a copolymer represented by formula (II). The technical fields of both inventions are technically and directly associated with each other, and their industrial fields of application are also the same.

Furthermore, because a new fundamental structure (X) is common to both copolymers, the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 29]

[Title of the Invention]

Modified cross-section shape filament, filament thread and silk fabrics [Claims]

- 1. A modified cross-section filament, wherein the cross section has a V-shape or C-shape; wherein the approximate central part of the periphery of the convex side of the cross section has a notch-type construction; wherein t_1 (thickness of the construction) and t_1 (maximum of a thickness of the filament) satisfy the equation $0.40t2 \le t_1 \le 0.95t_2$. [$a \le t_2 \le b$ a, b: positive fixed numbers].
- 2. A potentially bulky multifilament gained by submitting a modified cross-section filament as described in Claim 1 the fluid turbulent treatment, and then applying the heat intensity treatment afterwards.
- 3. A silk fabric composed of modified cross-section filaments as described in Claim 1.

[Excerpt of Detailed Description of the Invention and Drawing]

This invention provides a modified cross-section filament, which has a glossy, silky fiber, sheerness and a dry feel. This makes it possible to manufacture a knitted fabric with a texture very similar to a silk fiber with respect to bulk and flexibility, and provides a thread and a silky fabric made from the filament.



[Explanation]

Although the technical field of the specified invention (Claim 1) is "a filament" and the respective technical fields of the two related inventions (Claim 2 and 3) are "a thread" and "a knitted fabric," it is deemed highly appropriate that the technology of the technical field of a filament is applied to the technical field of a thread and a knitted fabric. Therefore, the technical fields of all these inventions are technically and directly associated with one another, and their industrial fields of application are also the same.

Additionally, the modified cross-section filament of the specified invention is equivalent to the substantial part of the matter in the claim of each related invention, and so therefore the substantial parts of matters in the claims of all these inventions are also the same.

[Concerned Section]

[Example 30]

[Title of the Invention]

Super-absorbent rayon Non-woven fabric and material for a blanket bath [Claims]

- 1. A non-woven fabric, wherein one of its fiber matters is a super-absorbent viscose rayon fiber created by adding sodium carbonate to viscose and spinning thread.
- 2. A material for a blanket bath, which is manufactured by soaking the non-woven fabric described in Claim (1) in a clean liquid.

[Excerpt of Detailed Description of the Invention]

This invention relates to a high liquid-retention, non-woven fabric, manufactured by using the super-absorbent viscose rayon fiber and adding sodium carbonate to viscose, with a towel manufactured from the non-woven fabric, and a material for a blanket bath (e.g. a wet napkin) which is soaked in a clean liquid. Although the non-woven fabric made from a regular viscose rayon fiber has been manufactured for a long time and has been used for making towels, etc., it had the disadvantage of not showing the effect of cleaning sufficiently. This is because water and a depurant, which are soaked into the non-woven fabric, are apt to vaporize. [Explanation]

Though the technical field of the specified invention (Claim 1) is "a super-absorbent viscose rayon non-woven fabric" and that of the related invention (Claim 2) is "a material for a blanket bath", it is highly appropriate that the technology of manufacturing a super-absorbent rayon non-woven fabric is applied to the technical field of a material for a blanket bath. Therefore the technical fields of both inventions are technically and directly associated with each other and their industrial fields of application are the same.

On the other hand, the super-absorbent rayon non-woven fabric, which is a new matter corresponding to the problem to be solved of the specified invention, is equivalent to the substantial part of the matter in the claim of the related invention, and therefore the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 31]

[Title of the Invention]

Filter cylinder of a concentration machine, and the concentration machine [Claims]

- A filter cylinder (20) for a wood pulp slurry concentration machine, comprising a cylindrical porous shell (42); a screening member covering the external surface of the cylindrical porous shell (42); a reinforced ring (48); end members with two separate rotating shafts (52, 53) attached to both lengthwise ends of the shell (42), wherein one end member has multiple apertures and the other end member is closed. (See Figure 1)
- 2. A concentration machine for concentrating a wood pulp slurry, comprising: a bat for concentration (30) with a slurry inlet (22); a filter cylinder (20) as described in Claim 1, which is retained so it can rotate freely in the bat (30); an exhaust of white water (32) which connects with the apertures of one end member so as to release white water within the filter cylinder (20); a couch roll (34) for releasing concentration pulp slurry formed on the surface of a filter cylinder (20), etc. (See Figure 2)

[Excerpt from Detailed Description of the Invention and Drawings]

In this invention relating to a concentration machine suitable for a paper manufacturing machine and a filter cylinder for the concentration machine, the weight of a filter cylinder is saved and the conventional shaft-less filter cylinder is improved by attaching a reinforced ring (48) to prevent the porous shell from deformation.



[Explanation]

Although the technical field of the specified invention (Claim 1) is "a filter cylinder" and that of the related invention (Claim 2) is "a concentration machine", it is described in Claim 1 that a filter cylinder of the specified invention is used in the technical field of a concentration machine. Therefore, the technical fields of both inventions are technically and directly associated with each other and their industrial fields of application are also the same.

Additionally, a filter cylinder of the specified invention is equivalent to the substantial part of the matter in the claim of the related invention, and therefore the substantial parts of matters in the claims of the two inventions are the same.

[Concerned Section]

[Example 32]

[Title of the Invention]

Blade for disintegration and screening of materials for manufacturing paper, and apparatus for disintegration and screening

[Claims]

- 1. A blade for the disintegration and screening of materials for manufacturing paper, comprising a blade part for disintegration and screening (19) and a blade part (20) at the tip of an arm member (22) that radiates in all directions from a boss part (21). (See Figure 2)
- 2. An apparatus for the disintegration and screening of materials for manufacturing paper, wherein a cylindrical screen (15) is set up in the 3rd room ... of a steel case (1); wherein a conical fixed blade (16) is set up at the base of the cylindrical screen (15) and on the inner face of the steel case (1); wherein a blade for disintegration and screening as described in Claim 1 is set up along the inner face of the cylindrical screen (15). (See Figure 1)

[Excerpt of Detailed Description of the Invention and Drawings]

This invention relates to a blade for disintegration and screening, and an apparatus for disintegration and screening particularly an apparatus for handling the processes of disintegrating and screening materials for manufacturing paper at the same time, especially in the process before the paper is made. Up until now, the materials fed to a paper machine in the paper manufacturing process have been the materials for manufacturing paper that has undergone the processes from disintegration to screening.



[Explanation]

Figure 1

The technical field of the specified invention (Claim 1) is a blade for the disintegration and screening of materials for manufacturing paper, and that of the related invention (Claim 2) is an apparatus for disintegration and screening. It is recognized it is highly appropriate that the technology of the technical field of a blade for disintegration and screening is applied to the technical field of an apparatus for disintegration and screening. Therefore, the technical fields of both inventions are technically and directly associated with each other, and their industrial fields of application are also the same. On the other hand, a blade for the disintegration and screening for materials for manufacturing paper, which is a new matter corresponding to the problem to be solved of the specified invention, is equivalent to the substantial part of the matter in the claim of the related invention, and so therefore the substantial parts of matters in the claims of the two inventions are also the same.

[Concerned Section]

[Example 33]

[Title of the Invention]

Twisted yarn applied to the surface of fiber bearing, and the bearing made by using this twisted yarn

[Claims]

- A twisted yarn used on the surface of a low-friction fiber bearing including a TFE fine yarn (10) used at the volume rate of up to 50%; a multiple wound yarn (11) made from high-temperature nylon, wherein the TFE fine yarn is loosely wound around a nylon multiple-wound yarn used as a core; and wherein synthetic resin can feed into the entire multiple loosely twisted yarn. (See Figure. 1.)
- 2. A bearing, wherein a twisted yarn including a TFE fine yarn (10), (13 ") used at the volume rate of up to50% and a multiple wound yarn made from high-temperature nylon (11), (13") is exposed on the surface of a bearing (15); wherein said TFE fine fiber is loosely wound around a nylon multiple-wound yarn used as a core, whose glide plain is equipped with hardened synthetic resin (14) with an affinity for said twisted yarn and forming a continuous solid object with no space. (See Figure 1, 2 and 3)

[Excerpt of Detailed Description of the Invention and Drawings]

This invention relates to a twisted yarn making up a low-friction fiber bearing and a fiber. The object of this invention is to hold a TFE fine yarn more securely against the rotation (at the portion where breakage occurs easily) by being equipped with a reinforcing material for a low-friction fiber on the surface of a bearing.

The bearings made by using a conventional tetra-fluoroethylene (TFE) fine yarn in order to gain low friction causes extreme abrasion and rapid fracture under a maximum load or more. Additionally, the maximum working temperature must be carefully controlled because a mechanical function decreases under a load or at the time of a rise in temperature.



[Explanation]

Though the technical field of the specified invention (Claim 1) is a twisted yarn and that of the related invention (Claim 2) is a fiber bearing, it is described in the Claims that a twisted yarn is applied to a fiber bearing, and so therefore the technical fields of both inventions are technically and directly associated with each other and their industrial fields of application are the same. In addition, a twisted yarn that is a new matter corresponding to the problem to be solved of the specified invention is equivalent to the substantial part of matter in the claim of the related invention; and so therefore the substantial parts of matters in the claims of both inventions are also the same.

[Concerned Section]

[Example 34]

[Title of the Invention]

Anchor for liquid gas underground tank and tank for storage of liquid gas [Claims]

- Anchor in underground storage tank for liquid gas comprising the principal member of an anchor member (10), and metal fixture (11) having cylindrical sealing parts (12) including the mid section of the anchor (10) and flexible support plates (16), wherein the metal fixture (11) holds the anchor (11) through the holding plate (14) bound to the end of the metal fixture. (See Figure 1).
- 2. Underground tank and the anchors for storage of liquefied gas, wherein the bottom plate (5) is attached to the side walls (3) of the tank; its edges has a vertical end face (5b), which makes contact with horizontal end face (5a) and lower inside surface (3b) of the side walls (3); and the unity of this underground storage tank for liquid gas is to have the anchors mounted with appropriate space on the inside of the lower part of the side walls (3) and the inside of the rim of the bottom plate (5). (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention pertains to the anchors used in underground storage tank for liquid gas and the underground storage tank for liquid gas that utilizes said anchors.

As the anchors used in this manner, publicly known type made of steel and extends between the sidewalls to the tank to the bottom plate. The problem to be solved with this process of attaching the bottom plate to the side walls was that, when a force is applied in the direction that would separate the bottom plate and the side walls, the bottom plate moved far enough away from the side walls, separating the sealing plate, allowing the ground water to penetrate the tank and freezing inside of it.



[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are an "anchor" and an "underground tank" respectively. Because an "anchor" is used in the technical field of an "underground tanks" in the claims, both inventions are technically and directly related, and the industrial fields of application of both inventions are the same.

The anchor that is a new matter corresponding to the problem to be solved of the specified invention is equivalent to the substantial part of matters in the claim of the related invention. Therefore the substantial parts of matters in the claims of both inventions are the same. [Concerned Section]

[Example 35]

[Title of the Invention]

Spinning body detector of spin and detector of vibrations caused by the spin [Claims]

- A spin measurement device designed to obtain specific spin rate pulse of the spinning body (2), comprising means to detect the spin pulse (2b, 6, 7, 15) of the spinning body (2), means to detect the pulse signal equivalent to timing and to store the information (17, 18, 21, 25, 26, 27) and oscillator (21, 22, 23, 24) to emit regular pulses based on said stored information and further divisive calculations. (See Figure 1)
- 2. A device to detect the spin rate of the spinning body described in Claim 1 comprising means to divide or multiply the detected spin rate by a specified factor (13, 14, 16, 19, 20), by attaching a device to calculate the phases (3a, 5a, 10, 11) of said spinning body and another one (3, 5), enabling to emit pulses that reflect the two spinning bodies (3, 5). (See Figure 2)
- Spin detector of spinning bodies and vibration detection device described in Claim 1 and 2, comprising said pulse of the spin detector device and phases detector used as a means to detect vibrations caused by the spin. (See Figure 3)

[Excerpt from Detail Description of the Invention and Drawings]

This invention pertains to improvement of spin detector of a spinning body by further processing the detected spin. It further detects the spin rate of a separate spinning body spinning at a rate proportional to the first spinning body as well as vibration caused by them and by comparing to the detected spin to perform as a vibration detector.



22. 256-ary counter

27. 256-array counter





- 8. detection amplifier
- 9. Oscilloscope
- 11. strobo-activator circuit
- 12. Sweep circuit
- 13. voltage memory
- 14. pulse phase voltage regulator
- 15. wave form shaping circuit
- 16. comparator
- 17. manostable multi-vibrator
- 18. manostable multi-vibrator

[Explanation]



Figure 3

- 19. phase setting dial
- 20. Timing-voltage transducer
- 21. clock pulse emitter
- 22. 256-array counter
- 23. 8 bit comparator
- 24. Manostable multi-vibrator
- 25. n-array counter
- 26. 8 bit latch
- 27. 256-array counter
- (1) The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are both in the area of angle of rotation detection device. Since they are the same, the industrial fields of application of both inventions are the same.

The related invention consists of all of new matters corresponding to the problem to be solved of the specified invention. Therefore the substantial parts of matters in the claims of both inventions are the same.

(2) The technical field of the specified invention is in high-performance detection of the angle of rotation of spinning body. The technical field of the related invention (Claim 3) is in a means to detect vibrations caused by the spin. Applying technology of rotation angle detection device having high-performance detection ability to the technical field of a means to detect vibrations caused by the spin is technically quite appropriate. The two inventions are technically and directly related, and the industrial fields of application of the inventions are the same.

The substantial part of matters in the claim of the related invention is the new matter corresponding to the problem to be solved of the specified invention. Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section]

[Example 36]

[Title of the Invention]

Standards for light intensity measurement device and reference unit [Claims]

- 1. Standards for light intensity measurement device (17) comprising a solid medium in which a large number of light scattering particles (36) are evenly imbedded, and ...said solid medium incorporates a light guide (12) at its edge (21) and flexible surface in order to establish complete optical contact. (See Figure 1)
- 2. Standards for light intensity measurement device, comprising a light guide (12) to be used in the measuring light input/output part of light detection equipment (35) in order to standardize such equipment, the edge (21) of said light guide (12) and the flexible surface (14) of the material composing the reference unit described in Claim 1 for establishing a complete optical contact, and having a means to maintain this condition. (19, 25, 31) (See Figure 1)

[Excerpt from Detail Description of the Invention and Drawings]

In standardizing a light intensity measurement equipment having a light guide (12) in measuring light input part using a light intensity standard, this standardization units allows the light to penetrate from the edge of the light guide to the standardization materials, while preventing the light leakage by complete contact between the two.

The existing light standards used hard materials. Standards produced of such a material has a weakness in that not all light transmitted by the light guide reached the standard, and often failed to standardize the light intensity measuring equipment.



Figure 1

[Explanation]

The technical field of the specified invention (Claim 1) is in the reference material for light intensity measuring equipment. The technical field of the related invention (Claim 2) is the standardization unit to prove measurement standard for light intensity measuring equipment. These two inventions have direct relationship since the combination of standard material and standard-measuring units is generally used, and their industrial fields of application of both inventions are the same.

The reference material that is the new matter corresponding to the problem to be solved of the specified invention (Claim 1) is substantial part of matters in the claim of the related invention (Claim 2). Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section] Patent Law Section 37(ii)

[Example 37]

[Title of the Invention]

Process for determination of the running speed of thread and estimating the number of false-twists in false-twisting machine

[Claims]

- Means for measuring the running speed of the tread (Y) by running said thread (Y) through two capacitance type detector heads (1a, 1b) spaced at specified distance L, through L/T operations of the time for the twist to pass through one head and arrive at the second. (See Figure 1)
- 2. Means of obtaining the running speed of the thread Y, and based on the this information, to estimate the false-twisting number of the thread Y, as the thread runs through the two capacitance type detector heads (1a, 1b) spaced at a specific distance L, while being twined, and the time T required for the twist of thread Y detected at one head and until it reaches the second is processed through L/T operation.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the detection of the funning speed of the thread without physical contact with the thread itself. Applying the specified process on false-twisting machine and measuring the running speed of the thread in false-twisting stage, enables estimation of the number of false-twists in the running thread Y. The usual process of measuring the running speed of the thread is by contact with a roller and obtaining the number of its spin, but this processesometime affected the running of the thread or caused the thread to break.



Figure 1

[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are in "the measurement of the running speed of the thread" and "estimation of false-twists in the thread", respectively. The measured running speed of the thread, however, is used to estimate the number of false-twists in a thread, the two inventions are technically and directly related, and the industrial fields of application of both inventions are the same.

The substantial part of the measurement of the running speed of the thread that is the new matter corresponding to the problem to be solved of the specified invention (Claim 1) is substantial part of matters in the claim of the related invention (Claim 2). Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section]

[Example 38]

[Title of the Invention]

Electromagnetic slewing mechanism and world-time display wristwatch incorporating the electromagnetic slewing mechanism

[Claims]

- 1. An electromagnetic slewing mechanism comprising a cylinder (89) having a zigzag (z form) annular groove (94), a pair of electromagnets (96) placed with a given distance, a permanent magnet (97) placed between the pair of electromagnets (96) that travels between the latter depending on selective activation, and a pin to propel an endless belt that extends into said cylinder from the permanent magnet (97). (See Figure 1)
- 2. ...A world-time display wristwatch incorporating the electromagnetic slewing mechanism with a cylinder (89) having a zigzag (z form) annular groove (94), a pair of electromagnets (96) placed with a given distance, a permanent magnet (97) placed between the pair of electromagnets (96) that travels between the latter depending on selective activation and a pin to propel an endless belt that extends into the said cylinder from the permanent magnet (97). The pin that penetrates to the electromagnetic slewing mechanism drives the endless belt on which the time of each world city (25) is displayed on a horizontal direction and, on the vertical direction, time at a given local time of various world cities (24) are displayed. ...The movement of the endless belt reveals a large number of world times. (See Figures 1, 2 and 3)

[Excerpt from Detail Description of the Invention and Drawings]

In this invention, the back-and-forth movement of the electromagnetic slewing device is converted to the spin of endless belt, which enables a display of time at a large number of world cities in a wristwatch.

As the slewing mechanism for endless belt for displaying a large number of world times, electric motor is conventionally used. Inclusion of a motor may be appropriate for large display panels for air terminals or a telegraph office; however, such a device is inappropriate for use in a wristwatch. By developing the electromagnetic slewing mechanism of this invention, it became possible to include a slewing device into a wristwatch.



[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are "electromagnetic slewing mechanism" and "display of world time," respectively. Since the electromagnetic slewing mechanism is miniaturizable process for turning endless belt, and application of this turning mechanism to world-time display wristwatch is also appropriate, the technical fields of the specified and related inventions are technically and directly related and their industrial fields of application of both inventions are the same.

The electromagnetic slewing mechanism that is the new matter corresponding to the problem to be solved of the specified invention (Claim 1) is substantial part of matters in the claim of the related invention (Claim 2). Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section]

[Example 39]

[Title of the Invention]

The lead frame for semiconductor integrated circuit and semiconductor integrated circuit [Claims]

- Lead frame for semiconductor integrated circuit comprising, 4-cornered tab (14) for supporting semiconductor chip; multiple number of leads (18) for bonding wires at one end of the tab, a frame (12A, 12B) at the opposite end of the tab, and the tab support leads (16A – 16D) extending from the 4 corners of said 4-cornered tab (14), characterized in that the tab support leads extend at an obtuse angle from the two sides of said 4-cornered tab (14). (See Figure 1)
- Semiconductor integrated circuit, comprising 4-cornered tab (14), multiple leads (18) of which the semiconductor chip is affixed to this tab and which extends from the said semiconductor chip to which bonding wires are connected, tab leads (16A – 16D) by which the said lead frame (14) holds 2 sides at an obtuse angle, and the resin sealer that covers the whole of said semiconductor chip, tabs (14, bonding wire, tab-holding leads 16A – 16D), and part of said lead (18). (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention pertains to the lead frame for semiconductor integrated circuit and the semiconductor integrated circuit. The conventional lead frame has the shortcoming of its tabs miss-shaping while applying the resin sealer so that connecting wire breaks due to unstable leads attaching the tab to the lead frame.





[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are "lead frame" and "semiconductor integrated circuit," respectively. Application of the art of the lead frame to that of semiconductor integrated circuit is quite appropriate. The two fields of the inventions are technically and directly related and the industrial fields of application are the same.

The lead frame that is the new matter corresponding to the problem to be solved of the specified invention is substantial part of matters in the claim of the related invention. Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section]

[Example 40]

[Title of the Invention]

MIS type semiconductor device and the semiconductor random access memory device application

[Claims]

- MIS type semiconductor device, comprising first MIS element (Q_{W11}) formed on the semiconductor substrate, utilizing either the drain (3) or the source (4) of the first MIS element (Q_{W11}) and the second MIS element (Q_{R11}) formed above the first MIS element (Q_{W11}). (See Figure 1)
- 2. A semiconductor random access memory device with the characteristics of having the matrix of memory cells (C11) that includes the first MIS element (Q_{W11}), the drain (3) or the source (4) of the first MIS element (Q_{W11}) and the second MIS element (Q_{R11}) formed above the first MIS element (Q_{W11}), gate input capacity information storage capacitor (C_{S11}) for the second MIS element (Q_{W11}). In the matrix of the memory array, the drain of the said first MIS element (Q_{W11}) electrically connected to the drain of the second MIS element (Q_{W11}), ... connecting so that the data line (D_1) orthogonally to sense (S_1) and word (W_1) lines of the each memory cell of the array. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the MIS semiconductor device and a high-integrated random access memory semiconductor device. This memory cell is composed of two MIS elements forming specific circuit in the memory cell circuit and a capacitor in which the first MIS element (Q_{W11}) and the second MIS element (Q_{R11}) formed above the former, further the either the source or drain of the first MIS element (Q_{W11}) is made function as the gate to the second MIS element (Q_{R11}) carrying a capacitor (C_{S11}) thereby achieving a semiconductor random access memory device which is simplified.



[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are "MIS type semiconductor device" and "semiconductor random access memory device application". Application of the art of the technical field of MIS type semiconductor device to the technical field of semiconductor random access memory consisting of many circuit elements is extremely appropriate. The technical fields of both inventions are related directly and technically, therefore their industrial fields of application of both inventions are the same.

The semiconductor device that is the new matter corresponding to the problem to be solved of the specified invention is substantial part of matters in the claim of the related invention. Therefore the substantial parts of matters in the claims of the inventions are the same. [Concerned Section] Patent Law Section 37(ii)

[Example 41]

[Title of the Invention]

Piezoelectric monocrystal and the surface acoustic wave element utilizing the piezoelectric monocrystal

[Claims]

- 1. A Piezoelectric monocrystal comprising the structure expressible by the general formula (Ba_2-xSr_x) TiSi₂O₈, where the value of X is $0.25 \le X \le 1.2$.
- 2. Surface acoustic wave element, characterized by using the surface waves that propagates parallel to the vertical surface of the Z-axis of piezoelectric monocrystal, that propagates in parallel to the X-axis surface of piezoelectric monocrystal or that propagates the surface that includes X-axis and also forms the angle μ where $|\mu| < 30^{\circ}$ in which the surface is parallel to the X-axis of piezoelectric monocrystal of the piezoelectric monocrystal having the structure expressible by the general formula (Ba2-xSrx) TiSi2O8, where the value of X is $0.25 \le X \le 1.2$.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the piezoelectric monocrystal and the surface acoustic wave element used in ultrasound oscillator element.

The piezoelectric monocrystal in this invention has a large coefficient of coupling and the coefficient of temperature in delay time is very low so that it is particularly suitable for use as the material in surface acoustic wave device.

This surface acoustic wave element using piezoelectric monocrystal in this invention is (1) that propagates on the vertical surface that is vertical to the Z-axis of the piezoelectric monocrystal (Figure 2 k^{P} is the propagating direction of the acoustic wave, μ is the Eulerian angle of the angle vertical to the cut surface and the Z-axis, θ is the Eulerian angle of the surface waves and the X-axis), (ii) the direction of the surface wave propagation in parallel to the surface that includes the X-axis (Figure 3), (3) the surface wave propagating in the vertical direction of the cut surface that includes the X-axis and the cut surface that is in the vertical direction, and the Z-axis of the monocrystal together comprises the angle μ where $|\mu| < 30^{\circ}$.



[Explanation]

The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are in "piezoelectric monocrystal" and "surface acoustic wave element," respectively. It is quite appropriate to include piezoelectric monocrystal in the surface wave acoustic element. The technical fields of both are directly and technically related and the industrial fields of application of both inventions are the same.

The piezoelectric monocrystal that is the new matter corresponding to the problem to be solved of the specified invention (Claim 1) is substantial part of matters in the claim of the related invention (Claim 2). Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section] Patent Law Section 37(ii)

[Example 42]

[Title of the Invention]

Connector and circuit board that includes the connector [Claims]

- 1. Cartridge type circuit board connector characterized by a flexible flanges (23), which protrude from the conductive part (12) of the connector, which in turn is made of conductive rubber. (See Figure 1)
- Cartridge type circuit board characterized by one end of flange part (12) indicated in Claim 1 in contact with the shoulder of the insulating casing (25), the other end of the end of the flange (23) pressed against the circuit board (22) which deploys MOS type IC (21). (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the connector, which is used in coupling the IC circuit board (22). When inserted as an expansion cartridge, the connector (24) and said circuit board (22) make an electric connection.

The existing system of cartridge type circuit board, internal circuit board (22) and connector (22) are already connected so that if static electricity laden human body part and other objects makes a contact with the connector part protruding from the insulated casing, the MOS type IC could have been damaged.





[Explanation]

The specified invention (Claim 1) and related invention (Claim 2) were in technical fields of "connector" and "cartridge type circuit board," respectively. Because the connector is to be used in the technical area of cartridge type circuit board in the claim, the two invention fields have technically direct relationship, and their industrial fields of application of both inventions are the same.

The connector that is the new matter corresponding to the problem to be solved of the specified invention is substantial part of matters in the claim of the related invention. Therefore the substantial parts of matters in the claims of the inventions are the same.

[Concerned Section]

3.3 Relationship under Patent Law Section 37(iii)

The relationship under Patent Law Section 37(iii) is that the relationship between the specified invention of a "product" and the related inventions falls under the relationship between the product and "processes for manufacturing said product, processes for using said product, processes for handling said product, machines, instruments, equipment or other means for producing said product, products solely utilizing specific properties of said product, or products for handling said product."

3.3.1 Process of Manufacturing the Product, and Machines, Instruments, Equipment or Other Things for Manufacturing the Product

The process or the product of the related invention is what is used to change the raw material or semi-finished material etc. into the product of the specified invention.

"Other things," includes ,except the "equipment," catalyst or microbes etc. that is used on another raw material or semi-finished material etc. to use its function to change them to obtain the product.

When the "the process of manufacturing" or "machines, instrument, equipment and others" are appropriate for manufacturing of the specified invention, the unity requirement is satisfied even if they can be used to manufacture products other than the product indicated as the specified invention.

[Example 43]

[Title of the Invention]

Rotary solvent extirpation equipment, and the process of the field assembly of the cell assembly of rotor of the rotary solvent extirpation equipment [Claims]

Rotary solvent extirpation equipment (16) having upper support beams (12) and lower support beams (14) which extend in the direction of diameter parallel to the rotor shaft, and the cells of the rotor are held by 4 upper and lower beams, wherein

- (a) Upper and lower positioning elements (40), inside and outside positioning elements (42, 44) affixed in the side-walls (20) held by the upper and lower support beams.
- (b) The inside wall material (18) affixed in between the said sidewalls.
- (c) The outside wall material (22) affixed in between the said sidewalls.
- (d) Gable structures (60) placed on the sidewalls of opposing cell. (See Figures 2, 3, and 4)
- 2. In the process of field assembly of the cell of the rotor for the rotary solvent extirpation equipment having upper support beams (12) and lower support beams (14) parallel to the rotor shaft, which are held by 4 upper and lower beams, comprising in combination;
 - (a) First placing the part with the side walls (20) with inside and outside positioning elements (42, 44) on the upper and lower support beams by means of the upper and lower positioning elements (40).
 - (b) Next, by using the positioning elements on the said sidewalls, place the inside wall parts.
 - (c) Further, place the out side part (22), by using the outside positioning elements as a guide, on said sidewalls.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the rotary solvent extirpation equipment and the process of the field assembly of the cell assembly of its rotor. More specifically, the equipment is stored in a configuration that is ready to be shipped to the field and consists of inside walls, outside walls and sidewalls. The invention allows an easy field assembly of the rotor that consists of the cell assembly in rotary solvent extirpation equipment.

The gable structure prevents solvents from dripping in between cells and to facilitate it to flow into the neighboring cell, and the process of field assembly of this invention is applicable to rotary solvent extirpation equipment of the type other than that having the gable structure.



Figure 1 Oblique view of the rotary solvent Extirpation equipment



Figure 3 Detailed side view of the assembled cell assembly

[Explanation]

The specified invention (Claim 1) is the invention of the rotary solvent extirpation equipment and the related invention (Claim 2) is the process of field assembly of the cell assembly of the rotary solvent extirpation equipment.

The related invention of the process of field assembly is appropriate for the matter of the specified invention of the rotary solvent extirpation equipment.

The related invention of the process of field assembly pertains to the process of manufacturing the equipment, the specified invention.

[Concerned Section]

[Example 44]

[Title of the Invention]

Antibiotic A/16686 and microbes to produce the antibiotic [Claims]

- Antibiotic A/16686, a sodium salt of white crystal substance, comprising A) having the melting point of 224-226°C, ...C) consisting of 51.73% carbon, 6.34% hydrogen, 9.96% nitrogen, 5.84% sodium (total contents), 4.74% ionized sodium and 1% of the remaining constituents of like elements, ...F) specific optical rotation, [α]D²⁴=+49.7°, ...J), amino acid analysis showing ornithine, aspargine... ...after hydrolyzing in 6 N nitric acid at 110°C for 6 hours.
- 2. A microbe belonging to *Actinoplanes philippinensis* that is capable of producing in glucose-asparagine agar the antibiotic A/16686 without producing sporangia.

[Excerpt from Detail Description of the Invention]

This invention concerns a new antibiotic substance A/16686, which has an antibacterial activity, and a microbe, *Actinoplanes philippinensis*, which is capable of producing the antibiotic substance A/16686.

Antibacterial substance A/16686 is a new glycopeptide antibiotic. This antibiotic is produced by culturing the microbe strain (NRRL5462) of *Actinoplanes philippinensis.* [Explanation]

The microbe of related invention (Claim 2) does not fall in the category of equipment to produce the antibiotic, but it falls in the category of "other things."

[Concerned Section]

[Example 45]

[Title of the Invention]

Structure of anti-slipping device of blind nut [Claims]

Anti-slipping device of blind consisting of a hollow cylinder (36) fabricated of a material capable of plastic deformation, having the female thread (12) on its inside front end and a flange (14) on its back end;
Wherein a groove (24) cut in the direction of the outside of the radius in the surface of the

mounting hole (22) of the part to be fastened (16); and the mid-section of the blind nut (34) expanding in the outside direction of the radius including the said groove (22), thus preventing the slippage of the blind nut. (See Figures 1 and 2)

2. The tool for forming the anti-slippage groove (22) comprising a guide portion (26) of the blind nut, which is inserted into the pre-drilled mounting hole of the piece to be fastened, a flange (30) able to be inserted in said mounting hole (22) provided at the rear side of said guide, and an edge (32) affixed at an angle of 15-40° and protruding in the outside direction of the radius of the edge of the flange. (See Figures 3 and 4)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the structure of anti-slippage device of blind nuts when a large torque is applied to the piece being held by the blind nut.

The conventional blind nut was tightened by means of an impact wrench and a like so that a large torque is applied to the blind nut and crimping becomes loose, the blind nut turned.

This invention combines the grooves in the mounting hole and the anti-slippage structure of the blind nut in order to prevent slippage, and the tool in Figures 3 and 4 is appropriate for forming the grooves in the mounting hole (22).



[Explanation]

The related invention (Claim 2), the tool does not manufacture the specified invention (Claim 1), the anti-slippage structure of the blind nut, but it is appropriate for cutting the grooves in the mounting hole to accept the structure of the specified invention blind nut. Both inventions have the relationship between the product and machines, instruments, equipment or other things for manufacturing the product.

[Concerned Section]

[Example 46]

[Title of the Invention]

Optical fiber cable and process of manufacturing [Claims]

- 1. Optical fiber cable comprising optical fiber core 3 on a protective tube 4' and at least one layer of a tension material 7 on the outside, ...contacting on the outside of the tension material 7 a co-axially extruded metal pipe 8. (See Figure 1)
- 2. Production process of a cable having envelope layer arranged on the twisted cable materials comprising the steps of: forming metal pipe 8 which is larger than the cable part 7 on the outside of twisted cable part 7, by continuous extrusion, deforming the extruded pipe until it contacts the cable part 7, ...thereby affixing the envelope layer 8' arranged on the twisted cable materials. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the optical cable that is combustible and able to withstand the high pressure and corrosiveness of the seawater, and it can be used in a long length, and the process of the production of this optical cable. This production process can be applied in manufacturing of items other than optical fiber such as combustible cables and ropes.

In the prior art of production where the pipe 8 is fabricated by welding a copper tape, the disadvantage is that parts contained in the pipe 8 is subjected to am adversary effect from the heat of welding.



[Explanation]

By means of related invention (Claim 2), the "process of cable production," the specified invention (Claim 1), the "optical fiber cable" as well as "combustible cable or rope" is manufactured, and the related invention, the "process of cable production" is appropriate for the production of the specified invention, the "optical fiber cable." Therefore, both inventions have the relationship between the product and process of manufacturing the product. [Concerned Section]

[Example 47]

[Title of the Invention]

Ignition trigger pulse generator and magnetizer [Claims]

- Ignition trigger pulse generator to be deployed on the drive shaft of an internal combustion engine comprising a pick-up coil device (13) and a permanent magnet (18), wherein the permanent magnet (18) consists of two magnetized components placed on the drive shaft separated and forms an area of reversed flux of magnetic induction (24, 25) across the magnetized radius and further these components are magnetized in the opposite directions. (See Figure 1)
- A magnetizer (31, 32) for ring-shaped permanent magnet (18) for an ignition trigger pulse generator for internal combustion engine comprising: a pole part (33) with U-shaped section having first and second poles which contacts half of the periphery of circular magnet, thereof lines up in the direction of a shaft, magnetizing coil (37) deployed on the surface of said pole part, and, a power source to provide the polarity and a given level of electric current selected by said coil (37). (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the drive-shaft mounted and electric generator equipped trigger pulse generator to provide 2- cylinder engine ignition condenser for outboard motor boats and others. In a ring-type permanent magnet, where two parts are separated in parallel to the shaft and opposite in the diameter, are set so that the polarity of the two parts are opposite, thereby setting up an area of reversed flux of magnetic induction (24, 25), causing the pickup-coil to release a sharp trigger pulse. The magnetic material for this device is magnetized as stated earlier and deployed on the drive shaft.

In the prior art, the pulse generator assembly is mounted under the electric generator, which required a longer drive shaft, resulting in a larger overall size and the device could not provide a sharp trigger pulse. When being assembled, the parts were likely to be pulled onto the magnets, reducing the work efficiency



[Explanation]

The related invention (Claim 2), the magnetizer, is magnetized after the specified invention (Claim 1), pulse generator, has been assembled. Therefore, both inventions have the relationship between the product and equipment for manufacturing the product.

[Concerned Section]

3.3.2 Process of Using the Product and Product Exclusively Using the Specific Characteristic of the Product

"A process of using the product" is meant an invention of a process to use the property or function of a product. "An invention of a product exclusively using the specific characteristic of the product" is an invention of a "product" to exclusively using the attribute of the product.

[Example 48]

[Title of the Invention]

A derivative of cyclopropane carbonic acid ester, an insecticide that contains the derivative, and the process of its use (C07C69/747, A01N53/00(102))

[Claims]

1. General formula (1)



The derivative of cyclopropane carbonic acid ester expressible (in the formula, X is sodium or bromine, R is halogen, low-grade alkyl, trifluoromethyl or low-grade alkoxide) in the general formula.

- 2. An insecticide having as active ingredient at least one of the compounds listed in Claim 1.
- 3. A process of insect control applying at least one of the compounds listed in Claim 1 in a desired location.

[Excerpt from Detail Description of the Invention]

This invention concerns a substance that shows an insecticidal activity, and the duration of its activity having a substituent on biphenyl unit benzene ring, [1,1'-biphenyl]-3-yl-methyl-3-(2,2-Dihaloethenyl)-2,2-dimethyl cyclopropanecarboxylates, and an insecticide that contain this compound and the process of its application.

[Explanation]

The related invention (Claim 2), an insecticide, falls under the product that exclusively uses the insecticidal activity of the derivative of cyclopropanecarbonic acid ester of the specified invention (Claim 1).

A process of the related invention (Claim 3), falls under the "process" to use the derivative of cyclopropanecarbonic acid ester of the specified invention.

[Concerned Section]

[Example 49]

[Title of the Invention]

The fourth class ammonium compounds and their usage [Claims]

1. The fourth class ammonium compounds expressible by the formula below.

$$\begin{pmatrix} CH_{2}CH_{2}-CH_{2}OH \\ CICH_{2}-CH_{2}OH \\ CH_{2}-CH_$$

- 2. A process to prevent growth and propagation by means of applying the fourth class ammonium compounds in effective dosages indicated in Claim 1 on the microbes selected from bacteria and fungi.
- 3. Process for reducing the bond between web fibers by applying in the slurry of cellulose pulp fibers...the fourth class ammonium compounds described in Claim 1.

[Excerpt from Detail Description of the Invention]

This invention concerns the newly developed fourth-class ammonium compounds and their application as microbial control and desegregation agent. [Explanation]

Processes indicated as the related inventions (Claim 2 and 3) are to apply the specified invention (Claim 1), fourth class ammonium compounds, as microbial control and desegregation agents, respectively. The relationship between the specified invention and related inventions fall under the product and the process of using the product.

[Concerned Section]

[Example 50]

[Title of the Invention]

Trifluoroethylene chloride/ethylene copolymer as filming component of a paint and the process of electrostatic coating

[Claims]

- 1. A paint having as its filming component Trifluoroethylene chloride/ethylene copolymer the mole fraction content of which is 40/60 70/30.
- 2. Process of electrostatic coating using the paint described in Claim 1.

[Excerpt from Detail Description of the Invention]

The filming component, Trifluoroethylene chloride/ethylene copolymer, is superior in its heat- and weather-resistibility and is therefor very suitable for metal roofing materials susceptible to heating by the heat of the sun and others.

The copolymer in question is polar and can be easily electrified, and as a consequence, adheres to a surface as an even coat. Since it absorb little water from humid air, it seldom discharges electricity, and is therefore its in electrostatic coating process adherence to the surface is strong.

[Explanation]

The process described in related invention (Claim 2) pertains to the electrostatic application of the specified invention, the paint. Both of the inventions, therefore, fall in the category of the product and the process of using the product.

[Concerned Section]

3.3.3 Handling Process for the Product and Product for Handling the Product

"Handling a product" refers to the maintenance and/or extraction of the function of the product, by externally acting on the product, in principle without causing change to the essence of the product. Transportation and storage of the product, for example, fall under this category.

Unity of application shall be recognized if the "handling process for the product" or "product for handling the product" of the related invention is suited to handling the product of the specified invention, even if the same process or product could also be applied to handling products other than the product of specified invention.
[Example 51]

[Title of the Invention] Magnet-clad seeds and seeding machine [Claims]

- 1. Magnetic seed covering for a given number of seeds (1) by means of water-soluble covering material (4) that includes magnetic particles (4), and form the grain size and their shape. (See figure 1)
- A seeding machine wherein one side of a turning disc, with magnets (8) imbedded on its periphery, is suspended in the seed bin (6), and affixing the seed-scraper (10) on the opposite side of the disc and having a seeding tube (11) on its lower side. (See figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention enables a specified number of seeds by means of the magnet to be sowed accurately. The seeds are first coated by means of water-soluble coating agent (4) that includes powerful magnetic material such as iron particles. The specified number of coated seeds (7) are transported out of the seed bin (6) by magnets (8) imbedded on the periphery of turning disc (7), and dropped into the seeding tube (11) by the seed-scraper (11).



[Explanation]

The seeding machine of the related invention (Claim 2) extracts the function of the coated seeds of the specified invention (Claim 1), thereby, the two inventions constitute the product and a product for handling the product.

[Concerned Section]

[Example 52]

[Title of the Invention]

Hydrophilic agent for potted plants and retaining tool [Claims]

- 1. Water retention agent of high-molecular weight for potted plants.
- 2. A retainer device composed of bag to hold the water-retention agent, which permits water and plant root penetration, with pores small enough to prevent water to runoff that, in turn fits onto the aeration plate fitted into the bottom of the planter pot.

[Excerpt from Detail Description of the Invention and Drawing]

This invention involves mixing polyacrylamide and other high-molecular hydrophilic materials into the potted soil, thereby encouraging root growth while reducing the frequency of watering.

The retaining tool consisting of the bag (1) and the aeration plate (10), by soaking them with the hydrophilic agent so that they have completely absorbed the hydrophilic agent before placing in the planter pot prior to placing the soil, it can be kept free of the agent, the process can be very simple, clean and quick. The root can penetrate the bag, but it must prevent the water from passing through it. The grain size of the high-molecular weight hydrophilic agent must be 1.5 to 3mm.



[Explanation]

The fixture for the hydrophilic agent for potted plant of the related invention (Claim 2), that is to put the hydrophilic agent for potted plant in the bottom in the potted soil, invented to maintain and extract the function of the hydrophilic agent for potted plant of the specified invention (Claim 1). They, therefore, constitute the product and a product for handling the product.

[Concerned Section]

[Example 53]

[Title of the Invention]

Collapsible transporter and the main-pipe elevating tool [Claims]

- Collapsible heavy-duty transporter, comprising 4 extendable main-pipes (1, 2, 3 and 4), 2 suspension-pipes (5 and 6), 2 side-pipes (7 and 8), 4 fittings (9) that maintain said main-pipes in a vertical position, suspension- and said side-pipes at a right angle within a horizontal space and rollers and bearings that can be affixed selectively on the lower part of the main-pipes. (See Figure 1)
- 2. Main-pipe elevating tool for the heavy-duty transporter main-pipes described in Claim 1, comprising distance block (12) installable on the floor, a pair of base-support plates (15) equipped with shaft holders (14) connected to both ends of said block (12) detachably, a pair of couplers (1a, 2a) one end of which is affixed to the base-support by means of a hinge and the receptacle for the main-pipes at the top of the other end and a fastening tool each end of which can be attached to a pair of reclining main-pipes. The fastening tool is used to pull the reclining pipes so that they are upright. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the transporter that is disassembled into several units to facilitate its transportation and the main-pipe elevating tool. Conventional device of this type has casters and bearings at the lower part of the four legs, but because the heavy load is suspended within the structure, it tends to become large and is generally cumbersome to transport and could not be pushed through smaller entrances.



Figure 1

[Explanation]

The tool of the related invention (Claim 2) is used for assembling the transpoter by raising the main-pipes of the collapsible transporter of the specified invention (Claim 1), and the function of the transporter is maintained and extracted by externally acting on the collapsible transporter. Thus, the two inventions constitute the product and a product for handling the product.

[Concerned Section]

[Example 54]

[Title of the Invention]

Anti-surface erosion block mats, the mat-laying process and the mat-laying equipment [Claims]

- 1. Anti-erosion block mat, comprising multiple blocks (1) with their reverse side covered with flexible sheet (2) that is strong enough to hold up against the weight of the said mats when lifted by it, and with enough excess on at least 2 sides to hold the blocks down when laid on the ground with the edges buried. (See Figure 1)
- 2. Construction plan based on the process of filling a section designed to accept a multiple number of independent blocks (1) with concrete or mortar while before the latter hardens, lift the blocks by means of the extra portion at one or both ends of the flexible sheet (2), and anchor the blocks by means of the flexible sheet (2) ends while leaving a small gap between the sectioning and the blocks.
- 3. Anti-erosion block mat laying equipment having a long beam (3) on which a movable block (4) travels along the long axis and a pinch-pickup (5) attached to the movable block. The pinch-pickup (5) in turn consists of the structural support (6), which is hinged to the beam (3), the link lever (7) attached to the upper frame (6a) of the structural support (6) and the lower frame (6b) attached to the upper portion of the said lever (7) working in consort with one another and a push-pressure device (8) to pinch-lift the extended portions of the flexible sheet (2) to lift the block mat. When the push-pressure device (8) exerts the pressure on the said lower frame (6b), the hinge (9) of the said link lever (7) and the push-pressure device (8) passes the line drawn vertically from the hinge of the link lever and the upper frame (6b), the said link lever is locked.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the mechanically laid anti-erosion block mats used on surface of banks, on levies, railroad and road elevations, the easy process of laying the mats and the block mat laying equipment. More specifically, the anti-erosion block mats of this invention include strengthening the adhesion of the block mats to the flexible backup sheet, and enabled the mechanical laying by means of extensions left to the sides of the block mats. The block-laying equipment of this invention, furthermore, has built into it a pinch-pickup device designed for the flexible backup sheet.

Figure 1 Figure 2



[Explanation]

The related invention (Claim 2) is the process of manufacturing the anti-erosion block mats of the specified invention (Claim 1), and they correspond to the product and the process of manufacturing the product.

The related invention (Claim 3), furthermore, is an invention of the mat-laying equipment that facilitates the function of the anti-erosion block mats of the specified invention (Claim 1), and they are related as the product and a product for handling the product.

[Concerned Section]

[Example 55]

[Title of the Invention]

Collapsible housing and the process of packing for shipment [Claims]

- Collapsible housing unit comprising a frame (6a, 6b, 6c) to which floors (7a, 7b, 7c) are built in, base units (1A, 1B, 1C)...assembled in such a way to be disassembled as a floor base (1), L-shaped corner panels (2A) assembled in such a way to be disassembled on four corners of the floor base (1) and side walls (2) constructed of side panels (2B, 2C, 2D) which is built in such a way as to be disassembled and assembled in such a way to be later disassembles by means of the fixtures (3A, 3B, 3C), and a roof fixture (3) placed at the upper inside of the side walls (2), also to be disassembled later and consisting of the roof paneling. (See Figure 1)
- 2. Packaging process of collapsible housing described in Claim 1, wherein temporary packaging frame (60) is formed by connecting the base units (1A, 1B, 1C) of the floor base in a U-shape in a disassemblable manner through multiple fixtures (58), corner panels (2A), side panels (2B, 2C, 2D) and roof panels (4A, 4B) are piled in the temporary packaging frame (60), and attachment units (3A, 3B, 3C) of the roof fixture (3) are piled on the temporary packaging frame (60) in such a manner as to be disassembled later. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the collapsible housing unit and its packaging to be used as an office space or sleeping quarters at a construction site.

The conventional units of this type have not been easy to assemble and disassemble and were not efficient in its transportability and storability.



[Explanation]

The process of packaging this collapsible housing of the related invention (Claim 2) can facilitate the functions (easy assembly, storability, transportability) of the collapsible housing of the specified invention (Claim 1). They therefore, have the relationship of the product and handling process of the product.

[Concerned Section]

[Example 56]

[Title of the Invention]

Ready-mixed concrete transfer hose and the process of cleaning [Claims]

- A ready-mixed concrete transfer hose including a pumping tube (8) attached directly to the concrete hopper (2) and pressure-transfer hose (17) to be connected to the pumping tube, wherein the connecting pipe (10) is used to make the connection of the above hoses (8 and 17), and the connecting pipe having cock (11). (See Figures 1, 2 and 3)
- 2. The process of cleaning ready-mixed concrete residue by shutting by means of placing a hydrophobic resilient material (18, 18a) at the end of the pressure-hose, severing the connection between the pumping tube (18) and pressure-transfer tube (17) and at the same time opening the cock (11) of the connection pipe (10). Following this processesimilar hydrophobic resilient material is sent out of the hopper by water-pressure, cleaning the inside of the pumping hose and the connection pipe. In the next step, shut off the cock of the connecting tube, send the hydrophobic resilient material placed at the end of the pressure-hose down the inside by means of the water pressure.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the ready-mixed concrete transfer hoses and their cleaning process. The pumping tube and pressure-transfer hose are connected by means of connecting pipe having a cock, which can be opened or closed, thereby enabling the cleaning of the pumping tube alone or by sending hydrophobic resilient material down the pumping tube, connecting pipe and pressure-transfer hose to remove residues of ready-mixed concrete completely from all of the parts. Conventional transfer hoses lacked the capability to be completely cleaned because the pumping tube and pressure-transfer hose were directly connected. It was particularly difficult to clean the inside of the pumping tube.



[Explanation]

The related invention (Claim 2), the cleaning process is to be effected on the ready-mixed concrete transfer hoses and is to maintain the function to transfer the ready-mixed concrete transfer. Therefore, the two inventions have the relationship of the product and the process of handling this product.

[Concerned Section]

[Example 57]

[Title of the Invention]

Internal combustion engine equipped with exhaust gas filter and the process of its operation [Claims]

- 1. Internal combustion engine equipped with supercharger flap (6) and ...pressure wave supercharger (7), wherein an exhaust gas filter (18) is placed in the exhaust pipe up-stream (11) of the pressure wave supercharger (7).
- 2. Process of operating the internal combustion engine equipped with supercharger flap (6) and...pressure wave supercharger (7) and placing a exhaust gas filter (18) in the exhaust pipe up-stream (11) of the pressure wave supercharger (7), characterized by an increase in the fuel supply to the internal combustion engine when the exhaust filter is clogged.

[Excerpt from Detail Description of the Invention and Drawings]

The primary invention concerns the internal combustion engine equipped with exhaust gas filter. If the exhaust filter is placed down-stream from the pressure wave supercharger, the engine could stall when the filter is clogged. The filter, thus, was placed on the up-stream side.

The second invention concerns the operation of the internal combustion engine equipped with the exhaust filter. When the exhaust gas filter is clogged, it is necessary to burn off the trapping form the filter. In order to raise the exhaust gas above the combustion temperature, an over supply of the fuel is required while the engine is running.



[Explanation]

In the exhaust filter for the internal combustion engine of the specified invention (Claim 1), its function cannot be effected or maintained. The related invention (Claim 2) is directed to operate the internal combustion engine so that the temperature of the exhaust gas is raised in order to remove the clogging. Affecting an external force to the filter allows it to maintain or activate its function. The two inventions, therefore, are the product and the process of handling the product.

[Concerned Section] Patent Law Section 37(iii)

[Example 58]

[Title of the Invention]

Assembled multiple step barrel-type centrifugal pump unit and detachable transporter [Claims]

- 1. Pre-assembled multiple step barrel-type centrifugal pump to be installed inside an outside housing where the compression unit (56) is installed inside pump casing, multiple pump phases including impellers, ...inlet aperture casing (41), ...side cover (57) and ...end cover of the last phase. The device which places compressive force (53, 54, 55) is directly connected to said compression unit, and a device to input compression to the input axis (75, 76) is installed in the pump unit. (See Figure 1)
- In the device to install pre-assembled pump unit and to uninstall the same consisted of ...support part (101), ...side parts (103, 104), ...rollers (105a, 105b, 106a, 106b), a pair of rails (110, 111) installed on the upper surface of said supports (101) and wheels to travel on the set of rails. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

The two inventions concerns installation and un-installation of multi-phased barrel-type pump.

Conventional multi-phased pumps required disassembling of inner parts in a given order and in re-assembly effect the same process in the reverse direction, a process that required precise adjustments and consequently required a long time of skilled labor. The first invention is related to assemblage of parts placed on an axis in a precise manner by using a compressor device, thereby achieving an easy assembly and disassembly. The second invention concerns transport kit to enhances handling of the unit.



Figure 1



[Explanation]

The related invention (Claim 2), the transport kit, is appropriate for transport and assembly of the specified invention (Claim 1), the pump unit. The product of related invention activates the function the product of the specified invention by affecting an external force on the product of the specified invention; therefore, the two inventions have the relationship of the product and a product for handling the product.

[Concerned Section]

[Example 59]

[Title of the Invention] High torque screw and its driver [Claims]

- 1. High-torque screw, comprising a drive-groove (16) on the head (22)) of a screw (10), said drive-groove (16) formed of an arching bottom (26) and walls (24) which is slightly under-cut, and further comprising a conical indentation (18) on said drive-groove (16), characterized in that the base (28) of said conical indentation (18) is larger than that of the central portion of the drive-groove (16) in diameter, and an apex of the cone (30) is about twice that of the central portion of said drive-groove (16). (See Figures 1, 2, 3)
- 2. The screwdriver, comprising a driver blade (12) which is located at one end of the tool (32), consists of a pair of almost parallel side walls and an arching bottom edge (36), having a conical protrusion (38) formed in the central portion of said drive blade (12), the conical protrusion (38) of said blade having larger diameter than the width of the central portion of said drive blade, and having a pointed apex (41) protruding out of the curved blade under said arching bottom edge (36). (See Figure 1)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the high-torque screw and its driver that does not require visual confirmation of the tool mounting on the screw head and completes the work quickly and easily.

Conventional tool of this type has regular or Phillips type screw drivers. They had the weakness of easily stripping or damaging the head.



Figure 1

[Explanation]

The related invention (Claim 2), the screw driver is designed specifically to effect external force on the specified invention, the high-torque screw, in order to allow it to effect its function. Therefore, the two inventions have the relationship, the product and a product for handling the product.

[Concerned Section]

[Example 60]

[Title of the Invention]

Fluorescent lamp fixture having a release mechanism and the lamp releasing tool [Claims]

- 1. The fluorescent lamp fixture with its long body (1) attached to the ceiling (13), a reflector plate (5) on which fluorescent lamp (4) is affixed, which is hinged at a long end of the said body (1) and having a hole (2), at the opposite end of the hole (2) an engagement unit (8) which engages the body (1) and the reflector plate (5), the extension of this engagement unit (8) a plate that go over the upper portion of the hole (2). By pushing against a push-plate (9) with the lamp releasing tool (10), it will disengage the engagement unit (8). (See Figure 1 and 2)
- 2. The lamp changing tool, which comprises a long pole (20) with an opening on the upper end and a C-shaped opening (21) near it, a sliding inner pipe (22) at the upper end of the pole (20), a flat stopper plate (23) placed near the opening at the end of the pole (20), a handle (24) through the C-shaped opening (21), which in turn is attached to the sliding inner tube (22) and a coiled spring (25) placed inside the pole (20) which buts against the sliding inner tube (22).

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns a lamp fixture placed on relatively high ceiling particularly for ease of changing lamps. It has the reflective plate, which can be released from the lamp housing and a tool to facilitate this process.

Changing lamps generally require a step stool or a ladder, but such a procedure is time-consuming and dangerous.

In this system, the reflective plate which is hinged on the lamp housing, enabling a man standing on the floor to change lamps.









[Explanation]

The specified invention (Claim 1) concerns the hinged lamp removing mechanism equipped lamp fixture and the related invention (Claim 2) concerns the tool used to enable removal of the lamp remotely by a man standing on the floor; it affects the specified invention externally in order to facilitate its use. The two inventions, therefore, have a relationship of the product and a product for handling the product.

[Concerned Section]

[Example 61]

[Title of the Invention]

Cassette and a mechanism to insert and retrieve the cassette [Claims]

- 1. A cassette, comprising a removable cover (16, 18) protection a projection mask (14), one of which (16) is equipped with a gas passage way (68) in and out of the cassette, and a normal closed valve in said gas passage way. (See Figure 1)
- 2. Cassette insertion/retrieval mechanism for projection equipment designed to place protective covers (16, 18) over the mask (14) of the cassette, protect the mask (14) from the atmosphere by evacuation of the cassette, place the cassette in the receptacle of the projector, releasing the vacuum upon reaching the receptacle, remove the covers (16, 18), advancing the cassette to the projection position. Upon completion of projection, the mechanism returns the cassette to the receptacle, replaces the covers (16, 18) and re-evacuates the cassette before ejecting it out of the projection equipment. (See Figure 2) [Excerpt from Detail Description of the Invention and Drawings]

This invention concerns handles the projection mask and masking image of the semiconductor projected on the silicone wafers. The projection mask of this process requires protection covers to keep out the particles, necessitating the opening of the covers inside the projection equipment.



[Explanation]

The process of the related invention (Claim 2) enables placement and retrieval of the cassette in and out of the projection equipment as well as removal and replacement of the cassette covers in order to enable the function of the cassette of the specified invention (Claim 1).

Therefore, the two inventions have a relationship of the product and a process for handling the product.

[Concerned Section]

[Example 62]

[Title of the Invention]

Sealer device for the screw-holes in the flange of the nuclear reactor and the process of its application and removal

[Claims]

- The sealer device (6) for the screw-holes (5) in the flange (4) of the nuclear reactor (1), comprising a lower cover (13) on which bolts (16) are born, an upper cover (12) bearing the bolt holes (17) through which said bolts (16), the nuts (20) screwed onto the said bolts (16), a circular U-grooves (14) placed on the circumferences of said covers (12, 13) and the seal-ring (15) to be placed in the said grooves (14), in which the placement of said covers (12, 13) are adjusted by means of said nuts (20) to deform the configuration of the seal ring (15) in order to seal the vessel. (See Figure 1 and 3)
- 2. The tool designed to place and remove the sealer device (6) for the screw-holes in the flange of the nuclear reactor described in Claim 1 comprising an outside piping part (28); a relatively ratable inside piping part (27) installed inside of and on the same axis as the said outside piping part (28), multidimensional contours (36, 50) offset placed within, a handle (32) affixed at the opposite end of the inside piping part (27), a stopper (53) to restrict relatively rotating two piping parts (27, 28) affixed at the opposite end of the outside piping part (28). The nut is turned by the relative rotation of said inside piping part (2') to the outside piping part (28), and the lining up, offset or the spin of the said multidimensional contour. (See Figures 2, 3)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the placement and removal of the sealing device for screw-holes of the nuclear reactor vessel while inspecting the reactor in order to reduce the exposure to radiation. The water is introduced into the reactor for the purpose, but because the presence of water in the screw-holes is undesirable, they must be sealed off. The invention concerns the sealing device and a tool to apply it prior to inspection or after the inspection is completed.

The existing device of which screw holes in the flange of a sealer is sealed is publicly know, but because its structure is complex and some doubts as to its efficacy existed.



Figure 1





Figure 3

[Explanation]

The related invention (Claim 2) is a tool for placement and removal of sealing device on the specified positions on the nuclear reaction vessel and therefore is a device to facilitate the function of the specified invention. They, therefore, constitute the product and a product for handling the product.

[Concerned Section]

[Example 63]

[Title of the Invention]

Flexible tubular waveguide and its reinforcement [Claims]

- Flexible tubular waveguide, comprising metal transmission tube (1) with plastic covering (2), with ring-like indentations (5) placed in a cyclic manner, thus obtaining flexibility in the tubing. (See Figure 3 (1) and (2))
- Heat-shrink piping part for the flexible tubular waveguide reinforcement described in Claim 1 to be deployed on the inside wall of the metal transmission tube (1) described in Claim 1, and further having the indentations that fit into indentations (5) of said metal transmission tube (1) in a cyclic manner on its outside. (See Figures 1 (3) and 3 (3))
- 3. Heat-shrink piping part for the flexible tubular waveguide reinforcement which fits into heat-shrink piping part described in Claim 1for the flexible tubular waveguide reinforcement to be fitted into the bore of the metal transmission tube (1), described in Claim 1, and further has the indentations that fit into indentations (5) of the said metal transmission tube (1) in a cyclic manner on its outside. (See Figure 2 (4))

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns the tubular waveguide and its reinforcement material. The conventional tubular waveguide was highly rigid piping connected by connective flanges, but this invention, which is tubular waveguide is flexible and can be coiled on the drums and also can be continuously manufactured. It also transmits electromagnetism more efficiently as compared with rigid waveguide.

The reinforcement of this invention maintains the shape of the waveguide when coiled on a drum.

After installation, hot air is blown into the waveguide to heat shrink the reinforcement and pulled out.



[Explanation]

The related invention (Claims 2, 3), the reinforcement equipment, effects the function of the flexible tubular waveguide without changing the tubular waveguide. The specified and related inventions, therefore, are the product and a product for handling the product. [Concerned Section]

3.4 Relationship under Patent Law Section 37(iv)

Patent Law section 37(iv) provides for unity of application between a specified invention pertaining to a "process" and related inventions pertaining to "machines, instruments, equipment or other things" directly used in working of the invention of the process."

3.4.1 Machines, Instruments, Equipment or Other Things Directly Used in the Working of Invention of Process

It is sufficient for the means of related inventions to be used directly in carrying out the process of the specified invention. In addition to machines, instruments and equipment, other things including catalysts and microorganisms etc. are allowed to become related inventions.

Unity of application shall be recognized even if the product of the related inventions could also be applied to carrying out processes other than the process of the specified invention, if they are suited to carrying out the process of the specified invention.

[Example 64]

[Title of the Invention]

A process of electroslag welding and the flux to be used [Claims]

- 1. Light metal electroslag welding process, wherein after arranging the parts (1) to be welded together with specified gaps, inserting an electrode (3) from below the pieces into a gap together with flux fill (4) the makeup of which is 65-75% barium fluoride, 15-25% cryolite and 5-10% (by weight) sodium bromide and placing the vessels (13, 14) above and below the pieces, applying current to melt the electrode and the flux for floating up the molten metal from a slag bath (5), forming the molten metal bath in the upper vessel (7), and opening the lower vessel by the melted electrode, and allowing the slag (5) into the said vessel, which introduces molten metal into the gap between the pieces to be welded.
- 2. Flux for the electroslag welding comprising the following matter (weight %): 65-75% barium fluoride, 15-25% cryolite and 5-10% sodium bromide

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns a process of electroslag welding for aluminum and other light metals using consumable electrodes and flux used in welding by this process.

In welding aluminum and other light metals, the mechanical strength of the welded portion could be weakened by oxidation or penetration of gases. In this invention, by using the slag bath (5) which is heavier than the metals being welded (1), using a new flux (4) having a higher melting point and inserting the electrode (3) from below, as well as placing the molten metal bath (7) above the slag bath (5) prevents oxidation of the welding part by the slag bath (5) and maintains the molten state of the metal by the heat of the slag bath and degas the metal.



During welding



[Explanation]

The related invention (Claim 2), the flux does not correspond to "equipment" directly used in working the invented process, but it falls under the category of "other things." [Concerned Section]

[Example 65]

[Title of the Invention]

A process of transcribing decorative patterns on textiles and transcription material [Claims]

- 1. A process of transcribing decorative patterns on textile by applying transcription material layered on a flexible base sheet, consisting of dyes, pigments, film-forming polymers, ...a catalyst activated by the heat emitted from cross bonding reactions in which the catalyst comprises:
 - (a) a base of a mono-basic organic compound having pKa of less than 3.50 in water at $20^{\rm o}{\rm C}$ and
 - (b) A base of a monobasic organic compound having pKa of over 3.75 in water at 20° C.

Characterized in that layered transcription material is pressed against the textile while being heated, flexible base sheet except the layer attached to the textile is removed, and the textile is heated at higher temperature to fix the transcribed pattern.

- 2. A transcription material consisting of dyes, pigments, film-forming polymers, ...a catalyst activated by the heat emitted from cross bonding reactions where in the catalyst consists of:
 - (a) a base of a mono-basic organic compound having pKa of less than 3.50 in water at $20^{\circ}\mathrm{C}$ and

(b) A base of a monobasic organic compound having pKa of over 3.75 in water at 20° C.

[Excerpt from Detail Description of the Invention]

This invention concerns the transcription material, which is layered on a flexible sheet material and a means of transcribing decorative patterns on textiles.

The shelf life of conventional transcription material was unsatisfactory and after it had been fixed, it often washed off in water.

This invention utilizes a catalyst, which is activated by the heat introduced to accelerate the cross bonding and has a long, stable shelf life. The resulting product, furthermore, shows durability against washing.

[Explanation]

The related invention (Claim 2), the transmission material, corresponds to "equipment" directly used in the working of the specified invention (Claim 1), the process of transcribing decorative patterns on textile.

[Concerned Section]

[Example 66]

[Title of the Invention]

A process of removal of the heat of exothermal reaction

[Claims]

- 1. A process of removal of reaction heat from the liquid phase of nitration reaction of aromatic compound, which comprises:
 - (a) placing the raw material mixture consisting of an aromatic compound, nitration reagent and a solvent as well as the starting mixture and immiscible, inactivated fluid into the reaction vessel and mix until homogeneous,
 - (b) separating the emulsion from into the phase that contains the reaction product and the heated immiscible, inactivated phase,
 - (c) cooling the said immiscible, inactivated liquid phase, and
 - (d) Reintroducing the immiscible inactivated liquid phase into the reaction vessel.
- 2. Equipment for removal of exothermal reaction which comprises:
 - (a) A reaction vessel (3) having a supply channel (1, 2) for starting material and solvent to mix raw material mixture and immiscible, inactivated liquid phase until homogeneous.
 - (b) a separator vessel (4) to separate the reaction product and immiscible, inactive phase, which is connected to the reaction vessel (3), and
 - (c) Heat exchange vessel (5) that removes heat and re-cycles the immiscible, inactive phase that is connected to the separator (4) and reaction (3) vessels.

[Excerpt from Detail Description of the Invention and Drawing]

This invention concerns the process of removal of reaction heat from the liquid phase of nitration reaction of aromatic compound and equipment which continuously removes the reaction heat of exothermal reaction.



[Explanation]

Though the equipment of the related invention (Claim 2) could be applied to processes other than the process of the specified invention (Claim 1), the equipment is suited to carrying out the process of the specified invention.

The equipment in the related invention falls under the category of equipment directly used in working the specified invention.

[Concerned Section]

[Example 67]

[Title of the Invention]

A process of producing low-grade olefin and zeolite catalyst used [Claims]

- A process of production of low-grade olefin, comprising methanol in gaseous phase and the constituents expressible as aM₂O · bM'O · Al₂O₃ · cSiO₂ · nH₂O (where M = alkali metal and/or hydrogen atom, M' = alkali earth metal, a = 0-1.5, b = 0.2-40, except a+b >1, c = 12-3,000 and n = 0-40) heated to 500-600°C in contact with alkali earth metal including crystal alminocilicate zeolite catalyst having X-ray defecation pattern indicated as xxx.
- 2. A catalyst comprising aM2O bM'O Al2O3 cSiO2 nH2O (where M = alkali metal and/or hydrogen atom, M' = alkali earth metal, a = 0-1.5, b = 0.2-40, except a+b >1, c = 12-3,000 and n = 0-40) as its constituent, and alkali earth metal including crystal alminocilicate zeolite catalyst having X-ray defecation pattern indicated as xxx for production of low-grade olefin from methanol

[Excerpt from Detail Description of the Invention]

The inventors of this process of selectively producing low-grade olefin from methanol as its starting material by means of using a zeolite catalyst represented as $aM_2O \cdot bM'O \cdot Al_2O_3 \cdot cSiO_2 \cdot nH_2O...$ and X-ray defecation pattern represented as xxx. This catalyst manufactures low-grade olefin at a temperature above 300°C, but selectively manufactures propylene at 500-600°C.

[Explanation]

The catalyst of the related invention (Claim 2) is directly used in the process of producing low-grade olefin of the specified invention (Claim 1), and therefore falls in the category of "other products."

[Concerned Section]

[Example 68]

[Title of the Invention]

A process of formation of heat insulator and the mixing gun [Claims]

- A process to form flame resistant insulation into a space between two surfaces by injection of a compound composed of synthetic high molecular weight foaming particles, synthetic high molecular weight latex binding agent and organic bromine-containing compound to give flame resistibility to the bound synthetic high molecular weight foaming particles.
- 2. A mixing gun with an aspirating chamber (4) with a high-pressure gas nozzle (3) connected an injection pipe (1) at its front-end, an aspirating pipe (6) to aspirate the foaming agent attached to branch out near the a high-pressure gas nozzle (3) of the injection chamber (4) and the injection chamber (5) to contain the latex binder and the flame retardant.

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns insulation where heat resistively is desired in the spaces between two surfaces such as those in a building.

Foaming polystyrene beads are appropriate for building space insulation because they form a foam structure. Because they have very low volume density and free liquidity, however, they are difficult to confine within the space and prevent it from running out of gaps and damaged area. The solution to this problem to be solved effected by the inventor is to cover the foaming polystyrene beads with synthetic high molecular weight latex binder. By this process, the said latex binder prevents movement of foaming polystyrene beads, and leakage of foaming polystyrene beads through openings is prevented.

Further uniqueness of this invention is that the proportion of synthetic high molecular weight foaming particles to latex binder and flame retardant can be controlled and the mixture is sent into the desired space by a nozzle (2) of the mixing gun.

In the mixing gun, the high molecular weight foaming particles are mixed with the mixture of the latex binder and the flame retardant near the nozzle (2) of the injection chamber (1) and is immediately injected out into the space through the nozzle (2). Thus, even if a long tubing is used to place the mixture into the space, the mixture will not build up on the inside of the tubing enabling continuous even placement in the space.

Furthermore, the said gun can be used to apply other mixtures such as noise dampening or water proofing material into the inter-wall spaces of a building by applying first an adhesive.





[Explanation]

The related invention (Claim 2), the mixing gun, can be used for processes other than the process of the specified invention (Claim 1), but is appropriate for that of the specified invention.

The mixing gun of the related invention is directly used equipment for working the process of the specified invention.

[Concerned Section]

[Example 69]

[Title of the Invention]

Hot metal desulfurization process and hot metal desulfurization agent [Claims]

- 1. A process of hot metal desulfurization comprising calcium carbide powder in xx weight % of oil mixed in proportion of ...kg/m³ with a carrier gas and blown into the under side of the bath.
- 2. A hot metal desulfurization agent comprising mixing of xx weight % of oil in calcium carbide powder.

[Excerpt from Detail Description of the Invention]

This invention concerns, in injection process desulfurization of hot metal, calcium carbide powder mixed with oil is used as desulfurization agent, thereby achieving efficiency in hot metal desulfurization process and desulfurization agent.

Said oil can be gasoline, kerosene, vegetable oil, animal oil or waxes, and desulfurization agent, which includes one of the oils is blown into the forge, the latter immediately turns into gas and destroys the particles of calcium carbide and disperses it, enlarging the area of contact with sulfur. Quick gassification, furthermore, improves the agitation in the bath, further improves desulfurization process. The oil also provides a better reducing environment in the bath, further improves efficiency of desulfurization.

The proportion of calcium carbide powder to the oil is xx weight % for the reason of...

In the said mixture, the calcium carbide powder digests the oil and manufactures calcium hydroxide on its surface, enhancing the motility of the powder, enabling a high proportion of calcium carbide to the carrier gas of ...kg/m³ to be carried by it, thereby reducing the amount of the carrier gas required in the process as well as a reduction in the amount of calcium carbide powder, which also permits reduction in the temperature of the forge. [Explanation]

The related invention (Claim 2), hot metal desulfurization agent, is appropriate for the desulfurization. Even though it does not fall under the category of "equipment" being directly used in working the process of the specified invention (Claim 1), hot metal desulfurization process, it falls in the category of "other products" being directly used in working the process of the specified invention.

[Concerned Section]

[Example 70]

[Title of the Invention]

Heat absorbing substrate fabrication process and etching medium [Claims]

 A process of manufacturing heat absorbing substrate wherein a large number of holes can be produced employing gas phase etching medium in equal proportion of O₂, Ar and CCl₂F₂, and exposing the medium to the substrate, the substrate is placed near the sputterable component, and ...effect sputtering, ...and complete etching are conducted. (See Figure 1)

2. A gas phase etching medium comprising equal proportion of O₂, Ar and CCl₂F₂.

[Excerpt from Detail Description of the Invention and Drawing]

This invention concerns a highly efficient feat absorbing substrate, and includes formation of extrusions and indentations on the surface of the heat absorbing substrate and the etching medium used in this process. A specified matter of the gas phase etching medium is used.

In the prior art, the formation of extrusions and indentations were produced chemically. As such the process required post-process treatments and required multiple additional steps. In this process of fabrication, no post-processing is required and the use of specific gas phase etching medium produces better results.



Figure 1

[Explanation]

The related invention (Claim 2) is the gas phase etching medium by sputtering. It does not correspond to the "equipment," but it falls under "other products" directly used in working the process for fabrication of the specified invention (Claim 1).

[Concerned Section]

[Example 71]

[Title of the Invention]

A process of electrochemical analysis and reagent composition [Claims]

- A process of electrochemical analysis of serum iron comprising releasing iron from the serum sample by adding it to iron-free mixture of low-grade fatty alcohol and about 5.5-about 8.5 N HCl, introducing the specified amount of this solution into the electroanalytic vessel, applying the first electrode for second ionized iron and copper ion level detector of potential ET2, and in the electroanalytic vessel first ionized iron and copper ion level detector of potential ET1, obtaining the current signal at each electrode, and comparing them in order to obtain iron level. (See Figure 1)
- 2. Iron-free reagent to free iron from serum for electrochemical analysis of serum iron level comprising low-grade fatty alcohol and about 5.5-about 8.5 N HCl.

[Excerpt from Detail Description of the Invention and Drawing]

This invention concerns the process of electrochemical analysis of iron in blood serum samples and composition of reagent used in this analysis.

In electrochemical analysis of serum iron, it is necessary to free iron from serum composition, and the copper ions present in the solution interferes with iron measurement.

However, when the invention described in Claim 2, the reagent for the analysis not only releases the iron from the serum, enhances the current-voltage curves of $Fe^{+2} \rightarrow Fe^{+3}+e$, $Fe^{+3}+e \rightarrow Fe^{+2}$, and shifts the current-voltage curves of $Cu^{+2}+e \rightarrow Cu^{+1}$ and separates it from that of $Fe^{+2} \rightarrow Fe^{+3}+e$, eliminating the confounding effect of the copper ions in the solution and allows an accurate estimate of the iron.



[Explanation]

The composition of the related invention (Claim 2) does not correspond to "equipment" but corresponds to "other things" directly used in working the process of the electrochemical analysis of the specified invention (Claim 1).

[Concerned Section]

[Example 72]

[Title of the Invention]

A process of transmission of television image signals and transmitter-receiver [Claims]

- 1. A process of television image signal transmission wherein the image signals for the center of the image area are expanded along the time base, those in the peripheral area reduced along the time base, and furthermore the central signals are transmitted on advantageous, narrow occupied band area, and the signals are restored to their original form upon reception.
- 2. A transmitter of television image signals comprising linearly correcting the deflections of the imaging device, expanding the image center on the time base, and compressing the peripheral image on the time base before transmission.
- 3. A receiver of television image signals which comprises having a time base control circuit to reduce the central image signals and expanding the peripheral image signals upon reception of signals.

[Excerpt from Detail Description of the Invention]

In the prior art, the scanning of television image, both in television camera as well as in the image receiving devices, has been effected linearly in both horizontal and vertical directions, providing a given resolution regardless of the position of the image within the display. As a consequence, equipment with increased number of scan lines such as enhanced image television will require up to ten times the frequency band width in order to transmit the signals, making the transmission of the image difficult.

In the invention, taking advantage of visual property of central and peripheral image detection, stable transmission of enhanced image television signals in a narrow bandwidth is enabled.

[Explanation]

The transmission and receiving equipment of the related inventions (Claim 2 and 3) is directly used equipment in order to implement expanding on the time base of the signals for the central portion of the image and reducing on the time base of the signals for the peripheral portion of the image and their restoration which are the new matters of the transmission process of the specified invention (Claim 1).

[Concerned Section]

3.5 Relationship under Patent law Section 37(v)

Section 37(v) of Patent Law is a provision left to Cabinet Order. Specifically, it recognizes unity of application for related inventions satisfying the provisions of Patent Law section 37(iii) or (iv) in relation to other related inventions, claimed in the Scope of Claims, which in turn satisfy the provisions of Patent Law section 37(i) or (ii) in relation to a specified invention. (Section 2 of Enforcement Orders for Patent Law)

A hypothetical example is used below to describe the relationships prescribed under Patent Law Section 37(v):

[Claims]

1. Substance A (The specified invention)

- 2. Process B to produce substance A
- 3.Ultraviolet absorbing substance C comprising substance A
- 4. Substance A'
- 5. Process B' to produce substance A'
- 6.Ultraviolet absorbing substance C' comprising substance A'
- 7.Substance A



With regard to the specified invention, the related invention (Claim 4), corresponds to the relationship in Patent Law Section 37(ii), the related invention (Claims 5 and 6) corresponds to the relationship prescribed under Paten Law Section 37(iii). Consequently, the related inventions of (Claim 5) and (Claim 6) satisfy the relationship prescribed under Patent Law Section 37(v).

[Example 73]

[Title of the Invention]

2, 2-dimethylpropane carboxylic acid ester and intermediary alcohol compounds [Claims]

1. Formula: a carboxylic acid ester represented as:



2. Formula: an alcoholic compound represented as:



3. A process for the preparation of alcoholic compound (Claim 2) using an acetate compound represented as:



in which solvolysis in the presence of a catalytic amount of base in methyl or ethyl alcohol is undergone.

[Excerpt from Detail Description of the Invention]

This invention concerns a process of production of intermediary products necessary for synthesis of a compound with effective insecticide activity of formula (I), 2,2-dimethylcyclopropane carboxylic acid ester. The compound of formula (I) is easily prepared by reaction with the alcoholic compound in formula (II) and the publicly known 2,2-dimethylcyclopropane carboxylic acid ester or its derivative.

[Explanation]

(1) Because the principal use of the compound in the related invention (Claim 2) can be accepted as a starting material (intermediary product) of the specified invention (Claim 1), applying the technical field of the compound of the related invention to that of the specified invention is quite appropriate. The two technical fields, therefore, have technically direct relationship and the industrial fields of application of the two inventions are the same.

Furthermore, both compounds have a common, new skeletal structure, and the final product of formula (I) is direct derivative of the intermediary of formula (II). Therefore, the two compounds have a technically close relationship each other and the substantial parts of matters in the claim of the two inventions are the same.



Thus, the related invention (Claim 2) has the relationship specified in Patent Law Section 37 (ii) to the specified invention.

(2) Since, the related invention (Claim 3) is for a process for producing the compound (intermediary), which has the relationship specified in Patent Law Section 37(ii) with respect to the specified invention, the related invention (Claim 3) has a relationship specified in the Patent Law Section 37(iii) with the related invention (Claim 2). Therefore, the related invention (Claim 3) is related to the specified invention in the manner indicated in Patent Law Section 37(v).

[Concerned Section]

[Example 74]

[Title of the Invention]

A process of enlargement excavation of tunnel and enlargement shield machine [Claims]

- In a process of tunnel enlargement excavation for an existing tunnel (3) originally excavated by means of shield process in an area specified to be enlarged, a portion is excavated (6), and the enlargement shield machine (18) is assembled in order to excavate the portion around the tunnel area, while removing the tunnel lining, advance the enlargement shield machine along the existing tunnel (3), thereby enlarging the tunnel. (See Figure 1)
- 2. A process of tunnel enlargement, wherein a powered excavator (22a) installed on the shield machine is utilized on the cutting face in the direction of the advance. (See Figure 2)
- 3. An enlargement shield machine in its inside circumference equipped with a guide plate (12) to guide the enlargement shield machine (18) along the primary shield segment (2) and equipped with a jack (15) that braces against the secondary segment (19) placed on the inside surface of the enlarged tunnel, thereby advancing the enlargement shield machine (18). (See Figure 2)
- 4. An enlargement shield machine on whose forward end (22) is equipped with a rotary cutter (22a), which in turn moves in and out of the circumference (22) of the shield on the enlargement shield machine. (See Figure 2)

[Excerpt from Detail Description of the Invention and Drawings]

This invention concerns a process for enlarging a tunnel by providing enlargement excavation portion at a fixed interval halfway a tunnel, and a shield machine to enlarge the tunnel by.

A conventional process of enlarging the existing tunnel is to excavate a shaft from the surface after excavating the ordinary diameter of the tunnel for enlargement construction by using the shaft in the portion to be enlarged.



[Explanation]

(1) The technical fields of the specified invention (Claim 1) and the related invention (Claim 2) are both in "tunnel enlargement excavation process" and are therefore the same, and industrial fields of application of the two inventions are the same.

Furthermore, the problems to be solved of both inventions are to enlarge the tunnel without resorting to excavating a shaft and are therefore the same. Consequently, the relationship of the related invention (Claim 2) to the specified invention is the relationship prescribed under Patent Law Section 37(i).

(2) The related invention (Claim 3) concerns an invention of a machine directly used in working of the process of the specified invention (Claim 1). Therefore, the related invention (Claim 3) has the relationship with the specified invention prescribed under

Patent Law Section 37(iv).

(3) Since, the related invention (Claim 4) is an invention of a machine directly used in working of the related invention (Claim 2), which holds the relationship with the specified invention prescribed under Patent Law Section 37(i), the related invention (Claim 4) holds with respect to the related invention (Claim 2) a relationship prescribed under Patent Law Section 37(iv). Consequently, the related invention (Claim 4) has the relationship in Patent Law Section 37(v) with the specified invention.

[Concerned Section]

Patent Law Section 37(i),(iv),(v)

[Example 75]

[Title of the Invention]

Keyboard switch and the process of manufacturing the switch [Claims]

- A keyboard switches comprising a metal sheet (1), from the surface of which an insulated part (2) made of elastomer protrudes, and the rest of which forms a flat electrode (4) serving as electrical contact member (3) and a substrate (5) carrying membrane electrodes (6) at opposite ends of each contact member (3) facing one another laminated into a single unit. (See Figure 1)
- 2. A keyboard switches with a metal sheet (11), in the indentations placed in specified locations of which is filled with elastomer resin, forming insulated parts (12) forming projections, the rest of the metal sheet (11) forming a flat electrode (14) serving as electrical contact member (13) and a substrate (15) carrying membrane electrodes (16) at opposite ends of each contact member (13) facing one another laminated into a single unit. (See Figure 3)
- 3. A process of fabrication of keyboard switches wherein a masking layer (8), composed of material without affinity toward elastomer resin, is placed on a metal plate (11), coating the exposed metal surface (1) with elastomer, followed by removal of the masking layer and forming the projections (2) composed of elastomer resin and flat electrode portion with electrical contact members (3), and laminate the flat electrode (4) with the substrate (5) carrying membrane electrodes (6), while ascertaining that the electrical contact members and membrane electrode form oppose one another. (See Figure 1 and 2)
- 4. A process of fabrication of keyboard switches wherein a masking layer (8), composed of material without affinity toward elastomer resin, is placed on a metal plate (11), after etching the indentations on the metal plate (11) surface, filling the indentations up to the level of the surface of the masking (18), followed by removal of the masking layer and forming the elastomer projections (12) and the flat electrode (14) with electrical contact members (13), and laminate the said flat electrode (14) and membrane electrodes (16) ascertaining that the electrical contact members (13) and the membrane electrodes (16) oppose one another. (See Figure 3 and 4)

[Excerpt from Detail Description of the Invention and Figures]

This invention concerns keyboard switch and a process of its fabrication.

The conventional keyboards with push buttons required a good deal of labor because of complexity of their structure, and it was large especially its thickness. Such keyboards, therefore, were inappropriate especially as the keyboard for light items such as hand calculators.

There have been some simply structured, thin keyboard switches made on high-molecular weight polymer films or those with electrodes printed on films with conductive ink, but because the resistance of high-molecular weight polymer and conductive ink is large and raised the contact resistance of the switches and made them inappropriate for use with high current.

The switch in this invention works by a light touch of a finger above the electrode as the elastomer below the pressure point is pressed, allowing the contact between the electrical contact member (3) and the membrane electrode (6) and effect the current to flow.





[Explanation]

- (1) The technical fields of the specified invention (Claim 1) and related invention (Claim 2) are both "keyboard switch" and the industrial fields of application of both inventions are the same. The problem to be solved of the two inventions, furthermore, is the same as they both are an effort to reduce the size of the keyboard by laminating and increase the current carrying capacity. Therefore, the related invention (Claim 2) has the relationship prescribed in Patent Law Section 37(i) with respect to the specified invention.
- (2) The related invention (Claim 3) corresponds to the process of manufacturing the keyboard switch of the specified invention. Consequently, the related invention (Claim 3) has the relationship prescribed in Patent Law Section 37(iii) with respect to the specified invention.
- (3) The related invention (Claim 4) is a process of manufacturing the keyboard switch of the relate invention (Claim 2), which holds the relationship prescribed in Patent Law Section 37(i) with the specified invention (Claim 1). Therefore, it has the relationship prescribed in Patent Law Section 37(iii) with the related invention (Claim 2). Consequently, related invention (Claim 4) has the relationship prescribed in Patent Law Section 37(v) with the specified invention.

[Concerned Section]

Patent Law Section 37(i),(iii),(v)

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

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Chapter 3 Requirements for Disclosure of Information on Prior Art Document

1. Patent Act Article 36(4)(ii)

Patent Act Article 36(4)(ii)

The statement of the detailed explanation of the invention as provided in item (iii) of the preceding Paragraph shall comply with each of the following items:

(i) (Omitted)

(ii) where the person requesting the grant of a patent has knowledge of any invention(s) (inventions as provided in Article 29(1)(iii), hereinafter the same shall apply in this item) related to the said invention, that has been known to the public through publication at the time of filing of the patent application, the statement shall provide the source of the information concerning the invention(s) known to the public through publication such as the name of the publication and others.

Patent Act Article 48-7

Where the examiner recognizes that a patent application does not comply with the requirements as provided in Article 36(4)(ii), the examiner may notify the applicant of the patent thereof and give the said applicant an opportunity to submit a written opinion, designating an adequate time limit for such purpose.

Patent Act Article 49(v)

The examiner shall make a decision that a patent application is to be refused where it falls under any of the following paragraphs:

(i) to (iv) (Omitted)

(v) where notice under the preceding Article has been given, following the amendment of the description or submission of the written opinion, the patent application does not comply with the requirements under Article 36(4)(ii);

(vi) to (vii) (Omitted)

2. Purport of requirements for disclosure of information on prior art document

(1) The Patent Act Article 36(4)(ii) prescribes the effect that the source of the information concerning the invention known to the public through publication such as the name of the publication and others (hereinafter referred to as "information on prior art documents") must be described in the detailed description of the invention when the person requesting the grant of a patent has knowledge of any invention(s) (inventions as provided in Article 29(1)(iii)) related to the said invention, that has been known to the public through publication at the time of filing of the patent application (hereinafter referred to as "Requirements for disclosure of information on prior art documents.").

The information on prior art documents is required to grasp what technical significance the invention for which a patent is sought has and what technical contribution is brought about in light of the state of the art at the time of filing of the application, and to judge the novelty and inventive step etc. of the invention for which a patent is sought. Therefore, it contributes to not only timely examination but also stabilization of the right as the accurate evaluation on the relation between the invention for which a patent is sought and the prior art can be made if the information on prior art documents is stated in the detailed description of the invention.

In this system of the disclosure of information on prior art documents, it is prescribed to carry out the notice under Article 48-7 when the examiner acknowledges that it does not comply with the requirements for disclosure of information on prior art documents. Also, the fact that it does not comply with the requirements in spite of the notice concerned is judged to be the reason for refusal (Article 49(v)) but not to be the ground for invalidation (Article 123(1)). The reason is that this system is established mainly for the purpose of realization of timely examination and even when it is in violation of this requirement, there shall be no substantial deficiency in the invention and it shall not damage the interest of a third person remarkably when it is patented.

(2) The provision under the Patent Act Article 48-7 prescribes that the notice on violation of requirements concerned can be made when the examiner acknowledges that it does not comply with the requirements for disclosure of information on prior art documents. Therefore, the notice under Article 48-7 shall not be made uniformly but shall be made when the examiner recognized it to be necessary.

If the fact that it does not comply with the requirements for disclosure of information on prior art documents resulted in directly the reason for refusal, the reason for refusal would be notified uniformly on the whole cases of application, which do not comply with the requirements concerned. In this case, the reason for refusal on the violation of this requirements would be notified surely even to applications without any reasons for rejection on other requirements, which may be contrary to the aim of this system whose main purpose of realization of timely examination. In addition, if the applicants are individuals or medium and small-sized enterprises, it is possible that they aren't informed of the information on prior art documents relating to the invention for which a patent is sought at the time of filing. In such a case, if the reason for refusal surely had to be notified when it was recognized to be the violation of this requirement, it would not contribute to the timely examination and also it would give excessive burden to these applicants.

Based on the facts described above, it is more appropriate to operate the provision under Article 48-7 so as to attain the timely examination as a whole than to operate it uniformly on all applications from the viewpoint of urging applicants to cooperate for timely examination through disclosure of information on prior art documents

(3) The Patent Act Article 49(v) prescribes that it can be the reason for refusal when the application still does not comply with the requirements concerned when the notification on violation of requirements for disclosure of information on prior art documents (Article 48-7) is made.

3. Information on prior art documents to be disclosed

3.1 Invention whose information on prior art documents should be disclosed

Applicant must state the information on prior art documents on the invention to comply with the following (1) to (4) in the detailed description of the invention.

(1) To be the invention(s) known to the public through publication

The "invention(s) known to the public through publication" prescribed in the Patent Act Article 36(4)(ii) is inventions that were described in a distributed publication, or inventions that were made publicly available through an electric communication line in Japan or a foreign country, prior to the

filing of the patent application (Patent Act Article 29(1)(iii)), which does not include inventions that were publicly known ((i) in the same paragraph) and inventions that were publicly worked ((ii) in the same paragraph)

Based on the aims of Article 29 (1)(iii), Article 29(2) and Article 36(4)(ii), it is appropriate to interpret that the source of the information should be stated even though it does not fall under the "invention" that is the creation of technical idea utilizing the law of natural (Article 2) strictly, if it relates to the invention for which a patent is sought. For example, when the invention for which a patent is sought is the invention relating to the business method, it is necessary to describe the name of publications in which the business method is stated if the applicant knows the related business method described in a publication.

On the other hand, as the invention described in the prior application, which is undisclosed at the time of filing, is not the invention known to the public through publication, it is not the object for disclosure of information on prior art documents. However, it is desirable to describe the application number when the invention concerned relates to the invention for which a patent is sought.

(2) To be the invention relating to the invention for which a patent is sought

It is described as "the invention related to the said invention, that has been known to the public through publication" in the Patent Act Article 36(4)(ii).

The "said invention" means "the invention for which a patent is sought", that is to say, "the claimed invention." Therefore, on the claimed inventions which has the related invention that has been known to the public through publication, the information on prior art documents on all of them must be described and it does not comply with requirements for disclosure of information on prior art documents if only the information on prior art documents on a part of claimed inventions is described.

It is judged considering matters shown in (i) to (iii) below whether the invention described in a publication "relates to" the invention for which a patent is sought.

(i) Relevancy between the invention for which a patent is sought and the invention described in a publication in terms of their technical field

(ii) Relevancy between in the invention for which a patent is sought and the invention described in a publication in terms of subject

(iii) Relevancy between the invention for which a patent is sought and the invention described in a publication in terms of the specified matters on invention

For example, the invention described in a publication to be a direct premise of the invention for which a patent is sought (the invention described in a publication and the like corresponding to a part "in _____" when the claim is described in the forms of "in _____, ___ characterized in ____") is thought to relate to the invention for which a patent is sought as it belongs to the identical technical field to the invention for which a patent is sought and has common specified matters on invention.

Also, when the accumulation of technology that has relevancy with the invention for which a patent is sought is less, there may be no invention that has direct relevancy such as identical technical field or problem. In such a case, the invention showing the general state of the art to be the technical background of the invention for which a patent is sought is contained in the invention relating to the invention for which a patent is sought.

Followings are actual examples of the invention described in a publication relating to the invention for which a patent is sought.

- Example 1: The invention for which a patent is sought is the one concerning "A portable telephone set with a case consisting of special magnesium alloy", on the contrary, the invention described in a publication is the one concerning "A portable telephone set with a case consisting of titanium alloy" and when both have the problem to be solved of weightreduction of a portable telephone set.
- Example 2: When the invention for which a patent is sought is the one concerning "A tail lamp consisting of a acrylic resin composition of specific component with excellent in heat resistance", on the contrary, the invention described in a publication is the one concerning "A tail lamp consisting of acrylic resin composition of other specific component with excellent in impact resistance" and when the acrylic resin composition of specific component in the invention for which a patent is sought and the acrylic resin composition of other specific component in the invention described in a publication have the closest component in the acrylic composition used for a tail lamp that the applicant knows.
- Example 3: When the invention for which a patent is sought is the one concerning "A refrigerator that has a door equipped with hinges of specific structure that can be opened and closed from either right or left", on the contrary, the invention described in a publication is the one concerning "A microwave oven that has a door equipped with hinges of other specific structure that can be opened and closed from either right or left" and when the hinge of the door of the refrigerator in the invention for which a patent is sought and the hinge of the door of the microwave oven in the invention described in a publication have the closest structure in the hinge that the applicant knows.

(3) To be the invention that a person who seeks a patent knows

It is prescribed that "the person requesting the grant of a patent has knowledge of any invention(s)" in the Patent Act Article 36(4)(ii). The following can be listed as inventions that a person requesting the grant of a patent (applicant) "has knowledge of", for example.

(i) Invention that an applicant obtained in the prior art search, which was carried out in the research and development stage or filing stage of the invention for which a patent is sought.

(ii) Invention that was stated in a writing such as a thesis and the like that an applicant announced before the filing.

(iii) Invention that was stated in the description, claims or drawings of the prior patent application that an applicant applied.

As an applicant usually seems to grasp the information that an inventor knows on the invention for which a patent is sought by himself/herself, it can be estimated that the applicant knows the invention that the inventor knows.

When the applicants are more than one person, the statement that "the person requesting the grant of a patent has knowledge of" means the fact that at least one of the applicants knows and not limited to the case that all applicants know.

(4) To be the invention that the person knows at the time of filing of the application

As it is prescribed in the Patent Act Article 36(4)(ii) that "the person requesting the grant of a patent has knowledge....at the time of filing of the patent application", an applicant must state the

information on prior art documents concerning the invention described in a publication, which he/she knows at the "time of filing of the patent application".

The Article 36(4)(ii) is not to obligate to carry out the prior art search newly for applicant who has no invention described in a publication that he /she knows at the time of filing an application for patent.

The Article 36(4)(ii) does not demand to add the invention described in a publication that the applicant knows after the application for patent to the detailed description of the invention by amendments, either. However, it is desirable to add the information on prior art documents on the invention to the description by amendments or to present by means of a written statement when the applicant considers it to contribute to timely and high-quality examination.

When there is the invention described in a publication that is known at the time shown in the right column regarding the application stated in the left column in the table shown below, the information on prior art document concerned should be described. When it is considered that the divisional application or the converted application are filed at the filing time of application for new patent, as they do not comply with requirements for division or conversion, the invention described in a publication that the applicant knows at the filing time of application for new patent is the invention that the applicant knows at the filing an application for patent.

Kinds of application	Time that falls under "the time of filing of the patent application"
Divisional application or converted application	Time of filing the original application
Application claiming internal priority right	Time of filing the application (later application)
Application claiming priority under the Paris Convention	Time of filing the application (application to Japan)
International patent application	Time of filing the international patent application

3.2 Description of information on prior art documents in a description as originally filed

(1) Description of information on prior art document

The "source of the information concerning the invention(s) known to the public through publication such as the name of the publication and others" prescribed in the Patent Act Article 36(4)(ii), are bibliographic items on the technical information and other information that can be obtained through publications that describe the invention described in a publication and electric communication lines. Accordingly, it is enough for the applicant to describe the bibliographic items of the publications in which the invention is described. And it is not necessary to submit an original or a copy of the publications. When it is difficult to obtain the publications the examiner can conduct the notice by examiner based on the provision under Article 194(1) (Submission of documents, etc.) and request the submission of papers and other articles necessary for examination to applicants.

As the Article 36(4)(ii) prescribes the requirements for description, the information on prior art documents should be described in the detailed description of the invention. It is impossible to comply with the requirements for disclosure of information on prior art documents by submitting a written argument or a written statement in which the information on prior art documents is stated.

When it is possible to specify the part to describe the invention described in a publication, the part shall be specified by describing number of pages, number of lines, paragraph numbers or figure numbers and the like in the column for describing the information on prior art documents. When the

information on prior art documents is described, it shall be described in accordance with the following statements at the end of this Chapter "(Reference) Procedures for describing information on prior art documents in a description".

(2) When there is a large number of information on prior art documents to be described

When there is a large number of inventions described in publications relating to the invention for which a patent is sought, it is desirable to describe appropriate number of inventions with higher relevancy among them, because it may hinder the understanding of the invention for which a patent is sought and go against the purpose of the system for disclosure of information on prior art documents if all of them are described. In addition, the invention described in a publication not relating to the invention for which a patent is sought should not be described.

(3) When there is no information on prior art documents to be described

When there is no information on prior art documents to be described at the time of filing, it is desirable to describe the effect with reasons in the detailed description of the invention. For example, when the prior art that an applicant knows is not the one relating to the invention described in a publication, that effect shall be described. In addition, the effect that there is no information on prior art documents to be described and reasons can be shown in a written statement.

3.3 Addition of information on prior art documents by amendments

(1) Amendments for adding information on prior art documents

<<The Guideline applied to the application whose filing date is on or after January 1, 2009 (In case of divisional applications and converted applications, the filing date is actual filing date.)>>

The amendments for adding information on prior art documents to the detailed description of the invention do not fall under the addition of new matter. And an amendment adding the content of documents to the column of [Background Art] in the detailed description of the invention do not fall under the addition of new matter. However, the amendments to cancel the deficiencies under the Patent Act Article 36(4)(i), with addition of information on evaluation of the invention such as comparison with the invention relating to the filing and the like or information on carrying out the invention and adding the contents described in the prior art documents fall under the addition of new matters, which are not approved. Refer to "Part III Amendments on Specification. Scope of Claims or Drawing Section I, Addition of contents of prior art document" for details.

Refer to "Part III Amendments of Description. Claims or Drawings, Section I 5.2(1), Addition of the content of prior art documents" and "Cases concerning judgment of new matters" for details.

<<The Guideline applied to the application whose filing date is on or before December 31, 2008 (In case of divisional applications and converted applications, the filing date is actual filing date.)>>

The amendments for adding information on prior art documents and contents described in the document concerned to a column of [Background Art] in the detailed description of the invention do not fall under the addition of new matter. However, the amendments to cancel the deficiencies under the Patent Act Article 36(4)(i), with addition of information on evaluation of the invention such as comparison with the invention relating to the filing and the like or information on carrying out the

invention and adding the contents described in the prior art documents fall under the addition of new matters, which are not approved.

Refer to "Part III Amendments of Description. Claims or Drawings, Section I 5.2(1), Addition of the content of prior art documents" and "Cases concerning judgment of new matters" for details.

(2) When the addition of information on prior art documents is required by amendments

An applicant must add the information on prior art documents regarding the invention described in a publication by means of amendments when the claimed invention becomes the one that is not correspond with the described information on prior art documents by amendments of the claims and when the applicant knows the invention described in a publication at the time of filing.

4. Determination on requirements for disclosure of information on prior art documents

An examiner carries out judgment on requirements for disclosure of information on prior art documents under Article 36(4)(ii) from the viewpoint of whether or not the information on prior art documents relating to the invention for which a patent is sought is stated properly or in the detailed description of the invention.

The typical cases in which the notification under the Article 48-7 can be carried out as the result that it does not comply with the requirements for disclosure of information on prior art documents are shown in the following items.

(1) When the information on prior art documents is not described and in addition, the reason is not described at all.

(2) When the information on prior art documents is not described and the reason is described, however, it is recognized that the probability that an applicant knows the invention described in a publication relating to the invention for which a patent is sought at the time of filing is high.

Example: When the information on prior art documents is not described and as the reason, it is described that the prior art that an applicant knows is not the one relating to the invention described in a publication, however, the applications by the applicant are disclosed in great numbers in the technical field relating to the invention for which a patent is sought.

(3) When the prior art is described in a specification or drawing of the application for which a patent is sought but the information on prior art documents corresponding to the prior art concerned is not described and the reason is not described.

(Note: The invention, which is described in a specification or drawing of the application for which a patent is sought as a prior art shall be treated as the invention that the person who seeks a patent knows at the time of filing of the patent).

(4) When only the place of information on the invention described in a publication not relating to the invention for which a patent is sought is described, and it is recognized that the probability that an applicant knows the invention described in a publication relating to the invention for which a patent is sought at the time of filing is high.

Example 1: When only the information on prior art documents on the matters not relating to the

invention for which a patent is sought and being different in technical field or subject from the invention for which a patent is sought is described, in spite of the fact that the invention described in a publication, which is identical in technical field and subject to the invention for which a patent is sought is known widely in general.

Example 2: When the information on prior art documents on the old invention with less connection is described in spite of the fact that the new invention described in a publication with high relevancy with the invention for which a patent is sought is known widely in general.

5. How to proceed with the examination

5.1 Notification under Article 48-7

(1) Notification under Article 48-7

An examiner can carry out the notification under Article 48-7 when it is recognized that the application does not comply with the requirements for disclosure of information on prior art documents under Article 36(4)(ii).

The notification under Article 48-7 is to basically carry out for the purpose of obtaining the information on prior art documents, which is useful at the time of examination, and it is appropriate to carry out before the first notification of reason for refusal. It is possible to carry out the notification under Article 48-7 and the notification of reasons for refusal on other requirements simultaneously, but that is not preferable because the former is to basically carry out to obtain the information on prior art documents, which is useful at the time of examination in advance.

However, in case that, contents of the prior art are stated in the detailed description of the invention but the information on prior art documents corresponding to the prior art concerned is not described, therefore, when the information on prior art documents concerned is required for determination of novelty and inventive step and the like on the application, which is recognized that it does not comply with the requirements for disclosure of information on prior art documents, an examiner can carry out the notification under Article 48-7 and the first notification of reasons for refusal (limited to the one that does not cite the invention described in a publication relating to the information on prior art documents concerned – hereinafter the same in this paragraph) simultaneously and carry out the notification under Article 48-7 after notifying the first reason for refusal.

And when contents of application are obscure remarkably and the examination on the requirements for patentability such as novelty, inventive step and the like is difficult, it is possible to carry out the notification under Article 48-7 and the notification of reasons for refusal to notify only the reason for refusal on requirements for description in a specification and scope of claims simultaneously.

When the reason for refusal that it does not comply with the requirements for disclosure of information on prior art documents is notified after the notification under Article 48-7 and the notification of reasons for refusal are notified simultaneously, it shall be noticed that the reason for refusal concerned will be the first notification of reasons for refusal as it becomes a new reason for refusal, except for a case that it falls under the provision of "Part IX How to Conduct Examination. 5.2.1 Matters to be the final notification of reasons for refusal".

When the notification under Article 48-7 is carried out and the claim in which it is recognized that it does not comply with the requirements for disclosure of information on prior art documents is observed in only a part, the claim shall be specified and also the reason for judging that it does not comply with the requirements for disclosure shall be described in the degree shown in (1) through (4)

in "4. Determination on requirements for disclosure of information on prior art documents" in this Chapter.

(Note) The designated time limit under the provision of Article 48-7 shall be 30 days when persons who carry out the procedure are not residents abroad and 60 days when they are residents abroad (however, when the notification under Article 48-7 and the notification of reasons for refusal are carried out simultaneously, it shall be 60 days when persons who carry out the procedure are not residents abroad and 3 months when they are residents abroad). Also, the extension of period by request shall not be approved.

(2) Measures to respond to notification under Article 48-7

An applicant can add information on prior art documents by amendments or insist that he/she does not know the relating invention described in a publication by submitting a written argument to the notification under Article 48-7. When the amendment to add the information on prior art documents is carried out, it is desirable to submit a written argument that describes contents of the invention described in a publication, and identical features and differences of the invention for which a patent is sought and the invention described in a publication.. Besides, the amendment to add contents of the invention described in a publication to a specification, scope of claims or drawing falls under the addition of new matters in general, which is not approved (Refer to 3.3 (1) in this Chapter.)

Submitting a written amendment or a written argument, when an examiner comes to convince that the description of the information on prior art documents in a specification complies with the requirements prescribed in the Patent Act Article 36(4)(ii), the examiner shall proceed to the examination on the prior art search and other requirements.

On the other hand, when the previous conviction on the description of information on prior art documents in a specification is not changed even after considering the written amendment and the written argument, for example, 1) when the disclosure of information on prior art documents is not carried out and in addition, the rational explanation that there is no invention described in a publication is not given in the written argument, 2) when the information on prior art documents is disclosed by the amendment but appropriate information on prior art documents is not disclosed and the like, an examiner shall notify the reason for refusal that it does not comply with the requirements for disclosure of information on prior art documents according to the following paragraphs.

5.2 Notice of reasons for refusal on violation of requirements for disclosure of information on prior art documents

When the notification under Article 48-7 on the requirements for disclosure of information on prior art documents is made and when it does not comply with the requirements for disclosure of information on prior art documents even submitting a written amendment or a written argument, the reason for refusal on violation of requirements for disclosure of information on prior art documents shall be notified (Article 49(v)).

The Patent Act Article 49(v) is a provision, which prescribes the case when it does not comply with the requirements for disclosure of information on prior art documents in spite of the notification under Article 48-7 and it is impossible to notify the reason for refusal on violation of requirements for disclosure of information on prior art documents without notification under Article 48-7.

(1) Notification of reasons for refusal

When the reason for refusal that it does not comply with the requirements for disclosure of information on prior art documents in Article 36(4)(ii) is notified and a claim in which it does not comply with the requirements is observed in only a part, the claim shall be specified and also, the reason for judging that it does not comply with the requirements for disclosure shall be described in the degree shown in (1) through (4) in "4. Determination on requirements for disclosure of information on prior art documents" in this Chapter.

When the reason for refusal that it does not comply with the requirements for disclosure of information on prior art documents is notified without carrying out the examination on patentability such as novelty, inventive step and the like, the effect shall be specified.

(2) Measures to respond to the notification of reasons for refusal

An applicant can add information on prior art documents by amendment or insist that he/she does not know the relating invention described in a publication by submitting a written argument for the notification of reasons for refusal. When the amendment to add information on prior art documents is carried out, it is desirable to submit a written argument that describes contents of the invention described in a publication and identical features and differences of the invention for which a patent is sought and the invention described in a publication. Besides, the amendment to add contents of the invention described in a publication to a specification, scope of claims or drawing falls under the addition of new matters in general, which is not approved (Refer to 3.3 (1) in this Chapter.)

Submitting a written amendment or a written argument, when an examiner comes to convince that the description of information on prior art documents in a specification complies with the requirements prescribed in the Patent Act Article 36(4)(ii), the reason for refusal shall be cancelled.

On the other hand, when the previous conviction on the description of information on prior art documents in a specification is not changed even after considering the written amendment and the written argument, for example, 1) when the disclosure of information on prior art documents is not carried out and in addition, the rational explanation that there is no invention described in a publication is not given in the written argument, 2) when the information on prior art documents is disclosed by the amendment but appropriate information on prior art documents is not disclosed and the like, the examination of the refusal shall be carried out according to the reason for refusal.

(Reference) Procedures for describing information on prior art documents in a description

1. Method for describing information on prior art documents

(1) Principle

The information on prior art documents is described in a [Prior art documents] column in the detailed description of the invention in a specification, changing a line for information on prior art documents.

In that case, the column with a serial number is prepared in order to describe as [Patent document 1] and [Patent document 2] when names of gazettes on patent, utility model or design are described and as [Non-patent document 1] and [Non-patent document 2] when places of other information such as periodical publications or information in Internet and the like are described and only the information on prior art documents is described one by one in each column. Matters other than information on prior art documents shall not be described in a column for describing information on prior art documents.

It should be described according to "3. Procedures for describing publication" shown below when information on prior art documents is described.

When a place for describing information on prior art documents in the publications can be specified, the place concerned is specified by describing number of page, number of line, paragraph number or drawing number and the like in the column, in which information on prior art documents is described.

(2) Description of contents of prior art

When contents of prior art relating to information on prior art documents and comparison with the invention for which a patent is sought and the like are described, they shall be described in a [Background technology] column in the detailed description of the invention in a specification.

When it refers to information on prior art documents in the description of contents and the like of the prior art relating to information on prior art documents, it is desirable to use the name of the column in which the information on prior art documents is described ([Patent document 1] and the like) (Refer to "Examples of correct description" in "Examples of description of information on prior art documents").

(3) Description of prior application

When the invention described in the prior application, which is not disclosed at the time of filing is described, the application number of the application concerned shall be described in a [Background technology] column in the detailed description of the invention in a specification.

(4) When there is no information on prior art documents to be described

When the effect that there is no information on prior art documents to be described and the reason are described, they shall be described in a [Background technology] column in the detailed description of the invention in a specification.

2. Examples of description of information on prior art documents

[Examples of correct description] [Technical field] [0001] [Background technology] [0002] The past ----- is doing-----. (For example, refer to Patent document 1). Also, there is the one that is doing-----. (For example, refer to Non-patent document 1) [Prior art documents] [Patent documents] [0003] [Patent document 1] Publication of unexamined patent application No. 2001-OOOOOO (Page 5-7, Figure 1) _____ [Non-patent documents] [0004] [Non-patent document 1] Written by OOOO" $\triangle \triangle \triangle \triangle \triangle$ " × Publication Co., January 1, 2001, p.12-34. [Summary of the invention] [Problem to be solved by the invention] [0005] -----

[Example 1 of inappropriate description] [Technical field] [0001] _____ [Background technology] [0002] The prior past ----- is doing-----. [Prior art documents] [Patent documents] [0003] [Patent document 1] Publication of unexamined patent application No. 1993-00000 (page 3-9, Figure 2) ----- is described in the document described above. [Summary of the invention] [Problem to be solved by the invention] [0004] -----

(Explanation)

The explanation on contents of information on prior art documents are stated in the column (column in [Patent document 1] and the like) for describing information on prior art documents in the example. However, the matters other than information on prior art documents should not be described in the column for describing information on prior art documents. When it is necessary to explain contents of information on prior art documents and the like, they shall be described in a [Background technology] column.

[Example 2 of description that is not appropriate] [Technical field]

[0001]

[Background technology]

[0002]

The prior ----- is doing-----. (For example, refer to Patent document 1).

Also, there is the one that is doing------. (For example, refer to Non-patent document 1)

[Mode for carrying out the invention] [Working example] [0049]

[0050]

There are the followings as information on prior art documents relating to the invention of this application.

[Patent document 1]

Publication of unexamined registered utility model application No. OOOOOOO (Page 10-17, Figure 2-Figure 4).

[Non-patent document 1]

Jun Shinsaki and 3 others, "Trends of New Technology" [online], April 1, 1998, Patent Society, [Retrieved on July 30, 1999], Internet

<URL : http://tokkyoshinsakijun.com/information/newtech.html>

[Brief description of drawing]

[Figure 1]

(Explanation)

The information on prior art documents is described just before the [Brief description of drawing] column at the end of the detailed explanation of the invention in this example. However, the information on prior art documents should be described in the [Prior art documents] column.

3. Procedure for describing publications

It is desirable to describe according to the procedure shown below when the titles of publication are described in a specification.

- A. Titles of gazettes on patent, utility model or design.
- (1) Patent Gazette, Utility Model Gazette and the like in Japan (Examples of description)
- ① In case of patented invention specification or registered utility model gazette.
- (a) Patent Specification No. 000000
- (b) Registered Utility Model Gazette No. 000000

② In case of registered utility model gazette based on the New Utility Model Act enforced on January 1, 1994.

Registered Utility Model Gazette No. 000000

③ In case of Gazette containing the Patent or Gazette containing the Utility Model of the applications decided to grant a patent or decided to register after January 1, 1996.

(a) Patent Gazette No. 000000

(b) Registered Utility Model Gazette No. OOOOOOO

④ In case of Patent Gazette or Utility Model Gazette (publication of examined application for opposition)

(a) Publication of Examined Patent Application No. Showa OO-OOOOOO

(b) Publication of Examined Patent Application No. Heisei OO-OOOOO

(c) Publication of Examined Utility Model Application No. Showa OO-OOOOOO

(d) Publication of Examined Utility Model Application No. Heisei OO-OOOOOO

However, in case of publication of examined utility model application in 1922 and 1923

(e) Publication of Examined Utility Model Application No. OOOOOO (in Taisho OO)

In case of publication of examined utility model application from 1924 to 1925

(f) Publication of Examined Utility Model Application in Taisho No. OOOOOO

(5) In case of publication of unexamined patent applications or publication of unexamined utility model applications

(a) Publication of Unexamined Patent Application No. Showa OO-OOOOOO

(b) Publication of Unexamined Patent Application No. Heisei OO-OOOOOO

(c) Publication of Unexamined Patent Application No. 0000-00000

(d) Publication of Unexamined Utility Model Application No. Showa OO-OOOOOO

(e) Publication of Unexamined Utility Model Application No. Heisei OO-OOOOO

(6) In case of published Japanese translation of PCT international publication for patent application or published Japanese translation of PCT international publication for utility model application

(a) Published Japanese Translation of PCT International Publication for Patent Application No. Showa OO-OOOOOO

(b) Published Japanese Translation of PCT International Publication for Patent Application No. Heisei OO-OOOOOO

(c) Published Japanese Translation of PCT International Publication for Patent Application No. O 000-000000

(d) Published Japanese Translation of PCT International Publication for Utility Model Application No. Showa OO-OOOOOO

(e) Published Japanese Translation of PCT International Publication for Utility Model Application No. Heisei OO-OOOOOO

⑦ In case of Design Gazette

Design Registration Gazette No. 000000

(2) Patent specifications and extracts of specification of foreign and international organization (examples of description)

- ① United States of America
- (a) United States Patent Specification No. OOOOOOO
- (b) Extracts of United States Patent Specification No. OOOOOOO

(c) Publication of Unexamined Application of United States Patent Specification No. 0000/00 00000

- (d) United States Reissued Patent Invention Specification No. OOOOOOO
- 2 European Patent Office
- (a) Publication of Unexamined Application of European Patent Specification No. OOOOOOO
- (b) European Patent Specification No. 000000
- ③ World Intellectual Property Organization International Bureau

International Publication Pamphlet No. OO/OOOOO

- (4) United Kingdom
- (a) British Patent Specification No. 000000
- (b) Extracts of British Patent Specification No. OOOOOOO
- (c) Publication of Unexamined Application of British Patent Specification No. OOOOOOO
- (d) British Revised Patent Specification No. 0000000
- 5 Germany (West Germany)
- (a) German Patent Invention Specification No. 000000
- (b) Publication of Unexamined Application of German Patent Specification No. OOOOOOO
- (c) West German Patent Specification No. 000000
- (d) Publication of Examined Application for Opposition of West German Patent Specification No. O 000000
- (e) Publication of Unexamined Application of West German Patent Specification No. OOOOOOO
- (f) West German Utility Model Specification No. OOOOOOO
- (g) Publication of Unexamined Application of West German Utility Model Specification No. OOO 0000
- 6 France
- (a) French Patent Invention Specification No. OOOOOOO
- (b) Publication of Unexamined Application of French Patent Specification No. OOOOOOO
- (c) French Utility Model Certificate Patent Invention Specification No. 000000
- (d) Publication of Unexamined French Utility Model Certificate Specification No. OOOOOOO
- (e) French Additional Patent Invention Specification No. 000000
- (f) Publication of Unexamined French Additional Patent Specification No. 000000
- (g) French Additional Utility Model Certificate Patent Specification No. OOOOOOO
- (h) Publication of Unexamined French Additional Utility Model Specification No. OOOOOOO

B. Location of other information.

(1) In case of journal of technical disclosure of Japan Institute of Invention and Innovation (an example of description).

Journal of Technical Disclosure No. OO-OOOOO in Journal of technical disclosure of Japan Institute of Invention and Innovation

(2) Consecutive publications, irregular publications and catalogs.

① The name of author, title of thesis (title of the statement), title of publication, publishing nation, publishing company and the like, publishing day, month and year are described in this order.

(2) It is possible to omit the name of author and title of thesis when they are not necessary.

③ The title of thesis (title of publication when the title of thesis is not described) shall be described with \lceil Jor " ".

(4) The title of publication shall be described without using an abbreviation in principle.

(5) The description of publishing company and the like can be omitted in the case of publication that is not liable to be mistaken.

(6) The publishing day, month and year to be described shall be Japanese name of an era or Christian era described in the publication. The day and month shall be described when they are deemed to be necessary.

 \bigcirc The description of number of volume can be omitted when it is possible to substitute the number of volume by the publishing day, month and year.

(8) The page shall be described adding "p." before the figures. The page throughout the volume shall be described in principle and the page in that issue is described when the page throughout the volume is not described. When the pages to be cited are more than 1, the numbers of the first page and the last page are connected with a hyphen if those pages are consecutive or they are set apart by a comma for indication if those pages are not consecutive.

(9) The publishing nation shall be described adding (). The description of publishing nation shall be omitted on the publications issued in Japan.

(1) When the name of author, title of thesis (title of the statement), title of publication, publishing company and the like are described in foreign language in the publication, the original language is described in parentheses after the name and title in Japanese.

(Examples of description)

(a) Inoue, "Recent Trends of Optical Materials—Infrared Transparent Materials—", Spectrum Study, Japan Spectrum Society, August, 1996, volume 45, Issue 4, p.133-138, 140

(b) Junichi Tachimichi and 7 others, "Ion Doping Device", Journal of technical disclosure of Nisshin Denki, Nisshin Denki Co., Ltd., December 7, 1994, volume 39, Issue 3, p.52-58.

(3) An independent volume

① The name of an author (or editor), title of a book, number of edition, number of volume, publishing nation, publishing company and the like, publishing day, month and year, and pages are described in this order.

(2) The original author (or original editor), translator and title of a book are described in this order in case of a translated book.

③ In case of series such as lecture and complete series, the titles of lecture and complete series and number of volumes of the series are described before the title of the book.

(4) The title of a book shall be described adding \lceil _Jor " " without using abbreviation.

5 The number of edition shall not be described when there is no indication in a book.

(6) The procedure for describing publishing day, month and year, pages, publishing nation, and the case in which an original language is used shall conform to the case of consecutive publications.

(Examples of description)

(a) Written by Yoichi Muraoka, "Computer Science College Course (Volume 11) Computer Architecture", 2nd edition, Modern Science Co., Ltd., November, 1985, p.123-127

(b) Written by Pierre Baldi, "Bioinformatics", (United States of America), 1st edition, MIT Press, August 1, 2001, p.56-65

(4) DERWENT Abstract journal (those published after June 11, 1980)

When DERWENT Abstract journal is cited, the title of abstract journal, number of volume of abstract journal, number of issue, publishing day, month and year of the abstract journal, publishing nation and publishing company and the like of the abstract journal, classification of publication of abstract journal (DERWENT classification), country name code and document number of the abstract and the titles of cited publications are described in this order.

The titles of abstract journal are as follows described below:

- ① DERWENT classification A to M (Field of Chemistry): Basic Abstracts Journal
- 2 DERWENT classification P to X (Field of non-chemistry): World Patents Abstracts Journal
- (5) Electronic technology information

It shall conform to Part II Chapter 5 "Handling of Internet information and the like as prior art" when electronic technology information, which is retrieved through Internet and the like is cited, and the cited form is based on WIPO Standard ST.14, and the bibliographic items, which are understood on the electronic technology information concerned shall be descried in the following order.

① Name of an author

2 Title

③ Related parts

They are indicated by page, column, line, paragraph number, drawing number, index in database, or first and last words and phrases.

④ Types of medium (online)

⑤ A page in which reporting day, month and year (publishing day, month and year), reporter (publisher), reporting place (publishing place) and related parts are disclosed.

6 Day for retrieval

A day when the electronic technology information is retrieved from the electronic media is described in parentheses.

⑦ Information source and address of the information

The information source and address of the electronic technology information or the accession number (Accession No.) are described.

(8) When the name of an author, a title, a reporter (publisher), reporting place (publishing place) and the like are disclosed in the electronic technology information in foreign language, the original language shall be described in parentheses after the description in Japanese.

(An example of description)

Jun Shinsaki and 3 others, "Trends of New Technology", (online), April 1, 1998, Patent Society, [Retrieved on July 30, 1999],

Internet < URL : http://tokkyoshinsakijun.com/information/newtech.html>

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part II: REQUIREMENTS FOR PATENTABILITY

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Chapter 1 Industrially Applicable Inventions

The first paragraph of Article 29(1) of the Patent Act reads:

"Any person who has made an invention which is industrially applicable may obtain a patent therefor ..."

It has been long established in theory and practice to consider that the above provision requires an invention to be "statutory" as well as "industrially applicable." These Guidelines, in accordance with this established rule, explain these two requirements, i.e., being "statutory" and "industrially applicable."

1. Statutory Inventions

Article 2(1) of the Patent Act defines a statutory invention as a highly advanced creation of technical ideas utilizing a law of nature. It should be noted, however, that the term "highly" has been introduced in the definition to differentiate "invention" from "device" under the Utility Model Act, and this term is disregarded in judging whether an invention is statutory or not.

The following is a list of non-statutory inventions.

1.1 List of Non-statutory Inventions

Since it is not a "creation of a technical idea utilizing a law of nature," any one of the following is not considered to be a statutory invention.

(1) A law of nature as such

Since statutory inventions shall utilize a law of nature, a law of nature as such, like a law of preservation of energy or a law of universal gravitation, is not considered as a statutory invention.

(2) Mere discoveries and not creations

One of the requirements for a statutory invention is to be a "creation", and thus, mere discoveries, such as discoveries of natural things like an ore or natural phenomena, for which an inventor does not consciously create any technical idea, are not considered to be a statutory invention.

However, if things in nature such as chemical substances or microorganisms have been isolated artificially from their surroundings, then those are creations and considered to be a statutory invention.

(3) Those contrary to a law of nature

If a matter necessary to define an invention involves any means contrary to a law of nature, the claimed invention is not considered to be a statutory invention (See: Example 1). The so-called perpetual motion is an example contrary to the second law of thermodynamics.

(4) Those in which a law of nature is not utilized

If claimed inventions are any laws as such other than a law of nature (e.g. economic laws), arbitrary arrangements (e.g. a rule for playing a game as such), mathematical methods or mental activities, or utilize only these laws (e.g. methods for doing business as such), these inventions are not considered to be statutory because they do not utilize a law of nature (see Examples 2-4).

Example 1: Computer programming languages

Example 2: A method of collecting money for an electricity bill or a gas bill etc., by rounding off the total amount to be collected to the nearest 10 yen unit.

Even if a part of matters defining an invention stated in a claim utilizes a law of nature, when it is judged that the claimed invention considered as a whole does not utilize a law of nature, the claimed invention is deemed as not utilizing a law of nature.

Example 3: A method of plying a container vessel to transport a large amount of fresh water from a region where crude oil is expensive and fresh water is inexpensive to another region where crude oil is inexpensive and fresh water is expensive, and after unloading the fresh water, transporting a large amount of crude oil instead of the water to the homeward voyage.

Example 4: A method of billboard advertising using utility poles, characterized by forming in advance groups A, B, C, D, ... with a prescribed number of poles in each group, placing a holding frame to post thereon a billboard for each pole, and posting the billboards in each group on holding frames placed to poles in each group in circulation in a certain time interval (See: Tokyo High Court Judgment Sho 31.12.25 (Syowa 31 (Gyo Na) 12))

On the contrary, even if a part of matters defining an invention stated in a claim does not utilize a law of nature, when it is judged that the claimed invention as a whole utilizes a law of nature, the claimed invention is deemed as utilizing a law of nature.

As stated above, the characteristic of the technology is to be taken into account in judging whether a claimed invention as a whole utilizes a law of nature.

Notes:

For inventions relating to a method for doing business or playing a game, since there are cases in which the claimed invention a part of which utilizes an article, apparatus, device, system, etc., is judged as not utilizing a law of nature when considered as a whole, careful examination shall be required. (See: Examples 5-7)

There is possibility for an invention to be qualified as statutory where the invention is made not from a viewpoint of a method of doing business or playing a game but from a viewpoint of computer software-related inventions such as software used in doing business or in playing a game. (See: "Part VII: Chapter 1. Computer Software-Related Inventions, 2.2")

(5) Those not regarded as technical ideas

(a) Personal skill (which is acquired through personal experience and cannot be shared with others as a knowledge due to lack of objectivity)

Example: A method of throwing a split-fingered fast ball characterized in the way of holding the ball in fingers and throwing the same

(b) Mere presentation of information (where the feature resides solely in the content of the information, and the main object is to present information)

[Examples]

written manual for instructing an operation of a machine or directing a use of a chemical substance, audio compact disc (where the feature resides solely in music recorded thereon), image data taken with a digital camera, program of an athletic meeting made by a word processor, or computer program listings (mere representation of program codes by means of printing them on paper, displaying them on a screen, etc.)

However, if technical features reside in presentation of information (presentation per se, a means for presentation, a method for presentation, etc.), claimed inventions are not considered as mere presentation of information.

Example 1: A test pattern for use in checking the performance of a television set (where a technical feature resides in the pattern per se) Example 2: A plastic card on which information is recorded with characters, letters and figures embossed on it (enabling one to copy the information by affixing the card on a paper, in this sense the technical feature residing in the means for presentation)

(c) Aesthetic creations

Example: paintings, carvings, etc.

(6) Those for which it is clearly impossible to solve the problem to be solved by any means presented in a claim

Example: A method for preventing explosion in a volcano by forming balls of neutron-absorbing material (e.g., boron) covered with substance having high melting temperature (e.g., tungsten) and throwing them into the volcanic vent (This invention allegedly works on the assumption that volcanic explosion is caused by nuclear fission of substances like uranium at the bottom of the volcanic vent.)

2. Industrial Applicability

Here, the word "industry" is interpreted in a broad sense, including mining, agriculture, fishery, transportation, telecommunications, etc., as well as manufacturing.

The following is a list of industrially inapplicable inventions. In principle, an invention which does not correspond to any one of the followings is considered as industrially applicable.

2.1 List of Industrially Inapplicable Inventions

2.1.1 Methods of surgery, therapy or diagnosis of humans

Methods of surgery, therapy or diagnosis of humans have been termed "medical activity" and are normally practiced by medical doctors (including those who are directed by medical doctors, hereinafter referred to as "medical doctors").

Methods for contraception or delivery are included in "methods of surgery, therapy or diagnosis of humans."

Even if methods of surgery, therapy or diagnosis are practiced on animal bodies in general, unless it is clear that the methods practiced on a human body are explicitly excluded, the methods are deemed as being "methods of surgery, therapy or diagnosis of humans."

2.1.1.1 Types of methods considered to be classified as "methods of surgery, therapy or diagnosis of humans"

(1) Methods of surgery of humans (Refer to Examples 8-1, 9-1, 10-1, 11-1, 12-1)

Methods of surgery of humans include the followings:

(a) Methods for surgical treatment (such as incision, excision, centesis, injection and implant)

(b) Methods of using (e.g., inserting, moving, maintaining, operating and extracting) a medical device (e.g., a catheter and an endoscope) inside the human body (excluding inside the mouth, inside the external nostril, and inside the external ear canal)

(c) Preparatory treatment for surgery (e.g., anesthetic treatment for surgery and method of disinfecting skin before injection)

Cosmetic methods having surgical operations whose purpose is not therapeutic or diagnostic are also considered as "methods of surgery of humans." (2) Methods of therapy of humans (Refer to Examples 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, 22-1)

Methods of therapy of humans include the followings:

- (a) Methods of administrating medicine or giving physical treatment to a patient for curing or restraining a disease
- (b) Methods of implanting substitute organs such as artificial internal organs or artificial limbs
- (c) Methods of preventing a disease (e.g., methods of preventing tooth decay or influenza)

Methods of treatment for the maintenance of physical health (e.g., methods of massage or *shiatsu* therapy) are also considered to be methods of preventing a disease.

- (d) Preparatory treatment for therapy (e.g., method for arranging electrodes for the electrical therapy), supplemental methods for improving treatment effects (e.g., rehabilitation methods), or methods for nursing associated with the treatment (e.g., methods to prevent bedsores)
- (3) Methods of diagnosis of humans

"Methods of diagnosis of humans" include methods of judging for the medical purpose the physical condition of a human body such as diseases and physical health, the mental condition of a human body, or prescription or treatment/surgery plans based on these conditions.

Case 1: Methods of judging whether the patient has had a stroke by observing the image obtained by the MRI scan.

2.1.1.2 Types of methods not considered to be classified as "methods of surgery, therapy or diagnosis of humans"

(1) A medical device or a medicinal substance is a product, and is not considered as "methods of surgery, therapy or diagnosis of humans." It should be noted that the combination of two or more products is not considered as "methods of surgery, therapy or diagnosis of humans." (Examples 13-2, 14-2, 15-2)

(2) A method for controlling the operation of a medical device is not considered to be classified as "methods of surgery, therapy or diagnosis of humans" as long as the function of the medical device is represented as a method. The method for controlling the operation of the medical device here may include not only a method for controlling the internal operation of the medical device but also a functional and/or systematic operation provided to the medical device, such as the moving, opening and/or closing of an incising means in accordance with an operating signal, the emitting and/or receiving of a radioactive ray, an electromagnetic wave, a sound wave, or the like. (Examples 8-2, 9-2, 10-2, 11-2, 12-2, 16-2 to 16-4, 17-2, 18-2, 19-2, 20-2, 24-2, 25-3)

However, a method including a step, as a matter to define claimed invention, with an action of a medical doctor (for example, a step where a medical doctor operates a device in order to provide medical treatment in accordance with a symptom) and/or a step with an influence on the human body by a device (for example, the incision and/or excision of a specific part of a patient by a device or the irradiation of radiation, electromagnetic wave or sound wave by a device) is not considered to be a method for controlling the operation of the medical device.

(3) The following methods for gathering various kinds of information by, e.g., measuring structures and functions of the various organs of the human body, is not considered to be methods of diagnosis of humans unless it includes the steps of judging for the medical purposes the physical condition of a human body such as diseases and physical health, the mental condition of a human body, or prescription or treatment/surgery plans based on these conditions. (Example 19-1, 20-1, 21)

(a) Methods of extracting samples and data from the human body, or methods of analysing, e.g., comparing such samples and data with standards.

Case 1: A method for an influenza test by extracting oral mucous membranes with cotton bud

Case 2: A method for capturing the image of the lung by X-ray irradiation to the chest

Case 3: A method for measuring the body temperature by inserting an electronic ear thermometer into external ear canal

Case 4: A method for judging the sugar level in the urine by dipping the test strip in the collected urine sample, and comparing the color of the test strip with the colors on the color chart

Case 5: A method of examining the susceptibility of the examinee to hypertension by determining the type of base on the nth line of the base sequence of the X gene of the examinee and comparing the base with a standard in which when the base type is A the susceptibility is low, and when the type is G the susceptibility is high

(b) Preparatory treatment for measuring structures or functions of various organs of the human body

Case 6: A method of preventing the uneven smear of the jelly for the ultrasonography that is spread on the body

However methods that include steps corresponding to methods of surgery or therapy of humans are deemed to be "methods of surgery or therapy of humans." (Examples 9-1, 10-1, 11-1, 18-1)

2.1.1.3 Methods for treating samples that have been extracted from the human body

Methods for treating samples that have been extracted from the human

body (e.g., blood, urine, skin, hair, cells or tissue) and methods for gathering data by analyzing such samples are not considered to be "methods of surgery, therapy or diagnosis of humans." (Example 25-2)

However, if a method for treating these samples or analyzing the samples in the process is performed on the presumption that the samples are to be returned to the same body (e.g., a method of dialyzing blood), then, such a method is qualified to be placed under the category of "methods of surgery, therapy or diagnosis of humans." (Example 24-1, 25-1)

Even if a method for treating these samples is performed on the presumption that the samples are to be returned to the same body, the following are not considered to be "methods of surgery, therapy or diagnosis of humans." (Example 22-2, 23-1, 23-2, 23-3)

(1) A method for manufacturing a medicinal product (e.g., blood preparation, vaccine, genetically modified preparation and cell medicine) by utilizing raw material collected from a human body

(2) A method for manufacturing a medical material (e.g., an artificial substitute or alternative for a part of the human body, such as an artificial bone, a cultured skin sheet, etc.) by utilizing raw material collected from a human body

(3) A method of manufacturing an intermediate product for a medicinal product or a medical material (e.g. methods for differentiation and induction of the cells, methods for separation and purification of the cells) by utilizing raw material collected from a human body

(4) A method of analyzing a medicinal product or a medical material, or intermediate product thereof which is manufactured by utilizing raw material collected from a human body

2.1.2 Commercially inapplicable inventions

An invention concerning marketable or tradable subject matter is considered commercially applicable. On the other hand, inventions indicated in (i) and (ii) below are regarded as commercially inapplicable, and hence industrially inapplicable.

- (i) an invention applied only for personal use, such as a method of smoking
- (ii) an invention applied only for academic or experimental purposes

It should be noted that such an invention as a "method of waving hair", which is used in the beautician field while being personally applied, is not considered as an "invention applied only for personal use." Likewise, a "kit for scientific experiments," which is used in experiments at school, is not considered as an "invention applicable only for academic or experimental purposes" as it is marketable and tradable.

2.1.3 Practically inapplicable inventions

An invention which can not be practically implemented is not considered

as an "industrially applicable invention" even if it works in theory.

Example: A method for preventing an increase in ultraviolet rays associated with the destruction of the ozone layer by covering the whole earth's surface with an ultraviolet ray-absorbing plastic film

3. Notes for examining the requirement for Industrial Applicability

The burden of proof regarding the requirement for industrial applicability is placed on the applicant. However, upon noticing that a claimed invention does not comply with the requirements for industrial inapplicability, the ground should be indicated as specifically as possible in the notification of reasons for refusal.

4. Examples

These examples were put together to explain the requirement of "Industrially Applicable Inventions" in the first paragraph of Article 29(1) of the Patent Act. Therefore, it is to be noted that some of the scope of claims in the examples have been modified, e.g., simplified in parts to provide an explanation easier to understand. Additionally, it does not mean the examples do not have reasons for refusal such as lack of novelty/inventive steps or description requirements of the description and the claims.

The list of examples is shown below.

4.1 Statutory invention requirement

4.1.1 Methods contrary to a law of nature

Example 1 A method of plating copper with iron (contrary to a law of nature)

4.1.2 Methods not utilizing a law of nature

- Example 2 A method for calculating the sum of natural numbers n to n+k (not utilizing a law of nature)
- Example 3 A method of teaching in science and mathematics courses (not utilizing a law of nature)
- Example 4 A method for drawing a regular N-polygon inscribed in a given circle (not utilizing a law of nature)
- Example 5 A method of playing a game (not utilizing a law of nature)
- Example 6 A method for determining a selling price of a commodity (not utilizing a law of nature)

Example 7 A method for holding a party (not utilizing a law of nature)

4.2 The requirement of industrial applicability

4.2.1 Methods of surgery of humans

Example 8-1 A method for treating an affected part by micro operation robot (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Example 8-2 A method for controlling the operation of a micro operation robot system (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

- Example 9-1 A method for sampling body fluid (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 9-2 A method for controlling the operation of a body fluid sampling device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 10-1 A method for the observation of the celom by using an endoscope (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 10-2 A method for controlling the operation of an endoscope (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 11-1 A method for contrast magnetic resonance imaging (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 11-2 A method for controlling a magnetic resonance imaging device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 12-1 A method for displaying superimposed images of an object being cut and a cutting apparatus (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 12-2 A method for controlling a device for displaying superimposed images of an object being cut and a cutting apparatus (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

4.2.2 Methods of therapy of humans

- Example 13-1 A method for the treatment of cancer (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 13-2 A system for cancer treatment (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 14-1 A method for regenerating cartilage (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 14-2 An implant material for cartilage regeneration (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 15-1 A method for the treatment of cardiac infarction (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 15-2 A composition for treatment of cardiac infarction (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 16-1 A method for giving electrical stimulus by a pacemaker (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 16-2 A method for controlling a pacemaker (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 16-3 A method for controlling a pacemaker (An invention not considered

as "methods of surgery, therapy or diagnosis of humans")

- Examples 16-4 A method for controlling the operation of a pacemaker (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 17-1 A method for retinal stimulation using an artificial eye system (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 17-2 A method for controlling an artificial eye system (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 18-1 A method for X-ray irradiation (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 18-2 A method for controlling the operation of an X-ray device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

4.2.3 Methods for gathering data

- Examples 19-1 A method for X-ray CT scanning (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 19-2 A method for controlling an X-ray CT scanner (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 20-1 A method for magnetic resonance imaging (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 20-2 A method for controlling the operation of magnetic resonance imaging device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 21 A method for nuclear medicine imaging (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

4.2.4 Methods for treating samples that have been extracted from the human body

- Examples 22-1 A method for Gene therapy (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 22-2 A method for manufacturing cells for gene therapy (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 23-1 A method of inducing differentiation of cells (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 23-2 A method of separating and purifying differentiation-induced cells (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 23-3 A method of analyzing a ratio of separated and purified cells (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

- Example 24-1 A method for blood purification (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 24-2 A method for controlling the operation of a blood purifying device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 25-1 A method for measuring hematocrit values of blood (An invention considered as "methods of surgery, therapy or diagnosis of humans")
- Example 25-2 A method for measuring hematocrit values of extracted blood (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Example 25-3 A method for controlling a blood hematocrit measuring device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

4.2.5 Methods relating to assisting devices

- Examples 26-1 A method for judging a motion state of walking (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 26-2 A method for controlling a power assisting device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")
- Examples 26-3 A method for power assisting (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

4.1 Statutory invention requirement

4.1.1 Methods contrary to a law of nature

Example 1 A method of plating copper with iron (contrary to a law of nature)

Claim

A method of plating copper with iron, comprising the steps of immersing a piece of copper piece in an aqueous solution containing iron ions, thereby forming an iron layer on said piece of copper.

Outline of Detailed Explanation of the Invention

Electroplating has been a conventional method for plating copper with iron. The present invention provides a method which enables plating of a piece of copper with hard iron layer by only immersing the copper piece in an aqueous solution containing iron ions such as iron sulfate, using simpler equipment than that conventionally employed.

[Explanation]

It is common general technical knowledge that iron has a higher tendency to ionize than copper. Therefore it is impossible to form a hard iron layer over a piece of copper by only immersing it in an aqueous solution containing iron ions such as iron sulfate.

This implies that the claimed invention involves a means to solve the problem which is contrary to a law of nature. Therefore, it is impossible to solve the stated object and the claimed invention is non-statutory.

4.1.2 Methods not utilizing a law of nature

Example 2 A method for calculating the sum of natural numbers n to n+k (not utilizing a law of nature)

Claim

A method for calculating the sum of natural numbers n to n+k in accordance with the formula:

s = (k+1)(2n+k)/2.

Outline of Detailed Explanation of the Invention

The sum of natural numbers n to n+k, noted as "s," is expressed by:

The equation remains unchanged even if the order of addition changes. Thus, the sum is expressed in a different way as follows by reversing the sequence of the right side of the equation:

$$s = (n+k)+(n+k-1)+(n+k-2)+ --- +(n+1)+n$$
 ...(2)

The combination of equations (1) and (2) results in

$$2s = (2n+k)+(2n+k)+(2n+k)+\cdots+(2n+k)$$

The right side of the equation consists of (k+1) times (2n+k), and it follows that the sum is simply calculated by

$$s = (k+1)(2n+k)/2$$

[Explanation]

A method of calculation is a mathematical process for processing given numbers or equations representing certain relations in mathematics or other fields of science in accordance with mathematical algorithm.

A mere mathematical process based on the formula:

$$s = (k+1)(2n+k)/2$$

is carried out in the claimed invention, and the invention utilizes solely laws other than a law of nature. The claimed invention is therefore non-statutory. **Example 3** A method of teaching in science and mathematics courses (not utilizing a law of nature)

Claim

A method of teaching in science and mathematics courses of lower elementary school grades, characterized in that the time ratio for introduction, development, and summary respectively 3:2:1.

Outline of Detailed Explanation of the Invention

Conventionally, education of lower grade children has been carried out in the order of introduction, development and summary, at the ratio of 1:4:1 respective time allocation ratio. The present invention is to improve the teaching of science and mathematics by changing the ratio into 3:2:1, taking account of the reasoning and memorizing ability of children.

[Explanation]

Since the "teaching" means providing instruction, it is a kind of mental activity.

This invention, considering the reasoning and memorizing ability of children, employs the time ratio of 3:2:1 for introduction, development and summary in lower elementary school grades in order to improve the teaching of science and mathematics courses.

It follows that the claimed invention utilizes solely laws other than a law of nature and is therefore non-statutory.

Example 4 A method for drawing a regular N-polygon inscribed in a given circle (not utilizing a law of nature)

Claim

A method for drawing a regular N-polygon inscribed in a circle comprising the steps of:

setting the diameter AB of a given circle as the radius;

drawing circles having said radius with A and B as centers;

denoting one of the intersecting points thereof as C;

denoting as D the intersecting point of the given circle and the linear line connecting the second point from the A of the N equipartition points of the diameter;

equipartitioning by a length equal to AD the circumference of the circle; and

connecting equipartitioned points on the circumference successively with linear lines to construct a regular N polygon.

Outline of Detailed Explanation of the Invention

This method makes possible the easy drawing of a regular N polygon in a given circle.

(Drawing)



[Explanation]

Generally, the term "drawing" is used with the meaning of depicting a figure which satisfies given conditions in geometry. In order to depict a figure satisfying such given conditions, it is a prerequisite to assume that several basic constructions (known as postulates) and several axioms are true. A set of the determined postulates and axioms make possible certain constructions, and a change in the postulates and axioms inevitably leads to a change in the constructions. Therefore, pure geometric construction is nothing but an operation based on assumed postulates and axioms, and utilizes laws other than laws of nature.

The application of the above considerations to this example follows that the claimed invention is nothing more than a pure geometric construction and utilizes solely laws other than laws of nature. The claimed invention is therefore non-statutory.

Example 5 A method of playing a game (not utilizing a law of nature)

Claim

A method of playing a game, comprising the steps of:

piling up from larger to smaller several pieces having similar shape but different sizes at one of the given three positions; and

moving the pieces on top one by one to other positions without placing a large piece on a small piece, thereby moving all the pieces to another position in the least number of moves.

Outline of Detailed Explanation of the Invention

The present invention enables players to enjoy an interesting, intellectually challenging game regardless of the number of players.

[Explanation]

A game is generally performed following artificial rules unrelated to a law of nature, relying on human mental abilities such as reasoning, memorization, skill, luck, inspiration and chance.

Rules employed in the claimed invention, such as the moving of pieces and prohibited actions, are artificial arrangements to perform the game among players, and a law of nature is not utilized here. The claimed invention is therefore non-statutory.
Example 6 A method for determining a selling price of a commodity (not utilizing a law of nature)

Claim

A method for determining the selling price of a commodity comprising the steps of:

attaching a label on a product to indicate the production time of the product, an expiration date and a list price at the production time, and

determining a selling price at a selling time based on the formula:

Selling price = f (selling time) x list price

wherein the function 'f' is a monotonous decreasing function satisfying the condition:

Outline of Detailed Explanation of the Invention

In the past, products of the same kind were placed on the same shelf for selling even if their production times differed. Therefore, those customers who prefer the freshness of a product tend to check the production time and select the most recent one, and therefore old products usually remain. As a result, those products that passed the expiration date lost the commercial value, and the cost to discard them as garbage was generated and this resulted in a loss of profit for the shop owner.

Then, in order to increase probability of selling old products, the shop owner tried to relocate products in a certain time interval in such a manner that old ones are placed at the front side of a shelf and new ones at the rear side. However, as shop floor space becomes larger, the cost for rearranging products in a certain time interval increases, and it always involved a risk that customers had a bad impression when they saw the rearrangement work.

Therefore, the problem to be solved by this invention is to provide a method for determination of the selling price of a commodity in that a lower selling price of the product can be set depending on the length of lapsed selling time by calculating the selling price using the formula:

Selling price = f (selling time) x list price

wherein the function 'f' is a monotonous decreasing function satisfying the condition:

0≦f≦1

in order to reduce the number of products whose selling period has expired as few as possible and to save the costs for rearrangement of the products on the shelf and for discarding the old products remained as garbage, without giving a bad impression created by the rearrangement to the customers. By this invention, the number of old products which remain otherwise can be reduced even without relocating the products on the shelf, as it is expected that customers who prefer the freshness will buy relatively expensive new products while those customers who prefer thrift will buy relatively economical old products. Furthermore, because the selling price of the products whose selling period has expired becomes zero and those customers who are conscious of thrift may take out some of the products for free, so that a part of the cost for discarding the old products remained can be reduced.

Now, the function 'f' can be set based on the following formula:

f (selling time) =
$$\log_{10}$$
 (1+9 max

(expiration date - selling time expiration date - production time), 0)

[Explanation]

A method for determining the selling price of a commodity defined in the claim is matter using a label as an article, but since it relies on economic laws or artificial arrangements, the claimed invention, considered as a whole, is not utilizing a law of nature.

The claimed invention is therefore non-statutory.

[Reference]

When the statement of this claim is amended as follows:

"A method for determining the selling price of a commodity in a cash register equipped with reading means for reading two dimensional bar codes indicating the production time, the expiration date and the list price of the product recorded on a label attached on the product, clocking means for outputting the current time, arithmetic means for calculating the selling price, display means for indicating the selling price, control means for controlling said reading means, clocking means, an arithmetic means, and display means, the method comprising the steps of:

reading by said reading means, the two dimensional bar codes recorded on a label attached to the product;

receiving by said control means, the information of the two dimensional bar codes outputted from said reading means;

outputting by said control means, said received bar codes information and the current time obtained by said clocking means to the arithmetic means;

calculating by said arithmetic means, the selling price of the product based on the formula:

Selling price = f (selling time) x list price

wherein, the function 'f' is a monotonous decreasing function satisfying the condition:

0≦f≦1

outputting the calculation result to said control means; and

indicating by said control means, the calculation result on said display means",

the amended claimed invention is deemed as the "creation of technological ideas utilizing a law of nature." (For practical judgment, see "Part VII: Chapter 1. Computer Software-Related Inventions")

Example 7 A method for holding a party (not utilizing a law of nature)

Claim

A method for holding a party, comprising the steps of:

sending e-mail to invite to the party with message stating that those who respond early will receive a gift at the party, to the members based on the invitation list;

receiving e-mail to respond to said e-mail confirming the attendance;

registering the order of arrival of which said email for response is received in the name list of expected participants;

collecting the party fee at the party reception desk; and

giving a gift in the order of arrival registered in said name list after collecting said party fee.

Outline of Detailed Explanation of the Invention

After calling for participation to the party, it is meaningless for the party planner if the actual number of participants is far less than expected. Then, just to be sure, the expected attendance will be confirmed in advance by e-mail for instance instead of return postcards, but this does not assure responses before the due date. Even if responses are received, it is uncertain if the members actually come to the party.

According to this invention, by telling members that those who responded early will receive a good gift, the probability of participation will increase and quick responses can be expected. Therefore, by grasping the anticipated attendance early, loss of expenses for preparation of the party such as meals can be reduced.

The cost of the gifts may be appropriated by the reduced expenses, previously including in the party fee, or by donation from the sponsors on the condition that the sponsors' goods will be used in the party.

[Explanation]

A method for holding a party defined in the claim uses a system of e-mailing for the confirmation of attendance, but dependent on artificial arrangement to make the confirmation between the party planner and the participants and to give gifts in the entry order, and the claimed invention, considered as a whole, is deemed as not utilizing a law of nature.

The claimed invention is therefore non-statutory.

[Reference]

When the statement of this claim is amended as follows:

"An operation method of an information processing system for supporting party holding, comprising the steps of:

an input means;

an e-mail transmission and receiving means;

a storage means of anticipated participants list to memorize names, e-mail addresses, and the order of response e-mail confirming the attendance from the anticipated participants;

a storage means for memorizing a message telling that a gift will be given

to the participants in the order of receiving the response e-mail;

a display means; and

a control means;

wherein, said control means comprising the steps of:

reading e-mail addresses from said storage means of the anticipated participants list and the message stored in said message storage means;

transmitting said message as an invitation e-mail requesting attendance confirmation to said e-mail addresses by the e-mail transmission and receiving means;

detecting response e-mails received by said e-mail transmission and receiving means;

memorizing a response e-mail received every time it is detected into said storage means of anticipated participants list in the order the response e-mails received; and

outputting all the names of anticipated participants of those who responded stored in said storage means of the anticipated participants list and the order of received response e-mail, when the instruction of the end of detection of response e-mails is sensed by said input means",

the amended claimed invention is deemed as the "creation of technical idea using a law of nature" (For practical judgment, see "Part VII: Chapter 1. Computer Software-Related Inventions")

4.2 The requirement of industrial applicability

4.2.1 Methods of surgery of humans

Example 8-1 A method for treating an affected part by micro operation robot (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for treating an affected part by using a micro operation robot having at its head optical observing means and incising means and having at its bottom receiving means for receiving manipulator signals from an extracorporeal remote operation device, comprising the steps of;

operating a manipulator in order to give medical treatment to the affected part while viewing the monitor of the remote operation device, receiving a manipulator signal from the remote operation device by the receiving means, and incising the affected part of a patient by an incising means based on the signal received.

Outline of Detailed Explanation of the Invention

The capsule type micro operation robot of the present invention can, owing to very delicate constitution thereof, perform treatment such as incision, excision, or the like of the affected part by remote control in an organ such as a blood vessel or the like, without excessively burdening the patient.

[Explanation]

The matter reading "operating a manipulator in order to give medical treatment to the affected part while viewing a monitor of the remote operation device" includes the step with an action of a medical doctor to view a monitor and to operate a manipulator for treating the affected part. Furthermore, the matter reading "incising the affected part of a patient by incising means" depicts the step with an influence on the human body by the device.

Accordingly, the claimed method is not considered to be a method for controlling the operation of the medical device.

As a result, the method in this example is nothing but a method of surgery of humans since it corresponds to a method for operating a manipulator and incising the affected part for the treatment of the affected part. Accordingly, the claimed method includes a method of surgery of humans as part of the steps of the invention; thus, the method is considered to be "methods of surgery, therapy or diagnosis of humans"

[Remark]

It should be noted that, if the claim is described as in Example 8-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 8-2 A method for controlling the operation of a micro operation robot system (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a micro operation robot system provided with a micro operation robot and a remote operation device for remote-operating the robot with a manipulator, wherein the robot has at its head an optical observing means and an incising means and at its bottom a receiving means for receiving manipulator signals from the remote operation device, comprising the steps of;

transmitting the signal of the manipulator by the transmitting device to the remote operation device, receiving the manipulator signal from the remote operation device by the receiving means of the robot, and controlling the operation of the incising means of the robot with the manipulator signal received.

Outline of Detailed Explanation of the Invention

The capsule type micro operation robot of the present invention can, owing to very delicate constitution thereof, perform treatment of the affected part by remote control in an organ such as a blood vessel or the like, without excessively burdening the patient.

[Explanation]

In this example, the function of the micro operation robot system is represented as a method.

Since the matter reading "controlling the operation of the incising means of the robot with the signal received" means that "the incising means" provided with the micro operation robot system is controlled with the manipulator signal received and does not mean so farther that the incising means incise the human body as a result of the operation; thus, the claimed method is judged not to include the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and the method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. As a result, it is not considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

(1) A micro operation robot system is generally designed to be operated based on a manipulator signal operated by a medical doctor and is assumed to be operated by an action of a medical doctor. However, in case the function of the micro operation robot system is described as a method in a claim, it is considered as a method for controlling the operation of the micro operation system as long as it does not include the step with an action of a medical doctor and/or the step with an influence on the human body by the device.

(2) Even if the function of the medical device is described as a method in a claim, it should be noted that the claim may not meet the requirement of description or embodiment if the device is not disclosed in the description, as in the case where only a method carried out by the step with an action of a medical doctor is disclosed.

Example 9-1 A method for sampling body fluid (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for sampling body fluid by a body fluid sampling device provided with a hollow piercing element installed inside housing, a sample extracting tube communicating with the piercing element, and an absorbing means, wherein the piercing element pierces the vein, and the body fluid is absorbed by the piercing element arranged in the vein blood vessel into the sample extracting tube.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for sampling body fluid such as blood or the like from the human body for analysis or processing. The housing of the body fluid sampling device is placed on the human body and a piercing element is pierced into the surface of the skin. When the device is operated, an absorbing power is applied to the piercing element to absorb the body fluid into the tube.

[Explanation]

The step of "the piercing element is pierced" is not carried out by a means provided with this fluid sampling device but is the step with an action of a medical doctor. (Note: In this case, the method may also be judged to include the step with an influence on the human body via the piercing element.)

The step of "the body fluid is absorbed from the piercing element arranged in the vein blood vessel into the sample extracting tube" is judged to include the step with an influence on the human body by the device, as a signal is not received from the human body but body fluid is extracted from the human body.

The claimed method, therefore, is not a method for controlling the operation of the medical device because it includes the step with an action of a medical doctor and the step with an influence on the human body by a device.

The claimed method includes the step of surgical operation of piercing human body with the piercing element. Accordingly, the claimed method includes methods of surgery of humans; thus, the method is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 9-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 9-2 A method for controlling the operation of a body fluid sampling device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a body fluid sampling device provided with a hollow piercing element installed inside a housing, a sample extracting tube communicating with the piercing element, a sampling vessel connected with the end of the tube and having a pressure detecting unit inside, and a negative pressure generating unit giving a negative pressure on the sampling vessel, wherein a suppressing means controlling the operation of the negative pressure generating means is operated when the pressure detecting means detects a pressure lower than the predetermined value in the operation of the negative pressure generating unit.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for sampling body fluid such as blood or the like from a human body for analysis or processing. The housing of the body fluid sampling device is placed on a human body and a piercing element is used to pierce the surface of the skin. When the device is operated, an absorbing power is applied to the piercing element to absorb the body fluid into the tube for sampling. In this invention, as the pressure detecting means and the suppressing means are provided in the sampling vessel, it becomes possible to avoid endangering a human body by preventing the application of a higher absorbing pressure than required.

[Explanation]

In this example, the function of the body fluid sampling device is represented as a method.

The matter reading "a suppressing means controlling the operation of the negative pressure generating means is operated when the pressure detecting means detects a pressure lower than the predetermined value in the operation of the negative pressure generating unit" means that the "suppressing means" provided with the body fluid sampling device is operated and does not mean so farther that the volume of the body fluid absorbed is changed as a result of the operation of the suppressing means, and the claimed method is judged not to include the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and the method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 10-1 A method for the observation of the celom by using an endoscope (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for capturing images of the inside of the celom with an endoscope, by way of changing the direction of the view by the operator using the rotation indicator, and rotating the imaging unit whose light axis tilted to the insertional axis of the endoscope.

Outline of Detailed Explanation of the Invention

This invention relates to an endoscope for optical observation by insertion into the human body. It is especially beneficial to alter the direction of the view of rigid scopes such as laparoscopes that do not have a curve.

The endoscope of this invention has an external cylinder made of stainless pipe for the entire length of the insertion section, and is equipped with a imaging unit with a lens and a solid image sensor. The light axis of the imaging unit is tilted to the axis of the external cylinder and can rotate on the same axis as the external cylinder.

The imaging unit is rotated by a stepping motor. When an operator sends a signal indicating the rotation angle to the stepping motor by using the rotation indicator, the stepping motor rotates according to the signal and the operator can gain the desired visual field.

[Explanation]

Since the matter reading "the operator using the rotation indicator" includes the step with an action of a medical doctor, the claimed method is not considered as "methods for controlling the operation of a medical device."

Since the claimed method does not involve the step with medical doctor's judgment on the physical condition of a human body such as disease or physical health, the method is not considered as "methods of diagnosis of humans."

However, the claimed method includes the step to operate the endoscope inside the human body, by rotating the imaging unit and changing the direction of the view, and it is described in the detailed explanation of the invention that the endoscope is inserted into the human body. Furthermore, the imaging with an endoscope is normally carried out with the endoscope placed inside the human body. Since the claimed method includes a method of surgery of humans as a part of the invention, the method is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 10-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 10-2 A method for controlling the operation of an endoscope (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of an endoscope, wherein means of rotating the imaging unit whose light axis is tilted to the insertional axis of the endoscope is operated by receiving an instruction signal to rotate.

Outline of Detailed Explanation of the Invention

This invention relates to an endoscope for optical observation by insertion into the human body. It is especially beneficial to alter the direction of the view of rigid scopes such as laparoscopes that do not have a curve.

The endoscope of this invention has an external cylinder made of stainless pipe for the entire length of the insertion section, and is equipped with a imaging unit with a lens and a solid image sensor. The light axis of the imaging unit is tilted to the axis of the external cylinder and can rotate on the same axis as the external cylinder.

The imaging unit is rotated by a stepping motor. When an operator sends a signal indicating the rotation angle to the stepping motor by using the rotation indicator, the stepping motor rotates according to the signal and the operator can gain the desired visual field.

[Explanation]

The matter reading "means of rotating the imaging unit whose light axis is tilted towards the insertional axis of the endoscope is operated by receiving an instruction signal to rotate" means that the means provided with the endoscope itself is operated by receiving an instruction signal to rotate, but it does not mean so further that a medical doctor gives the instruction signal to rotate, and the claimed method is judged not to include the step with an action of a medical doctor. Further, the claimed method does not include the step with an influence on the human body by the endoscope.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and is not considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

The statement of the claim of this example reads "A method for controlling the operation of an endoscope, wherein..." at the front, compared to that of Example 10-1. Additionally, the subject of the step of "is operated" is "means of rotating the imaging unit whose light axis is tilted to the insertional axis of the endoscope."

Example 11-1 A method for contrast magnetic resonance imaging (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for contrast magnetic resonance imaging, wherein an examinee injected with contrast media is imaged with low-resolution real-time mode and then the mode is shifted to the actual high-resolution imaging when the signal strength within the desired domain exceeds the threshold value drastically.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for magnetic resonance imaging in accordance with the movement of contrast media.

The total dose of contrast media is determined by the patient's weight, and the change in the infusion rate is determined depending on the part of the body to be imaged and the imaging method. The determined dose of contrast agent and the change in the infusion rate are then read into the power injector, and contrast media is injected into the examinee's artery or venous during the imaging procedure. In order to obtain the image when the contrast agent reaches the desired domain, a real time image is acquired at low-resolution mode which enables a high time-resolution monitoring after the start of the contrast media injection. During the real time imaging procedure, the contrast magnetic resonance imaging device will continuously monitor the signal strength within the desired domain, and when the value exceeds the predetermined threshold value, the contrast magnetic resonance imaging device will detect that the contrast media has reached the desired domain and the mode is shifted to the actual imaging procedure of high-resolution setting.

[Explanation]

Since the claimed method does not represent the function of the medical device but the steps with an action of a doctor, the method is not deemed as "methods for controlling the operation of a medical device."

The method in this example is not considered to be "methods of diagnosis of humans," since it does not include the steps of medical doctors judging the condition of human diseases or the physical condition of a human body for medical purposes.

In addition because the claim reads "an examinee injected with contrast media" the claimed invention is not defined by the procedure of contrast media injection. However, as the detailed explanation of the invention reads "injected into the examinee's artery or venous during the imaging procedure," a surgical treatment of injecting contrast media into blood vessels is practiced during the imaging procedure of the claimed method.

Therefore, although "an examinee injected with contrast media" is stated in the claim as if the contrast media was injected before the imaging, the claimed method is considered as "methods of surgery, therapy or diagnosis of humans" since a surgical treatment is practiced in working of the claimed method and it includes a method of surgery of humans as a part of the step of the invention.

[Remark]

It should be noted that, if the claim is described as in Example 11-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 11-2 A method for controlling a magnetic resonance imaging device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a magnetic resonance imaging device, wherein means of shifting to high resolution imaging is operated by the device when the signal strength within the desired domain drastically changes from the threshold value.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for magnetic resonance imaging in accordance with the movement of contrast media.

The total dose of contrast media is determined by the patient's weight, and the change in the infusion rate is determined depending on the part of the body to be imaged and the imaging method. The determined dose of contrast agent and the change in the infusion rate are then read into the power injector, and contrast media is injected into the examinee's artery or venous during the imaging procedure. In order to obtain the image when the contrast agent reaches the desired domain, a real time image is acquired at low-resolution mode which enables a high time-resolution monitoring after the start of the contrast media injection. During the real time imaging procedure, the contrast magnetic resonance imaging device will continuously monitor the signal strength within the desired domain, and when the value exceeds the predetermined threshold value, the contrast magnetic resonance imaging device will detect that the contrast media has reached the desired domain and the mode is shifted to the actual imaging procedure of high-resolution setting.

[Explanation]

The claimed method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. The operation of the magnetic resonance imaging device to shift to high resolution imaging when the signal strength within the desired domain drastically changes from the threshold value, i.e., the function of the magnetic resonance imaging device, is represented as a method.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device and is not considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

The statement of the claim of this example reads "A method for controlling the operation of a magnetic resonance imaging device, wherein..." at the front, compared to that of Example 11-1. Additionally, the subject of the step of "is operated" is "magnetic resonance imaging device."

Example 12-1 A method for displaying superimposed images of an object being cut and a cutting apparatus (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for displaying superimposed images of the three-dimensional data of an object being cut and the three-dimensional data of a cutting apparatus, comprising;

a step of obtaining the three-dimensional data of an object to be cut and a cutting device with markers attached, a step of detecting the position of the markers on the object to be cut and the cutting device, and a step of making a connection between the three-dimensional data of the object being cut and the three-dimensional data of the cutting device by calculating the relative positioning data of the object being cut and the cutting device.

Outline of Detailed Explanation of the Invention

The invention relates to a method for displaying superimposed images of an object being cut and a cutting device.

During a surgical operation for cutting bone or treating caries tooth, the image of the bone or the tooth can be displayed as superimposed images on the screen adjacent to the surgeon, thereby providing the surgeon with information regarding the progress of the surgical procedure. By observing the images on the screen, the surgeon can check accurately even sections that are difficult to view, and hence can carry out the surgery appropriately.

[Explanation]

A method for displaying superimposed images of an object being cut and a cutting device defined in the claim is a method to indicate a situation of cutting bone or treating caries tooth, and includes a method for cutting the bone or tooth.

Therefore, the claimed method includes a method of surgery or therapy of humans as a part of the steps of the invention; thus the method is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 12-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 12-2 A method for controlling a device for displaying superimposed images of an object being cut and a cutting apparatus (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a device for displaying superimposed images of the three-dimensional data of an object being cut and the three-dimensional data of a cutting apparatus, comprising;

a step for obtaining the three-dimensional data of an object to be cut and a cutting device with markers attached by means to obtain the image data, a step for detecting the position of the markers on the object to be cut and the cutting device by means to detect the position of the markers, and a step for making a connection between the three-dimensional data of the object being cut and the three-dimensional data of the cutting device with calculating the relative positioning data of the object being cut and the cutting device by means to make a connection.

Outline of Detailed Explanation of the Invention

The invention relates to a method for displaying superimposed images of an object being cut and a cutting device.

During a surgical operation for cutting bone or treating caries tooth, the image of the bone or the tooth can be displayed as superimposed images on the screen adjacent to the surgeon, thereby providing the surgeon with information regarding the progress of the surgical procedure. By observing the images on the screen, the surgeon can check accurately even sections that are difficult to view, and hence can carry out the surgery appropriately.

[Explanation]

The claimed method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. The function of the device for displaying superimposed images of the three-dimensional data of an object being cut and the three-dimensional data of a cutting device is represented as a method.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device and is not considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

The statement of the claim of this example reads "A method for controlling the operation of a device for..." at the front, compared to that of Example 12-1. Additionally, the subjects of the steps are "means to obtain the image data", "means to detect the position of the markers" and "means to make a connection."

4.2.2 Methods of therapy of humans

Example 13-1 A method for the treatment of cancer (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for treatment of cancer using;

a micro capsule X which contains an anti-cancer agent and releases the agent when disintegrated by a convergence supersonic wave, and

an apparatus having means to obtain the image data showing the position of the tumor, means to focus the convergence supersonic wave on the position of the tumor, and means to irradiate the convergence supersonic wave onto the micro capsule X.

Outline of Detailed Explanation of the Invention

This invention is directed to a method for treatment of cancer comprising injecting a micro capsule X with a anti-cancer agent inside into the blood vessel, destroying the micro capsule X in the body, and making the anticancer agent work efficiently on the tumor. Since the convergence supersonic wave is focused onto the position of the tumor, only the micro capsule that has reached the tumor is disintegrated and thus the anti-cancer agent can be effectively administered to the tumor.

[Explanation]

The method is to make an anticancer agent work on the tumor for treatment and falls under "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 13-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 13-2 A system for cancer treatment (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A cancer treatment system comprising;

a micro capsule X which contains an anti-cancer agent and releases the agent when disintegrated by a convergence supersonic wave, and

an apparatus having means to obtain the image data showing the position of the tumor, means to focus the convergence supersonic wave on the position of the tumor, and means to irradiate the convergence supersonic wave onto the micro capsule X.

Outline of Detailed Explanation of the Invention

The present invention relates to a system for effectively administering an anti-cancer agent to the tumor.

Since the convergence supersonic wave is focused onto the position of the tumor when the micro capsule X which contains an anti-cancer agent and has been injected into the blood vessel disintegrates inside the human body, only the micro capsule that has reached the tumor is disintegrated and thus the anti-cancer agent can be effectively administered to the tumor.

[Explanation]

The claimed treatment system is an invention of the combination of the micro capsule X, and the apparatus having the means to obtain the image data, the means to focus the convergence supersonic wave on the position of the tumor, and means to irradiate supersonic waves; hence it is a product invention. Therefore, it is not considered as "methods of surgery, therapy or diagnosis of humans."

Example 14-1 A method for regenerating cartilage (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for regenerating cartilage wherein a material wherein the A-cells is embedded in gel formed by the biocompatible polymeric material Z is transplanted to a joint of humans.

Outline of Detailed Explanation of the Invention

It was found that transplantation of a material wherein the A-cells is embedded in gel formed by the biocompatible polymeric material Z to a joint of humans has a remarkable cartilage regenerating effect.

[Explanation]

The claimed invention is a method for regenerating cartilage and thus a method of therapy of humans. Also the claimed invention is a method to transplant a medical material into the body and thus a method of surgery of humans. Therefore, the claimed invention is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 14-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 14-2 An implant material for cartilage regeneration (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

An implant material for regenerating a cartilage consisting of biocompatible polymeric material Z and A-cells wherein the A-cells are embedded in gel formed by the biocompatible polymeric material Z, characterized in that the implant is transplanted to a joint of humans.

Outline of Detailed Explanation of the Invention

It was found that transplantation of a material wherein the A-cells is embedded in gel formed by the biocompatible polymeric material Z to a joint of humans has a remarkable cartilage regenerating effect.

[Explanation]

As the implant material for cartilage regeneration described in the claim itself is a product, it does not fall under "methods of surgery, therapy or diagnosis of humans."

Example 15-1 A method for the treatment of cardiac infarction (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for treating cardiac infarction wherein A-cells and cell growth factor W are combined to be administrated to the site of cardiac infarction of humans.

Outline of Detailed Explanation of the Invention

It was found that the infarct area was reduced and cardiac function was recovered by injecting a combination of A-cells and cell growth factor W to the site of cardiac infarction of humans.

[Explanation]

As the claimed method is for treating myocardial infarction, it is a method of therapy of humans. Also as the claimed method involves a method for administrating A-cells and cell growth factor W to the site of cardiac infraction, it is a method of surgery of humans. Therefore, the claimed invention falls under "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 15-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 15-2 A composition for treatment of cardiac infarction (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A composition for treating cardiac infarction containing A-cells and cell growth factor W as active ingredients, characterized in that the composition is administrated to the site of cardiac infarction of humans.

Outline of Detailed Explanation of the Invention

It was found that the infarct area was reduced and cardiac function was recovered by injecting a combination of A-cells and cell growth factor W to the site of cardiac infarction of humans.

[Explanation]

As the composition for treating cardiac infarction described in the claims itself is a product, it does not fall under "methods of surgery, therapy or diagnosis of humans."

Example 16-1 A method for giving electrical stimulus by a pacemaker (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for giving an electrical stimulus by a pacemaker, comprising;

a step of comparing a heart rate detected by a detecting unit with a threshold value stored in a memory device, and, when the heart rate is lower than the threshold value,

a step of reading out an average heart rate in a steady state from the memory device, a step of calculating the difference between the average heart rate and the detected heart rate, a step of setting a pulse generating interval value in accordance with the difference, a step of a pulse generating unit's giving stimulus to the ventricle of the heart with the pulse generating interval having been set, and a step of keeping the heart rate steady.

Outline of Detailed Explanation of the Invention

Since the pacemaker constantly analyzes an electric signal from a myocardium to give a stimulus to the ventricle of the heart with a signal most fitted to the state of the heart, the maintenance of the optimum heart rate is made possible without a switching operation of the output signal.

[Explanation]

Since the matter reading "giving stimulus to the ventricle of the heart, and keeping the heart rate steady" includes the step with an influence on the human body by the device, the claimed method is not considered to be a method for controlling the operation of the medical device.

The method in this example is considered to be a method of therapy of humans, since it corresponds to a method for curing diseases by giving a stimulus to the ventricle of the patient's heart with pacemaker pulses and maintaining an optimum heart rate. Accordingly, the claimed method includes a method of therapy of humans as a part of the steps of the invention; thus, the method is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 16-2 to 16-4, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 16-2 A method for controlling a pacemaker (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling a pacemaker, comprising;

a step of comparing a heart rate detected at a detecting unit with a threshold value stored in a memory, and, when the heart rate is lower than the threshold value,

a step of reading out an average heart rate in a steady state from the memory, a step of calculating the difference between the average heart rate and the detected heart rate, and a step of setting a pulse generating interval value in accordance with the difference.

Outline of Detailed Explanation of the Invention

Since the pacemaker constantly analyzes an electric signal from a myocardium to set a generating interval of the pulses most fitted to the state, the maintenance of an optimum heart rate is made possible.

[Explanation]

In this example, the method relates to a method for controlling the internal operation of a pacemaker, and the function of the medical device is represented as a method.

Additionally, no step involves the step with an action of a medical doctor on a human body or the step with an influence on a human body by a device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device and is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 16-3 A method for controlling a pacemaker (An invention method not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling a pacemaker, comprising;

a step of comparing a heart rate detected at a detecting unit with a threshold value stored in a memory, and, when the heart rate is lower than the threshold value,

a step of reading out an average heart rate at a steady state from the memory, a step of calculating the difference between the average heart rate and the detected heart rate, a step of setting a pulse generating interval value in accordance with the difference, and a step of the pulse generating means' generating pulses for giving stimulus to the ventricle of the heart with the pulse generating interval.

Outline of Detailed Explanation of the Invention

Since the pacemaker constantly analyzes electrical signals from the myocardium to set the generating interval of the pulses most fitted to the state, the maintenance of an optimum heart rate is made possible.

[Explanation]

In this example, the function of the pacemaker is represented as a method, and, in addition to the method for controlling the internal operation of the pacemaker as described in Example 16-2, this method includes the step of generating pulses toward the outside of the pacemaker.

The matter reading "the pulse generating means' generating pulses for giving stimulus to the ventricle of the heart with the pulse generating interval" means that "the pulse generating means" provided with the pacemaker generates pulses, but it does not mean so farther that the generated pulses give stimulus to the ventricle of the heart as the direct result of the pulses being generated; thus, it is judged not to have the step with an influence on the human body by the device.

It should be further noted that pulses "for giving stimulus to the ventricle of the heart" does not depict the step with an influence on the human body, since it specifies the state and/or the character of the pulse and differs from an influence on the human body of giving stimulus to the ventricle of the heart.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method and does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

A pacemaker is generally designed to be placed and operated in the human body by nature and is assumed to operate in a human body. However, in case the function of the pacemaker is described as a method in a claim, it is considered as a method for controlling the operation of the pacemaker as long as the method does not include the step with an action of a medical doctor and/or the step with an influence on the human body by the device.

Example 16-4 A method for controlling the operation of a pacemaker (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a pacemaker; wherein means for comparing a heart rate detected in a detecting unit with a threshold value stored in a memory is operated, and, when the heart rate is lower than the threshold value, means for reading out an average heart rate at a steady state from the memory is operated, means for calculating the difference between the average heart rate and the detected heart rate is operated, means for setting the pulse generating interval value in accordance with the difference is operated, and pulse generating means for generating pulses for giving stimulus to the ventricle of the heart with a set pulse generating interval is operated.

Outline of Detailed Explanation of the Invention

Since the pacemaker constantly analyzes electrical signals from a myocardium to set the pulse-generating interval best fitted to the state of the heart, the maintenance of the optimum heart rate is made possible.

[Explanation]

In this example, the function of the pacemaker is represented as a method.

The matter reading "pulse generating means for generating pulses for giving stimulus to the ventricle of the heart is operated" means that "the pulse generating means" provided with the medical device is operated, but it does not mean so farther that the generated pulses give stimulus to the ventricle of the heart as the direct result of "the pulse generating means" being operated and the claimed method is judged not to include the step with an influence on the human body.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and does not include the step with an action of a medical doctor on the human body or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 17-1 A method for retinal stimulation using an artificial eye system (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for giving stimulus to a retina by an artificial eye system provided with an extracorporeal device composed of a visor device having an image receiving element and a light emitting element, and an extracorporeal image processing device, and an intraocular devices having a light receiving element, a signal processing circuit and an electrode, comprising;

a step of making a picture signal by processing an outside picture image obtained from the image receiving element of the visor device, a step of converting the picture signal into an optical signal for transmitting from the light emitting element of the visor device to the light receiving element of the intraocular devices, a step of receiving the optical signal by the light receiving element of the intraocular devices installed inside the oculus, a step of converting the received signal into a signal for use in electrical stimulation by the signal processing circuit of the intraocular devices, and a step of transmitting the signal for use in the electrical stimulation to an electrode for retina to transfer the signal to the retina, wherein stimulus of the picture information is given to the retina of the patient by the artificial eye system.

Outline of Detailed Explanation of the Invention

The artificial eye system of the present invention can transfer the signal of the artificial picture information to the retina of a visually handicapped patient through an electrode for retina buried in the retina, by combining the image receiving element, the light emitting element, the light receiving element, and the signal processing circuit.

[Explanation]

The matter reading "transmitting the signal for use in electrical stimulation to an electrode for retina to transfer the signal to the retina" includes the step with an influence on the human body by the device as it transfers the signal to the retina resulting in the electrical stimulation of the retina.

In addition, the matter reading "stimulus of the picture information is given to the retina of the patient" depicts the step with an influence on the human body by the device giving stimulus to the retina of the patient.

The claimed method, therefore, is not considered to be a method for controlling the operation of the medical device.

The method in this example is considered to be a method of therapy of humans, since it corresponds to a method for recovering the visual functions of a patient to cure diseases by transferring the signal for use in the electrical stimulation to the retina of a patient with the artificial eye system.

Accordingly, the claimed method includes a method of therapy of humans as a part of the steps of the invention; thus, it is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 17-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 17-2 A method for controlling an artificial eye system (An invention method not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling an artificial eye system provided with an extracorporeal device composed of a visor device having an image receiving element and a light emitting element, and an extracorporeal image processing device, and an intraocular device having a light receiving element, a signal processing circuit and an electrode, comprising;

a step of making a picture signal by processing an outside picture image by the image receiving element of the visor device, a step of converting the picture signal into an optical signal for transmitting from the light emitting element of the visor device to the light receiving element of the device for intraocular use, a step of receiving the optical signal by the light receiving element of the devices for intraocular use, a step of converting the received signal into a signal for use in the electrical stimulation for transferring to the retina by the signal processing circuit of the device for intraocular use, and a step of transmitting the signal for use in the electrical stimulation to the electrode buried in the retina.

Outline of Detailed Explanation of the Invention

The artificial eye system of the present invention can transfer the signal of the artificial picture information to the retina of a visually handicapped patient through an electrode buried in the retina, by combining the image receiving element, the light emitting element, the light receiving element, and the signal processing circuit.

[Explanation]

In this example, the function of the artificial eye system is represented as a method.

Since the matter reading "transmitting the signal for use in the electrical stimulation to the electrode buried in the retina" means that the device for intraocular use transmits signals for use in electrical stimulation and does not mean so farther as transferring the signal for use in the electrical stimulation to the retina as the result of the transmission, the claimed method is judged not to include the step with an influence on the human body by the device.

It should be noted that the matter reading "buried in the retina" in the above step specifies the state and/or the character of the electrode in the artificial eye system and is distinguished from the step with the action of a medical doctor burying the electrode in the retina or from the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of the medical device since the function of the medical device is represented as a method and does not include the step with an action of a medical doctor on the human body or the step with an influence on the human body by the device. As a result, it is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 18-1 A method for X-ray irradiation (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for irradiating X-rays onto the human body by changing the tube voltage and the tube current of the X-ray generator each time the generator rotates one lap inside the gantry.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for treatment of the human body by X-ray therapy with confirming the X-ray therapy process by monitoring the X-ray image of the affected area.

The device used in the current invention places the X-ray generator and the X-ray detector in opposite positions inside the gantry, and rotates one lap around the circumference of the gantry maintaining the opposite positions. The X-ray generator which is used for treatment of the human body and imaging procedures sets the appropriate tube voltage and tube current for treatment at the time of treatment and sets the appropriate tube voltage and tube current for image processing at the time of imaging. The X-ray device used in this invention has a control function for controlling the operation of the X-ray generator and the X-ray detector, and their rotation, detects the rotating position of the X-ray generator, and changes the tube voltage and tube current each time it rotates one lap around the circumference.

In the present invention the treatment and the imaging procedures are switched over each time the X-ray generator and the X-ray detector rotates one lap inside the gantry. At the time of treatment the X-ray will be irradiated to the affected area at the appropriate tube voltage and tube current value for treatment procedures while the X-ray generator is rotating one lap around the circumference. Just before the start of the next lap, the value of the tube voltage and tube current is changed to the appropriate value for imaging. During the next lap, the X-ray will be irradiated to the affected area at the appropriate tube voltage and tube current value for imaging, the X-ray that penetrate the affected area are detected by the X-ray detector, and image reconstruction is performed.

[Explanation]

Since the matter reading "irradiating X-rays onto the human body" includes the step with an influence on the human body by the device, the claimed method is not considered to be a method for controlling the operation of the medical device.

Additionally since the claimed method does not include the steps with an action of a medical doctor judging the condition of human diseases or the physical condition of a human body for medical purposes, it is not considered to be "methods of diagnosis of humans."

According to the detailed explanation of this invention, by changing the tube voltage and tube current of the X-ray generator, the treatment and imaging is repeated alternately; thus the steps to irradiate X-rays onto the human body by changing the tube voltage and tube current of the X-ray generator include a step of therapy of humans. Therefore, the claimed method is considered to be "methods of surgery, therapy or diagnosis of humans."

[Remark]

It should be noted that, if the claim is described as in Example 18-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 18-2 A method for operating an X-ray device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the X-ray generator by control means of the X-ray device; wherein the control means change ethe tube voltage and the tube current of the said X-ray generator each time the generator rotates one lap inside the gantry.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for treatment of the human body by X-ray therapy with confirming the X-ray therapy process by monitoring the X-ray image of the affected area.

The device used in the current invention places the X-ray generator and the X-ray detector in opposite positions inside the gantry, and rotates one lap around the circumference of the gantry maintaining the opposite positions. The X-ray generator which is used for treatment of the human body and imaging procedures sets the appropriate tube voltage and tube current for treatment at the time of treatment and sets the appropriate tube voltage and tube current for image processing at the time of imaging. The X-ray device used in this invention has a control function for controlling the operation of the X-ray generator and the X-ray detector, and their rotation, detects the rotating position of the X-ray generator, and changes the tube voltage and tube current each time it rotates one lap around the circumference.

In the present invention the treatment and the imaging procedures are switched over each time the X-ray generator and the X-ray detector rotates one lap inside the gantry. At the time of treatment the X-ray will be irradiated to the affected area at the appropriate tube voltage and tube current value for treatment procedures while the X-ray generator is rotating one lap around the circumference. Just before the start of the next lap, the value of the tube voltage and tube current is changed to the appropriate value for imaging. During the next lap, the X-ray will be irradiated to the affected area at the appropriate tube voltage and tube current value for imaging, the X-ray that penetrate the affected area are detected by the X-ray detector, and image reconstruction is performed.

[Explanation]

The claimed method does not include the step with an action of a medical doctor on the human body or the step with an influence on the human body by the device. The operation of the X-ray generator by control means of the X-ray device, i.e. the function of the X-ray device, is represented as a method.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device and is not considered to be "methods of surgery, therapy or diagnosis of humans."

4.2.3. Methods for gathering data

Example 19-1 A method for X-ray CT scanning (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for imaging by controlling the respective parts of an X-ray CT scanner by control means, comprising;

a step of exposing X-rays to the human body by controlling X-ray generating means, a step of detecting the X-rays permeated through the human body by controlling X-ray detecting means, and a step of performing reconstruction of the detected data and converting such detected data into picture data for display.

Outline of Detailed Explanation of the Invention

The present invention relates to a method for imaging by controlling an X-ray CT scanner for picking up an image of a human body, and a picture image thereof can be accurately displayed on account of the reconstruction of the detected data.

[Explanation]

The claimed invention does not include the steps of medical doctors judging for medical purposes the physical condition of a human body such as diseases and physical health, nor the steps of surgery or therapy of humans. Therefore, the claimed method is not considered as "methods of surgery, therapy or diagnosis of humans."

[Remark]

Since the matter reading "exposing X-rays to the human body" includes the step with an influence on the human body by the device, the claimed method is not considered to be a method for controlling the operation of the medical device.

Example 19-2 A method for controlling an X-ray CT scanner (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the respective parts of an X-ray CT scanner by control means, comprising;

a step of generating X-rays by controlling X-ray generating means, a step of detecting X-rays permeated through the human body by controlling X-ray detecting means, and a step of performing reconstruction of the data detected and converting the detected data into picture data for display.

Outline of Detailed Explanation of the Invention

The present invention relates to a method of controlling an X-ray CT scanner for picking up an image of a human body, and a picture image thereof can be accurately displayed on account of reconstruction of the detected data.

[Explanation]

In this example, the function of the X-ray CT scanner is represented as a method.

Since the matter reading "generating X-rays by controlling X-ray generating means" means that the "X-ray generating means" belonging to the X-ray CT scanner generates X-rays and does not mean so farther that the human body is exposed by the X-rays; thus, the claimed method is judged not to include the step with an influence on the human body by the device.

Furthermore, the matter reading "detecting X-rays permeated through the human body by controlling X-ray detecting means" represents the function that the "X-ray detecting means" provided to the X-ray CT Scanner receives a signal (X-ray) permeated through a human body. As a result, the claimed method is judged not to include the step with an action of a medical doctor or the step with an influence on a human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and the method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. Accordingly, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."
Example 20-1 A method for magnetic resonance imaging (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for magnetic resonance imaging by a magnetic resonance imaging device comprising;

a step of repeating pulse sequences while sequentially changing the intensity of the gradient magnetic field in the phase encode direction in the order from lower to higher, wherein the pulse sequence is carried out by irradiating 90° pulse to the imaging objective region while generating a gradient magnetic field in the slice direction, a step of generating a predetermined quantity of the gradient magnetic field in the phase encode direction, a step of irradiating 180° pulse to the region while generating the gradient magnetic field in the slice direction, and a step of detecting a magnetic resonance signal from the pertinent region while generating the gradient magnetic field in the lead-out direction.

Outline of Detailed Explanation of the Invention

The magnetic resonance imaging device of the present invention acquires magnetic resonance signals in the order of phase encode from low to high when the human body is imaged by the spin-echo method.

[Explanation]

The claimed invention do not include the steps of medical doctors judging for medical purposes the physical condition of a human body such as diseases and physical health, nor the steps of surgery or therapy of humans. Therefore, the claimed method is not considered as "methods of surgery, therapy or diagnosis of humans."

[Remark]

Since the matters reading "irradiating 90° pulse to the imaging objective region while generating a gradient magnetic field in the slice direction" and "irradiating 180° pulse to the region while generating the gradient magnetic field in the slice direction" include the step with an influence on the human body by the device, the claimed method is not considered to be a method for controlling the operation of the medical device.

Example 20-2 A method for controlling magnetic resonance imaging device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a magnetic resonance imaging device in which the control means of the magnetic resonance imaging device controls a transmitting and receiving circuit, a RF coil, and a gradient coil, comprising; a step of repeating pulse sequences while sequentially changing the intensity of the gradient magnetic field in the phase encode direction in the order from low to high, wherein the pulse sequence is carried out by a RF coil transmitting a 90° pulse toward a uniform magnetic field space while the gradient coil is generating the gradient magnetic field in the slice direction, a step of a gradient coil generating a predetermined quantity of the gradient magnetic field in the phase encode direction, a step of a RF coil transmitting an 180° pulse while the gradient coil is generating a gradient magnetic field in the slice direction, and a step of a RF coil receiving a magnetic resonance signal from a human body while a gradient coil is generating a gradient magnetic field in the read-out direction.

Outline of Detailed Explanation of the Invention

The magnetic resonance imaging device of the present invention acquires magnetic resonance signals in the order of the phase encode from low to high when a human body is imaged by a spin-echo method.

[Explanation]

In this example, the function of the magnetic resonance imaging device is represented as a method.

The matters reading "a RF coil transmitting a 90° pulse toward a uniform magnetic field space while the gradient coil is generating the gradient magnetic field" and "a RF coil transmitting 180° pulse while the gradient coil is generating the gradient magnetic field" mean that "the RF coils" provided with the magnetic resonance imaging device transmit pulses; however, this does not mean so farther that the generated pulses are exposed to the human body as a result of generating pulses. Accordingly, the claimed method is judged not to include the step with an influence on the human body by the device.

Furthermore, the matter reading "the RF coil receiving a magnetic resonance signal from the human body" represents the function that "the RF coil" receives a signal (magnetic resonance signal) from the human body; thus, the claimed method is judged not to include the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method, and the method does not include the step with an action of a medical doctor or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 21 A method for nuclear medicine imaging (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for nuclear medicine imaging comprising;

a step of performing SPECT imaging synchronized with the cardiac cycle on the examinee's heart administered with a radioactive agent, a step of performing ultrasonic Doppler imaging synchronized with the cardiac cycle on the examinee's heart without contrast agent, and a step of superimposing of the SPECT image and the ultrasonic Doppler image that have the same time phase of the heartbeat.

Outline of Detailed Explanation of the Invention

The present invention relates to the superimposed image display of a SPECT (Single photon emission computed tomography) image which is a type of a nuclear medicine image and a supersonic Doppler myocardial image.

Firstly with regard to the myocardial SPECT imaging, a radioactive agent that contains gamma emitters such as Technetium is administered to the vain of the examinee, and 45 minutes later, the examinee is moved to the bed of the SPECT device. An electrocardiogram device is attached to the examinee and the SPECT imaging is performed in synchronization with the heartbeat.

Next, in order to avoid excess strain on the examinee's heart, further use of radioactive agent are avoided and an electrocardiogram device is attached to the examinee and the Doppler myocardial imaging is performed in synchronization with the heartbeat.

The SPECT images and supersonic Doppler images that have the same time phase of the heartbeat are displayed in a superimposed display format.

The superimposed image displays enable the evaluation of cardiac ischemia, and because of the synchronization with the heartbeat, inconsistency in the data appearance due to pulsation can be avoided.

[Explanation]

In order to perform SPECT imaging, radioactive agent injection into the vein is required; however, the imaging is commenced after a time lapse according to the detailed explanation of the invention. No surgical procedure takes place during the steps of the claimed method. Furthermore, the claimed method does not include the steps of medical doctors judging the condition of human diseases or the physical condition of a human body for medical purposes.

Therefore, the claimed method is not considered as "methods of surgery, therapy or diagnosis of humans."

[Remark]

Since the claimed method does not represent the function of the medical device but the steps with an action of a doctor, the method is not deemed as "methods for controlling the operation of a medical device."

4.2.4 Methods for treating samples that have been extracted from the human body

Example 22-1 A method for Gene therapy (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method of reducing a cancer by administering the vector Z including both the DNA encoding protein X and the DNA encoding protein Y into a human body.

Outline of Detailed Explanation of the Invention

It was found that a cancer would be reduced as a result of suppression of angiogenesis particular to cancer tissues and simultaneously stimulation of immunity by administering the claimed recombinant vector into a human body.

[Explanation]

A method for the reducing cancer by administration of the recombinant vector into a human body is considered as methods of therapy of humans. Therefore, the claimed method is considered as "methods of surgery, therapy or diagnosis of humans."

Example 22-2 A method for manufacturing cell formulation for gene therapy (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for manufacturing cell formulation for cancer therapy by introducing genes with vector Z including both the DNA encoding protein X and the DNA encoding protein Y into a cell W extracted from a human body

Outline of Detailed Explanation of the Invention

It was found that a cancer would be reduced as a result of suppression of angiogenesis particular to cancer tissues and simultaneously stimulation of immunity by the recombinant cell medicine for cancer therapy obtained by the claimed method.

The cells obtained from a donor who is a relative of the patient could be used. However, it is the most preferable to use the cells from the patient himself or herself in view of compatibility.

[Explanation]

Methods for manufacturing medicines like recombinant cell medicines from the cells extracted from a human body as a raw material are not considered as "methods of surgery, therapy or diagnosis of humans," even if the cells extracted from the patient himself or herself are supposed to be used, as described in the detailed explanation of the invention.

Examples 23-1 A method of inducing differentiation of cells (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method of inducing differentiation of an human induced pluripotent stem cells to a neural stem cells wherein the human induced pluripotent stem cells are cultured in serum-free medium and in the presence of X cell growth factor.

Outline of Detailed Explanation of the Invention

It was found that the differentiation of human induced pluripotent stem cells (hereinafter abbreviated as "iPS cells") to neural stem cells was induced by culturing them in serum-free medium and in the presence of X cell growth factor.

Moreover, taking into consideration of immunological compatibility, it is preferable to use iPS cells derived from somatic cells of the same patient. The neural stem cells differentiated from human iPS cells can be used as a therapeutic agent for degenerative neurological disorder.

[Explanation]

Since the method of inducing differentiation to the neural stem cells outside the human body is applicable to "a method for manufacturing an intermediate product for a medicinal product or a medical material by utilizing raw materials collected from a human body," it does not fall under "methods of surgery, therapy or diagnosis of humans," even if the method is practiced on the presumption that the materials are to be returned to the same body.

Examples 23-2 A method of separating and purifying differentiation-induced cells (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method of separating and purifying neural stem cells from a cell population including them differentiated from human iPS cells, the said method comprising the steps of;

(a) separating the neural stem cells by using separation membrane M, and

(b) culturing the cells separated in (a) in the medium containing compound P.

Outline of Detailed Explanation of the Invention

It was found that the separation membrane M selectively absorbed the neural stem cells. Moreover, it has been publicly known that compound P is useful for maintaining pluripotency of the neural stem cells and for proliferation of them.

Thus, it is possible to obtain high-purity neural stem cells by separating the neural stem cells from the cell population containing undifferentiated human iPS cells and purifying them by using the separation membrane M, and by culturing them in the medium containing compound P. The high-purity neural stem cells can be used as a safer therapeutic agent for degenerative neurological disorder.

[Explanation]

Since the method of separating and purifying the neural stem cells outside the human body is applicable to "a method for manufacturing a intermediate product for medicinal product or a medical material by utilizing raw materials collected from a human body," it does not fall under "methods of surgery, therapy or diagnosis of humans," even if the method for treating materials is practiced on the presumption that the materials are to be returned to the same body.

Example 23-3 A method of analyzing a ratio of separated and purified cells (An invention method not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method of analyzing a ratio of neural stem cells within a cell population including separated and purified neural stem cells derived from human iPS cells, the said method comprising the steps of;

(a) measuring the expression level of cell marker A and cell marker B in the said cell population using a labeled antibody respectively, and

(b) determining the ratio of the neural stem cells based on the said expression level,

wherein the cell marker A consists of the amino-acid sequence of SEQ ID NO:1.

Outline of Detailed Explanation of the Invention

It was found that the cell marker A was specifically expressed in the neural stem cells and consisted of the amino acid sequence of SEQ ID NO:1. An antibody which binds to the cell marker A was also produced. Moreover, the cell marker B is publicly known as a cell marker widely expressing in the overall stem cells.

Thus, it is possible to measure the expression level of the cell marker A and the cell marker B using a labeled antibody respectively,, and to analyze the ratio of the neural stem cells in a cell population derived from the human iPS cells by deciding a determining the the expression level of the cell marker A to that of the cell marker B, which allows safer treatment of degenerative neurological disorder.

[Explanation]

Since the method of inspecting the separated and purified cell population outside the human body is applicable to "a method for analyzing a medicinal product or a medical material, or an intermediate product thereof which is manufactured by utilizing raw materials collected from a human body," it does not fall under "methods of surgery, therapy or diagnosis of humans," even if the method for treating materials is practiced on the presumption that the materials are to be returned to the same body.

Example 24-1 A method for blood purification (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for blood purification by a blood purifying device provided with a blood removal line, a blood return line, a blood plasma separation apparatus to separate the blood cell and blood plasma in the blood introduced through the blood removal line, a absorptive apparatus to remove any disease virus separated from the blood plasma, a pressure sensor to detect the pressure of the blood removal line and blood return line, and a blood pump, comprising;

a step of removing blood via the blood removal line, a step of separating the blood cell and the blood plasma, a step of removing any disease virus from the separated blood plasma, a step of mixing the blood cells with the blood plasma with the disease virus removed, a step of returning blood via the blood return line, and a step of controlling the flow of blood from the blood pump according to the pressure of the blood removal line and blood return line.

Outline of Detailed Explanation of the Invention

The blood purifying device of the present invention can perform treatment safely and continuously by controlling the flow of blood from the blood pump according to the pressure of the blood removal line and blood return line when removing any disease virus such as bilirubin from the blood.

[Explanation]

The matter reading "removing blood via the blood removal line" and "returning blood via the blood return line" are the step with an influence on the human body by a device.

The matters reading "separating the blood cell and the blood plasma," "removing any disease virus from the separated blood plasma" and "mixing the blood cells with the blood plasma with the disease virus removed" mean that separating blood into the blood cell and the blood plasma, removing any disease virus from the separated blood plasma, and mixing the blood cells with the blood plasma with the disease virus removed are performed in an extracorporeal circuit; thus are deemed as the steps with an influence on the human body by a device.

The matter reading "controlling the flow of blood from the blood pump according to the pressure of the blood removal line and blood return line" means that the flow of blood from the blood pump is controlled; thus are deemed as the step with an influence on the human body by a device.

Therefore, the claimed method is not considered to be a method for controlling the operation of a medical device.

The method in this example is considered as "methods of surgery, therapy or diagnosis of humans," since it corresponds to a method of treating the blood in an extracorporeal circuit, and is a method to treat a sample which has been extracted from the human body on the assumption that the sample is to be returned to the same human body for medical treatment purposes; thus it is considered as methods of therapy of humans.

[Remark]

It should be noted that, if the claim is described as in Example 24-2, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 24-2 A method for controlling the operation of a blood purifying device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling a blood purifying device provided with a blood removal line, a blood return line, a blood plasma separation apparatus to separate the blood cell and blood plasma in the blood introduced through the blood removal line, a absorptive apparatus to remove any disease virus separated from the blood plasma, a pressure sensor to detect the pressure of the blood removal line and blood return line, and a blood pump, wherein a means controlling the flow of the blood pump is operated according to the output from the pressure sensor.

Outline of Detailed Explanation of the Invention

The blood purifying device of the present invention can perform treatment safely and continuously by controlling the flow of blood from the blood pump according to the pressure of the blood removal line and blood return line when removing any disease virus such as bilirubin from the blood.

[Explanation]

In this example the function of the blood purifying device is represented as a method.

The matter reading "a means controlling the flow of the blood pump is operated according to the output from the pressure sensor" means that "the means controlling the flow of the blood pump" provided with the blood purifying device is operated, but it does not mean so further that there is a change in the blood output from the pump as a result, and it is judged not to include the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method and does not include the step with an action of a medical doctor on the human body or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 25-1 A method for measuring hematocrit values of blood (An invention considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for optically measuring hematocrit values of blood, the method comprising;

irradiating the blood with light comprising a selected range of wavelengths; and calculating the hematocrit value based on the strength of the reflection from the blood.

Outline of Detailed Explanation of the Invention

The present invention relates to a method of measuring the blood hematocrit value, by utilizing the light absorbing characteristic of each element in blood, and calculating the blood hematocrit value.

This invention enables the measuring of the hematocrit value of blood flowing in the blood circuit during dialysis treatment. During a dialysis treatment the fluid removal rate has to be controlled so that the patient does not experience any blood pressure drop or shock. The hematocrit value of blood flowing in the blood circuit which is a parameter closely related to the rate of change of the circulating blood volume, which is a control factor for the fluid removal rate, can be calculated without direct contact with the circulating blood.

Other than measuring the hematocrit value of the blood during dialysis treatment, the present invention enables conducting of various tests such as anemia tests. In such cases, the extracted blood is housed in a test container, the blood housed in the test container is irradiated with light comprising a selected range of optical wavelengths, and the blood hematocrit value which is an indicator for anemia is calculated based on the strength of the reflection from the blood.

[Explanation]

Although the claimed method does not include a method for removing blood or returning blood, the method in this example corresponds to a method for measuring blood hematocrit values of blood in an extracorporeal circuit.

Accordingly the claimed method is deemed as "methods of surgery, therapy or diagnosis of humans," since it corresponds to a method to analyze a sample which has been extracted from the human body on the assumption that the sample is to be returned to the same human body for medical treatment purposes.

[Remark]

It should be noted that, if the claim is described as in Example 25-2 and 25-3, the claimed invention is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 25-2 A method for measuring hematocrit values of extracted blood (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for optically measuring hematocrit values of blood which is housed in a test container, the method comprising;

irradiating the blood with light comprising a selected range of wavelengths; and calculating the hematocrit value based on the strength of the reflection from the blood.

Outline of Detailed Explanation of the Invention

The present invention relates to a method of measuring the blood hematocrit value, by utilizing the light absorbing characteristic of each element in blood, and calculating the blood hematocrit value.

This invention enables the measuring of the hematocrit value of blood flowing in the blood circuit during dialysis treatment. During a dialysis treatment the fluid removal rate has to be controlled so that the patient does not experience any blood pressure drop or shock. The hematocrit value of blood flowing in the blood circuit which is a parameter closely related to the rate of change of the circulating blood volume, which is a control factor for the fluid removal rate, can be calculated without direct contact with the circulating blood.

Other than measuring the hematocrit value of the blood during dialysis treatment, the present invention enables conducting of various tests such as anemia tests. In such cases, the extracted blood is housed in a test container, the blood housed in the test container is irradiated with light comprising a selected range of optical wavelengths, and the blood hematocrit value which is an indicator for anemia is calculated based on the strength of the reflection from the blood.

In addition, the blood which is housed in a test container is discarded without returning to human body.

[Explanation]

The claimed method is considered to be a method for measuring the blood hematocrit value of blood which is housed in a test container, and does not include a method practiced in the extracorporeal curcuit. As a result, it is not considered to be "methods of surgery, therapy or diagnosis of humans."

Example 25-3 A method for controlling the operation of a blood hematocrit measuring device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling the operation of a device for optically measuring blood hematocrit value, wherein;

means of irradiating the blood with light comprising a selected range of wavelengths is operated; and means of calculating the hematocrit value based on the strength of the reflection from the blood is operated.

Outline of Detailed Explanation of the Invention

The present invention relates to a method of measuring the blood hematocrit value, by utilizing the light absorbing characteristic of each element in blood, and calculating the blood hematocrit value.

This invention enables the measuring of the hematocrit value of blood flowing in the blood circuit during dialysis treatment. During a dialysis treatment the fluid removal rate has to be controlled so that the patient does not experience any blood pressure drop or shock. The hematocrit value of blood flowing in the blood circuit which is a parameter closely related to the rate of change of the circulating blood volume, which is a control factor for the fluid removal rate, can be calculated without direct contact with the circulating blood.

Other than measuring the hematocrit value of the blood during dialysis treatment, the present invention enables conducting of various tests such as anemia tests. In such cases, the extracted blood is housed in a test container, the blood housed in the test container is irradiated with light comprising a selected range of optical wavelengths, and the blood hematocrit value which is an indicator for anemia is calculated based on the strength of the reflection from the blood.

[Explanation]

In this example the function of the device for optically measuring the blood hematocrit value is represented as a method.

The matter reading "means of irradiating the blood with light comprising a selected range of wavelengths is operated" means that "the means of irradiating with light comprising a selected range of wavelengths" provided with the blood purifying instrument is operated, but it does not mean so further that the light is irradiated to the human body as a result of the "the means of irradiating with light comprising a selected range of wavelengths" being operated and it is judged not to include the step with an influence on the human body by the device.

Therefore, the claimed method is considered to be a method for controlling the operation of a medical device since the function of the medical device is represented as a method and does not include the step with an action of a medical doctor on the human body or the step with an influence on the human body by the device. As a result, the method is not considered to be "methods of surgery, therapy or diagnosis of humans."

4.2.5. Methods relating to assisting devices

Examples 26-1 A method for judging a motion state of walking (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for judging walking conditions with a power assisting equipment coupled to a leg of a worker to reduce his burden comprising,

a step of measuring myogenic potential of the leg of the worker by a sensor attached to a leg part of the power assisting equipment, and

a step of judging the walking conditions based on the measured myogenic potential.

Outline of Detailed Explanation of the Invention

This invention relates to a method for judging walking conditions using the power assisting equipment used to reduce a burden of a worker who involves in hard work. The power assisting equipment is appropriately controlled based on the result of judgment of walking conditions. ("A worker," described in the claims is defined as a person who involves in hard work in the detailed explanation of the invention. It is not supposed that the power assisting equipment of this invention assists movements of those who lost muscle strength and those who lost physical motor function for medical purposes.)

[Explanation]

The step for judging walking conditions based on the myogenic potential measured by a sensor attached to a leg part of the power assisting equipment is the step with an action by a device. Therefore, since the claimed method for judging walking conditions does not include the steps of judging for the medical purpose the physical condition of a human body such as diseases and physical health, it is not deemed as "methods of diagnosis of humans."

According to the detailed explanation of this invention, since "a worker" is defined as a person who involves in hard work and it is not supposed that the power assisting equipment of this invention assists for the medical purpose movements of those who lost muscle strength and those who lost physical motor function, the claimed method does not fall under the method of therapy of humans.

Therefore, the claimed method is not considered to be "methods of surgery, therapy or diagnosis of humans."

Examples 26-2 A method for controlling a power assisting device (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A method for controlling a power assisting equipment coupled to a worker to reduce his burden comprising,

a step of measuring myogenic potential of an arm or a leg of the worker by a sensor attached to the power assisting equipment, and

a step of moving the arm or the leg of the worker by driving a motor attached to the power assisting equipment based on the measured myogenic potential.

Outline of Detailed Explanation of the Invention

This invention relates to a method of appropriately controlling the power assisting equipment used to reduce a burden of a worker who involves in hard work based on the myogenic potential of an arm or a leg of the worker. ("A worker," described in the claims is defined as a person who involves in hard work in the detailed explanation of the invention. It is not supposed that the power assisting equipment of this invention assists movements of those who lost muscle strength and those who lost physical motor function for medical purposes.)

[Explanation]

This case relates to a method for controlling the power assisting equipment. According to the detailed explanation of this invention, since "a worker" is defined as a person who involves in hard work and it is not supposed that the power assisting equipment of this invention assists for the medical purpose movements of those who lost muscle strength and those who lost physical motor function, the method for controlling the power assisting equipment of this invention does not fall under "methods of surgery, therapy or diagnosis of humans."

Examples 26-3 A method for power assisting (An invention not considered as "methods of surgery, therapy or diagnosis of humans")

Claim

A power assisting method to assist movements of a worker by a power assisting equipment coupled to workers to reduce their burden comprising,

a step of measuring myogenic potential of an arm or a leg of the worker by a sensor attached to the power assisting equipment, and

a step of moving the arm or the leg of the workers by driving a motor attached to the power assisting equipment based on the measured myogenic potential.

Outline of Detailed Explanation of the Invention

This invention relates to a method of appropriately controlling the power assisting equipment using judgment results of a judgment made by the power assisting equipment used to reduce a burden of a worker who involves in hard work. This invention relates to a method for controlling a power assisting equipment used to reduce a burden of a worker who involves in hard work based on the myogenic potential of an arm or an leg of the worker and assisting movements of the worker. ("A worker," described in the claims is defined as a person who involves in hard work in the detailed explanation of the invention. It is not supposed that the power assisting equipment of this invention assists movements of those who lost muscle strength and those who lost physical motor function for medical purposes.)

[Explanation]

This case relates to a power assisting method.

According to the detailed explanation of this invention, since "a worker" is defined as a person who involves in hard work and it is not supposed that the power assisting equipment of this invention assists for the medical purpose movements of those who lost muscle strength and those who lost physical motor function, the power assisting method of this invention does not fall under "methods of surgery, therapy or diagnosis of humans."

[Reference] The Applicable Term of These Guidelines for Industrially Applicable Inventions

The following Guidelines is only applicable to the applications filed on April 1, 1997 or later (Note)

1.1 Non-statutory Inventions (4) and (5)(b)

(As for the application filed on or before March 31, 1997, exchanged in these parts, "Examination Guidelines for Patent and Utility Model (released in June,1993) Part II: Chapter 1. Industrially Applicable Inventions," 1.1 Non-statutory Inventions (4), (5)(ii) and (iv) are applied.)

(Remark) "The applications filed on April 1, 1997 or later" includes divisional applications in accordance with Article 44 of the Patent Act whose original applications are filed on April 1, 1997 or later, converted applications in accordance with Article 46 of the Patent Act whose original applications are filed on April 1, 1997 or later, and applications claiming priority (under the Paris Convention, priority declared as governed by the Paris Convention and priority based on patent application, etc.) filed on April 1, 1997 or later.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part II: REQUIREMENTS FOR PATENTABILITY

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Chapter 2 Novelty and Inventive Step

This chapter explains matters related to the provisions of Patent Act Article 29(1) regarding inventions lacking novelty, and Article 29(2) regarding inventions lacking an inventive step.

1. Novelty

Patent Act Article 29(1) reads: (Note)

An inventor of an invention that is industrially applicable may be entitled to obtain a patent for the said invention, except for the following:

(i) inventions that were publicly known in Japan or a foreign country, prior to the filing of the patent application;

(ii) inventions that were publicly worked in Japan or a foreign country, prior to the filing of the patent application; or

(iii) inventions that were described in a distributed publication, or inventions that were made publicly available through an electric telecommunication line in Japan or a foreign country, prior to the filing of the patent application.

(Note) A provision applied to an application on or after Jan.1, 2000 is as follows. Patent Act Article 29(1) reads:

Any person who has made an invention which is industrially applicable may obtain a patent, therefore, except in the case of the following inventions:

(i) inventions which were publicly known in Japan or elsewhere prior to the filing of the patent application;

(ii) inventions which were publicly worked in Japan or elsewhere prior to the filing of the patent application;

(iii) inventions which were described in a distributed publication or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application.

(Reference: Handling of inventions which were made available to the public through electric telecommunication lines (Patent Act Article 29 (1)(iii)), see Chapter.5)

1.1 Purport of the Provision of Patent Act Article 29(1)

The purport of the Patent System is to grant an exclusive right that is a reward for the disclosure of an invention, so that an invention which deserves a patent should be novel.

The provision of Patent Act Article 29(1)(i) to (iii) categorizes inventions lacking novelty, in order to define the scope of such inventions.

1.2 Patent Act Article 29(1)(i)-(iii)

1.2.1 Prior to the Filing of the Patent Application

"Prior to the filing of the patent application," not stating "prior to the date of filing of a

patent application," implies the definite time even in hours and minutes of the filing.

Consequently, the invention filed is deemed publicly known in Japan prior to the filing of a patent application, for instance, when the application is filed after noon on the date while the invention in question is publicly known before noon on the same date in Japan. The invention filed is deemed as having been described in a distributed publication in foreign countries prior to the filing of the patent application, when the application is filed after noon on the date in Japan while the publication is distributed in foreign countries before noon on the same date in Japan.

1.2.2 Publicly Known Invention

A "publicly known invention" within the meaning of Article 29(1)(i) means an invention the contents of which have been known to an unspecified person without obligation of secrecy.

An invention, which is disclosed by a person assuming a duty confidence to a third party without being aware of the secret nature, results in the "publicly known invention," irrespective of the inventor's or the applicant's intent to keep it secret.

For example, a manuscript for a journal of an academic society, in general, is usually kept secret against a third party, even after the receipt of the manuscript by the academic society. Therefore, the invention described in that manuscript is not considered a publicly known invention until its contents are released.

1.2.3 Publicly Worked Invention

A "publicly worked invention" within the meaning of Article 29(1)(ii) means an invention which has been worked under the conditions where the contents of the invention are to be publicly known (Note 1) or can potentially be publicly known (Note 2) & (Note 3).

- (Note 1) "Conditions where the contents of the invention are to be publicly known" include, for example, a situation where a person skilled in the art may easily understand the contents of the invention by observing the manufacturing process associated with the invention at a plant that is exposed to an unspecified person.
- (Note 2) "Conditions where the contents of the invention can potentially be publicly known" include, for example, a situation where, although inner parts of the manufacturing facility cannot be known to an unspecified person (a visiting inspector) by merely observing its exterior view and the person cannot know the invention as a whole without knowing that inner parts, the person is allowed to observe the inner parts or can have the inner parts explained. (i.e., the request for observation or explanation is not to be refused by the plant.)
- (Note 3) The working of the invention, which has caused its fact to be publicly known, falls within a "publicly known invention" as stated in Patent Act Article 29(1)(i). Meanwhile, the item (ii), ibid., includes a situation where the working has been publicly conducted, even without the finding of the fact that an invention has become publicly known as a result of working.

1.2.4 Invention Described in a Distributed Publication

(1) Distributed publication

A "publication" in the context of Article 29(1)(iii) is a document, a drawing or other similar medium for the communication of information, duplicated for the purpose of disclosing the contents to the public through distribution.

A "Distribution" in the context of the wording "inventions described in a distributed publication" provided in Article 29(1)(iii) means placing a publication as defined above in the condition where unspecified persons can read or see it. It does not necessitate the fact of a certain person's actual access to such a publication.

[Example 1]

The invention should be said to fall under earlier Patent Act 4(2) without regard to whether the public could refer to the following specification of the application, since French patent specification that has been the same contents of the filed invention of the appellant, has been received by the JPO Industrial Property Library prior to the filing of the application for patent of the invention.

(Reference: Sho 36 (O) 1180)

[Example 2]

The microfilm should be considered as a publication distributed in a foreign country prior to the filing of the application for the utility model, since the public could refer to the contents of the film by using a display screen and obtain a copy of it.

(Reference: Sho 61 (Gyo Tsu) 18)

(2) Time of distribution

- 1 When the time of publication is indicated in a publication, it is presumed as follows:
- (i) In the case where only the year of a publication is indicated, the last day of that year;
- (ii) In the case where a month and a year of a publication is indicated, the last day of the month of the year; and
- (iii) In the case where a day, a month and a year of a publication is indicated, that date.
- 2 In the case where the date of publication is not indicated in a publication
- (i) The distribution date of a foreign publication is presumed in the light of the period normally required to reach Japan from the country of the publication, as far as the date of its receipt in Japan is clear.
- (ii) In the case where there is a derivative publication such as a book review, an extraction or a catalog, the date of distribution of the publication in question is presumed based on the publication date of the derivative publication.
- (iii) In the case where there is a second edition or a second print of the publication, the date of distribution is presumed to be the publication date of the first edition indicated therein.
- ($\rm iv$) In the case where other appropriate information is available, the date of distribution is presumed or estimated therefrom.

③ In the case where the filing date of a patent application is the same as the date of the Publication In the case where the filing date of a patent application is the same as the date of the publication, the time of distribution is not deemed prior to the filing of a patent application, except when the filing time of application is clearly after the time of publication.

(3) Invention described in a publication

An "invention described in a publication" means an invention identified by the matters described or essentially described, though not literally, in a publication.

"Matters essentially described, though not literally, in a publication" means those directly derivable from the matters described, taking into consideration the common general knowledge (Note) as of the filing.

(Note) "The common general knowledge" means technologies generally known to a person skilled in the art (including well-known or commonly used art) or matters clear from empirical rules.

"Well-known art" means technologies generally known in the relevant technical field, e.g., many prior art documents, those widely known throughout the industry, or those well-known to the extent needless to present examples. "Commonly used art" means well-known art which is used widely.

1.3 Inventions Ruled by Novelty Requirement

The novelty requirement is applied to "claimed inventions."

1.4 Principle of Method of Determining whether a Claimed Invention is Novel

The examiner shall determine whether or not a claimed invention is novel by judging whether the claimed invention falls under the inventions categorized in the provision of Article 29(1)(i) to (iii).

When there are two or more claims in an application, the determination should be made for each claim.

1.5 Method of Determining whether a Claimed Invention is Novel

1.5.1 Finding of a Claimed Invention

The finding of a claimed invention should be made on the basis of the statements of the claim. Matters (terms) stated in the claim defining the claimed invention should be construed in the light of the description in the specification (excluding the claim(s)) (hereinafter referred to as "specification" in the explanation on Article 29(1)), the drawings and the common genera knowledge as of the filing.

The method of finding a claimed invention is as follows.

(1) When the claim statements are clear, the finding of the claimed invention should be made just as stated in the claim. Terms or language in such a claim should be construed as what they normally mean.

[Example 1]

The finding of the gist of the claimed invention, i.e., the finding of technical matters stated in the scope of claim, should be primarily based on the statements in the scope of claim. When the statements in the scope of claim is unambiguously clear so that it is possible to understand the contents of the invention with accuracy by the statements, the finding of the gist of the claimed invention is not allowed to consider matters described in the detailed description of the invention. The description of the detailed description of the invention could be taken into account only when the statements themselves in the scope of claim are not directly clear enough to find its technical meaning.

(Reference: Hei 4 (Gyo Ke) 116)

[Example 2]

The finding of the gist of the claimed device is done in order to define the technical matters described in the scope of claim as a method of determining whether the filed device satisfies the registration requirements. The finding of the gist of the claimed device should be done according to the description in the scope of claim insofar as the technical matters in the scope of claim are clear. Limited construction of the gist of the claimed device in the light of the matters described in the detailed description or in the drawing is not allowed.

(Reference: Hei 1 (Gyo Ke) 42)

[Example 3]

The finding of the gist of an invention should be done as a premise that the invention will be compared with inventions given in each paragraph of Patent Act Article 29(1), when trial examination of novelty and an inventive step of the filing invention is made. Then, the finding of the gist of the invention should be done on the basis of the statements in the scope of claim in the specification, insofar as there was no special circumstance, such as the technical meaning of the statements in the scope of claim could not be understood unambiguously and definitely, or the statements was apparently wrong at first sight in the light of the description in the detailed description in the specification.

(Reference: Sho 62 (Gyo Tsu) 3)

(2) Even though the claim statements are clear, however, when terms or language used in the claim (matters defining the claimed invention) are defined or explained in the specification or the drawings, the definition or explanation should be considered when the terms or language are construed. A mere illustrating of more specific concepts contained in concepts of the matters in claims, which is described in a detailed explanation or the drawings, does not correspond to the definition or the explanation mentioned above.

When statements in a claim, unclear or difficult to understand, can be clarified by construing terms or language in the claim in the light of the description in the specification, the drawings and the common general knowledge as of the filing, they should be referred to when the terms or language are construed.

[Example 1]

Nomenclature should be used as the technical terms in the specification and the terms should be used in a normal sense. Thus, it is also necessary to refer to the definition or explanation in a dictionary, etc. for understanding or construction of the technical terms in the specification, but it is not appropriate to intend to understand or construe only by means of the above. Meanings or contents of the technical terms should be primarily understood or construed on the basis of the description in the said specification or the drawing.

(Reference: Hei 6 (Gyo Ke) 78)

[Example 2]

In the case where the meaning of the technical terms used in "the scope of claim" is different from what it normally means, and that effect is described in "the detailed description of the invention", or in the case where the statements in "the scope of claim" is obscure and difficult to understand and those meanings are defined in "the detailed description of the invention," it goes without saying that the description in "the detailed description of the invention" shall be taken into account in construing these terms and language.

(Reference: Sho 41 (Gyo Ke) 62)

[Example 3]

It is reasonably allowable to identify the correct meaning of the obscure technical terms or technical matters in the scope of claim in the light of the description in the detailed description of the device for rational construction of the statements in the scope of claim.

(Reference: Sho 47 (Gyo Ke) 33)

(3) If a claimed invention is not clear, even by referring to the description in the specification, the drawings and the common general knowledge as of the filing, the finding of the claimed invention should not be conducted.

(4) Even though there is inconsistency between an invention found in a claim and an invention described in the specification and the drawings, the finding and examination of an invention should not be made solely on the basis of the description in the specification and the drawings, disregarding the statements of the claim.

Even though they are described in the specification or the drawings, matters (terms or language), not stated in a claim, should not be treated as they do exist in the claim when the finding of the claimed invention should be made. On the other hand, matters (terms or language) stated in a claim should be always considered and should not be treated as they do not exist in the claim.

[Example 1]

In the case where the statements of "the scope of claim" is clear and the contents of the invention are correctly comprehended with such statements, it is not allowable to understand the contents of the said invention in the light of matters not described in "the scope of claim" but described in "the detailed description of the invention" when the finding the gist of the filed invention is done.

(Reference: Sho 41 (Gyo Ke) 62)

[Example 2]

The finding or construction of the gist of the invention should be conducted on the basis of the statements in the scope of claim. Then, it is not allowed to neglect matters described in the scope of claim or add matters not described insofar as there are not special circumstances.

(Reference: Sho 48 (Gyo Ke) 62)

1.5.2 Concrete method of finding the claimed invention in a claim using a specific expression

(1) When the claim includes an expression specifying a product by its work, function, property, or characteristic (hereinafter referred to as the "function, characteristic, etc.")

When a claim includes an expression specifying a product by its function, characteristic, etc., such an expression should, in principle, be construed as every product that has such function, characteristic, etc., except when it should be construed otherwise according to 1.5.1(2). (see, Note below) For example, "a building-wall material incorporating a layer that insulates heat" should be construed as a building-wall material incorporating "a product" that is "a layer capable of performing a work or function of heat-insulation."

(Note) For example, if a claim includes "heat-resistant alloy comprising a composition of...," and the expression "heat-resistant alloy" should be construed as "alloy used for a purpose of requiring heat resistance" as a result of finding the claimed invention by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing, the examiner should follow the guidelines set forth in "(2) When the claim includes an expression specifying a product by its use" below.

However, if the function, characteristic, etc. is inherent in the product, such expression does not help to specify the product and it should be construed as the product per se.

Example 1: "Chemical compound X having an anticancer effect"

In Example 1, if the anticancer effect is a characteristic inherent in the specific chemical compound X, the expression "having an anticancer effect" does not help to specify the product, so it should be construed as the "chemical compound X" per se regardless of whether or not the chemical compound X was already known to have an anticancer effect. Therefore, if the chemical compound X is already publicly known, the claimed invention is regarded as lacking novelty. (In the case of "an anticancer agent comprising the chemical compound X," the examiner should follow the guidelines set forth in "Part VII, Chapter 3 Medicinal Inventions")

Example 2: "RC-integration circuit that cuts higher frequency signals and passes lower frequency signals"

In Example 2, the function "cuts higher frequency signals and passes lower frequency signals" is inherent in an "RC-integration circuit." Therefore, Example 2 should be construed as a generic "RC-integration circuit." However, it should be noted that if a claim includes "RC-integration circuit that cuts higher frequency signals of more than...Hz and passes lower frequency signals of less than...Hz," the expression does not specify the product by a function inherent in a generic "RC-integration circuit" but it represents "a circuit with a specific frequency characteristic among generic RC-integration circuits." Therefore, such an expression helps to specify the product.

There are also cases where an expression specifying a product by its function, characteristic, etc. should not be construed as a specific product among all products that have such function, characteristic, etc. when taking into account the common general technical knowledge at the time of the filing.

For example, if a claim includes "a means for fixing the first wooden member to the second plastic member," it is clear that "a means for fixing" does not represent a fixation means used for metals, such as welding, among all fixation means.

(2) When the claim includes an expression specifying a product by its use (limitation of use)

Where a claim includes an expression specifying a product by its use, such as "for use as ..." (i.e. limitation of use), the examiner should determine what the limitation of use means to specify the claimed invention by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing. (It should be noted that when the examiner is unable to understand the meaning as a matter specifying the claimed invention, the claim may constitute violation of Article 36(6)(ii).)

However, in the case of a chemical compound with a limitation of use such as "for use as …" (e.g., the chemical compound Z for use as Y), such limitation of use usually only indicates the utility of the chemical compound alone. Thus, the claim should be construed to represent the chemical compound per se with no limitation of use (e.g., the chemical compound Z) without having to apply the approaches indicated in and below (see, Example 1) (court judgment for reference: Tokyo High Court Judgment of July 8, 1997 [1995 (Gyo Ke) No. 27]). This approach should be applied not only to chemical compounds but also to microorganisms.

Example 1: "Chemical compound Z for insecticidal use"

When taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing, the expression of "for insecticidal use" merely indicates the utility of the chemical compound. So the "chemical compound Z for insecticidal use" should be construed as the "chemical compound Z" per se with no limitation of use. Therefore, in this case, the "chemical compound Z for insecticidal use" and publicly known "chemical compound Z" with no limitation of use cannot be regarded as different inventions.

General approach for the case where the claim includes a limitation of use

A limitation of use can be construed as a shape, structure, or composition (hereinafter simply referred to as a "structure, etc.") which is particularly suitable for such use, by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing. As in such a case, where a product with a limitation of use is construed as a product which is particularly suitable for such use, the product should be construed as a product with the structure, etc. represented by the limitation of use.

Therefore, even when the matters specifying the claimed invention and the matters specifying a cited invention are the same in all respects except for the limitation of use, if the structure, etc. represented by the limitation of use differs, the two should be regarded as different inventions (see, Example 2 and Example 3).

On the other hand, if a product with a limitation of use cannot be construed as a product which is particularly suitable for such use even by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing, such limitation of use is not construed as having a meaning that specifies the product except when it should be construed as representing a use invention set forth in below.

Therefore, in this case, if the matters specifying the claimed invention and the matters specifying a cited invention are the same in all respects except for the limitation of use, the two

cannot be regarded as different inventions.

Example 2: "Hook that has the shape of...for use as a crane"

If the expression "that has the shape of...for use as a crane" is construed as describing the "hook" as having a structure with a particularly suitable size or strength to be used as a crane by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing, the claimed invention should be interpreted as a "hook" that has such a structure. Therefore, a "hook that has the shape of...for use as a crane" is different from a similarly shaped "hook for use of fishing (fishhook)" because their structure, etc. is different.

Example 3: "Iron alloy that has Composition A for use as piano wire"

The expression "that has Composition A for use as piano wire" might be construed as expression describing the iron alloy as having a fine lamellar microstructure to give high tension, which is particularly suitable for piano wire, by taking into account the descriptions in the specification and drawings and the common general technical knowledge at the time of the filing. In such a case, the claimed invention should be interpreted as the "iron alloy" that has such fine lamellar microstructure. Therefore, the "iron alloy that has Composition A for use as piano wire" is different from iron alloy that has no such fine lamellar microstructure (e.g., "iron alloy that has Composition A for use as gear wheels"), because their structure, etc. is different.

Approach for the case where an invention of product with a limitation of use should be construed as a use invention

Generally, a use invention is construed as an invention based on discovering an unknown attribute of a product and finding that the product is suitable for a new use due to the presence of such attribute.

Court judgments for reference: Tokyo High Court Judgment of April 25, 2001 (1998 [Gyo Ke] No. 401); Tokyo District Court Judgment of October 23, 1992 (1990 [Wa] No. 12094); Tokyo High Court Judgment of July 13, 2000 (1998 [Gyo Ke] No. 308); Tokyo High Court Judgment of February 10, 2000 (1998 [Gyo Ke] No. 364)

When a claim includes a limitation of use and the claimed invention can be construed as an invention based on discovering an unknown attribute of a product and finding that the product is suitable for new use due to the presence of such attribute, the limitation of use should be regarded as having a meaning that specifies the claimed invention and it is appropriate to construe the claimed invention by including the aspect of the limitation of use. Therefore, in this case, even if the product per se is already known, the claimed invention can be novel as a use invention (see, Example 4).

However, even when an unknown attribute has been discovered, if the claimed invention is not considered to provide new use for the product by taking into account the common general technical knowledge in the relevant technical field at the time of the filing, the claimed invention is regarded as lacking novelty. In addition, even when the claimed invention and a cited invention are inventions of products defined by different wordings in the limitation of use, the claimed invention is regarded as lacking novelty if the two cannot be distinguished in terms of their use by taking into account the common general technical knowledge in the relevant technical field at the time of the filing (see, Example 5 and Example 6).

Example 4: "Composition for use as antifouling coating applied to a ship bottom comprising a specific quaternary ammonium salt"

A "composition for use as electrodeposition primer comprising a specific quaternary ammonium salt" and a "composition for use as antifouling coating applied to a ship bottom comprising a specific quaternary ammonium salt" may be the same in all respects except for the limitation of use. However, if the use "as electrodeposition primer" is based on an attribute that it forms an electrodeposition coating layer on a member and also improves the adhesiveness of the overcoat layer, while the use "as antifouling coating applied to a ship bottom" is based on a discovery of an unknown attribute to prevent shellfish from adhering to the ship bottom, and is a new use that is based on such discovered attribute and different from known uses, this limitation of use is construed as specifying the "composition." Therefore, the two inventions should be regarded as different inventions.

Example 5: "Yogurt containing Ingredient A for use of strengthening bones"

Even though "yogurt containing Ingredient A for use of strengthening bones" is an invention based on an unknown attribute that it promotes calcium absorption in bones, both "yogurt containing Ingredient A" and "yogurt containing Ingredient A for use of strengthening bones" are used as food. Therefore, "yogurt containing Ingredient A for use of strengthening bones" cannot be regarded as providing a new use as food; and "yogurt containing Ingredient A for use of strengthening Ingredient A for use of strengthening bones" is regarded as lacking novelty in light of "yogurt containing Ingredient A."

Considering the common general technical knowledge in the food field, with regard to any products used for food as well as yogurt, a discovery of a new attribute of publicly known food usually does not provide new use that can distinguish the invention from known food.

Example 6: "Cosmetic product for use of preventing skin wrinkles containing Ingredient A as an active ingredient"

Even though a "cosmetic product for use of moisturizing the skin containing Ingredient A as an active ingredient" is based on a skin conditioning attribute that it softens the stratum corneum and promotes the moisture absorption of the skin while a "cosmetic product for use of preventing skin wrinkles containing Ingredient A as an active ingredient" is based on an unknown skin-improving attribute that it accelerates production of Substance X inside the body and each of the two inventions includes different wordings in the limitation of use, the two cannot be distinguished in terms of their use, if they are both used as skin-care cosmetic products externally applied to skin and if it is common knowledge in the relevant field that a cosmetic product with a moisturizing effect conditions the skin by improving skin wrinkles through moisturizing and can also be used for preventing skin wrinkles. Therefore, if the two are the same in all respects other than the limitation of use, the latter invention is regarded as lacking novelty in light of the former invention.

(Note 1) In general, when an unknown attribute of a product is discovered and an invention is found to be creative in respect to its use for a certain purpose that was unknown as the purpose of use of the product, such invention can be novel as a use invention. This approach to use invention is generally applied to technical fields in which it is relatively difficult to understand how to use the product from the structure or name of the product

(e.g., the technical field of use of compositions containing chemical substances). On the other hand, the approach to use invention is not applied to machines, instruments, articles, and apparatuses because these products usually have fixed uses.

- (Note 2) Even when the claimed invention provides a new use based on an attribute of the product, if a person skilled in the art could have easily arrived at such use based on known attributes or known product structures, the claimed invention is regarded as lacking an inventive step (Tokyo High Court Judgment of August 27, 2003 [2002 (Gyo Ke) No. 376]).
- (Note 3) Looking at use inventions in respect to the expressions in the claims, there are claims expressed by agent form, the method of use or others as well as those expressed by limitation of use. The guidelines mentioned above can also be applied to use inventions other than those expressed by limitation of use. However, due to the reason indicated in 1.5.1(4), the applicable scope of the guidelines should be limited to the cases where any term that indicates use is included in the claims (e.g., "catalyst comprising ...," "ornamental material comprising an ... alloy" and "method of killing insects using ...").

(3) Claim statements defining a product by its manufacturing process (product-by-process) Where a claim includes a statement defining a product by its manufacturing process, such a statement is construed as meaning a product per se unless it should be construed as different meaning in compliance with 1.5.1(2). (Note) If an identical product can be obtained by a different process from the one stated in the claim, thus, the claimed invention is not novel where the product is publicly known prior to the filing.

(Note) The reason of the above construction is that there are cases where a product cannot be defined by its structure but only can be defined by its manufacturing process (e.g., an invention of isolated protein) and that it is not appropriate to make a distinction between an invention defined by its structure and an invention defined by its manufacturing process. Thus, even though applicant's intention is clear to limit the claimed invention to only the product which is obtained by particular process, such as a claim reading as "Z which is obtained solely by process A," the claimed invention should be construed as the product per se.

Example 1: "Protein which is obtained by process P (steps p1, p2, ... and pn)"

In the case of Example 1, if the protein which is obtained by process P is identical with a publicly known particular protein Z which is produced by process Q, the claimed invention is not novel, irrespective of whether the process P is publicly known prior to the filing.

Example 2: "A two-layer structured panel which is made by welding together an iron sub-panel and a nickel sub-panel"

In the case of Example 2, If a panel of which structure is the same as the panel made by welding can be obtained by process other than welding where that panel is publicly known prior to the filing, the claimed invention is not novel. Since a product with the same structure as the product stated in the claim, however, cannot be obtained by any other process than welding, the claimed invention is novel unless a two-layer structured panel made by welding is publicly known

prior to the filing.

1.5.3 Finding of a Cited Invention as provided in Patent Act Article 29(1)(i)-(iii)

(1) Publicly known invention

"A publicly known invention" is one actually known by an unspecified person through the medium of people. Generally, it is often the case that it is known through the medium of speakers at lectures, presentations, etc. In such a case, the finding of an invention is made on the basis of the facts presented at the lectures or presentations.

The presented facts can be construed in the light of the common general knowledge. The matters directly derivable from the facts in consideration of the common general knowledge as of the lectures, presentations, etc., can also be a basis for the finding of a publicly known invention.

(2) Publicly worked invention

"A publicly worked invention" is one worked under conditions where the invention is or can potentially be publicly known to an unspecified person through the medium of machinery or systems, etc. Therefore, the finding of an invention is made on the basis of the facts embodied in machinery or systems, etc.

The facts embodied in machinery or systems, etc. can be construed in the light of the common general knowledge. The matters directly derivable from the facts in consideration of the common general knowledge as of the working can also be a basis for the finding of a publicly worked invention.

(3) Invention described in a publication

① The finding of "an invention described in a publication" is made on the basis of "the matters described in a publication." Matters described in a publication can be construed in the light of the common general knowledge. The matters which a person skilled in the art can directly derive from matters described in a publication in consideration of the common general knowledge as of the filing (hereinafter referred to as "matters essentially described, though not literally, in a publication") can be a basis for the finding of an invention described in a publication. In other words, "an invention described in a publication" means an invention which a person skilled in the art can identify on the basis of the matters both described and essentially described, though not literally, in a publication.

Thus, unless an invention can be identified by a person skilled in the art on the basis of the matters both described and essentially described, though not literally, in a publication, the invention shall not be deemed to be "an invention described in a publication," i.e., "a cited invention" under Article 29(1)(iii). For example, where "matters described in a publication" are a part of alternatives of Markush-type formula, it is determined whether a person skilled in the art can identify an invention of which a matter is one of the alternatives.

(An example regarded as matters essentially described, though not literally, in a publication) [Example 1]

The fact that the conductor as a shielding means for preventing electrical interference, is connected to an earth is recognized as the common general knowledge in the related electrical field. Consequently, the fact that a person skilled in the art is expected to presume that shield

plate for the switch disclosed in the cited document is connected to the earth should be recognized as a matter of course, even though it was not disclosed in the cited document. In view of the purport of the provision of Utility Model Act Article 3, it is reasonable that "a device described in a publication" in Section 3(1)(iii) corresponds to the technical idea that a general person skilled in the art can recognize in the description in a publication. ... When the cited document is read in the light of the above-mentioned common general knowledge, that "the shielding plate disclosed in the cited document is connected to an earth as a use mode" should be deemed as constituting the portion of the technical meaning of the term "shield plate" itself in the cited document so that it should be considered as essentially disclosed, though not literally. (Reference: Sho 56 (Gyo Ke) 93)

(An example not regarded as matters essentially described, though not literally, in a publication) [Example 2]

Attapulgite clay (acidic components) as the same effect substance of citric acid is indicated in the working example 6 in the cited document and is insoluble in a solvent. In addition, it is a reasonable understanding that only the use of solvent-insoluble phenol resin is indicated because a solvent-insoluble substance has been normally used as acidic components in the said technical field. Consequently, it is impossible to say that there is the description indicating that the soluble substance in a solvent that is common to basic component should be selected from "phenol resins" in the cited document.

(Reference: Sho 55 (Gyo Ke) 12)

② Unless it is clear that an invention is described in a publication in such a manner that a person skilled in the art can make the product in case of a product invention or can use the process in case of a process invention in consideration of the common general knowledge as of the filing, the invention shall not be deemed to be "a cited invention" under Article 29(1)(iii).

For example, if a chemical substance is expressed merely by its name or its chemical formula in a publication, and if it is not clear that a person skilled in the art can produce the chemical substance on the basis of the description in the publication, even in the light of the common general knowledge as of the filing, the chemical substance does not fall under "an invention described in a publication" under Article 29(1)(iii). (Note that the above does not mean that the claim violates the enablement requirement under Article 36(4) where the publication is a patent application claiming the chemical substance as one of alternatives of Markush-type formula.)

(4) The finding of a cited invention expressed in specific concept or generic concept ① A cited invention expressed in a specific manner in a disclosure necessarily implies or suggests "a generic invention of which matters defining the invention are the same family or the same genus, or have the common characteristic with the cited invention," and leads to the finding of an invention expressed in generic concept (Note 1). Without the cited invention expressed in specific concept being identified to its generic invention, the determination of whether the claimed generic invention is novel may be conducted at the comparison and determination steps.

② A cited invention expressed in generic concept neither implies nor suggests an invention expressed in a specific manner, and does not lead to the finding of the invention expressed in a specific manner (except when an invention expressed in a specific manner can be directly

derivable from such a generic invention in consideration of the common general knowledge (Note 2)).

- (Note 1) "Generic concepts" is defined as concepts integrating matters in the same family or the same genus, or a concept integrating a plurality of matters with the common characteristic.
- (Note 2) The plain logic that generic concept contains specific disclosure, or a term in generic concept contains specific terms, does not substantiate the necessary derivation (disclosure) of an invention expressed in a specific concept.

1.5.4 Comparison of a Claimed Invention with a Cited invention

(1) The finding of the identicalness and the difference between a claimed invention and a cited invention is conducted by comparing the matters defining the claimed invention and the matters considered to be needed at the expression of the cited invention in words (hereinafter referred to as "matters defining the cited invention").

(2) A more specific concept within the concept of the claimed invention may be compared with a cited invention for the purpose of finding the identicalness and the difference between a claimed invention and a cited invention, instead of the method of comparison mentioned (1).

An example of "a more specific concept within the concept of a claimed invention" is the disclosed invention described in the detailed description of the invention or the drawing as a mode for carrying out the claimed invention. Inventions other than this may be compared with the claimed invention as far as they are more specific concepts within the concept of the claimed invention.

This alternative method would be helpful for the examination of novelty in terms of claims with statements defining a product by its function or characteristic, etc., or claims with numerical limitation, etc.

(3) In cases where the matters defining a claimed invention is compared with the matters described in a cited publication instead of the method of comparison mentioned (1) and 1.5.3(3), the finding of the identicalness and the difference between the claimed invention and the cited invention may be conducted in consideration of the common general knowledge as of the filing. But the result of using this method shall be the same as the result of the methods mentioned (1) and "1.5.3(3)".

(4) The comparison shall not be conducted between a claimed invention and a combination of two or more cited inventions.

1.5.5 Determining whether a Claimed Invention is Novel

(1) Where there is no difference between the matters defining a claimed invention and the matters defining a cited invention as a result of the comparison, the claimed invention is not novel. Where there is a difference, the claimed invention is novel.

(2) If matters defining a claimed invention are expressed by alternatives either in form or de facto

(Note1), and if any one of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such inventions has no difference from a cited invention, the claimed invention shall be deemed not to be novel.(Note 2)

(Note 1) "Alternatives in form" means a claim statement with an apparent form of alternatives. Among claims with "alternatives in form" are a claim with Markush-type formula and a multiple dependent form claim which refers to two or more other claims in analternative form.

"Alternatives in de facto" means a claim statement which is of comprehensive nature but intends to include a certain number of more specific matters. Whether a claim statement is "de facto alternatives" should be determined in the light of the description in the specification, the drawings and the common general knowledge as of the filing in addition to the claim statement. Among typical examples of claims having "de facto alternatives" is a claim of which a matter defining the claimed invention is "an alkyl with 1 to 10 carbons." (The above claim statement of comprehensive nature includes a methyl, an ethyl and so on.)

As opposed to the above, a term "thermoplastic resin" in a claim should not be construed as one that merely denotes a certain number of more specified matters by means of the term of comprehensive nature except when it should be construed in the light of the description in the specification, the drawings and the common general knowledge as of the filing in such a case as the term is defined in the description of the invention. Thus, the term should not be deemed to be de facto alternatives. In other words, it should be construed that the concept of "thermoplastic resin" includes uncertain number of more specified matters (e.g., polyethylene, polypropylene, etc.), and that the term denotes a certain generic concept in terms of characteristic which the more specific matters have in common (i.e., "thermoplasticity" in this case).

(Note 2) The handling does not relate with the practice for the appropriate time to stop prior art searches. See " Part IX : Procedure of Examination."

(3) Handling of a claim with statements defining a product by its function or characteristic, etc. ① Where a claim includes statements defining a product by its function or characteristic, etc. and it falls under either the following (i) or (ii), there may be cases where it is difficult to compare of the claimed invention with a cited invention. In the above circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie identical with the product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29(1) as far as there is no other difference. Then an applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal. The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed product is prima facie identical with the product of the cited invention. Where the applicant's argument, which is, for example, abstract or general, does not change the examiner's evaluation to that extent, the examiner may render a decision of refusal under Article 29(1).

The above-mentioned handling, however, shall not be applied, if matters defining the cited invention fall under either the following (i) or (ii).

(i) a case where the function or characteristic, etc. is neither standard, commonly used by a person skilled in the art in the relevant technical field nor comprehensible of its relation to a commonly used function or characteristic, etc. to a person skilled in the art if the function or characteristic, etc. is not commonly used, or

(ii) a case where plural of functions or characteristics, etc. each of which is either standard, commonly used by a person skilled in the art in the relevant technical field or comprehensible of its relation to a commonly used function or characteristic, etc. to a person skilled in the art if the function or characteristic, etc. is not commonly used, are combined in a claim so that the claim statements as a whole fall under (i).

(Note) Function or characteristic, etc. should be deemed to be standard if it is either defined by JIS (Japanese Industrial Standards), ISO-standards (International Organization for Standardization-standards) or IEC-standards (International Electro-technical Commission-standards), or if it can be determined quantitatively by a method for testing or measuring which is provided in those standards. Function or characteristic, etc. should be deemed to be commonly used by a person skilled in the art if it is commonly used by a person skilled in the art if it is definition or the method for testing or measuring or measuring can be understood by a person skilled in the art.

② Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he reveals that a prior art product is identical with the product of the claimed invention as a
 result of converting the function or characteristic, etc. into a different definition with the same
 meaning or a different method for testing or measuring the same;
- where a claimed invention and a cited invention are defined by identical or similar function or characteristic, etc. which are measured or evaluated under different measuring conditions or different evaluation methods, and there is a certain relationship between them, and there is a high probability that the function or characteristic, etc. defining the cited invention, if measured or evaluated under the same measuring conditions or evaluation method as the claimed invention, is included in the function or characteristic, etc. defining the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing and (s)he discovers the particular product is publicly known prior to the filing;
- (s)he discovers a prior art product which is identical with or similar to a mode for carrying out the claimed invention (for example, (s)he discovers a prior art product of which starting material is similar to and of which manufacturing process is identical with those of the mode for carrying out the claimed invention, or (s)he discovers a prior art product of which starting material is identical with and of which manufacturing process is similar to those of the mode for carrying out the claimed invention, etc.); and
- the claimed invention and a cited invention have common matters defining the inventions other than those defining a product by its function or characteristic, etc., and the cited invention has the same objective or effect as the matters defining a product by its function or characteristic, etc. have, and there is a high probability that the function or characteristic, etc. defining the cited invention is included in the function or characteristic, etc. defining the claimed invention
The examiner should follow the ordinary method when the requirement of novelty can be examined without using this exceptional handling.

(4) Handling of a claim with statements defining a product by its manufacturing process (1) If a claim is one with statements defining a product by its manufacturing process, there may be cases where it is difficult to determine what is the product per se structurally. In such circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie identical with the product of the cited invention without making a strict comparison of the claimed product with the product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29(1), as far as there is no other difference, as mentioned in the above (3).

The above-mentioned handling, however, shall not be applied, if matters defining the cited invention include statements defining a product by its manufacturing process.

② Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he discovers a product of a cited invention of which starting material is similar to and of which manufacturing process is identical with those of the product of the claimed invention;
- (s)he discovers a product of a cited invention of which starting material is identical with and of which manufacturing process is similar to those of product of the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing, and (s)he discovers the particular product is publicly known prior to the filing of the application; and
- (s)he discovers a cited invention which is identical with or similar to a mode for carrying out the claimed invention.

The examiner should follow the ordinary method when the requirement of novelty can be examined without using this exceptional handling.

1.6 Notice of Reasons for Refusal under the provision of Patent Act Article 29(1)

If the examiner has a conviction that a claimed invention is unpatentable under Article 29 (1), (s)he will send a notice of reasons for refusal to an applicant.

The applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal.

The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed invention is unpatentable under Article 29(1). Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may render a decision of refusal on the ground of lacking novelty.

2. Inventive Step (Nonobviousness)

Patent Act Article 29(2) reads:

Where an invention could easily have been made, prior to the filing of the patent application, by a person with ordinary skill in the art to which the invention pertains, on the basis of an invention or inventions referred to in any of the paragraphs of Paragraph (1), a patent shall not be granted for such an invention notwithstanding Paragraph (1).

2.1 Purport of the provision of Patent Act Article 29(2)

The purport of the provision of Patent Act Article 29(2) is not to grant a patent to such inventions that were easily made by a person skilled in the art, since granting a patent to such inventions does not contribute to and even hampers the progress of technology.

2.2 Patent Act Article 29(2)

(1) "An invention or inventions referred to in any of the paragraphs of Paragraph (1)" means any of the inventions which were publicly known or publicly worked in Japan, and inventions described in a distributed publication in Japan or elsewhere prior to the filing of the patent application. (Note 1)

(Note 1) For the application on or after Jan 1, 2000, it means any of the inventions which were publicly known or publicly worked in Japan or elsewhere and inventions which were described in a distributed publication or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application.

(2) "A person with ordinary skill in the art to which the invention pertains" (referred to as "a person skilled in the art" hereinafter) provides a hypothetical person:

who has the common general knowledge as of the filing in the art to which the claimed invention pertains, and has ability to use ordinary technical means for research and development;

who has ability to exercise ordinary creativity in selecting materials and changing designs;

and who is able to comprehend as his/her own knowledge all technical matters in the state of the art (Note 2) in the field to which a claimed invention pertains at the time of filing a patent application.

In addition, a person skilled in the art is supposed to be able to comprehend as his/her own knowledge all technical matters in the field of technology relevant to a problem to be solved by an invention.

Further, there may be cases where it is more appropriate to think in terms of "a group of persons" than a single person.

(Note 2) "The state of the art" at the time of filing a patent application is constituted of "an invention or inventions referred to in any of the paragraphs of Paragraph (1)" and the common general knowledge and other publicly known technical matters (i.e., technical knowledge and information, etc.).

(3) "An invention could easily have been made, prior to the filing of the patent application, by a person with ordinary skill in the art to which the invention pertains, on the basis of an invention or inventions referred to in any of the paragraphs of Paragraph (1)" means that a person skilled in the art could have been able to easily arrive at a claimed invention by exercising ordinary creativity on the basis of the inventions provided in Article 29(1) (referred to as "cited inventions" hereinafter) prior to the filing of an application.

2.3 Invention Ruled by Inventive Step Requirement

An invention to be ruled by inventive step requirement is "a claimed invention" which has met novelty requirement.

2.4 Principle of Method of Determining whether a Claimed Invention Involves an Inventive Step

(1) Whether or not a claimed invention involves an inventive step is determined whether the reasoning that a person skilled in the art could have easily arrived at a claimed invention based on cited inventions can be made by constantly considering what a person skilled in the art would do after precisely comprehending the state of the art in the field to which the present invention pertains at the time of the filing.

(2) Concretely, after finding of a claimed invention and one or more cited inventions, one cited invention most suitable for the reasoning is selected. And comparison of the claimed invention with a cited invention is made, and the identicalness and the difference in matters defining the inventions are clarified. Then, the reasoning for lacking an inventive step of the claimed invention is attempted on the basis of the contents of the selected invention, other cited inventions (including well-known or commonly used art) and the common general knowledge. The reasoning can be made from various and extensive aspects. For example, the examiner evaluates whether a claimed invention falls under a selection of an optimal material, a workshop modification of design, a mere juxtaposition of features on the basis of cited inventions, or whether the contents of cited invention. If advantageous effects of the claimed invention over a cited invention can be clearly found in the description in the specification, etc., it is taken into consideration as facts to support to affirmatively infer the involvement of an inventive step.

When the reasoning can be made as a result of the above method, the claimed invention should be denied its inventive step. When the reasoning cannot be made, the claimed invention should not be denied its involvement of an inventive step.

(3) The method of finding a claimed invention and cited inventions, and comparing the two, set forth in "Method of Determining whether a Claimed Invention is Novel" (see 1.5.1 to 1.5.4) is also applied to the determination of the inventive step requirement.

2.5 Specific Examples of Reasoning

The reasoning can be made from various and extensive aspects. Examples are as

follows.

(1) Selection of an optimal material, workshop modification of design, mere juxtaposition of features

① Selection of an optimal material, workshop modification of design, etc.

Among exercises of ordinary creativity of a person skilled in the art are a selection of an optimal material from publicly known materials which achieve a specific object, an optimization of a numerical value range, a replacement with equivalents, and a workshop modification of design in applying specific technology. When the difference of a claimed invention in comparison falls only under these categories, it is usually considered that a person skilled in the art could have easily arrived at it, unless otherwise there is another ground for inferring inventive step.

[Example 1]

Sending or receiving with infrared waves of approximately 0.8-1.0 μ m of infrared energy wavelength range is recognized as well-known art. Then, since there is no special circumstances which prevent to apply the technology to an apparatus for communicating their position of emergency vehicles, it is admitted that a person skilled in the art could have been easily arrived at the claimed invention by applying the technology for the communication of their positions of the cited invention 1.

(Reference: Hei 9 (Gyo Ke) 86, Example easy to apply unless there is no obstructive factors)

[Example 2]

Using a cloth or paper, not reinforced, as a foundation material holding plants is well-known and commonly used in making pressed flowers. Therefore, in the case where it is unnecessary to use a reinforced cloth or paper, like a bendable absorbent plate of the cited invention, it is mere a workshop modification of design or easily made to try to use a cloth or paper absorbing calcium chloride, not reinforced, not only for a person skilled in the art, but also for anyone who tries to make pressed flowers.

(Reference: Hei 6 (Gyo Ke) 82, 83)

② Mere juxtaposition of features

If matters defining an invention are not linked each other functionally or operationally and the invention is a combination of each matter (mere juxtaposition of features), the invention is deemed as a mere exercise of ordinary creativity of a person skilled in the art, unless otherwise there is another ground for inferring inventive step.

[Example 1]

The remarkable working-effect which the plaintiffs assert is not deemed to be anything but a mere combination of expected effects of each publicly known art. Thus, the effect is not deemed to be a specific remarkable working-effect of the claimed invention.

(Reference: Sho 44 (Gyo Ke) 7)

(2) Probable cause or motivation

① Close relation of technical fields

An attempt to apply a technical means in a related technical field in order to solve a problem is a mere exercise of ordinary creativity of a person skilled in the art. A replaceable or add-able means in a related technical field, for example, can be a strong ground for the reasoning

that a person skilled in the art would have been led to a claimed invention.

[Example 1]

Although the closing-release system of the cited invention relates to a pachinko game machine not a slot machine, since both relate to amusement machines, and designed to stop after counting the given number, it is allowed that converting the said closing-release system of the pachinko game machine to the slot machine is easily arrived at regardless of the difference that the counted object is a pachinko-ball or medal. Whether the conversion is easy or not should be determined from the views of whether a person skilled in the art can easily conceive the idea of converting the technology to another field to which the relevant field of this technology is technically similar when the person skilled in the art develops the technology. Thus, it is admitted for a person skilled in the art to have easily conceived to convert the technology of the pachinko game machine to the field of the slot machine from the above-mentioned perspective. (Reference: Hei 8 (Gyo Ke) 103)

[Example 2]

A camera and an automatic strobe light are always used together and are closely related. Therefore, applying the incidence control element of a photometric circuit for the camera to a photometric circuit for the automatic strobe light would have been easily made by a person skilled in the art, unless an outstanding structure is utilized in terms of the application.

(Reference: Sho 55 (Gyo Ke) 177)

[Example 3]

Since the cited invention 1 is related to a printing ink-withdrawing device of a printing machine for corrugated papers and the cited invention 2 is related to a furnishing device for high viscosity liquid like printing ink, the both inventions apparently belong to the same technical field. In the said judgment of differences, a matter that should be applied from the cited invention 2 is merely an extremely basic technical means wherein a transmit pump is composed of an emitting/aspiration pump convertible to normal/reverse turn by connecting a drive motor of the transmit pump to a reverse control circuit. Consequently, the reason that specific technical problems (objectives) of both are not identical cannot be a ground to deny that the application of the technical means in the cited invention 2 to the cited invention 1 is very easy for a person skilled in the art.

(Reference: Hei 8 (Gyo Ke) 21)

2 Close similarity of a problem to be solved

A close similarity of a problem to be solved can be a strong ground for the reasoning that a person skilled in the art would be led to a claimed invention by applying or combining cited inventions.

[Example 1]

The two inventions of cited documents 1 and 2 have the common problem to be solved in that a carrying sheet weakly attached with labels stops at a prescribed position. A person skilled in the art could have easily conceived the idea of applying the label feeding control means disclosed in the cited document 2 to the cited invention 1 for solving the technical problem.

(Reference: Hei 2 (Gyo Ke) 182)

[Example 2]

The thickness of a blade of a ripsaw usually varies according to its length, and the technical problem itself of a blade changeable ripsaw to use blades with changing their various thickness is easily predicted for a person skilled in the art who contacted the cited invention 1. Holding means in the cited inventions 4 to 7 can clearly hold various thickness of blades by their grasping force because of its elasticity. And the elements themselves are found to be manufactured on the basis of the technical idea of holding various thickness of blades in view of the structure itself. Therefore, the technical idea in the cited inventions 4 to 7 has a common technical problem with the concerned device on the point of using with changing blades with their various thickness. Thus, it should be said that a person skilled in the art can very easily arrived at conversion of the elements of the cited inventions 4 to 7 to the elements of the ripsaw blade in the cited invention 1.

(Reference Hei 7 (Gyo Ke) 5)

When a cited invention does not intend a similar problem to be solved to that of a claimed invention, further examination based on the state of the art should be conducted whether a problem to be solved is evident or whether it would have been easily conceived.

[Example 1]

The problem "to save costs and space" of the claimed invention concerned is a general problem not only of a mixer but of every device. In other words, it is nothing but an evident problem in the light of the structure of the device. Then, it is easily conceived to adopt above axial speed reducer and speed reducer with motors described in the cited invention 4 in order to save the occupied space of the mixer of the cited invention 1 according to the said evident problem, in consideration of both the said problem and the said properties of an axial speed reducer and a speed reducer with motors. Thus, it cannot be said that there is a special difficulty to do that. (Reference Hei 4 (Gyo Ke) 142)

[Example 2]

A cited invention 4 clearly indicates that "light-weighted" is one of the important properties required for a golf club shaft, and suggests the needs or the advantages of lightning a golf club shaft in relation to drive of golf balls. Thus, it is allowed that a problem of the claimed device to lighten a golf club shaft is the matter which a person skilled in the art can predict as a matter of course.

(Reference Hei 7 (Gyo Ke) 152)

Even based on a problem to be solved of a cited invention which is different from that of a claimed invention, the inventive step of the claimed invention can be denied regardless of the difference in problems, if the reasoning can properly be made that a person skilled in the art could have easily arrived at the matters defining the claimed invention in a different way of thinking from the problem-solution of the claimed invention. This also applies to inventions wherein any problem to be solved cannot be identified, for example, inventions based on a discovery by trial and error.

[Example 1]

The claimed invention is a carbon disk brake with grooves to drain water on its face. The cited document 1 discloses a carbon disk brake. The cited document 2 discloses a metal disk brake with grooves to remove dust on its face.

In this case, it is clear that dust on the face prevents the brake even for the carbon disk brake disclosed in the cited document 1 in the light of the general function of the brake. To provide a carbon disk brake with grooves to solve the problem suggested in the cited document 2 is a technical improvement which a person skilled in the art could have easily arrived at. Consequently, the same structure as the claimed invention in obtained, so that the claimed invention involves no inventive step.

(Reference: 201USPQ658)

If the applicant, however, provides sufficient arguments or evidence of a situation where the combination of the technologies of cited inventions 1 and 2 is obstructed (e.g., Since it is the common general knowledge that carbon disk brakes have no dust problem unlike metal disk brake, there would be no reason to conceive a carbon disk brake with grooves for the purpose of removing dust.), an inventive step of the claimed invention cannot be denied from the disclosure of the cited documents.

③ Close similarity of function, work or operation

If a close similarity in function, work or operation exists between a claimed invention and a cited invention or between cited inventions, there can be a well-founded reasoning that a person skilled in the art would have been led to the claimed invention by applying and combining the cited inventions.

[Example 1]

Both the cited invention 1 and the cited invention 2 are common in respect of washing cylinders of the printing machine by pressing a cloth on it. There is no difference between the cam structure of the cited invention 1 and the expansion structure of the cited invention 2, in respect of that the cloth is placed for attaching to or detaching from the cylinder. Then, it could be said that there is a background of conversion of the expansion structure of the cited invention 2 in place of the cam structure of the cited invention 1 as a pressure means.

(Reference Hei 8 (Gyo Ke) 262)

④ Suggestions shown in the contents of cited inventions

Suggestions shown in the contents of cited inventions relevant to a claimed invention can be a strong ground for the reasoning that a person skilled in the art would have been led to the claimed invention.

[Example 1]

The cited document discloses the condition of metal ions of which the electric potential is higher than that of iron as a cation suitable for the objective similar to the claimed invention of obtaining an aqueous cationic electrodepositing bath, in which chemical pretreatment is unnecessary, and concretely exemplifies seven types of metal ions.

Although lead ions are not exemplified, which are the specific compositions of the claimed invention, it is a publicly known fact that the electric potential of lead is higher than that of iron, so that it is allowed that the suggestion to use lead ions is disclosed in the cited document.

Thus, adding lead ions to the electrodepositing bath can be easily conceived by a person skilled in the art, insofar as there are no conditions such as the unsuitability of using lead to achieve the objective of the claimed invention.

(Reference: Sho 61 (Gyo Ke) 240)

[Example 2]

The 3-chlorocompound of the claimed invention merely differs in the substitution position in the chemical formula from the 2-chlorocompound and 4-chlorocompound in the cited document. And there is no notation in the cited document that the chemical compound should restrict the substitution position to the specific positions in order to be used as a color brightener, the 3-chlorocompound can be considered as being suggested in the cited document in the light of the above. Thus, the brightener can be easily predicted by a person skilled in the art.

(Reference: Sho 51 (Gyo Ke) 19)

(3) Advantageous effects

If an advantageous effect compared to cited inventions can clearly be identified from descriptions in the specification and the drawings, it is taken into consideration as a fact to support to affirmatively infer its inventive step. An advantageous effect compared to cited inventions means an effect which is advantageous in comparison with an effect of a cited invention, among the effects derived from the matters defining a claimed invention (i.e., among the characteristic effects).

$(\ensuremath{\underline{1}})$ Advantageous effects to be considered

Reasoning is attempted by confirming and taking into consideration an advantageous effect, if any, of a claimed invention compared to cited inventions. It is noted that regardless of advantageous effects, inventive step may be properly denied by the uncontestable reasoning that a person skilled in the art could have easily arrived at a claimed invention.

[Example 1]

Even though the laminated material manufactured by the claimed invention has slightly superior property compared to the conventional material in strength and other factors, the result was achieved through selecting polypropylene resin in place of polyethylene resin according to a selection that a person skilled in the art would have easily conceived. Thus, it does not affect the determination with regard to the inventive step.

(Reference: Sho 37 (Gyo Na) 199)

[Example 2]

Adapting a silicon carbide as the material in the semiconductor region on the light-irradiated side of the semiconductor layers in the photoelectric conversion semiconductor device would have been easy from the viewpoint of minimizing light absorption in the said region. Thus, the finding that adopting a silicon carbide would have been easy is not affected even though the semiconductor region has the effect of preventing i-type property deterioration in the second semiconductor region.

(Reference: Sho 63 (Gyo Ke) 282)

However, when the advantageous effect compared to the cited invention so remarkable

that it cannot be foreseen by a person skilled in the art from the state of the art, there may be cases where its inventive step is not denied.

For example, even though a reasoning seems to be possible that a person skilled in the art could have easily arrived at a claimed invention because of the close similarity between the matters defining a cited invention and the ones defining a claimed invention or because of a combination of plural cited inventions, the inventive step should be positively inferred if a claimed invention has an advantageous effect, qualitatively different or qualitatively the same but quantitatively prominent in comparison with those of cited inventions, and if the advantageous effect cannot be foreseen by a person skilled in the art from the state of the art.

Particularly, in the case of an invention in a technical field in which an effect of a product is difficult to predict from its structure like a selection invention explained later, the advantageous effect compared to the cited invention is an important fact to positively infer its inventive step.

[Example 1]

It is possible to be allowed that producing motilin derivative like the claimed invention on the basis of the cited invention could be easily conceived by a person skilled in the art. However, even though the motilin of the claimed invention has an effect of the same quality as the motilin of the cited invention, it is appropriate to understand that the invention could be granted a patent as involving an inventive step if the motilin of the invention has an extremely excellent effect and if the effect is so remarkable that it cannot be foreseen by a person skilled in the art from the state of the art at the time of filing.

(Reference: Hei 8 (Gyo Ke) 136)

[Example 2]

The effect of the claimed invention is not derived until combining each of the constituent features, and is remarkable. Thus, the constituent features cannot have been easily conceived, although each of the constituent features are disclosed in each of the cited documents. (Reference: Sho 44 (Gyo Ke) 107)

② Effects to be considered, asserted in a written argument, etc.

Where advantageous effects compared to cited inventions are described in a specification, or where advantageous effects are not explicitly described but can be inferred from the statements in the specification or the drawings by a person skilled in the art, the effects asserted or verified (e.g., experimental results) in a written argument, etc. should be considered. However, the effects asserted in the written argument, which are not described in the specification and that a person skilled in the art couldn't deduce from the description of the specification or the drawings, should not be taken into consideration.

(Reference: Hei 9 (Gyo Ke) 198)

③ Method of handling selection invention

(i) Where an invention with a generic concept is expressed in a cited reference, an invention with more specific concept selected from the generic concept is called "selection invention," if it is novel over the generic invention and pertains to a technical field in which an effect of a product is difficult to understand from its structure. Where an invention is expressed as alternatives either in form or de facto in a cited reference, an invention selected from a group of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such

inventions is also called "selection invention," if it is novel over the alternatives and pertains to a technical field in which an effect of a product is difficult to understand from its structure. Thus, an invention can be a selection invention, if it is not an invention described in a publication (refer to 1.5.3(3)).

(ii) A selection invention involves an inventive step, when it generates an advantageous effect, not disclosed in a cited reference, qualitatively different or qualitatively the same but quantitatively prominent in comparison with that of an invention with a generic concept in a cited invention, neither of the effect being foreseen by a person skilled in the art from the state of the art.

(References: Sho 34 (Gyo Na) 13, Sho 51 (Gyo Ke) 19, Sho 53 (Gyo Ke) 20, Sho 60 (Gyo Ke) 51)

[Example 1]

It was publicly known that a chemical compound expressed with generic formula has the property of insecticide. While a specific compound is included in the generic formula, but was not specifically publicly known with respect to the property of insecticide, the claimed invention selected the specific compound as an effective component in the insecticide, on the basis of the discovery that the toxicity to humans of the specific compound is remarkably less than the other compounds in the generic formula. And, there is no other evidence which makes this expectation possible.

[Example 2]

Even though the claimed invention has a more excellent working effect in chroma than the cited invention, the difference of the effect is nothing more than successively transition from the working effect of the cited invention and could not be a remarkable effect that exceeds the prediction of a person skilled in the art. Thus, the claimed invention could not form a selection invention.

(Reference Hei 4 (Gyo Ke) 214)

④ Method of handling invention with numerical limitation

When a claimed invention is defined by specific numerical values, i.e., an invention with numerical limitation, the determination of inventive step comes under the following criteria. (i) Optimizing by experiment a numerical range is normally considered as an exercise of ordinary creativity of a person skilled in the art, and hence its inventive step is denied in general. (ii) However, a claimed invention involves an inventive step, when within a limited numerical range it has an advantageous effect, not disclosed in cited references, and qualitatively different or qualitatively the same but quantitatively prominent in comparison with that of a cited, neither of the effects also being foreseen by a person skilled in the art from the state of the art.

The remarkable effect should be confirmed in any part of a limited numerical range.

[Example]

The claimed invention is not found to have remarkable effect under reaction conditions within a range of at least from 350 to about 500°C, within the range of reaction temperature of 350 to 1,200°C which the claimed invention claims as its requirement.

(Reference: Sho 54 (Gyo Ke) 114)

In addition, a note to what is called the significance of critical range of numerical limitation is the following.

A remarkable difference in effect is required between inside and outside the limited numerical range where a claimed invention is on the continuation of a cited invention, that is, the two inventions differ only in the presence and lack of the numerical limitations, respectively, and have the closely similar problem to be solved.

[Example]

"Including more than 90% of P-section size within 100-14 mesh" in the claimed invention is extremely numerically approximate to 50-12 mesh of P-section size desirable in the cited invention and there are no particular differences in the working effect. Thus, if it can be said that a person skilled in the art could arrive at the limitation of P-section size on the basis of the cited invention without special creativity, the claimed invention should be deemed to be easily made on the basis of the cited invention and well-known art by a person skilled in the art.

(Reference Sho 63 (Gyo Ke) 107)

However, where two inventions have different problems to be solved and qualitatively different effects respectively, the significance of critical range of numerical limitation is not required even though the two inventions have the same matters defining the inventions except for the numerical limitation.

(Reference: Sho 59 (Gyo Ke) 180)

2.6 Handling of a Claim with Statements Defining a Product by its Function or Characteristic, etc.

(1) Where a claim includes statements defining a product by its function or characteristic, etc. and it falls under either the following ① or ②, there may be cases where it is difficult to compare the claimed invention with a cited invention. In the above circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie similar to the product of the cited invention and that the claimed invention would prima facie involve no inventive step without making a strict comparison of the claimed product with the product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29(2). Then an applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal. The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed product is prima facie involve no inventive step. Where the applicant's argument, which is, for example, abstract or general, does not change the examiner's evaluation to that extent, the examiner may make a decision of refusal under Article 29(2).

The above-mentioned handling, however, shall not be applied, if matters defining the cited invention fall under either the following ① or ②.

① a case where the function or characteristic, etc. is neither standard, commonly used by a person skilled in the art in the relevant technical field nor comprehensible of its relation to a commonly used function or characteristic, etc to a person skilled in the art if the function or characteristic is not commonly used; or

2 a case where plural of functions or characteristics, etc. each of which is either standard,

commonly used by a person skilled in the art in the relevant technical field or comprehensible of its relation to a commonly used function or characteristic, etc. to a person skilled in the art if the function or characteristic is not commonly used, are combined in a claim so that the claim statements as a whole fall under ①.

(2) Examples where the examiner has a reason to prima facie suspect are the followings:

- (s)he reveals that a product of a cited invention deemed to be a ground for denying an inventive step for a claimed invention as a result of the converting the function or characteristic, etc. into a different definition with the same meaning or a different method for testing or measuring the same;
- where both the claimed invention and the cited invention are defined by identical or similar function or characteristic, etc. which are measured or evaluated under different measuring conditions or different evaluation methods and there is a certain relationship between them, there is a high probability that the function or characteristic, etc. defining the cited invention, if measured or evaluated under the same measuring conditions or evaluation method as the claimed invention, is similar to the function or characteristic, etc. defining the claimed invention so that it can be a ground for denying an inventive step of the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing and (s)he discovers the particular product could be made on the basis of inventions publicly known prior to the filing of the application;
- (s)he discovers a product of a cited invention which is identical with or similar to a mode for carrying out a claimed invention and which can be a ground for denying an inventive step of the claimed invention (for example, (s)he discovers a cited invention of which starting material is similar to one of the mode for carrying out the claimed invention and of which manufacturing process is identical with one of the mode for carrying out the claimed invention, or (s)he discovers a cited invention of which starting material is identical with one of the mode for carrying out the claimed invention and of which manufacturing process is similar to one of the mode for carrying out the claimed invention, etc.); and
- the matters defining a claimed invention are identical with those defining a cited invention except the ones defining the claimed invention by its function or characteristic, etc., or have no inventive step, and the cited invention has the objective or effect identical with or similar to the one which the claim statements of the claimed invention defining a product by its function or characteristic, etc., and the cited invention can be a ground for denying an inventive step of the claimed invention.

The examiner should follow the ordinary method when the requirement of inventive step can be examined without using this exceptional handling.

2.7 Handling of a Claim with Statements Defining a Product by Its Manufacturing Process

(1) If a claim is one with statements defining a product by its manufacturing process, there may be cases where it is difficult to determine what is the product per se structurally. In such circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie identical with the product of the cited invention and that the claimed invention would prima facie involve no inventive step without making a strict comparison of the claimed product with the

product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29(2) as mentioned in the above 2.6.

The above-mentioned handling, however, shall not be applied, if matters defining the cited invention include statements defining a product by its manufacturing process.

(2) Examples where the examiner has a reason to prima facie suspect are the followings:

- (s)he discovers a product of a cited invention of which starting material is similar to and of which manufacturing process is identical with those of the product of the claimed invention;
- (s)he discovers a product of a cited invention of which starting material is identical with and of which manufacturing process is similar to those of the product of the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing, and (s)he discovers the particular product could be made on the basis of inventions publicly known prior to the filing of the application; and
- (s)he discovers a cited invention which could deny an inventive step of what is identical with or similar to a mode for carrying out the claimed invention.

The examiner should follow the ordinary method when the requirement of inventive step can be examined without using this exceptional handling.

2.8 Notes to Determination of whether a Claimed Invention Involves an Inventive Step

(1) When there is such a description in a cited reference that precludes the reasoning the claimed invention is easily arrived at, the cited reference is not eligible for a cited invention. However, regardless of the description in a cited reference such as the difference of the problem to be solved, which prima facie precludes the reasoning, the eligibility for a cited invention shall be maintained, if the reasoning could be possible in terms of other aspects such as a close relation of technical fields or close similarity of function, work or operation, etc.

[Example 1]

While the claimed invention uses carbon dioxide which accompanies decomposition of magnesium carbonate, the disclosure of the cited document denies its use. Thus, It cannot be provided as a material for comparison.

(Reference: Sho 62 (Gyo Ke) 155)

[Example 2]

The cited invention 1 is an attachment device of a transformer with the aim of thinning down by devising the way of setup of the terminal pins. If the constitution of the cited invention 2 was applied to the terminal pins of the cited invention 1, it would be a modification of the terminal pins contrary to the aim of the contrivance which intends to thin down with an effort by devising the way of setup with establishing of a by-pass port. Thus, it is not allowed that a person skilled in the art could have easily arrived at the claimed invention in the light of the similarity that the both inventions can be attached to the plane.

(Reference Hei 8 (Gyo Ke) 91; an example of which the inventive step is admitted in the light of obstructing factors)

[Example 3]

When the technical idea, which is to carry out the two operations selectively by one robot by means of putting two holding means with respective functions into one robot indicated in the cited inventions 2 and 3, is applied to cited invention 1, the said auto-packing device could not be an obstacle.

(Reference Hei 10 (Gyo Ke) 131; an example where an existence of obstructing factors is denied)

[Example 4]

There is no fault in the judgment of appeal that is "generally speaking, it is commonly used that adding inert solvent properly and adjusting viscosity, etc. according to coating means or condition, etc. in this kind of coating compositions. In addition, since it could not be said that there are special technical obstructions to use an inert solvent in the cited invention, it can be said that a person skilled in the art could have easily arrived at using an inert solvent together in the cited invention."

(Reference Hei 9 (Gyo Ke) 111; an example where an existence of obstructing factors is denied)

(2) Since well-known or commonly used art is important material constituting the state of the art which can be a ground for a notice of reasons for refusal, well-known or commonly used art should be accompanied with an exemplary document insofar as possible except when it is so well-known that any evidential document seems unnecessary, regardless of whether it is used as a basis to find the cited invention or to find the knowledge (the state of the art including the common general knowledge) or the ability (the ability to use ordinary technical means for research and development or the ordinary creativity) of a person skilled in the art if an examiner refers to well-known or commonly used art.

(3) If an applicant admits in a specification that a technology presented as prior art is publicly known prior to the filing of the application, the technology may be properly cited as the state of the art at the time of filing, in determining inventive step of a claimed invention.

(4) If matters defining a claimed invention are expressed by alternatives either in form or de facto (Note), the examiner compares a cited invention with a group of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such inventions, and attempts to make a reasoning to deny inventive step of such inventions. If the reasoning can be properly made as this result, the claimed invention as a whole shall be deemed as lacking an inventive step.

This handling does not relate to the practice in deciding the appropriate time to stop prior art searches. See "PartIX: Procedure of Examination."

(Note) With regard to "alternatives in form or de facto", see 1.5.5 (Note1).

(5) Where an invention of a product per se involves an inventive step, inventions of a process of producing the product or of a use of the product involves an inventive step in principle.

(6) A commercial success or other similar facts can be taken into consideration in order to support to affirmatively infer an inventive step, insofar as the examiner finds that the fact is established by the features of a claimed invention, not by any other factors such as sales promotion technique and advertisement through an applicant's legitimate assertion or

substantiation.

[Example 1]

It should be said that the idea of using said remaining gas of oil factory that consists of composition like the claimed invention is absolutely different from the cited invention, and a person skilled in the art cannot easily arrive at that. Since the claimed invention apparently provides the economic effects that are provision of materials in extremely low cost and effective use of wastes by using remaining exhaust gas of oil factory, and the effect could be evaluated remarkable, the claimed invention is not allowed to be what a person skilled in the art could have easily made on the basis of the cited invention.

(Reference: Hei 1 (Gyo Ke) 180)

[Example 2]

Commercial success of a working goods of the claimed invention, as in the assertion of the plaintiff, does not affect the predictability of a working effect.

(Reference: Hei 8 (Gyo Ke) 193)

2.9 Notice of Reasons for Refusal under the provision of Patent Act Article 29(2)

If the examiner has a conviction that a claimed invention is unpatentable under Article 29 (2), (s)he will send a notice of reasons for refusal to an applicant.

The applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal.

The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed invention is unpatentable under Article 29(2). Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may make a decision of refusal on the ground of the reason for refusal for lacking an inventive step.

3. Examples regarding the Method of Determining whether a Claimed Invention is Novel

3.1 A reason to suspect that the claimed inventions would be prima facie identical with a cited invention in case of Determining whether the Claimed Invention is Novel

(See Part II, Chapter 2, Novelty and Inventive Step, 1.5.5. Determining whether a Claimed Invention is Novel)

Where a claim includes statements defining a product by its function or characteristic, etc. and it falls under either the following (i) or (ii), there may be cases where it is difficult to compare of the claimed invention with a cited invention. In the above circumstances, if an examiner has a reason to suspect that the claimed invention would be prima facie identical with the product of the cited invention without making a strict comparison of the claimed invention with the product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29(1) as far as there is no other differences. The examiner may wait for the argument or clarification from the applicant on the differences between these inventions.

The above-mentioned handling, however, shall not be applied, if matters defining the cited invention fall under either the following (i) or (ii).

(i) a case where the function or characteristic, etc. is neither standard, commonly used by a person skilled in the art in the relevant technical field nor comprehensible of its relation to a commonly used function or characteristic, etc. to a person skilled in the art if the function or characteristic, etc. is not commonly used, or

(ii) a case where plural of functions or characteristics, etc. each of which is either standard, commonly used by a person skilled in the art in the relevant technical field or comprehensible of its relation to a commonly used function or characteristic, etc. to a person skilled in the art if the function or characteristic, etc. is not commonly used, are combined in a claim so that the claim statements as a whole fall under (i).

As for claims including numerical scope or numerical formula (including an expression of inequality) for specifying a product by "operation, function, quality or characteristics" described above, the following cases can be considered as examples of the cases in which examiners should have a reason to suspect that the claimed inventions would be prima facie identical with cited inventions.

- (s)he reveals that a prior art product is identical with the product of the claimed invention as a
 result of converting the function or characteristic, etc. into a different definition with the same
 meaning or a different method for testing or measuring the same;
- where a claimed invention and a cited invention are defined by identical or similar function or characteristic, etc. which are measured or evaluated under different measuring conditions or different evaluation methods, and there is a certain relationship between them, and there is a high probability that the function or characteristic, etc. defining the cited invention, if measured or evaluated under the same measuring conditions or evaluation method as the claimed invention, is included in the function or characteristic, etc. defining the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain

product after the filing and (s)he discovers the particular product is publicly known prior to the filing;

- (s)he discovers a prior art product which is identical with or similar to a mode for carrying out the claimed invention (for example, (s)he discovers a prior art product of which starting material is similar to and of which manufacturing process is identical with those of the mode for carrying out the claimed invention, or (s)he discovers a prior art product of which starting material is identical with and of which manufacturing process is similar to those of the mode for carrying out the claimed invention, etc.); and
- the claimed invention and a cited invention have common matters defining the inventions other than those defining a product by its function or characteristic, etc., and the cited invention has the same objective or effect as the matters defining a product by its function or characteristic, etc. have, and there is a high probability that the function or characteristic, etc. defining the cited invention is included in the function or characteristic, etc. defining the claimed invention

3.2 Notice of Reasons for Refusal when the examiner has a reason to suspect that the claimed inventions would be prima facie identical with cited inventions

(See Part II, Chapter 2, Novelty and Inventive Step, 1.6. Notice of Reasons for Refusal under the provision of Patent Act Article 29(1))

If the examiner has a reason to suspect that the claimed invention would be prima facie identical with the cited invention and it is unpatentable under Article 29 (1), in the notice of reasons for refusal to an applicant, (s)he should point out the bases for the reason and present his/her views on what kind of opposing arguments and vindications are effective if necessary.

For example, in case if it is necessary to show the quantitative comparison regarding the "operation, function, quality or characteristics" of the product in order to make a rational opposing arguments and vindications that the claimed product and the cited product are not identical, (s)he should point out in a notice of reasons for refusal that it is necessary to clarify that the claimed products and the products cited in the notice of reasons for refusal are not identical by presenting the certificate of experimental results.

The applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal. The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed invention is unpatentable under Article 29(1). Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may render a decision of refusal on the ground of lacking novelty.

3.3 Notice of Reasons for Refusal based on the certificate of experimental results, etc. submitted by information offering

Generally, it may be necessary to show experiments in many cases in order to explain that the claimed invention using numerical scope or numerical formula (including an expression of inequality) to specify a product by "operation, function, quality or characteristics" is identical with the invention described in a publication which is distributed prior to the application.

It is possible, in the light of the necessity described above, to submit the certificate of experimental results, etc. by the information offering system as a "document" to explain that the

claimed invention is identical with the invention described in a publication distributed prior to the application. At that time, the certificate of experimental results, etc. in which required matters are described, so that the matters to be certified, contents of experiment and results of experiment can be confirmed obviously, shall be submitted.

In the case that the certificate of experimental results, etc., submitted by the information offering is cited in the notice of reasons for refusal, the submission date and the names of persons in charge of experiment concerning the certificate of experimental results, etc. to be cited in the notice concerned shall be described to specify the cited evidence.

The certificate of experimental results, etc. submitted by the information offering can be offered for public inspection.

Shown as follows are examples in which reasons for refusal should be noticed based on a reason to suspect that the claimed inventions would be prima facie identical with cited inventions and examples of the certificate of experimental results.

Тур	e: 1
	Description in the application concerned
[C	laim 1 】
Α	polyvinyl chloride resin particle having an
avei	rage particle diameter R of 150 to 190um, and

a porosity A (cc/g) satisfying the following expression; $0.15 \log R - 0.11 < A < 0.34$

Cited document

[Title of the invention] Granulation method for polyvinyl chloride resin

[Example]

.....the polyvinyl chloride resin having an average particle diameter of 180µm and 27% in porosity was produced by a suspension polymerization method. And this polyvinyl chloride resin was.....

[Explanation]

When the value of the average particle size of the polyvinyl chloride resin described in the cited document is assigned to a left-hand side of the claimed expression, it can be 0.15log 180 - 0.11 \doteq 0.228. Also, as the specific gravity (d) of the polyvinyl chloride resin is normally from 1.16 to 1.55, the porosity A (cc/g) of the polyvinyl chloride resin whose porosity is 27% can be determined by "void per unit volume" / "weight per unit volume", that is to say, 0.27/(1 - 0.27) d and it can be "0.239 A 0.319".

Accordingly, as the polyvinyl chloride resin described in the cited document satisfies the claimed expression, it can be recognized that there would be the reason to doubt that the polyvinyl chloride resin described in the cited document is prima facie identical with the claimed one.

Type: 2 Description in the application concerned Cited document [Claim 1] [Title of the invention] A biaxially oriented polyester film, A biaxially oriented polyester film (A) which contains (a) 0.1 to 0.6% by weight of first inorganic particles having an average particle diameter of 0.03 to 0.2µm, and (b) 0.002 to 0.03% by weight of second inorganic particles having an average particle diameter of 0.3 to 1.2µm, this average particle diameter being greater than the average particle diameter of the first inorganic particles by at least 0.2µm, wherein: (B) the heat shrinkage factor in heat treatment at 90°C for 1 hour under no load is not more than 0.8%, and (C) the thickness is 6.0 to 10.0µm. [Example] Polyethylene-2,6-naphthalate containing 0.5% [Detailed description of the invention] by weight of silica particles having an average In the film of the present invention, the particle diameter of 0.1µm and 150ppm of heat shrinkage factor in heat treatment at 90°C calcium carbonate particles having an average under no load for 1 hour is required to be not particle diameter of 0.5µm was extruded to give more than 0.8%. When the heat shrinkage factor an unstretched film. The film was stretched is more than 0.8%, a tape produced from a film lengthwise at a stretch ratio of 3.9 times at 150° C, having such a heat shrinkage factor causes a stretched widthwise at a stretch ratio 4.0 times at thermal irreversible change, so it is not 130 $^{\circ}$ C, and heat-treated for 6 seconds at 200 $^{\circ}$ C preferable..... to give a film having a thickness of 8µm. The

[Explanation]

As the heating temperature for measuring the heat shrinkage factor is different between the claimed film and the film described in the cited document, it is impossible to compare them with each other in the heat shrinkage factor.

1.4%.

heat shrinkage factor of the film in heat treatment at 150°C for 1 hour under no load was

However, the lower the measured temperature, the smaller the thermal shrinkage factor in case of the polyester film generally required the size stability. Therefore, when the thermal shrinkage factor of the polyester film described in the cited document is measured at 90°C, it is highly probable that the thermal shrinkage factor would be included in the scope of claimed invention.

Consequently, it can be recognized that there would be the reason to doubt that the claimed film is prima facie identical with that described in the cited document.

Type: 3

Description in the application concerned

【Claim 1】

A laminated film, in which layer A consisting of thermoplastic resin containing particles is laminated on layer B consisting of polyester containing no particle, with the protrusions of 0.12μ m or less in average height formed in the rate of $1.6 \times 10^4 - 1.6 \times 10^5$ pieces/mm² on the surface of layer A and with a <u>0.002 - 0.02µm of</u> <u>SRa which means the three-dimensional center</u> <u>surface average roughness.</u>

【 Detailed description of the invention】

...... The surface roughness was measured by using a high precision surface roughness meter ZZ produced by XX manufacturing Co. Ltd. under the conditions of cut-off value 0.25mm and ZX. The three-dimensional center surface average roughness SRa (μ m) is obtained from the following expression. A portion of area S_M is cut out from the rough surface on the center surface, and the axis orthogonal to the center surface of the portion is expressed by the Z-axis. A value obtained from the expression is expressed with μ m unit.

SRa = $1/S_{M} \int_{0}^{LXLY} f(X,Y) | dxdy$ (wherein LX · LY=S_M) Cited document

【 Title of the invention 】 A laminate film

【 Detailed description of the invention 】

<u>The center line surface roughness Ra</u> is measured by using a high precision surface roughness meter OO produced by XX manufacturing Co. Ltd. and a chart is drawn under the condition of cut-off value 0.08mm and OX, according to JIS B0601. A portion of measured length L is cut out from a film surface roughness curve to the direction of the center line. When the center line of the portion is expressed as an X axis, the vertical direction is expressed as a Y axis, and a roughness curve is expressed as Y = f (X), the value obtained from the following expression is Ra (µm).

Ra =
$$1/L \int_{0}^{L} |f(X)| dx$$

This measurement is practiced on four points as the reference length is 1.25mm and Ra is expressed in the average value.

[Example]

The polyethylene containing the talc particles in 40 weight % with 0.05µm in average particle diameter and the polyethylene terephthalate containing no particle were co-extruded under the condition of, drawn and heat treated to obtain a biaxially oriented film of 9.8µm. The micro-protrusions of 0.1µm or less were formed at the rate of 55,000 pieces/mm² on the surface of the polyethylene layer and <u>the center line</u> <u>surface roughness Ra was 0.009µm.</u>

[Explanation]

Since the claimed method for evaluation of measured surface roughness is different from the one described in the cited document, it is impossible to compare them directly.

However, there is no statement in the application concerned and the cited document that the film surface roughness has directionality or specific distribution, and if it is a general film without directionality or specific distribution in the surface roughness, it can be considered that the values of three-dimensional center surface roughness and the center line surface roughness become almost the same even if considering the difference in concrete measurement conditions.

Considering all mentioned above, when the surface roughness of the film described in the cited document is evaluated by the three-dimensional center surface average roughness, it is highly probable that the cited invention would be included in the scope of the claimed invention.

Consequently, it can be recognized that there would be the reason to doubt that the claimed film is prima facie identical with that described in the cited document.

Type: 3 Description in the application concerned

[Claim 1]

The silica fine particle for plastic compounding whose average particle diameter is in $0.02 - 1\mu m$, whose <u>area ratio for a circumscribed circle</u> <u>defined in the following expression is over 90%</u>, and the standard deviation of the particle diameter is 1.1 - 1.2,

wherein the area ratio for a circumscribed circle projected area of particle

= _____ x100 area of a circumscribed circle for a particle

[Detailed description of the invention]

..... The particle shape of the silica is important. <u>A sheet whose slipperiness and abrasion</u> <u>resistance is excellent would be obtained by</u> <u>using particles whose shape are close to the</u> <u>spherical. The area ratio for a circumscribed</u> <u>circle is used as an evaluation method for</u> <u>sphericity</u>. Concretely, selecting any 20 particles from the images of electron microscope pictures that are used for measuring the average diameter of particles, the projected area of each particle was measured by an image analyzer. Also, the area ratio was gained by calculating the area of a circle for the particles. ... Cited document

[Title of the invention] Filler

[Detailed description of the invention]

......The fine spherical silica particle in the claimed invention which constitutes filler for plastic shapes spherical in individual extremely close to a sphericity. It would be evaluated by a particle diameter ratio b/a of a major axis (a) and a minor axis (b). The particle diameter ratio would be measured by the electron microscope pictures.

[Example]

......The shape and the standard deviation of the particle diameter of the filler consisting of these fine silica particles were shown as follows.

	Average	Particle	Standard
	particle	diameter	deviation
	diameter	ratio	
	(µm)	b/a	
Example 1	25	0.90	1.1
Example 2	35	0.89	1.2
Example 3	50	0.88	1.3

[Explanation]

Since the claimed silica fine particle and the silica fine particle described in the cited document are different in the evaluation method for sphericity, they cannot be compared with each other directly. However, since the silica fine particle described in the cited document is high in sphericity and fine, the area ratio can be estimated by converting the shape of projected cross section to an ellipse. And considering the high sphericity of the claimed silica fine particle as well, an effect to the area ratio of the surface property is extremely small.

Accordingly, when the sphericity of the silica fine particle described in the cited document, with the particle diameter ratio of 0.9, would be measured by the area ratio described in the claim, it is highly probable that the area ratio described in the cited document would be included in the scope of the claimed invention.

Consequently, it can be recognized that there would be the reason to doubt that the claimed silica fine particle is prima facie identical with that described in the cited document.

Type: 3

Description in the application concerned

[Claim 1]

A rubber composition for tire excellent for abrasion resistance, which comprises 100 parts by weight of at least one rubber component selected from the group of natural rubber and diene synthetic rubber and 30 - 60 parts by weight of carbon black having <u>a CTAB surface area of 70 - 123m²/g</u> and a DBP absorption amount of 110 - 155ml/100g.

[Detailed description of the invention]A carbon black with extremely less surface pores is used in the claimed rubber composition for tire to improve the abrasion resistance.

[Example]

In Examples, the following carbon black is used.

No	1	2	3
CTAB(m ² /g)	72	96	105
DBP(ml/100g)	143	146	138

*CTAB surface area (CTAB : cetyltrimethylam monium bromide) ASTM D3765-80 *DBP (dibutyl phthalate) JIS K6221

Cited document

[Title of the invention] Carbon black with high abrasion resistance

[Detailed description of the invention]<u>The claimed carbon black is excellent in</u> <u>abrasion resistance because of reducing the</u> <u>number of surface pores.</u>.....

[Example]

The nitrogen absorption specific surface area (N_2SA) and DBP absorption amount of the produced carbon black are shown as follows.

No	1	2	3	
N ₂ SA (m ² /g)	99	125	138	
DBP(ml/100g)	143	149	121	

* N₂SA ASTM D3037-88 * DBP JIS K6221

A rubber composition was produced from 100 weight parts of diene synthetic rubber and 45 weight parts of the carbon black described above, and using the rubber composition, the tire was produced with a general method. The abrasion resistance of the tire was measured under the conditions as follows....

[Explanation]

The value of the CTAB surface area of the carbon black is not described in the cited document.

Usually, the CTAB surface area indicates the effective specific surface area not including the surface pore part on the carbon black. On the other hand, the nitrogen absorption specific surface area indicates the total specific surface area including the surface pore part on the carbon black. If the carbon black has an excellent abrasion resistance and less surface pores, the values of CTAB surface area and nitrogen absorption specific surface area would be considered to indicate the almost identical level each other.

Accordingly, it is highly probable that when the CTAB surface area of the carbon black described in the cited document is measured, it would be included in the scope of claimed invention.

Consequently, it can be recognized that there would be the reason to doubt that the claimed rubber composition is prima facie identical with the rubber composition described in the cited document.

Type: 4

Description in the application concerned

[Claim 1]

The ethylene-propylene copolymer wherein polymerization degree is 100 - 300, whose ethylene content is 20 – 40 weight% and drawdown property is 20 - 50m/min.

[The drawdown property means the winding speed of a ropy object at the time of cut-off when the winding speed of a winding roller is increased gradually after the melted olefin resin heated to 200°C is extruded in ropy at the constant speed of 1mm/s from a die with 2mm wide and 5mm long in aperture cross section, and then, the ropy object is passed through a feeding roller positioned above a tension detecting pulley to be positioned below a nozzle for winding.]

[Detailed description of the invention]

In order to obtain the ethylene-propylene copolymer whose drawdown property is 20 - 50m/min or less, <u>usually, the ethylene-propylene</u> copolymer with 100 - 300 of polymerization degree and 20 - 40% of ethylene content would be stirred in a reactor substituting with inert gas, and then, be reacted at 100 - 120°C for about 5 - 7 minutes keeping stirring after being added 5 - 10mmol/kg of the peroxide.

Cited document

[Title of the invention] Ethylene-propylene copolymer

[Example]

The ethylene-propylene copolymer is obtained by adding the 0.8mmol peroxy carbonate to 100 g of the ethylene-propylene copolymer (with 200 of polymerization degree and 30 weight% of ethylene content) in a reactor, reacting them at 90°C for 10 minutes keeping stirring under the argon gas, and then stopping the reaction.

[Explanation]

Although the cited document does not disclose any information about the drawdown property of the ethylene-propylene copolymer, the ethylene-propylene copolymer described in the cited document is produced by using the same starting material as the one of the claimed invention and by the production process almost the same as the one of the claimed invention.

Consequently, it can be recognized that there would be the reason to doubt that the claimed ethylene-propylene copolymer is prima facie identical with the ethylene-propylene copolymer described in the cited document.

Type: 5

Description in the application concerned

[Claim 1]

A polyester film for magnetic recording medium including inactive particles in 3 - 15 weight % and whose thickness is 20µm or less, where it meets the following requirements;

the ratio d/t is 0.01 - 0.04, where d means the average diameter of contained particles and t means the thickness of the base film;

and, the planar orientation coefficient Ns and the average refractive index na meet the relational expression below;

<u>Ns ≧ 1.53na - 2.33</u>

[Detailed description of the invention]

<u>The film satisfying the relation of Ns \geq 1.53na -2.33 has a high Young's modulus in vertical direction and horizontal direction as over 750kg/mm², and when it satisfied the relation above it has an excellent electromagnetic conversion property, over +2.0dB, using as a magnetic tape...</u>

[Example 1]

Measuring the Young's modulus of the polyethylene terephthalate film obtained in this way, it was read as 850kg/mm² in vertical direction and 750kg/mm² in horizontal direction, and the electromagnetic conversion property was read as +2.0dB.

[Example 2]

Measuring the Young's modulus of the polyethylene-2,6-naphthalate film obtained in this way, it was read as 750kg/mm² in vertical direction and 870kg/mm² in horizontal direction, and the electromagnetic conversion property was read as +2.2dB.

Cited document

[Title of the invention] Polyester film for magnetic recording medium

[Example]

The un-stretched film of 180µm was obtained by the process that polyethylene terephthalate containing 10 weight % of titanium oxide whose average particle diameter is 0.2µm was melted and extruded at 300°C, and then rapid solidification.

After the un-stretched film was drawn 3.7-fold at vertical direction and horizontal direction at the temperature of 150°C, it was treated with heat at 210°C for 10 seconds, and then, an stretched film of 6.5µm in thickness was obtained. <u>The Young's modulus of this film was measured as 870kg/mm² in vertical direction and 900kg/mm² in horizontal direction, and the electromagnetic conversion property of this film was measured as 3.0dB.</u>

[Explanation]

It is not described in the cited document that the planar orientation coefficient Ns and the average refractive index na satisfy the relation of Ns \geq 1.53na - 2.33. However, the description in the application concerned described that the Young's modulus in vertical and horizontal direction and the electromagnetic conversion property would be improved as the effect by satisfying the said relation.

Moreover, the concrete values are almost the same as those of the Young's modulus and the electromagnetic conversion property described in the cited document.

Consequently, it can be recognized that there would be the reason to doubt that the claimed film is prima facie identical with the film described in the cited document, which achieves the same level of advantageous effect by satisfying the above described relation between the planar orientation coefficient Ns and the average refractive index na.

Type: 5

Description in the application concerned

[Claim 1]

A polyethylene-2,6-naphthalate film which is characterized in that <u>the number of the</u> <u>protrusion whose height is h (nm)</u> formed on the film surface is within the scope shown as follows;

 $\frac{1}{100} + \frac{100:1,000-20,000 \text{ pieces/mm}^2}{h:0-50 \text{ pieces/mm}^2}$

and the film surface roughness Ra is 2 - 10nm.

[Detailed description of the invention]

... The film that satisfies the conditions of 1 <u>h <100 : 1,000 - 20,000 pieces/mm², 100 <u>h :</u> <u>0 - 50 pieces/ mm² is good in handling as the</u> <u>base film and excellent in the cursoriality when it</u> <u>is used as a magnetic tape.</u>Also, the film <u>whose surface roughness Ra is within the range</u> <u>of 2 - 10nm is good in handling as the base film</u> <u>and the cursoliality when it is used as a</u> <u>magnetic tape.</u>...</u>

[Example]

	Ex. 1	Ex. 2	Comp.	Comp.
			Ex. 1	Ex. 2
Number of				
surface				
protrusion				
1 h				
<100:	15,325	3,48	22,389	21,309
100 h	10	0	120	21
		14		
Ra (nm)	8	6	29	12
Running	good	good	bad	Not
Durability				good

Cited document

[Title of the invention] Magnetic recording film

[Claim 1]

Magnetic recording film in whichand the surface roughness Ra is 3 - 8nm.

[Detailed description of the invention]

... The film of the claimed invention which satisfies the surface roughness condition is good in handling the film and the cursoliality when it is used as a magnetic tape. And, <u>even if</u> the range of surface roughness meets the range of the claimed invention, it is desirable not to contain a rough and large protrusion because the remarkably high protrusion may give negative effect on the cursoliality when it is used as a magnetic tape,.....

[Example]

...was drawn and heat treated under the conditions ofto produce a polyethylene-2, 6-naphthalate film.

The center line surface roughness Ra of this film was 5nm. <u>The cursoriality of this film using as a magnetic tape was more excellent than that of the conventional film, and the winding up in manufacturing of the tape was also good.</u>

[Explanation]

It is not described in the cited document that the relation between the height and the number of the protrusion satisfies the conditions of 1 $h < 100 : 1,000 - 20,000 \text{ pieces/mm}^2$, 100 $h : 0 - 50 \text{ pieces/mm}^2$. According to the detailed description of the invention in the application concerned, the effect that is obtained by specifying the conditions of relation between the height and the number of the protrusion described above is identical with the effect obtained by specifying the range of surface roughness (improvement in film handing performance and cursoliality). In addition, it only describes the comparative examples of the inventions that is not satisfied the both conditions of the relation between the height and the number of the protrusion, and the range of surface roughness.

Therefore the sole effect led by specifying the relation between the height and the number of the protrusion described above cannot be confirmed.

On the other hand, the problems to improve the cursoliality and the solutions for controlling both the surface roughness and the rough/large protrusion was recognized in the cited document, because it is also described in the cited document that, even if the condition of the scope of surface roughness is satisfied, a remarkably high protrusion may give negative effect on thecursoliality.

The film described in the cited document also achieves the effects concerning cursoliality and handling the tape. As it turns out, the problems and the effect of the claimed invention for specifying the height and the number are not substantially different from those of film described in the cited document.

Consequently, it can be recognized that there would be the reason to doubt that the claimed film is prima facie identical with the film described in the cited document.

An example of certificate of experimental results

(A case in which it is certified that the product described in a publication is identical with the product in the claimed invention)

Certificate of Experimental Results

(month)/(day)/(year) ...Laboratory,...Co., Ltd. Name: ZZ ZZ seal

- 1. Experiment day
- 2. Experiment place
- 3. Person in charge of experiment ...Laboratory, ...Co., Ltd. Name: OO OO

4. Purpose of experiment

It should be described as follows, for example:

To confirm that the film in the claimed invention is identical with the film described in example 1 of above described official gazette, by manufacturing the polyethylene film disclosed in example 1 in JP, OO-OOOOOO, A, measuring the XX and ZZ of the film obtained.

5. Contents of experiment

The manufacturing conditions for manufacturing the product concerned shall be shown concretely, so that it may be clear that the product is the faithful reproduction of the product described in a publication. (There may be a case where only the description "A film was manufactured in accordance with the example 1 in JP, OO-OOOOOO, A." is insufficient.)

When new conditions are established for the manufacturing concerned, or when it is impossible to carry out the experiment under the same conditions as those described in a publication, the reasons shall also be described.

Next, the physical properties described in the publication shall be measured and described in order to confirm that the product described in the publication can be reproduced.

6. Result of experiment

All physical properties required shall be measured and described in order to confirm that the product described in the publication is identical with the product in the claimed invention. When the physical properties of the product concerned are measured, the conditions concerned shall be shown concretely, so that it becomes clear that they are the same as the conditions for measurement that are used in the claimed invention. (There may be a case where only the description "The XX and ZZ are measured under the similar conditions to those in the claimed invention." is insufficient.) When the new conditions are established for the measurement concerned or when it is impossible to carry out the experiment under the same conditions as described in the claimed invention, the reasons shall also be described.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part II: REQUIREMENTS FOR PATENTABILITY

Chapter 3 Patent Act Article 29bis

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Chapter 3 Patent Act Article 29bis

Patent Act Article 29bis reads:

Where an invention claimed in a patent application is identical with an invention or device (excluding an invention or device made by the inventor of the invention claimed in the said patent application) disclosed in the description, scope of claims or drawings (in the case of the foreign language written application under Article 36bis (2), foreign language documents as provided in Article 36bis (1)) originally attached to the written application of another application for a patent or for a registration of a utility model which has been filed prior to the date of filing of the said patent application and published after the filing of the said patent application in the patent gazette under Article 66(3) of the Patent Act (hereinafter referred to as "gazette containing the patent") or in the utility model bulletin under Article 14(3) of the utility Model Act (Act No. 123 of 1959) (hereinafter referred to as "utility model bulletin") describing matters provided for in each of the paragraphs of the respective Article or for which the publication of the patent application has been effected, a patent shall not be granted for such an invention notwithstanding Article 29(1); provided, however, that this shall not apply where, at the time of the filing of the said patent application, the applicant of the said patent application and the applicant of the other application for a patent or for registration of a utility model are the same person.

1. Purport of the provision of Patent Act Article 29bis

An invention disclosed in a specification or drawings, if not in claims, is usually laid open to the public in a publication of an examined or unexamined application. A claimed invention of subsequent applications which is identical with an invention disclosed in the specification or drawings of a precedent application, even if the subsequent application is filed prior to the publication of a precedent application examined or unexamined, cannot be an invention of an application filed first to disclose a new technology in its publication to the public. Granting a patent to such an invention is inappropriate and to be rejected in that it is inconsistent with the role of the Patent Act to protect an invention as a reward for the disclosure of a new invention.

2. Patent Act Article 29bis

2.1 Invention Claimed in a Patent Application

An invention claimed in a patent application is referred to as "a claimed invention."

2.2 Another Patent or Utility Model Application, Filed Prior to the Filing Date of a Patent Application, and Published in Examined or Unexamined Publication After Filing the Said Application

(1) Another patent or utility model application (referred to as "another application" hereinafter) to be cited as a reference under Article 29bis is required to have been filed prior to the filing date of the said patent application (or the priority date of the application with a priority claim), and to have been published in an examined or unexamined publication after the filing of the said application.

(December 2008)

(2) In the case where another application is a divisional application, a converted application, or a patent application based on a utility model registration, the critical date of filing as a reference is the actual filing date of filing such an application, not the date of filing the initial application.

(3) In the case where another application is one with a priority claim under the Paris Convention, and filed within the priority period and accompanied by a priority document, it is deemed as filed in Japan on the filing date of filing in the country of origin, for an invention commonly disclosed in the specification, etc. of the original application and in a specification and drawings originally attached to the request in Japan (referred to as an "initial specification, etc." hereinafter).

(4) An "early application," which was a basis for a domestic priority claim (under Article 41(1)), or an application with a priority claim thereof (referred to as a "later application" hereinafter) is deemed as another application based on an invention disclosed in the initial specification, etc. as follows:

① For the part of an invention commonly disclosed in the initial specifications, etc. of both earlier and later applications, the earlier application is deemed as another application filed on the earlier filing date in the provision of Patent Act Article 29bis which should be applied (Patent Act Article 41(2) and (3)).

However, in the case where the said earlier application also claims a priority right (including one under the Paris Convention), for the part of an invention commonly disclosed in the said earlier and later initial specification, etc. and an initial specification, etc. of another previous application, which had been another basis of a priority claim for the said earlier application, the said early application is not deemed as another application in the provision of Patent Act, Article 29bis which should be applied (Patent Act Article 41(2)and (3)).

② For the part of an invention solely disclosed in the initial specification, etc. of a later application but not in that of an earlier application, a later application is deemed as another application under Patent Act, Article 29bis (Patent Act Article 41(2) and (3)).

(5) Even where an earlier application, which was a basis for a domestic priority claim, or a later application with a domestic priority claim thereof is deemed as another application, an invention solely disclosed in an initial specification, etc. of an earlier application but not in that of a later application is not deemed as disclosed in a publication. Thus, Patent Act, Article 29bis does not apply.

2.3 Invention or Device Disclosed in the Initial Specification etc. of Another Application

"An invention or a device disclosed in an initial specification, etc. of another application" means an invention or a device identified by "matters described" (Note 1) or "matters essentially described, though not literally," in an initial specification, etc. of another application as of the filing.

"Matters essentially described, though not literally" means those directly derivable from the matters described, taking into consideration the common general knowledge (Note 2) at the time of the filing of another application.

- (Note 1) Matters described in an initial specification, etc. of another application, even deleted by a later amendment, do fall within the provision of Patent Act Article 29bis.
- (Note 2) "The common general knowledge" means technologies generally known to a person skilled in the art (including well-known or commonly used art) or matters clear from empirical rules.

"Well-known art" means technologies generally known in the relevant technical field, e.g., many prior art documents, those widely known throughout the industry, or those well-known to the extent needless to present examples. "Commonly used art" means well-known art which is used widely.

2.4 A Claimed Invention Identical with an Invention or a Device Disclosed in an Initial Specification etc. of Another Application

"A claimed invention identical with an invention disclosed in an initial specification, etc. of another application" includes a case that there is no difference between matters to define an invention for which a patent is sought and matters to define an invention disclosed in an initial specification, etc. of another application (as referred to "cited invention" hereinafter), and a case that there is a very minor difference in an embodied means to solve a problem (substantially identical).

2.5 The Same Inventors of the Invention or the Device as of the Invention of the Present Patent Application

(1) An inventor of a claimed invention of the present patent application and an inventor of an invention or a device of a specification, etc. of another application are deemed as inventors as indicated in the requests, except for "special conditions" such as an indication of another inventor of a certain invention is stated in a specification.

(2) The sameness of inventors means the complete sameness of all of the indicated inventors in the two requests. If the sameness is incomplete or partial, the finding of the complete sameness is conducted by identifying inventors substantially as a matter of fact.

(3) In order to reverse a finding of incomplete sameness, in addition to an applicant's assertion, evidence supporting such an assertion (such an inventor's affidavit or declaration of another application) is mandatory.

(4) Joint inventors in effect ought to make a useful contribution to a completion of an invention by complementing each other's technical creative activities at least in part in the course of the completion.

2.6 The Same Applicants of the Present Patent Application at the Time of Filing as of Another Application

(1) The finding of the sameness of applicants should be made at the time in effect of filing by identifying applicants of the present and another applications in comparison.

(2) In the case of plural applicants, the complete sameness of applicants indicated in the two requests is mandatory to find the sameness of applicants.

(3) The sameness of applicants remains effective even in the case of the subsequent discrepancy of applicants caused by a change of name, inheritance or a merger of applicants of the present and another applications.

(4) In the case of the present application, either a divisional or converted application, the applicant of the initial application on the date of retroactive of the initial filing is deemed as the applicant of the present application for the purpose of sameness.

3. Method of Determining the Identity of a Claimed Invention with an Invention or a Device Disclosed in the Initial Specification, etc. of Another Application

When there are two or more claims, the determination of requirements for Patent Act Article 29bis is made for each claim.

3.1 Finding of a Claimed Invention

The method of finding a claimed invention set forth in "Chapter 2. 1.5 Method of Determining Novelty" is also applied to the examination under Article 29bis.

3.2 Finding of an Invention or a Device Disclosed in an Initial Specification etc. of Another Application

(1) "An invention or a device disclosed in an initial specification, etc. of another application" means an invention or a device identified by "matters described in an initial specification, etc. of another application (Note 1)" or "matters essentially described, though not literally, in an initial specification, etc. of another application (those directly derivable from the matters described, taking into consideration the common general technical knowledge at the time of filing of another application)."

Therefore, unless an invention or a device can be identified by a person skilled in the art on the basis of matters either described or essentially described, though not literally, in an initial specification, etc. of another application, neither such an "invention nor a device shall be deemed as "an invention or a device disclosed in an initial specification, etc." i.e., "a cited invention" or "a cited device" under Article 29bis. For example, when a particular matter is disclosed in the initial specification, etc. of another application as a part of alternatives of Markush-type formula, attention should be drawn to whether or not the disclosed matter itself provides a person skilled in the art with a full basis for identifying an invention (a cited invention).

(Note 1) Matters described in an initial specification, etc. of another application, even deleted by a later amendment, do fall under the provision of Patent Act Article 29bis.

(2) Also, unless it is clear that an invention or a device is disclosed in the initial specification of another application in such a manner that a person skilled in the art can make the

product in case of a product invention or a device, or can use the process in case of a process invention, taking into consideration the common general knowledge as of another application, then such an invention or a device shall not be deemed as "a cited invention" nor "a cited device" under Article 29bis.

For example, if a chemical substance is expressed merely by a name or chemical formula in an initial specification of another application and if it is not clear that a person skilled in the art can produce the chemical substance on the basis of the description of the specification, even taking into consideration the common general knowledge at the time of filing of another application, then, the chemical substance does not fall under an "invention disclosed in an initial specification of another application" under Article 29bis. (Note that this does not mean that, when another application claims the chemical substance as one of alternatives of Markush-type formula, the claim violates the enablement requirement under Article 36(4).)

(3) The finding of a cited invention expressed in specific concept or generic concept ① A cited invention expressed in a specific manner necessarily implies or suggests "a generic invention of which matters defining the invention are the same family or the same genus, or have the common characteristics with the cited invention," and leads to the finding of an invention expressed in generic concept (Note 2). Without identifying the cited invention expressed in specific concept to its generic invention, the determination under Article 29bis of the claimed generic invention may be conducted at the comparison and determination steps.

② A cited invention expressed in generic concept neither implies nor suggests an invention expressed in a specific manner, and does not lead to the finding of the invention expressed in a specific manner (except when an invention expressed in a specific manner can be directly derivable from such a generic invention, taking into consideration the common general knowledge (Note 3)).

- (Note 2) "Generic concept" is defined as a concept integrating matters in the same family or the same genus, or a concept integrating a plurality of matters with the common characteristics.
- (Note 3) The plain logic that generic concept contains specific disclosure, or a term in generic concept contains specific terms, does not substantiate the necessary derivation (disclosure) of an invention expressed in specific concept.

3.3 Comparison of a Claimed Invention with a Cited Invention

(1) The finding of the identicalness and difference between a claimed invention and a cited invention is conducted by comparing the matters defining the claimed invention and the matters defining the cited invention.

(2) A more specific concept within the concept of the claimed invention may be compared with a cited invention for the purpose of finding the identicalness and difference between a claimed invention and cited invention, instead of the method of comparison mentioned (1).

An example of "a more specific concept within the concept of the claimed invention" is the invention disclosed in the detailed description of the invention as a mode for carrying out the claimed invention. Inventions other than this may be compared with the
claimed invention as far as they are more specific concepts within the concept of the claimed invention.

This alternative method would be helpful for the examination under Article 29bis in terms of claims with statements defining a product by its function, property or characteristics, etc. or of claims with limitation by numerical range, etc.

(3) The matters defining a claimed invention may be directly compared with the matters described in an initial specification of another application, instead of the method of comparison mentioned (1) and "Chapter 2. 1.5.3(3)." In doing so, the finding of the identicalness and difference between the claimed and cited inventions may be conducted by interpreting the matters described in the initial specification, etc. taking into consideration the common general knowledge as of the filing of another application. The result of the determination shall be the same as the result obtained by following the method of comparison mentioned (1) and "Chapter 2. 1.5.3(3)."

(4) The comparison should never be conducted between a claimed invention and a combination of two or more cited inventions.

3.4 Determining the Identity of a Claimed Invention and a Cited Invention

(1) Where there is found no difference between the matters defining the claimed invention and the matters defining the cited inventions as a result of the comparison, the claimed and cited inventions are identical. Even where there is a difference between the two, they are deemed to be identical if the difference is considered as a very minor difference (addition, deletion, or replacing of well-known or commonly used art, generating no new effects) in embodied means to solve a problem (i.e. substantially identical).

(2) If matters defining a claimed invention are expressed by alternatives either in form or de facto (Note), and if any one of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such inventions has no difference from or is substantially identical with a cited invention, then, the claimed invention shall be deemed identical with the cited invention.

This handling does not relate to the issue of when a prior art search is to be finalized. See "PartIV: Procedure of Examination" in this regard.

(Note) As for "by alternatives either in form or de facto," see "Chapter 2. 1.5.5 (Note 1)"

(3) Handling of a claim with statements defining a product by its function or characteristics, etc.

① Where a claim includes statements defining a product by its function or characteristics, etc., and it falls under either the following (i) or (ii), there may be cases where it is difficult to compare the claimed invention with the cited invention. In the above circumstances, if the examiner has a reason to suspect that they would be prima facie identical with the product of the cited invention, the examiner may send the notice of reasons for refusal under Article 29bis without making a strict comparison of the claimed product with the product of cited invention. Then an applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal. The reason

for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that truth or falsity becomes unclear. Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may make a decision of refusal on the ground of the notice of reasons for refusal which is earlier notified.

The examiner, however, shall not cite a reference under this handling if matters defining a cited invention include a statement defining a product by its function or characteristics, etc. and fall under either the following (i) or (ii):

(i) a case where the function or characteristics, etc. is neither standard, commonly-used nor comprehensible to a person skilled in the art; or

(ii) a case where plural of functions or characteristics, etc., each of which is either standard, commonly-used, or comprehensible to a person skilled in the art, are combined in a claim so that the claim statements as a whole fall under (i).

(Note) Function, property or characteristics should be deemed standard if it is either defined by JIS, ISO-standard or IEC-standard, or it can be determined by a method for testing or measuring which is provided in those standards. Function, property or characteristics should be deemed commonly used if it is commonly used by a person skilled in the particular art as well as its definition or the method for testing or measuring can be understood.

② Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he reveals that a prior art product is identical with the product of the claimed invention as a result of the converting the function or characteristics, etc. into a different definition with the same meaning or a different method for testing or measuring the same;
- where both the claimed invention and cited invention are defined by identical or similar function or characteristic, etc. which are measured or evaluated under different measuring conditions or different evaluation methods and there is a certain relationship between them, there is a high probability that the function or characteristic, etc. defining the cited invention, if measured or evaluated under the same measuring conditions or evaluation method as the claimed invention, is included in the function or characteristic, etc. defining the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing and (s)he discovers the particular product is disclosed in the initial specification of another application;
- (s)he discovers a prior art product which is identical with or similar to a mode for carrying out the claimed invention (for example, (s)he discovers a prior art product of which starting material is similar to and of which manufacturing process is identical with those of the mode for carrying out the claimed invention, or (s)he discovers a prior art product of which starting material is identical with and of which manufacturing process is similar to those of the mode for carrying out the claimed invention, etc.); and
- the claimed invention and a cited invention have common matters defining the invention other than those defining a product by its function or characteristic, etc., and the cited invention has the same objective or effect as the one which the matters defining a

product by its function or characteristic, etc. have, and there is a high probability that the function or characteristic, etc. defining the cited invention is included in the function or characteristic, etc. defining the claimed invention.

The examiner should follow the ordinary method when the requirement under Article 29bis can be examined without using this exceptional handling.

(4) Handling of a claim with statements defining a product by its manufacturing process

 Where a part or all of claim statements are those which define a product by its
manufacturing process, there may be cases where embodying the structure of such a
product per se is difficult. In such cases, the examiner may send the notice of reasons for
refusal under Article 29bis without making a strict comparison between the claimed product
and the product of cited invention and may wait for the applicant's argument against the
notice, if the examiner has a reason to suspect that they would be prima facie identical.

The examiner, however, shall not cite a reference under this handling if matters defining a cited invention include a statement defining a product by its manufacturing process.

② Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he discovers a prior art product of which starting materials is similar to and of which manufacturing process is identical with those of the product of the claimed invention;
- (s)he discovers a prior art product of which starting materials is identical with and of which manufacturing process is similar to those of the product of the claimed invention;
- a product of the claimed invention has been revealed identical in structure with a certain product after the filing, and (s)he discovers the particular product is disclosed in the initial specification of another application; and
- (s)he discovers a prior art product which is identical with or similar to a mode for carrying out the claimed invention.

The examiner should follow the ordinary method when the requirement under Article 29bis can be examined without using this exceptional handling.

4. Notice of Reasons for Refusal under Patent Act Article 29bis

Where the examiner has a reason to suspect that inventions would be unpatentable under Article 29bis, (s)he should send a notice of reasons for refusal. Against the notice of reasons for refusal, an applicant may argue or clarify by

putting forth a written argument or a certificate of experimental results, etc.

The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that truth or falsity becomes unclear. Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may make a decision of refusal on the ground of the notice of reasons for refusal which is earlier notified.

[Case Law for Reference]

(1) Finding of an invention disclosed in the specification, etc. of a precedent application.

Sho 58 (Gyo Ke) 95, (Judgement: Sept. 30, 1985)

A known art may be taken into consideration in construing descriptions in a specification, but this is to the extent that the subject matter concerned is described in the specification.

However, if this rule were to be applied to the present case in which the description concerned is at a very abstract level, then what the specification is deemed as disclosing would be far reaching beyond a reasonable extent.

Therefore, in judging the identity of inventions under Patent Act Article 29bis (1), it is improper, though admissible in judging on an inventive step, to take into consideration the teaching of other reference in construing the description of the present specification which was expressed in a very abstract way.

Sho 60 (Gyo Ke) 43, (Judgement: Jan. 28, 1987)

The cited reference describes nylon 66/6 copolymer as one of the examples of polyamide resin. However taken into account the common general knowledge at the time of filing, it is found that the cited reference essentially, although not literally with respect to the proportion of the composition, discloses nylon 66/6 copolymer having a composition within a range limited in the claim, because a person skilled in the art would have immediately conceived it based on the description.

Sho 59 (Gyo Ke) 176, (Judgement: June. 28, 1988)

...The cited reference does not give an express explanation to the means of writing data, therefore, the present invention and the cited prior art seemingly differ in whether two data lines and two bit lines for reading data are also used for writing data. Otherwise the two inventions have common features.

...However, in light of the common general knowledge concerning the data writing and reading as mentioned above, it is construed that the cited reference essentially discloses the art to use for writing data the two data lines connected to the two bit lines.

Sho 61 (Gyo Ke) 29, (Judgement: Sept. 29, 1986)

The plaintiff argues that the identity of the two shall be judged by the sole comparison therebetween and common general knowledge is not allowed to be considered.

However, an applicant is not required to cover in a specification all the arts related to an invention; rather, most specifications are prepared assuming common general knowledge.

Thus, it should be allowed to refer to common general knowledge in understanding an invention disclosed.

(2) Comparison and Judgement

Sho 61 (Gyo Ke) 29, (Judgement: Sept. 29, 1986)

The plaintiff further argues that the Patent Act Article 29bis does not mention

"substantially identical" on which the appeal board decision relies and thus the board decision is against the Act.

However, the case rarely happens in which two inventions become literally identical including their constitutions and effects described, and it should be allowed to find that the two inventions are identical, if the differences resides merely in expressional or very minor design variations and there is no significant difference in effects. Thus, a later invention shall be excluded from patentability under the Patent Act Article 29bis when it is substantially identical with an earlier invention in the meaning above.

Hei 1 (Gyo Ke) 226, (Judgement: Sept. 20, 1990)

The feature E of the present invention is quite different from the feature e of the cited invention. Since the feature E is a constituent element of the present invention, it can not be found the two inventions are substantially identical, unless it is shown that the features E and e are commonly or widely used in the technical fields to which those inventions pertain.

The defendant argues that the holding means adopted in the present invention is merely a conversion of an equivalent means. However, the structures of the two features are too different to find that there is no difference in their works and effects, and yet the defendant failed to show that the two features are commonly or widely used in the relevant technical field. Consequently, only the facts that the two features are equivalent, and that there is no significant difference in their effects do not constitute a ground for the two inventions being deemed as substantially identical. Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part II: REQUIREMENTS FOR PATENTABILITY

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Chapter 4 Patent Act Article 39

[Provisions applied to applications filed on and before December 31, 1998] Patent Act Article 39 reads:

(1) Where two or more patent applications relating to the same invention are filed on different dates, only the first applicant may obtain a patent for the invention.

(2) Where two or more patent applications relating to the same invention are filed on the same date, only one such applicant, agreed upon after mutual consultation among all the applicants, may obtain a patent for the invention. If no agreement is reached or no consultation is possible, none of the applicants shall obtain a patent for the invention.
(3) Where an invention claimed in a patent application is the same as a device claimed in a utility model application and the applications are filed on different dates, the patent applicant may obtain a patent only if his application was filed before the utility model application.

(4) Where an invention claimed in a patent application is the same as a device claimed in a utility model application and the applications are filed on the same date, only one applicant, agreed upon after mutual consultation between the applicants, may obtain a patent or a utility model registration. If no agreement is reached or no consultation is possible, the patent applicant shall not obtain a patent for the invention.

(5) Where a patent application or a utility model application is withdrawn or dismissed, such application shall, for the purpose of the four preceding Paragraph, be deemed never to have been made.

(6) A patent application or a utility model application filed by a person who is neither the inventor nor the creator nor the successor in title to the right to obtain a patent or utility model registration shall, for the purpose of Paragraphs (1) to (4), be deemed not to be a patent application or a utility model application.

(7) The Commissioner of the Patent Office shall, in the case of Paragraph (2) or (4), order the applicants to hold consultation for an agreement under Paragraph (2) or (4) and to report the result thereof, within an adequate time limit.

(8) Where the report under the preceding Paragraph is not made within the time limit designated in accordance with that Paragraph, the Commissioner of the Patent Office may deem that no agreement under Paragraph (2) or (4) has been reached.

[Provisions applied to applications filed on or after January 1, 1999] Patent Act Article 39 reads:

(1)-(4) are omitted

(5) Where a patent application or a utility model application is abandoned, withdrawn or dismissed, or where an examiner's decision or trial decision that a patent application is to be refused has become final and conclusive, such application shall, for the purposes of Paragraphs (1) to (4), be deemed never to have been made. However, this provision shall not apply where an examiner's decision or a trial decision that the patent application is to be refused under the provision of the last sentence of Paragraph (2) or (4) becomes final and conclusive.

(6)-(8) are omitted

[Provisions applied to applications filed on or after April 1, 2005]

(March 2005)

Patent Act Article 39 reads:

(1)-(3) are omitted

(4) Where an invention and a device claimed in applications for a patent and a utility model registration are identical (excluding the case where an invention claimed in a patent application based on a utility model registration under Article 46bis (1) (including a patent application that is deemed to have been filed at the time of filing of the said patent application under Article 44(2) (including its mutatis mutandis application under Article 46(5)) and a device relating to the said utility model registration are identical) and the applications for a patent and a utility model registration are filed on the same date, only one of the applicants, selected by consultations between the applicants, shall be entitled to obtain a patent or a utility model registration. Where no agreement is reached by consultations or no consultations are able to be held, the applicant for a patent shall not be entitled to obtain a patent for the invention claimed therein.

(5) Where an application for a patent or a utility model registration has been waived, withdrawn or dismissed, or where the examiner's decision or trial decision to the effect that a patent application is to be refused has become final and binding, the application for a patent or a utility model registration shall, for the purpose of paragraphs (1) to (4), be deemed never to have been filed; provided, however, that this shall not apply to the case where the examiner's decision or trial decision to the effect that the patent application is to be refused has become final and binding on the basis that the latter sentence of paragraph (2) or (4) is applicable to the said patent application. (6)-(8) are omitted

1. Purport of the Provision of Patent Act Article 39

The patent system is one to grant an exclusive right to a patentee for a limited term as a reward for disclosure to the public of an invention which is a creation of technical ideas.

Therefore, two or more such rights shall not be granted for one invention. The provision of Patent Act Article 39 makes the principle "one patent for one invention" clear so as to exclude such double patenting, and also makes it clear that, where two or more applications relating to one and the same invention are filed, only the first applicant may obtain a patent for the invention.

2. Patent Act Article 39

2.1 Patent Act Article 39(1)

2.1.1 Invention Ruled by Article 39

(1) It is "claimed inventions" that are subject to determination as to being the same or not under Patent Act Article 39.

According to Patent Act Article 2, an invention is defined as a highly advanced creation of technical ideas by which a Act of nature is utilized. Therefore, whether inventions are the same or not is determined by judging whether or not the technical ideas concerned are the same.

Even if certain embodiments could be common to the inventions to be judged, so

long as the technical ideas concerned are different, the inventions are not deemed to be the same.

(Reference: Sho 30 (Gyo Na) 39, Sho 42 (Gyo Tsu) 29)

(2) When an application has two or more claims, the examination under Article 39 should be made for each of the claims.

2.1.2 Two or More Patent Applications Filed on Different Dates; the First Patent Application

The determination of whether two or more applications are filed on the same date or different dates, and the determination of which application is the first one, are made as follows.

(1) In the case where such an application has no priority claim, such determination is made based on the filing date (Note).

(Note) In the case where such an application is an international application, its international filing date is considered to be the filing date.

(2) In the case where such an application has a priority claim under the Paris Convention, as to the invention disclosed in the specification or drawings of the application which is the basis of the priority claim, such determination is made based on the priority date (In the case where two or more priorities are claimed, such determination is made based on the filing date of the application which is one of the basis of the priority claims and discloses the claimed invention to be determined.).

(3) In the case where an application has an internal priority claim, as to the invention disclosed in the original specification or drawings of the earlier application which is the basis of the internal priority claim, such determination is made based on the filing date of the earlier application (In the case where two or more priorities are claimed, such determination is made based on the filing date of the application which is one of the basis of the priority claims and discloses the claimed invention to be determined.).

2.2 Patent Act Article 39(2)

2.2.1 One Applicant Agreed upon after Mutual Consultation among all the Applicants

Where two or more patent applications relating to the same invention are filed on the same date, the Commissioner of the Patent Office orders the applicants to hold consultation.

Even where such patent applications are filed by one and the same applicant, such consultation is ordered in the same way as in the case where such applicants are not the same.

As to details of consultation, refer to 2.7.1

2.2.2 Where No Agreement Is Reached or No Consultation Is Possible

Where two or more patent applications relating to the same invention are filed on

the same date, and if no agreement is reached or no consultation is possible, none of the applicants shall obtain a patent for the invention.

The cases where no consultation is possible are the following; where consultation cannot be held, for example because one of the applicants refuses to participate in the consultation; or where one of the applications has already been abandoned, refused finally and conclusively or patented.

In the case where one of the applications has already been abandoned, refused finally and conclusively or patented and therefore consultation cannot be held, orders to hold consultations are not to be issued and a reason for refusal under Patent Act Article 39(2) is to be notified to the other application(s).

(Note) In applications filed on or after January 1, 1999, where one of the applications has already been abandoned, or refused finally and conclusively, such application is deemed never to have been made, and therefore consultation cannot be held. As to the treatment in the case where one of applications has already been patented, refer to 2.7.1.

2.3 Patent Act Article 39(3)

2.3.1 Where an Invention Claimed in a Patent Application Is the Same as a Device Claimed in a Utility Model Application

A device, similar to an invention, is defined as a creation of technical ideas by which a law of nature is utilized. Therefore, the determination of whether an invention claimed in a patent application and a device claimed in a utility model application are the same or not is made in the same way as in the determination of whether two inventions are the same or not.

2.4 Patent Act Article 39(4)

2.4.1 Where No Agreement Is Reached or No Consultation Is Possible

Where an invention claimed in a patent application is the same as a device claimed in a utility model application (excluding the case the invention of the patent application based on the registered utility model and the device of the registered utility model are identical)and the applications are filed on the same date, and if no agreement is reached or no consultation is possible, the patent applicant cannot obtain a patent for the invention.

The cases where no consultation is possible are the following; where consultation cannot be held, for example, because the applicant of the utility model refuses to participate in the consultation; or where the utility model application has already been abandoned, rejected finally and conclusively or registered.

In the case where the utility model application has already been abandoned, refused finally and conclusively or registered and therefore, consultation cannot be held, no order to hold consultation is to be issued and a reason for refusal under Patent Act Article 39(4) is notified to the patent applicant.

(Note) In applications filed on or after January 1, 1999, where one of the applications has already been abandoned, or refused finally and conclusively, such application is deemed never to have been made, and therefore consultation cannot be held. As to treatment in the case where the utility model application has already been registered, refer to 2.7.1.

2.5 Patent Act Article 39(5)

2.5.1 Where a Patent Application or an Utility Model Application Is Withdrawn or Dismissed

Where a patent application or a utility model application is withdrawn or dismissed, such application is, for the purpose of Patent Act Article 39(1) to (4), deemed never to have been made.

Patent Act Article (1) to (4) is applied to an application abandoned or refused finally and conclusively, except the case where the application falls under Patent Act Article 39(6).

(Note) As for applications on or after January 1, 1999, where a patent application or a utility model application is abandoned, withdrawn or dismissed, or where the patent application is refused finally and conclusively, such patent application or such utility model application is deemed never to have been made. However, where the patent application is refused finally and conclusively, because of falling under the provision of the second sentence of Article 39 (2) or (4), such a case is not restricted by this paragraph.

2.6 Patent Act Article 39(6)

2.6.1 A Person Who Is Neither the Inventor Nor the Creator Nor the Successor in Title to the Right to Obtain a Patent or a Utility Model Registration

A patent application or a utility model application by an unauthorized applicant is, for the purpose of Patent Act Article (1) to (4), deemed not to be a patent application or a utility model application.

2.7 Patent Act Article 39(7)

2.7.1 Consultation

[1] Where All Applications Are Pending at the Patent Office

① Where the Applicants Are not the Same

(i) Where a request for examination has been made for each application

Consultation is ordered to the applicants in the name of the Commissioner of the Patent Office.

(a) Where the report of the result of the consultation is submitted within the designated time limit, the decision to grant a patent is made on the application of the applicant agreed upon after the consultation, unless there are no other reasons for refusal.

If the other application(s) was not withdrawn or abandoned at the time of such

decision, a reason for refusal under the Patent Act 39(2) or (4) is notified to the applicant(s) of such application(s).

(b) Where the report of the result of the consultation is not submitted within the designated time limit, it is deemed that no agreement has been reached (Patent Act Article 39(8)), and a reason for refusal under the Patent Act 39(2) or (4) is notified to all the applicants. (ii) Where a request for examination has not been made for at least one application

In this case, no order to hold consultation is possible. Therefore, the applicant who has requested examination is notified to the effect that examination of the application is not to be conducted because a request for examination has not been made for other application(s) concerned.

After the notification, the examination is not conducted until a request for examination on the other application(s) is made and it becomes possible to order to hold consultation, or until the other application is withdrawn (including the case of expiry of the period for request for examination) or abandoned.

② Where the Applicants Are the Same

Where the applicants are the same, Patent Act Article 39(2) or (4) is also applied in the same way as the above case where the applicants are not the same, and treatment is made according to (1) (i) and (ii) mentioned above.

However, when treating according to (1)(i) above, the order to hold consultation in the name of the Commissioner of the Patent Office and a notice of reasons for refusal under Patent Act Article 39(2) or (4) are issued simultaneously. (Explanation)

The purport of the provision of Patent Act Article 39(2) is that one right is granted for one invention. Therefore, this provision is also applied to the case where the applicants are the same.

In the case where the applicants are the same, the treatment is ruled as mentioned above, because the applicant dose not need to have the time for holding consultation. [2] Where One of the Applications Has Already Been Granted a Patent or a Utility Model Right

Where one of the applications has already been granted a patent or a utility model right, so long as the applicant of the pending patent application(s) is different from such patentee or the owner of the utility model right, a reason for refusal under Patent Act Article 39(2) or (4) is notified to the applicant(s) of the pending application(s) and, the fact that such a reason for refusal has been notified to such applicant(s) is communicated to the patentee or the owner of the utility model right.

However, where the patent applicant and the patentee or the owners of the utility model right are the same in the above case, such communication is not given, since such applicant can take appropriate measures by receiving the said reason for refusal. (Explanation)

Where one of the applications has already been granted a patent or a utility model right, it is not possible to hold consultation (refer to 2.2.2 and 2.4.1). However, holding an opportunity of substantial consultation between the patent applicant and the patentee or the owner of the utility model right is considered to be useful for avoiding a possible reason for refusal or invalidation and obtaining appropriate protection. Therefore, the treatment is made as described above.

Hereinafter, explanation will be made on the case where the first application or the other application filed in the same date is a patent application, but this also applies to the

case where the first application or the other application filed in the same date is a utility model application.

3. Method of Determining the Identity of Claimed Inventions

3.1 Finding of a Claimed Invention

The method of finding a claimed invention set forth in "Part II : Chapter 2. 1.5 Method of Determining whether a Claimed Invention is Novel" is also applied to the examination under Article 39.

3.2 Comparison of Claimed Inventions

The finding of the identicalness and difference between a claimed invention of one application and a claimed invention of the other application is conducted by comparing between the matters defining the claimed inventions.

3.3 Method of Determining the Identity of Claimed Inventions of Two or More Patent Applications Filed on Different Dates

(1) Where there is found no difference in matters defining an invention between an invention claimed in a later filed application (hereinafter referred to as "later invention") and an invention claimed in an earlier filed application (hereinafter referred to as "earlier invention"), the two inventions are identical.

(2) Even where there is a difference between the matters defining the later invention and the matters defining the earlier invention, the two inventions are deemed identical (substantially identical) in the following cases:

① in the case where the later invention can be induced from the earlier invention by such a minor change as an addition of well-known or commonly used art (Note1) to the matters defining earlier invention, a deletion of well-known or commonly used art from the matters defining earlier invention, or a replacement of any of the matters defining earlier invention with well-known or commonly used art, and where those changes generate no new effects;

② in the case where a difference between the two inventions resides only in that the later invention is expressed in more generic concept (Note2) which encompasses the matters defining earlier invention of a specific concept; and

③ in the case where a difference between the two inventions is mere difference in category expressed.

- (Note1)"Well-known art" means technologies generally known in the relevant technical field, e.g., many prior art documents, those widely known throughout the industry, or those well-known to the extent needless to present examples. "Commonly used art" means well-known art which is used widely.
- (Note2)"Generic concept" is defined as a concept integrating matters in the same family or the same genus, or a concept integrating a plurality of matters with common characteristic.

(3) Matters defining the earlier invention or the later invention are expressed by two or more alternatives

(1) If matters defining the earlier invention are expressed by alternatives in form or de facto (Note1), and if a later invention has no difference from or is substantially identical (the above (1)(2)) with any one of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such inventions, then, the later invention shall be deemed identical with the earlier invention as a whole.

Such an invention, however, must be able to be identified by a person skilled in the art from the claim, taking into consideration the specification (excluding claims) (hereinafter referred to as "specification" in the explanation on Article 39) and drawings of the earlier application and common general knowledge as of the filing of the earlier application. If a claim of earlier application is expressed in Markush-type formula, therefore, attention should be paid to whether or not a person skilled in the art can identify such an invention from each of the alternatives.

② If matters defining the later invention are expressed by alternatives in form or de facto (Note1), and if any one of inventions each of which is identified by supposing that each of the alternatives is a matter to define each of such inventions has no difference from or is substantially identical with an earlier invention (Note 2), then, the later invention as a whole shall be deemed identical with the earlier invention.

This handling does not relate to the issue of when a prior art search is to be finalized. See "Part IV: Procedure of Examination" in this regard.

(Note 1) With regard to "alternatives in form or de facto," see "Chapter 2. 1.5.5 (Note1)."

(Note 2) If matters defining an invention with respect to "an earlier invention" are expressed by alternatives in form or de facto, the "earlier invention" should be identified by supposing that each of the alternatives is a matter to define each of the inventions.

(Remarks)

An invention shall not be deemed as "the earlier invention" under the handling mentioned in (1) to (3) above, unless it is clear that a claimed invention of the earlier application is described in the specification and drawings in such a manner that a person skilled in the art can make the product in case of a product invention or can use the process in case of a process invention, taking into consideration the common general knowledge as of the filing of the earlier application.

For example, if a chemical substance is expressed merely by a name or a chemical formula as one of alternatives of a Markush-type claim of an earlier application and if it is not clear that a person skilled in the art can produce the chemical substance on the basis of the specification and drawings, even taking into consideration the common general knowledge as of the filing of the application, then, the chemical substance does not fall under an "earlier invention" under Article 39. (Note that this does not mean that the claimed invention of the earlier application violates the enablement requirement under Article 36(4).)

3.4 Method of Determining the Identity of Claimed Inventions of Two or More Applications Filed on the Same Date

(1) Only if invention B is deemed "identical" with invention A (within the meaning of "identical" under the above-mentioned practice in 3.3(2) concerning applications filed on different dates) on the assumption of invention A being an earlier invention and invention B being a later invention, and invention A is deemed identical with invention B on the assumption of invention B being an earlier invention and invention A being a later invention, then, the two inventions filed on the same date should be considered identical.
(2) Even where invention B is identical with invention A on the assumption of invention A being an earlier invention B being an earlier invention A on the assumption of invention A being an earlier invention B being a later invention, the two inventions filed on the same date should be considered identical.
(2) Even where invention and invention B being a later invention, the two inventions filed on the same date should be considered identical.
(2) Even where invention and invention B being a later invention, the two inventions filed on the same date should be considered identical.
(2) Even where invention and invention B being a later invention, the two inventions filed on the same date should not be considered identical if invention A is not identical with invention B on the assumption that invention B being an earlier invention and invention A being a later invention.

(Explanation)

In the case where such inventions A and B are filed on the same date, such inventions that the invention A is an invention of specific disclosure type and the invention B is an invention of generic concept type, and on the assumption that the invention A is an earlier invention and the invention B is a later invention, the invention B is deemed the same as the invention A, but on the assumption that the invention B is an earlier invention and invention A is a later invention. The invention A is not deemed the same as the invention B, it is not proper to consider the two inventions A and B to be identical, taking into account that, where the invention B is an earlier invention and the invention A. Is a later invention, the later invention A is not deemed to be the same as the earlier invention B. Further, since the provision of Patent Act Article 39(2) is one which is formulated on the premise that there are two or more applications relating to the same invention and therefore such treatment should not be made that only one of the applications has a reason for refusal only to the applicant of the invention B. Consequently, treatment is made as described above.

(Note) The handling 3.3(3) applies to matters defining inventions of two applications filed on the same date expressed in two or more alternatives.

(3)The relation between the identity of applicants and the identity of inventions

Whether applicants are the same or not makes no effects on the determination of whether the inventions are the same or not.

3.5 Handling of a Claim with Statements Defining a Product by Its Function or Characteristic, etc.

(1) Where a claim includes statements defining a product by its function or characteristic, etc. and it falls under either the following ① or ②, there may be cases where it is difficult to compare the claimed invention with the earlier invention. In the above circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie identical with the product of the earlier invention without making a strict comparison of the

claimed product with the product of the earlier invention, the examiner may send the notice of reasons for refusal under Article 39. Then an applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal. The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that it is unclear that the claimed product is prima facie identical with the product of the earlier invention. Where the applicant's argument, which is, for example, abstract or general, does not change the examiner's evaluation to that extent, the examiner may render a decision of refusal under Article 39.

The above-mentioned handling shall not be applied, if matters defining the earlier invention fall under either the following ① or ②. However, in the case where two invention filed on the same date are subject to determine the identity, it can be applied thereto only if, at least, the matters defining either of the inventions fall under the following ① or ②:

① a case where the function or characteristic, etc. is neither standard, commonly used by a person skilled in the art in the relevant technical field nor comprehensible of its relation to a commonly used function or characteristic, etc to a person skilled in the art if the function or characteristic is not commonly used; or

② a case where plural of functions or characteristics, etc. each of which is either standard, commonly used by a person skilled in the art in the relevant technical field or comprehensible of its relation to a commonly used function or characteristic, etc to a person skilled in the art if the function or characteristic is not commonly used, are combined in a claim so that the claim statements as a whole fall under ①.

(Note) Function or characteristic, etc. should be deemed to be standard if it is either defined by JIS (Japanese Industrial Standards), ISO-standards (International Organization for Standardization-standards) or IEC-standards (International Electrotechnical Commission-standards), or if it can be determined quantitatively by a method for testing or measuring which is provided in those standards. Function or characteristic, etc. should be deemed to be commonly used by a person skilled in the art if it is commonly used by a person skilled in the art in the relevant technical field as well as its definition or the method for testing or measuring can be understood by a person skilled in the art.

(2) Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he reveals that a product of an earlier invention is identical with the product of the claimed invention as a result of the converting the function or characteristic, etc. into a different definition with the same meaning or a different method for testing or measuring the same;
- where both the claimed invention and the earlier invention are defined by identical or similar function or characteristic, etc. which are measured or evaluated under different measuring conditions or different evaluation methods and there is a certain relationship between them, there is a high probability that the function or characteristic, etc. defining the earlier invention, if measured or evaluated under the same measuring conditions or evaluation method as the claimed invention, is included in the function or characteristic, etc. defining the claimed invention;
- a product of the later invention has been revealed identical in structure with a certain

product after the filing and (s)he discovers the particular product is a product of an earlier invention;

- (s)he discovers a product of an earlier invention which is identical with or similar to a
 mode for carrying out the later invention disclosed (for example, (s)he discovers a
 product of an earlier invention of which starting material is similar to and of which
 manufacturing process is identical with those of the mode for carrying out the claimed
 invention, or (s)he discovers a product of an earlier invention of which starting material
 is identical with and of which manufacturing process is similar to those of the mode for
 carrying out the later invention, etc.); and
- the later invention and an earlier invention have common matters defining the invention other than those defining a product by its function or characteristic, etc. and the earlier invention has the same objective or effect as the one which the claim statements of the later invention defining a product by its function or characteristic, etc. have and there is a high probability that the function or characteristic, etc. defining the earlier invention is included in the function or characteristic, etc. defining the later invention.

The examiner should follow the ordinary method when the requirement under Article 39 can be examined without using this exceptional handling.

3.6 Handling of a Claim with Statements Defining a Product by Its Manufacturing Process

① If a claim is one with statements defining a product by its manufacturing process, there may be cases where it is difficult to determine what is the product per se structurally. In such circumstances, if the examiner has a reason to suspect that the claimed product would be prima facie identical with the product of the earlier invention without conducting a strict comparison of the claimed product with the product of the earlier invention, the examiner may send the notice of reason for refusal under Article 39 as mentioned in the above 3.5.

The examiner, however, shall not cite an earlier invention under this handling if matters defining the earlier invention include a statement defining a product by its manufacturing process. In the case of two or more inventions filed on the same date, on the contrary, the examiner may follow this handling if matters defining invention with respect to at least any of the inventions include a statement defining a product by its manufacturing process.

② Examples where the examiner has a reason to suspect the prima facie identity are the followings:

- (s)he discovers an earlier invention of a product of which starting material is similar to and of which manufacturing process is identical with those of the product of the later invention;
- (s)he discovers an earlier invention of a product of which starting material is identical with and of which manufacturing process is similar to those of the product of the later invention;
- a product of the later invention has been revealed identical in structure with a certain product after the filing, and (s)he discovers the particular product is identical with an earlier invention; and
- (s)he discovers an earlier invention which is identical with or similar to a mode for

carrying out the later invention.

The examiner should follow the ordinary method when the requirement under Article 39 can be determined without using this exceptional handling.

4. Procedure of Examination in Cases Where There Exists a Reason for Refusal under Patent Act Article 39

4.1 Procedure for Examination of a Later Application Where There Is an Earlier Application Relating to the Same Invention

4.1.1 Where the Applicants are Not the Same

Where neither the applicant(s) nor inventor(s) of the later application are the same as those of the earlier application, Patent Act Article 29bis is applied to the later application. Where the applicant(s) is not the same but the inventor(s) is the same, Patent Act Article 20 is applied to the later application.

Article 39 is applied to the later application. However, a decision of refusal to the later application on such ground that it was filed later than another application claiming the same invention is made after a decision for the earlier application becomes final and conclusive.

4.1.2 Where the Applicants are the Same

In the case where the applicants are the same, a reason for refusal can be issued to the later application and the examination can proceed even before a decision for the earlier application becomes final and conclusive.

Where the reason for refusal under Patent Act Article 39 on the basis of the earlier application is issued to the later application before the decision for the earlier application becomes final and conclusive (including the case where a request for examination is not made on the earlier application), the remark to the effect that if the reason for refusal is not resolved, a decision of refusal is made even though the decision for the earlier application does not become final and conclusive is added to the notice of reasons for refusal. After the expiry of the time limit, if the reason for refusal is not resolved, a decision of refusal is made.

However, in the case where a request for examination on the earlier application has already been made but examination has not yet started on the application before the expiry of the time limit to respond to the reasons for refusal to the later application, and the applicant states he has an intention to amend the earlier application in the response to the reasons for refusal to the later application, examination proceeds as follows:

① Where there are reasons for refusal to the earlier application, the reasons for refusal are notified to the earlier application. After the expiry of the time limit, presence of any amendments to the earlier application and the content of such amendments are confirmed and then examination of the later application proceeds.

② Where there are no reasons for refusal to the earlier application, the examination of the later application proceeds after the decision to grant a patent on the earlier application is made.

4.2 Procedure for Examination of Applications Relating to the Same Invention Filed

on the Same Date

4.2.1 Where the Applicants are Not the Same

(1) Where there are no reasons for refusal other than under Patent Act Article 39(2), an order to hold consultation is sent to each applicant.

Refer to 2.7.1 for details of consultation.

(2) Where there are any other reasons for refusal to at least one application than under Patent Act Article 39(2), such other reasons are also notified when sending the order to hold consultation.

(Explanation)

Where two or more applications relating to the same invention are filed on the same date, an order to hold consultation shall be sent. By notifying reasons for refusal other than the reason under Patent Act Article 39(2), if any, the applicant can learn substantially all of the reasons for refusal simultaneously and thus can take appropriate measures.

4.2.2 Where the Applicants are the Same

Where applicants are the same, an order to hold consultation and notice of any reasons for refusal are sent simultaneously.

5. Remarks

5.1 Where New Matter Is Included

Where a claimed invention in an earlier application or other application filed on the same date became to include, by amendments, a matter which does not remain within the scope of the features disclosed in the specification or drawings originally attached to the request, Patent Act Articles 39(1) to (4) are not applied to such claimed inventions. (Explanation)

It is contradictory to the first-to-file rule to give a right to exclude later applications to a claimed invention including a matter which does not remain within the scope of the features disclosed in the specification or drawings originally attached to the request (new matter).

Therefore, where the claimed invention in the earlier application or the other application filed on the same date has become to include new matter by amendment, Patent Act Articles 39(1) to (4) are not applied to such claimed invention.

5.2 In the Case of Conversion of Applications

In the case of conversion of applications, since the original application is deemed to be withdrawn (Patent Act Article 46(4), Utility Model Act Article 10(5)), the original application is, for the purpose of Patent Act Article 39(1) to (4), deemed never to have been made.

When the converted application is valid, since the application is deemed to have been filed at the time of filing of the original application, Patent Act Article 39(1) to (4) are

applied to the converted application as having been filed on the filing date of the original application.

6. Notice of Reasons for Refusal under Patent Act Article 39

If the examiner has a conviction that a claimed invention is unpatentable under Article 39(1) to (4), (s)he will send a notice of reasons for refusal to an applicant.

The applicant may argue or clarify by putting forth a written argument or a certificate of experimental results, etc. against the notice of reasons for refusal.

The reason for refusal is to be dissolved if the applicant's argument succeeds in changing the examiner's evaluation at least to the extent that truth or falsity becomes unclear. Where the applicant's argument does not change the examiner's evaluation to that extent, the examiner may render a decision of refusal on the ground of the reason for refusal.

[Case Law for Reference]

(1) Even if certain embodiments are common to two inventions, so long as the technical ideas concerned are different, the two inventions shall not be deemed the same

Sho 30 (Gyo Na) 39, (Judgment: Dec. 11, 1956)

... As mentioned above, the present invention has different constituent features from those of the invention disclosed in the cited reference. Therefore, the two inventions must not be considered to be the same.

However,... although it seems to happen that it is difficult to distinguish the two inventions from each other in embodiments, to co-exist Vitamin C other than Vitamin B1 in the invention disclosed in the cited reference has no direct connection with ... as the object of the invention, and, therefore, such co-existing is not considered to be the indispensable constituent features of the invention. Accordingly, even if it may happen that it becomes difficult to distinguish one embodiment of the invention disclosed in the cited reference from addition of Vitamin C as a reducer which is indispensable in the present invention, this cannot be the ground for interpreting that the two inventions are the same.

Sho 42 (Gyo Tsu) 29, (Judgment: July 10, 1975)

It has already been stated above that the original judgment is justifiable, which judgment states that the invention disclosed in the cited reference is different from the invention of the present application in terms of the constituent features, and they may overlap only in their embodiments. On the other hand, the cited invention always needs a dominant carrier wave, while the present invention does not always need a dominant carrier wave. In this regard, these two inventions are different in terms of their constituent features. In the case where different technical ideas can be found in the later filed invention in the sense that the limitation of the constituent feature imposed to the cited invention is not necessary to the present invention, even if the two inventions may overlap in their embodiments if the present invention uses a dominant carrier wave, this matter cannot be the ground for determining that the two inventions are the same. Further, the previous Patent Act (Act No. 96 of 1921) Article 8 cannot be construed so as to refuse the later-filed application as being the same invention, unless the overlapped part is excluded from the later-filed application in such a case. The original judgment states that the present invention is different from the invention disclosed in the cited reference is justifiable,...

(2) Whether or not the inventions are the same is determined by comparing the constituent features of the inventions

Sho 45 (Gyo Ke) 76, (Judgment: Jan. 23, 1973)

... In order for two inventions to be considered as different, the difference between the two inventions must be recognized objectively. Therefore, the criterion for determining whether the two inventions are the same shall be selected in the light of the above. As the constituent features of the invention are the objective expression of the invention, this can be used as the criterion for the identity. ...On the other hand, the object of the invention is subjective intention of the inventor. And the effect is inherently subjective. However, the effect of the invention described in the specification is limited to what the inventor recognized, or to what the inventor considered to be necessary in connection with the object of the invention. Therefore, the object of the invention or the effect of the invention cannot be the criterion to judge the identity of the inventions.

(3) Cases of addition, deletion, or replacing of well-known or commonly used art; generating no new effects

Sho 56 (Gyo Ke) 45, (Judgment: June 23, 1983)

... In the first-filed invention, the claimed invention is defined in generic concept, by the description of 'count the number of the pulse generated linearly in proportion to the intensity of the object light' and it does not specify a type of A-D converter required therefor. On the other hand, the present invention restricts to the use of a voltage-time conversion type A-D converter, by defining in the claim 'using a pulse of a constant period as a reference pulse signal to convert an analog electric signal to a digital signal representing light intensity of the object'. In this respect, a certain distinction is recognized between the two inventions,...

However,...it is recognized that before the filing of the first-filed invention, as a typical example of a so-called counting type A-D converter, both voltage-time conversion type and voltage-frequency conversion type were known as the well-known technical means exchangeable with each other, and it was also well known to apply the technology of the A-D converter to an optical field. Therefore, considering the well-known arts described above and ... the object of the first-filed invention, the description of the constituent features in the first-filed invention concerning A-D conversion recognized above shall not be restricted to the working example recognized above, but shall also include the case where voltage-time conversion type A-D converter is used for the counting type A-D converter and the usage meets the requirement.

Therefore, it shall not be recognized that the present invention constitutes a different invention from the first-filed invention by the reason that the present invention is restricted to using the voltage-time conversion type A-D converter for the counting type A-D converter,...

Sho 57 (Gyo Tsu) 51, (Judgment: Sep 7, 1982) (Sho 55 (Gyo Ke) 82 (Judgment: Jan 26, 1982))

... Consequently, in the first-filed invention, water slurry of xonotlite needle-like crystal, or composition to produce a calcium silicate mold which is prepared by adding clay to the water slurry described above is anticipated as a material of which a calcium silicate mold is made by conventional molding means. The calcium silicate mold in the present invention corresponds to water slurry of xonotlite needle-like crystal, with or without clay in the first-filed invention, which is compressed by conventional molding means. Further, it is not set forth in the present invention that other special molding means than the conventional molding means described in the specification of the first-filed application is used or clay is added in an unusual proportion.

Therefore, the first-filed invention and the present invention are considered the same, even if there is such difference that one directs the material to produce the mold and the other directs the mold per se.

(4) Where differences are due to only a difference of the category expressed in the claimed inventions

Sho 44 (Gyo Ke) 93, (Judgment: May 20, 1970)

... In the form of the expression, the former is the invention concerning 'a product' and the latter is the invention concerning of 'a process', but the substantial technical ideas are chemicals added in producing concrete, i.e. admixture for reinforcement. Both inventions are in the same technical field and the effects of the inventions are deemed the same. According to the recognition above, the original invention and the present invention are both based on finding new material to be used advantageously in the same field, and the present invention concerns a self-evident process for usage of the material relating to the original invention, along the object for the usage of the material. And the usage per se does not give patentability. Therefore, the original invention and the present invention are considered the same....

Sho 48 (Gyo Ke) 27, (Judgment: May 31, 1978)

... There is the difference whether the invention is expressed as a process or expressed as a structure of an apparatus between the two inventions, however, the technical ideas of the two inventions are the same. Therefore, the two inventions are not considered to constitute different inventions....

Sho 37 (Gyo Na) 103, (Judgment: Oct 29, 1971)

... In the cited reference, a manner which is necessarily required to implement the process of the present invention is expressed as an appliance, while, in the present invention a manner which is necessarily required to implement metallic cold-finish to be carried out by using the appliance is expressed as a process. It means that the only difference between the two inventions lies in the difference in expression, namely the same technical idea is expressed as the appliance in the cited reference and as the process in the present invention. Therefore, the two inventions are deemed to be the same...

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part II: REQUIREMENTS FOR PATENTABILITY

Chapter 5. Treatment of Information Disclosed on the Internet as Prior Art

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Chapter 5. Treatment of Information Disclosed on the Internet as Prior Art

(Applied to Applications on January 1, 2000 and after)

Patent Act Article 29 (1) reads:

"An inventor of an invention that is industrially applicable may be entitled to obtain a patent for the said invention, except for the following:

(iii) <u>inventions that were</u> described in a distributed publication, or inventions that were <u>made publicly available through an electric telecommunication line</u> in Japan or a foreign country, prior to the filing of the patent application.

<Explanation of Terms>

- (1) A "line" means a two-way transmission line, generally constituted by send and receive channels. Broadcasting, which is only capable of one-way transmission, does not fall under the definition of a "line" (except for cable TV etc. that is capable of two-way transmission).
- (2) The "public" means an unspecified person in the society.
- (3) "Available to the public" means situations where information can be seen by an unspecified person, and it does not necessarily require that the information has actually been accessed. More specifically, information is considered as being available to the public in cases where a site on the Internet disclosing the invention is linked with any other sites on the Internet, the site is registered with any search engines, or the URL of the site appears in mass media (e.g., a widelyknown newspaper or magazine), on condition that public access to the site is not restricted.
- (4) "Internet etc." mentioned in this chapter refers to all means that provide technical information through electric telecommunication lines, including the Internet, commercial databases, and mailing lists. "Web page etc." refers to what provides information on the Internet etc.

1. Information Made Available to the Public through Electric Telecommunication Lines that can be Cited as Prior Art

In order to cite technical information made available to the public through electric telecommunication lines (hereinafter referred to as "electronic technical information") as prior art as in the case of the printed publications, it is required that the cited electronic technical information was published as it is before the filing of the application concerned.

The question of whether or not the information was made available before the filing of the application is judged based on the time of publication indicated in the cited electronic technical information. Therefore, electronic technical information without an indication of the time of publication cannot be cited, in principle. (See 1.1(3) for exceptional cases where electronic technical information without an indication of the time of publication is citable).

The following points explain how the cases should be handled when the time of publication indicated in the cited electronic technical information is before the filing of the application.

1.1 Cited Electronic Technical Information was Published As It Is before Filing of the Application

(1)The problem concerning the time of publication and alteration of the contents of the cited electronic technical information

Since electric information on the Internet etc. can be easily altered, the issue will always arise of whether the cited electronic technical information was published as it is at the indicated time of publication.

Even if the indicated time of publication thereof was before the filing of the application at the time the examiner discovered that information ^(Note), there is still a slight possibility that the indication itself was altered.

Even if the cited electronic technical information was published at the time the examiner discovers that information, there is still a slight possibility that its content was altered.

(Note)The time of publication is determined by converting the local time in the country or region where the information on the Internet etc. was published into the Japanese Standard Time.

(2)Measures to cope with the problems concerning the time of publication and alteration of the content of the cited electronic technical information

With regard to web sites etc. where there is only extremely small doubt that the cited electronic technical information was not published as it is at the indicated time of publication, the examiner should cite the information on the presumption that the content of information published at the time of the examiner's access was the same at the time of publication indicated in the web site etc.

With regard to cases where there is doubt as to whether the cited electronic technical information was published as it is at the indicated time of publication, the examiner should investigate whether the information is citable.

The examiner should not cite information on web sites etc., if there is only a small possibility of clearing the doubt that the cited electronic technical information was not published as it is at the indicated time of publication.

(3)Web sites etc. where there is only extremely small doubt that the cited electronic technical information was not published as it is at the indicated time of publication

Information published on the following web sites usually indicates points of contact clearly and thus are hardly considered to be altered.

- Web sites of publishers that have been issuing well-established publications etc. (e.g. web sites with electronic data from newspapers, magazines, etc. which offer electronic publications etc. of academic magazines.)
- Web sites of academic institutions (e.g. web sites of academic societies, universities, etc. which publish electronic data (technical papers) of academic societies, universities, etc.)
- Web sites of international organizations (e.g. web sites of standardization bodies, etc.

which publish information on standard of measures etc.)

- Web sites of public organizations (e.g. web sites of ministries and agencies which publish the details of research activities, outline of research findings, etc. especially on the web sites of research institutes.)

Examiners should not cite information on these web sites etc., in principle, when the information does not indicate the time of publication, but they can cite such information if a certificate on the time of its publication as well as content thereof from a person with authority or responsibility for the publication, maintenance etc. of the published information is available.

(4)Handling policy where there is doubt that the cited electronic technical information was not published as it is at the indicated time of publication

When the examiner judges that the cited electronic technical information is subject to the doubt above, he/she should inquire to the point of contact indicated in the web sites as to whether the information is altered, and examine.

If and only if, the doubt is cleared consequently, the examiner can cite the information.

(5)Web sites etc. where there is only a small possibility of clearing the doubt that the cited electronic technical information was not published as it is at the indicated time of publication

The examiner should not cite information on web sites etc. for which neither points of contact nor time of publication thereof is clearly indicated, because there is only a small possibility of clearing the doubt.

1.2 Cited Electronic Technical Information was Available to the Public before Filing of the Application

Information on the Internet etc. is usually available to the public since it may be accessible to unspecified persons and can be transmitted in the same way as information disclosed in the distributed publications.

Information can be considered as being available to the public if it is published on the Internet etc., and its presence and location can be found by the public, and it is accessible by unspecified persons, even if the access to the web sites etc. requires a password or a charge.

(1) Examples of cases where electronic technical information is available to the public

Web sites that are registered with search engines and that can be searched for, or whose presence and location can be found by the public (e.g. web sites linked from the web site of related academic bodies or news sites; the URL of the web site appears in mass media, such as newspapers or magazines.)

In case of web sites that require passwords, those that are accessible by unspecified persons merely by inputting the password (i.e. the information is considered as being available to the public, if anybody can access the web site etc. by acquiring a password through a non-discriminating procedure, regardless of whether acquisition thereof is charged).

In case of charged web sites etc. those that are accessible by unspecified persons

merely by paying a fee (i.e. the information is considered as being available to the public if anybody can access the web site etc. by paying a fee).

(2) Examples of cases where electronic technical information is not considered available to the public

Even if the information appears on the Internet etc., information falling under the following is not considered as being available to the public:

Web sites etc. that are on the Internet, but are only accessible by chance due to the lack of publication of the URL.

Web sites etc. that are only accessible by members of a specific body or a company and of which information is treated as secrets (e.g. an in-house system only accessible by the employees, etc.).

Web sites etc. on which information is encoded in such a way that it cannot generally be read (excluding cases where a decoding tool is openly available, with or without a fee)

Information that is not published long enough to be accessed by the public (e.g. information which published on the Internet for a short period of time).

2. Method of Citation

The electronic technical information retrieved from the Internet etc. shall be treated as follows at the time of citation.

(1) When there is the paper publication describing the same content as the electronic technical information, and when both can be cited, the paper publication shall be cited.

(2) Handling of cited electronic technical information

Even if information on the Internet etc. appeared at the time when the examiner conducted searching prior art, the information may be altered or deleted by the time the applicant or a third party accessed. Since this is a difficult situation for the applicant or the third party to correspond sufficiently, the examiner shall take the following procedures to store the electronic technical information on the Internet etc. that was cited in the notice of reasons for refusal etc. in a patent-related document database:

examiner prints out the information such as a web page;

examiner writes the time of access, the name of the examiner who accessed, the application number of the application for which the information was cited, and the URL of the web site on a paper printout mentioned in ; and

after that, the paper printout is handled in the same way as in digitizing cited nonpatent literatures (NPLs).

(3) Manner of indicating electronic technical information as cited document etc

In the case of citing electronic technical information retrieved from the Internet etc., the bibliographical items about the electronic technical information, as far as they have been known, shall be listed in the following order which is in compliance with WIPO Standards ST.14:

Name of the author Title Relevant parts Indicating the page, column, line, item number, drawing number, index within a database, or the first and the last phrases of the cited part.

Type of medium (online)

Date of publication, name of publisher, location of publication, and the page(s) in which the relevant information is published

Date of retrieval

Describing the date when the electronic technical information was retrieved from the electronic media in parenthesis.

Identification of the source of the information and its address

Describing the source of electronic technical information and the URL of the web sites or the accession number.

Examples of indication of electronic technical information retrieved from the Internet

(Example of indication of information obtained from product manuals/catalogs or web sites)

Corebuilder 3500 Layer 3 High-function Switch. Datasheet. [Online]. 3Com Corporation, 1997. [Retrieved on 1998-02-24]. Retrieved from the Internet: <URL: <u>http://www.3com.com/products/ dsheets/400347.html</u>>.

(Example of the indication in Japanese)

新崎 準、外3名、"新技術の動向"、[online]、平成10年4月1日、特許学会、[平成11年7 月30日検索]、インターネット <URT: <u>http://iij.sinsakijun.com/information/newtech.html</u>>

<u>Example of indication of electronic technical information retrieved from online database</u> Dong, X.R. 'Analysis of patients of multiple injuries with AIS-ISS and its clinical significance in the evaluation of the emergency management', Chung Hua Wai Ko Tsa Chih, May 1993, Vol. 31, No. 5, pages 301-302. (abstract) Medline [online]; United States National Library of Medicine, Bethesda, MD, USA. [retrieved on 24 February 1998] Retrieved from: Dialog Information Services, Palo Alto, CA, and USA. Medline Accession no. 94155687, Dialog Accession no. 07736604

3. Provision of Information

Electronic technical information on the Internet etc. can be provided, similar to a distributed publication. The provider of the information must submit a printout of the electronic technical information on the Internet etc. in order to prove that the provided information is correct. The submitted printout of the information must include the content of information, indication of the time of publication, the URL at which the information was obtained, and the point of contact for the information. In this case, it is desirable to attach a certificate by the person with authority or responsibility for the publication, maintenance etc. of the information.

4. Counterargument of Applicant

(1) Where the counterargument of an applicant against the indicated time of publication and the content of information is not supported by evidence, but only based on his/her suspicion that there is the possibility of the disclosure through the Internet etc., the counterargument cannot prevail due to lack of specific grounds.

(2) Where a counterargument of an applicant raises a doubt that the electronic technical information was not published as it is or was not available to the public before the filing of the application, the examiner shall request with the person with the authority or

responsibility for the publication, maintenance, etc. of the information to issue a certificate as to the date of publication on the web sites etc. and the content of information thereof.

(3) Where, as a result of examining the counterargument etc. of the applicant, the examiner cannot be certain whether the electronic technical information in question was published as it is before the filing of the application, the said information should not be cited as prior art information.

5. Treatment of Unpublished Applications

The examiner can conduct searching prior art using the Internet for a patent application which is still yet to be published at the time of searching prior art. However, since there is possibility that search information such as search query, search keys etc.^(Note) is divulged at the time of searching, and thus the claimed invention in the patent application is leaked to a third party, careful attention shall be paid.

However, in cases where the cited document was found in a document list on the web sites etc. of a scientific society etc., or where the electronic technical information was obtained from information that had been provided, there is no possibility for leakage of the claimed invention in the patent application.

(Note) The following search queries are likely to lead to leakage of the invention to a third party:

- in cases of searching by using a new combination of general terms
- where a publicly known art is used for a new use (using the article for this use is new)

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part III: AMENDMENT OF DESCRIPTION, CLAIMS AND DRAWINGS

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Section I New Matter

1. Relevant Provision

Patent Act Article 17bis(3) reads:

"...any amendment of the description, scope of claims or drawings... shall be made within the scope of the matters described in the description, scope of claims or drawings originally attached to the application..."

If an amendment fails to meet the requirement, it falls under a reason for refusal (Article 49(1)), as well as a ground for invalidation (Article 123(1)(i)). And an amendment in response to the final notice of reasons for refusal or an amendment made at the time of demanding an appeal against examiner's decision of refusal is subject to the dismissal of amendment, if such amendment does not satisfy the requirement (Article 53, Article 159(1) and Article 163(1) respectively).

(Explanation)

Article 17bis(3) was stipulated with respect to amendment of a description, claims or drawings (hereinafter referred to as "description, etc.") based on Article 11 of the Act Concerning the International Application of the Patent Cooperation Treaty and Related Matters (hereinafter referred to as "International Application Act"). Article 11 of the International Application Act is applied in line with the PCT Guidelines aiming to prohibit adding of new matter like practices in the United States or Europe.

2. Purport of Conditions for Amendment

It is desirable for an applicant to submit a complete description, etc. as of filing, for a smooth and prompt examination procedure. In fact, however, an application without any flaws cannot be expected in a few cases. Hence, it is necessary to allow an amendment of a description, etc. under certain conditions. If an amendment, however, which extends beyond the content of the description, etc. originally attached to a request (hereinafter referred to as "original description, etc.") were permitted, third parties relying on the content of the original description, etc. might suffer from unforeseeable disadvantages because the amendment would be in force retroactively from the time of filing.

For the purpose of settling the conflict of interests between an applicant and third parties, the Patent Act defines that any amendment shall be made within the scope of matters described in the original description, etc..

3. Basic Principles

(1) An amendment which introduce matters extends beyond the "matters described in the original description, etc." (i.e., an amendment containing new matter) is not acceptable.

(2) The phrase, "matters described in the original description, etc." means not only "matters expressly presented in the original description, etc." but also "matters inherently presented in the original description, etc.."

(3) In order to conclude that an amendment is done within the scope of "matters inherently presented in the original description, etc.," the meaning of the particulars of the amendment shall be evident to a person skilled in the art in light of common general technical knowledge as of the filing date, as if it were written in the original description, etc., even though it is not expressly presented there. (see, Notes 1 to 3)

(4) Addition of well-known art or commonly used art is not acceptable if the reason of the addition is simply because the art is well-known art or commonly used art. This kind of addition is acceptable only if such art is inherently presented in the original description, etc., that is, the art is evident to a person skilled in the art as if it were written in the original description, etc..

(5) In some cases, a matter is inherently presented to a person skilled in the art in light of several parts in the original description, etc. (e.g., problems to be solved and embodiments of an invention, a description and drawings).

Example: A specific elastic support is not disclosed in the description, but a device equipped with an elastic support is described therein. If a person skilled in the art would regard the elastic support as a helical spring, in light of matters described in the drawings and common general technical knowledge, an amendment changing the term "elastic support" to a "helical spring" is acceptable.

(Remarks)

① A priority certificate (i.e., a priority certificate in the case of priority under the Paris Convention or the like stipulated in Article 43(2) and 43bis, and a set of filing documents of an earlier application in the case of internal priority stipulated in Article 41) cannot be used as a basis for determining whether or not new matter is added in a description etc. because the priority certificate is not included in the description, etc.

2 This guideline is applicable on determining whether or not a description, etc. of a divisional or a converted application is within the scope of matters described in the description, etc. of the parent application as filed.

(Note 1) Tokyo High Court Decision dated on Jul. 1, 2003 (Heisei 14 (Gyo Ke), No.3), Apparatus of a Network Transfer System for a Game or Pachinko or the like"

[" Matters described in the description and drawings originally attached to the request" should be limited to either matters actually described in the description or drawings originally attached to the request or matters which are not actually described but are inherently presented in light of the actual description. Here, in order to conclude that the matters are inherently present based on an actual description, any person skilled in the art must recognize that they are all but described therein. It should not be regarded as matters inherently presented, if the matter does not become readily understandable until it is explained to a person."] This court decision is helpful to interpret the meaning of "matters inherently presented in the original description, etc.."

(Note 2) PCT Guidelines

An amendment should be regarded as introducing subject matter which extends beyond the content of the application as filed, and therefore unacceptable, if the overall change in the content of the application (whether by way of addition, alteration or excision) results in the skilled person being presented with information, which was not expressly or inherently presented in the application as filed even when taking into account matter which is implicit to a person skilled in the art in what has been expressly mentioned. The term "inherently" requires that the missing descriptive matter is necessarily present in the disclosure, and that it would be recognized by persons of ordinary skill. Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

(Note 3) The Relationship with Rule 33 of the PCT

The term "Jimei" is used in a Japanese translation of Rule 33 of the PCT. This term is coined with reference to the word "obviousness" in the U.S. Patent Act which corresponds to the words "easily arrived" in Japanese Patent Act. (This is evident since the Rule 33 (1) is reciting the phrase "it does or does not involve an inventive step (to be non-obvious)")

On the other hand, the term "Jimei" used in this examination guideline is used as a regular meaning of Japanese and stands for that "it is evident as it is without any supporting evidence (see, Koujien [5th edition] etc.)," which is similar to the interpretation of the term by courts etc.

4. Amendment of Claims

4.1 General Principle

After an amendment is done, if the matters specifying the claimed invention extend beyond the matters described in the original description, etc., the amendment is not acceptable.

4.2 Detailed Discussion

(1) Making a generic concept or a specific concept

① If a matter, which is not described in the original description, etc., is added, as a result of amending a matter specifying the claimed invention to be conceptually generic (for example, a matter specifying the invention is deleted) or if a matter, which is not described in the original description, etc., is singled out, as a result of amending it to be conceptually specific (for example, a matter specifying the invention is added), the amendment cannot be construed to be done within the scope of matters described in the original description, etc..

② In a case where it is amended to be conceptually generic by deleting a matter specifying the claimed invention, if the deleted matter does not essentially have technical significance, and if it is evident that new technical significance is not added by the amendment, the amendment is considered to be done within matters described in the original description, etc., because no new matter is added in this case (The same is true in a case where the deleted matter is an optionally additional matter based on a description, etc.).

Incidentally, if an amendment that changes a matter specifying the invention leads to addition of a matter which extends beyond the scope of matters described in the original
description, etc., the amendment is not considered to be within the scope of matters described in the original description, etc..

[Example of an Unacceptable Amendment]

Example 1: Amendment altering a matter specifying the invention

The amendment changes the language "when the control means is not put into normal operation" to "based on the negation signal in a case where the control means is not put into normal operation."

(Explanation)

In this example, the original description, etc. merely states that when a control means fails to put into normal operation, absence of a positive signal lasts for a certain period of time and then a resetting signal starts. This amendment adds a situation where the resetting signal starts on the basis of a "negation signal" different from the absence of a positive signal, but this situation is not mentioned in the original description, etc..

(Reference: Tokyo High Court Decision dated on Nov. 16, 2001 (Heisei 12 (Gyo-Ke), No.221, "Apparatus for controlling a Pachinko Machine")

[Example of an Acceptable Amendment]

Example 2: Amendment deleting a part of matters specifying the invention

The amendment changes the language "an impurity dispersion area constitutes a source and a drain" to "an impurity area constitutes a source and a drain" in the claim(s) on the invention concerning a semiconductor device consisting of a double-hetero compound. (Explanation)

In this example, the heart of the invention is that a semiconductor layer of an active area consists of a specific structure and materials. Claims as filed happens to recite that the source and drain is limited to one having an "impurity dispersion area", but it is not limited to the one using diffusion, because the language of the description inherently indicates that any impurity dispersion area is sufficient for the purpose of the invention. Therefore, the amendment does not affect technical significance of the invention.

Example 3: Amendment limiting a part of matters specifying the invention

The amendment changes the language "a recorder or player device" in the claim to "a disk recorder or player device".

(Explanation)

In this example, a CD-ROM player is described in the original description, etc. as an embodiment. In light of the rest of the description (for example, this invention reduces battery power consumption by adjusting the power supply when the recorder and/or player device receives no operation command), it is evident that the invention is applicable not only to a CD-ROM player but also to any other disk recorder and/or player.

(Reference: Tokyo High Court Decision dated on Dec. 19, 2002 (Heisei 10 (Gyo-Ke), No.298, "A Power Supply Circuit using Battery"))

Example 4: Amendment limiting a part of matters specifying the invention

The amendment changes the word "work piece" in the claims to "rectangular work piece"

(Explanation)

In this example, the original description, etc. states that a glass base, wafer and other work pieces is coated with the coating device. Almost all of the examples present in

the description are virtually related to a square shape, but it is evident that the typical shape of a glass base is a rectangular shape. An amendment changing "work piece" to "rectangular work piece" is therefore considered to be within the scope of matters described in the original description, etc..

(Reference: Tokyo High Court Decision dated on May 23, 2001 (Heisei 11 Gyo-Ke), No.246, "A Device of Coating")

(2) Claims in Markush-Type

① When a claim is described in an alternative form such as the Markush-Type, an amendment deleting a part of the alternatives is acceptable if the rest of matters specifying the invention is within the scope of matters described in the original description, etc..

2 For example, where chemical substances are described in the form of a combination of many alternatives in the original description, etc., if another specific combination of alternatives within the scope of the multiple alternatives in the original description, etc. is added to the claims, or if the specific combination of alternatives remains in the claims as a result of deletion of other alternatives, sometimes the specific combination may not be disclosed in the original description, etc..

Especially in cases where only one of the multiple alternatives for a substitution group as of the filing is left as a result of an amendment, namely the other alternatives no longer exist, unless the original description, etc. discloses the specific combination of alternative (refer to the example ③ below), such an amendment is not acceptable because the disclosure in the original description shows no intention of selecting that specific alternative.

③ On the other hand, as a result of an amendment which deletes alternatives so as to leave the alternatives that are supported by the embodiments, there may be cases where such alternatives are deemed to be described as of the filing, considering from the whole description, etc. including the embodiments.

For example, where a group of chemical substances is described in the original description, etc., in the form of a combination of substitutions with multiple alternatives, an amendment of a claim is acceptable only if the group, which is formed by a combination of specific alternatives corresponding to a "single chemical substance" described in the embodiments, etc. in the original description, etc., is left in the claim.

(3) Limitation of Numerical Range

An amendment adding a limitation of numerical range is acceptable, provided that the numerical range is within the scope of matters described in the original description, etc..

For example, if there is a clear description such as "preferably between $24 - 25^{\circ}$ C" in a detailed description of the invention, such numerical range may be introduced in claims. The embodiment at the points of " 24° C" and " 25° C" does not necessarily support the amendment adding numerical range " $24 - 25^{\circ}$ C", but if the specified scope of " $24 - 25^{\circ}$ C" is deemed to be referred to by considering the whole description, etc. as filed (for instance, " 24° C" and " 25° C" are respectively deemed to be described as the boundary value of the upper and lower limits with a certain continuous numerical range, considering the entire description of the problems to be solved by the invention and the effect of the invention), the amendment adding such numerical range is acceptable because the numerical range is deemed to be described as of the filing. This case is distinguishable from one where no embodiment with numerical range is provided in a description.

(In the case where numerical values regarding an amendment are derived from plural parts of a description: Tokyo High Court Decision dated on Dec. 11, 2001 (Heisei 13 (Gyo Ke), No.89, "A Deep Ultraviolet Ray Lithography")).

For instance, an amendment setting a new numerical range with a lower limit different from the range specified in former claims is acceptable, if the lower limit is specified in the original description, etc. and the new numerical range is within the numerical range specified in the original description, etc..

(4) Disclaimer

The word "disclaimer" stands for a claim expressly stating that a part of subject matter included in a claimed invention is excluded from the claim.

The disclaimer which excludes some matters described in the original description, etc. through an amendment while retaining original expressions in a claim before the amendment is acceptable, provided that the disclaimer after the exclusion remains within the scope of matters described in the original description, etc..

The amendments described in (i) and (ii) below, which are both based on a disclaimer, are exceptionally deemed to be within the scope of matters described in the original description, etc..

(i) An amendment excluding only overlaps between a claimed invention and the prior art, which may result in loss of novelty or the like (Article 29(1)(iii), Article 29bis or Article 39) while retaining an original expression described in a claim before the amendment.

(ii) An amendment excluding the term "human being," while retaining an original expression in a claim before the amendment, in case the application fails to meet the requirement in the main paragraph of Article 29 of the Patent Act or is refused under Article 32 of the Patent Act because the invention in the claim originally encompasses "human being."

(Explanation)

The "disclaimer" in the case of (i) above means a claim excluding subject matter described in distributed publications or in the description, etc. of an earlier filed application (including subject matter virtually equivalent to the written matter) as the prior art under Article 29(1)(iii), Article 29bis or Article 39, while retaining original expressions of matter in claims before the amendment.

- (Note 1) An invention in an application containing a disclaimer may be patented, in a case where it has an inventive step because it is remarkably different in technical ideas over the prior art but it accidentally lacks novelty by overlapping with the art. Otherwise a disclaimer hardly overcomes a rejection on the grounds of lack of an inventive step.
- (Note 2) If a large part or many parts of an invention in claims are excluded in a disclaimer, attention should be paid, because sometimes a single invention cannot definitely be conceived from a single claim.

The disclaimer in the case of (ii) is a claim stating that the term "human being" is excluded from subject matter in claims, while an original expression of matters described in claims before the amendment remains.

The reasons for this exceptional treatment are given below:

① If an amendment of making a disclaimer were not allowed for an invention, which accidentally comes to lack novelty etc. by overlapping with the prior art, the invention could not be properly protected. Even if matters written as a prior art are excluded from the original claims, it does not inflict unforeseen disadvantages on third parties.

2 Where the inclusion of "human being" in a claim leads to a failure to meet the requirement in the main paragraph of Article 29 of the Patent Act or constitutes a reason for refusal under Article 32 of the Patent Act, an amendment excluding "human being" indicates a definite range of exclusion and leads to the elimination of the reason for refusal. Furthermore, it does not make the invention, for which a patent is sought, indefinite.

(Concrete examples)

- Example for (i): Suppose that a "washing agent for an iron plate whose main ingredient is inorganic salts containing sodium ion as a cation" is specified in claims before making an amendment and that an invention of "a washing agent for an iron plate whose main ingredient is inorganic salts containing carbon trioxide ion as an anion" is mentioned in a prior art and the sodium ion used as a cation is disclosed as a concrete example. It is acceptable in this case to make an amendment specifying "inorganic salt containing sodium ion (except when carbon trioxide is used as an anion)" to exclude the matter concerning a prior art from claims.
- Example for (ii): Suppose that "a mammal characterized in that a certain polynucleotide with DNA Sequence No.1 is introduced into the chromosomes of the somatic cells of mammals and that the same polynucleotide was regenerated in those cells" is specified in the claims of an application before an amendment is made. "Mammals" essentially include "human beings" unless the detailed description of the invention clearly states that human beings are excluded. An invention directed to an object including human beings might be harmful to public order and immorality, and therefore violates Article 32 of the Patent Act. An amendment to change the language in claims to "mammals excluding human beings" in order to exclude human beings from the claims is acceptable even if human beings are not supposed to be excluded in the original description, etc..

5. Amendment of a Detailed Description of the Invention

5.1 General Principle

After making an amendment, if matters described in the detailed description of the invention extend beyond the matters disclosed in the original description, etc., such amendment is not acceptable.

5.2 Detailed Discussion

(1) Addition of the content of prior art documents

<<The Guideline applied to the application whose filing date is on or after January 1, 2009 (In case of divisional applications and converted applications, the filing date is actual filing date.)>>

To provide description of the information on prior art documents (titles of publications concerning a related invention and any other information about location relating to an invention disclosed in prior publications) is required by the provision of Article 36(4)(ii) of the Patent Act. An amendment adding the information on prior art documents and the content of documents does not usually inflict unforeseeable disadvantages on third parties. Hence, an amendment adding the information on prior art documents to the detailed description of the invention is acceptable. And an amendment adding the content of documents to the column of [Background Art] in the detailed description of the invention such as a comparison with the invention of the application, adding information to carry out the invention or adding the content of prior art documents for the purpose of eliminating flaws to meet the requirement of Article 36(4)(i) of the Patent Act.

<<The Guideline applied to the application whose filing date is on or before December 31, 2008 (In case of divisional applications and converted applications, the filing date is actual filing date.)>>

To provide description of the information on prior art documents (titles of publications concerning a related invention and any other information about location relating to an invention disclosed in prior publications) is required by the provision of Article 36(4)(ii) of the Patent Act. An amendment adding the information on prior art documents as well as the content of documents to the column of [Background Art] in a detailed description of the invention does not usually inflict unforeseeable disadvantages on third parties. Hence, such an amendment is acceptable. But it is not acceptable to make an amendment adding information on an evaluation of an invention such as a comparison with the invention of the application, adding information to carry out the invention or adding the content of prior art documents for the purpose of eliminating flaws to meet the requirement of Article 36(4)(i) of the Patent Act.

(2) Addition of concrete examples

Generally, an amendment adding concrete examples of an invention or materials extends beyond the matters described in the original description, etc.. For instance, it is not acceptable to amend a patent application concerning a rubber composition consisting of plural ingredients by adding information that "a particular ingredient may be added." Similarly, if a device equipped with an elastic support is described in the original description, etc. without disclosing a specific elastic support, it is not acceptable to add information that "a helical spring may be used as the elastic support."

(3) Addition of effect of inventions

Generally, an amendment adding another effect of an invention extends beyond the matters described in the original description, etc.. However, if the additional effect is evident from the structure, operation and function of the invention explicitly described in the original description, etc., such an amendment is acceptable.

(4) Addition of unrelated or inconsistent matter

Needless to say, it is not acceptable to make an amendment adding matter unrelated or inconsistent with the content of the original description, etc..

(Reference: Tokyo High Court Decision dated on Dec. 17, 2001 (Heisei 12 (Gyo Ke), No.396, " A Mid-passing Fishing Rod "))

(5) Resolution of inconsistent description/correction of ambiguous description

If two or more inconsistent parts are present in a description, etc. and the correct matter is evident to a person skilled in the art from the content of the original description, etc., an amendment leaving the correct one and eliminating the rest of them is acceptable. If matter is ambiguous in itself but its inherent meaning is evident to a person skilled in the art from the content of the original description, etc., an amendment clarifying the ambiguous matter is acceptable.

6. Amendment of Drawings

An amendment of drawings is acceptable if it is done within the scope of matters described in the original description, etc.. But it should be noted that drawings after an amendment often contain matters extends beyond those described in the original description, etc.. It is to be noted especially when photographs attached to the request instead of drawings as filed are replaced after filing. Furthermore, it is deemed that drawings do not necessarily reflect actual measurements.

7. Explanation by an Applicant

(1) An applicant who made an amendment is encouraged to underline the words, passages, etc. to expressly indicate amended parts, and to explain that the amendment is done within the scope of matters described in the original description, etc.. Such explanation is required in his or her written statement if the amendment is made before examination or in his or her written opinion if the amendment is made in response to a notice of reasons for refusal.

(Explanation)

Because an applicant knows the matters described in the original description, etc. and the content of the amendment thoroughly, they are required to fully explain that the amendment is done within the scope of the matters described in the original description, etc. in a written statement or a written opinion when they make an amendment. Unless doubt as to whether it is done within the scope of the matters described in the original description, etc. is cleared, the amendment is not considered within the scope.

In the case of the "elastic support" in 3. (5), for instance, the amendment is acceptable, provided the applicant successfully convinces that the "elastic support" is readily construed to mean a "helical spring" by a person skilled in the art when taking into consideration the drawings and other documents, and the doubt as to whether the

amendment is done within the scope of features disclosed in the original description, etc. is cleared. Otherwise, the amendment is not deemed to be within the scope.

(2) Even if a patent is granted for an application including matters extends beyond the matters described in the original description, etc., the applicant must bear in mind that the patent contains a potential ground for invalidation.

(3) If no explanation is given by an applicant and the relationship between the content of the amendment and the matters described in the original description, etc. is not understandable, an examiner may notice a reason for refusal or the like on the grounds that the amendment is deemed to extend beyond the matters described in the original description, etc..

Section II Amendment that Changes a Special Technical Feature of an Invention

1. Relevant Provisions

Patent Act Article 17bis(4) reads:

In addition to the case provided in the preceding paragraph, where any amendment of the scope of claims is made in the cases listed in the items of paragraph (1), the invention for which determination on its patentability is stated in the notice of reasons for refusal received prior to making the amendment and the invention constituted by the matters described in the amended scope of claims shall be of a group of inventions recognized as fulfilling the requirements of unity of invention set forth in Article 37.

Patent Act Article 37 reads:

Two or more inventions may be the subject of a single patent application in the same application provided that, these inventions are of a group of inventions recognized as fulfilling the requirements of unity of invention based on their technical relationship designated in Ordinance of the Ministry of Economy, Trade and Industry.

Patent Act Enforcement Order Article 25octies

(1) The technical relationship defined by an ordinance of the Ministry of Economy, Trade and Industry under Patent Act Article 37 means a technical relationship in which two or more inventions must be linked so as to form a single general inventive concept by having the same or corresponding special technical features among them.

(2) The special technical feature provided in the former Paragraph stands for a technical feature defining a contribution made by an invention over the prior art.

(3) The technical relationship provided in the first Paragraph shall be examined, irrespective of whether two or more inventions are described in separate claims or in a single claim written in an alternative form.

If an amendment does not meet the requirements under Article 17bis(4), it shall constitute a reason for refusal (Article 49(1)). In addition, an amendment may be subject of a dismissal of amendment if the amendment is made in response to a notice of reasons for refusal given along with a notice under Article 50bis, made in response to the final notice of reasons for refusal, or made at the time that an appeal is demanded against the examiner's decision of refusal and does not meet the above-mentioned requirements (Article 53, Article 159(1), Article 163(1)).

2. Purport of Article 17bis(4)

Inventions that may be the subject of a single patent application in the same application are limited to those that fulfill the requirements of unity of invention (Article 37). However, if claims can be amended freely beyond such limitation after reasons for refusal are notified, there may be amendments that require prior art search and examination to be conducted again since the result of prior art search and examination conducted until then cannot be effectively used in the examination after the notice of reasons for refusal is given. If such an amendment is made, it will not only obstruct the prompt and precise granting of rights but also prevent ensuring of sufficient fairness in the handling of applications. Therefore, regarding amendments to claims after a notice of reasons for refusal has been given, the same limitation was set as the limitation on the scope of inventions that may be the subject of a patent application by single request.

3. Basic Concept

Article 17bis(4) is a provision to prohibit making an amendment whereby inventions, of which patentability has been determined in a notice of reasons for refusal, in the claims before the amendment, and inventions amended after the notice of reasons for refusal is given do not meet the requirements of unity of invention because they do not have any same or corresponding special technical features (hereinafter referred to as the "amendment that changes special technical features of the inventions"). This provision makes the requirements of unity of invention extend to claimed inventions after amendment.

For this reason, whether or not an amendment that changes special technical features of the inventions is determined based on whether or not all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment meet the requirements of unity of invention as a whole.

In addition, where two or more notices of reasons for refusal have been given before an amendment, the above determination is made based on whether all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the first notice of reasons for refusal and all other notices of reasons for refusal given before the amendment and all of the inventions in the claims after the amendment meet the requirements of unity of invention as a whole.

4. Procedure of Examination

4.1 Basic Procedure of Examination

(1) Whether or not an amendment that changes special technical features of the inventions is determined based on whether or not all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment have the same or corresponding special technical feature. Whether or not such inventions have the same or corresponding special technical feature is determined by following Part I, Chapter 2 "Requirements of unity of Invention." However, if the invention first mentioned in the claims before the amendment does not have any special technical feature, examination will proceed by following 4.3 below.

If all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment have the same or corresponding special technical feature, all inventions after the amendment will be the subject of the examination on requirements other than the requirements under Article 17bis(4). (Hereinafter "subject of the examination on the requirements other than the requirements other than the requirements other than the requirements under Article 17bis(4)" is merely referred to as "subject of the examination" in this Article.)

On the other hand, if the same or corresponding special technical feature cannot be found between all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment, inventions that do not have any special technical feature that is the same as or corresponding to the technical feature of all of the inventions that were examined (only if the inventions have the same or corresponding technical feature between the invention first mentioned in the claims before the amendment) in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment (hereinafter referred to as the "inventions whose special technical features were changed") are not the subject of the examination, and other inventions will be the subject of the examination. In this case, a reason for refusal on the grounds of violation of the requirements under Article 17bis(4) shall be notified along with the result of examination on inventions that become the subject of the examination.

(2) In making a determination as mentioned in (1) above, a special technical feature shall be understood based on description, claims and drawings (hereinafter referred to as "description, etc."), common general technical knowledge as of the filing, and the prior art cited in the notice of reasons for refusal before the amendment.

(Explanation)

If whether or not all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment have the same or corresponding special technical feature could be determined based on the prior art which have not been presented to the applicant before the amendment, in addition to description, etc., common general technical knowledge as of the filing and the prior art cited in a notice of reasons for refusal before the amendment, the applicant who has received the notice of reasons for refusal would not be able to sufficiently predict the scope of acceptable amendment which does not change any special technical features of the inventions when he/she considers an amendment to make. If an amendment is made under such circumstances, the final notice of reasons for refusal to the effect that the amendment that changes special technical features of the inventions will be given by following "Part IX: Procedure of Examination." This may result in closing the door to amendment to the invention which should have been patented otherwise. Therefore, the guidelines mentioned above shall be adopted.

4.2 Example of Basic Procedure of Examination

Example 1: [Claims before the amendment]

Claim 1: A cell-phone handset comprising; means for receiving TV broadcasts and a means for recording that can compress and record received TV broadcast data

[Claims after the amendment]

- Claim ①: A cell-phone handset comprising; means for receiving TV broadcasts and a means for recording that can record received TV broadcast data at a different compression rate depending on the content of the broadcast
- Claim ②: A cell-phone handset that can receive broadcasts of emergency warnings comprising; means for receiving TV broadcasts, and a

power supply control means that intermittently supplies power to said means for receiving TV broadcasts during standby

Cited document 1 describes a cell-phone handset comprising; means for receiving TV broadcasts, and cited document 2 describes a portable information device with a means for recording that can compress and record image data. Therefore, in the first notice of reasons for refusal, the examiner notified the applicant of a reason for refusal on the grounds of lack of inventive step based on cited documents 1 and 2. Through an amendment made after the above-mentioned notice of reasons for refusal was given, claimed inventions were changed to the invention claimed in claim ①, in which "a means for recording that can compress and record received TV broadcast data" in claim 1 before the amendment was restricted to "means for recording that can record received TV broadcast data" a different compression rate depending on the content of the broadcast," and the invention claimed in claim ② that can receive broadcasts of emergency warnings.

(Explanation)

Out of the technical features common to the invention claimed in claim 1 before the amendment and the invention claimed in claim ① after the amendment, "cell-phone handset comprising means for receiving TV broadcasts" does not make any contribution to the prior art in light of cited document 1. However, "cell-phone handset comprising means for receiving TV broadcasts and a means for recording that can compress and record received TV broadcast data" makes a contribution to the prior art in light of common general technical knowledge as of the filing and cited documents 1 and 2. Therefore, it is a special technical feature. Consequently, the invention claimed in claim 1 before the amendment and the invention claimed in claim ① after the amendment meet the requirements of unity of invention.

On the other hand, the invention claimed in claim (2) after the amendment does not meet the requirements of unity of invention in relation to the invention claimed in claim 1 before the amendment since claim (2) does not have said special technical feature which the invention claimed in claim 1 before the amendment and the invention claimed in claim (1) after the amendment have in common.

Therefore, only the invention claimed in claim ① after the amendment is the subject of the examination, and in the second (final) notice of reasons for refusal, a reason for refusal on the grounds of violation of the requirements under Article 17bis(4) is notified along with the result of examination on the invention claimed in claim ①.

Example 2: [Claims before the amendment]

- Claim 1: Quick-drying ink for an ink-jet printer containing specific component X
- Claim 2: An ink-jet printer characterized by having a nozzle of a special shape that enables the user to adjust the amount of ink being dropped

[Claims after the amendment]

Claim ①: An ink-jet printer characterized by having a nozzle of a special shape that enables the user to adjust the amount of ink being dropped

Although the invention claimed in claim 1 before the amendment has a special technical feature, that is, "specific component X," the inventions claimed in claims 1 and 2 before the amendment do not meet the requirements of unity of invention since the

invention claimed in claim 2 before the amendment does not have said special technical feature. Therefore, in this case, the invention claimed in claim 1 before the amendment was the subject of the examination, and a reason for refusal on the grounds of violation of the requirements of unity of invention was notified in the first notice of reasons for refusal along with a reason for refusal on the grounds of lack of inventive step. Through an amendment after the above-mentioned notice of reasons for refusal, claim 1 before the amendment was deleted, and claim 2 before the amendment was moved to claim after the amendment.

(Explanation)

The invention claimed in claim after the amendment does not meet the requirements of unity of invention in relation to the invention claimed in claim 1, which was examined in terms of the requirements for patentability, such as novelty and inventive step, before the amendment, as already indicated in the first notice of reasons for refusal. Therefore, the invention claimed in claim after the amendment is not the subject of the examination, and in the second (final) reasons for refusal, only a reason for refusal on the grounds of violation of the requirements under Article 17bis(4) is notified.

4.3 Procedure of Examination in Case where the Invention First mentioned in the Claims before an Amendment Does Not Have Any Special Technical Feature

If the invention first mentioned in the claims before an amendment does not have any special technical feature, no same or corresponding special technical feature can be found between said invention and an invention after the amendment. Therefore, it cannot be said that the requirements of unity of invention are met in the relationships between all of the inventions that were examined in terms of the requirements for patentability, such as novelty and inventive step, in the claims before the amendment and all of the inventions in the claims after the amendment.

However, since Article 17bis(4) stipulates that the scope of possible amendment of claims shall be the same as the scope prescribed in Article 37, even in such a case, claimed inventions after the amendment will exceptionally be the subject of the examination without questioning the requirements under Article 17bis(4) if they are inventions within the certain scope mentioned in 4.3.1 or 4.3.2 below. This idea is same as that of "Part I: Chapter 2. Requirements of Unity of Invention," in which the scope of inventions that exceptionally become the subject of the examination is determined without questioning the requirements under Article 37 in consideration of the convenience of applicants, etc..

4.3.1 Where an Invention with a Special Technical Feature Was Found among Inventions in the Claims before the Amendment that Were the Subject of the Examination

Where an invention with a special technical feature was found among inventions in the claims before the amendment that were examined in terms of the requirements for patentability, such as novelty and inventive step, by following to of the [Procedure for deciding the subject of the examination] in 4.2 in Part I, Chapter 2 "Requirements of unity of Invention," inventions in the claims after the amendment, in the same category, which include all matters specifying the invention with a special technical feature before the amendment (see, Note), will be the subject of the examination without questioning the requirements under Article 17bis(4). On the other hand, inventions in the claims after the

amendment which do not include all of the matters specifying the invention with a special technical feature before the amendment will not be the subject of the examination, and a notice of reasons for refusal on the grounds of violation of the requirements under Article 17bis(4) shall be given.

In addition, other inventions of which examination has been substantially completed as a result of examination on the above-mentioned subject of the examination and inventions of which examination has been substantially completed through examination conducted before the amendment are also added to the subject of the examination without questioning the requirements under Article 17bis(4).

(Note) The cases where an invention "includes all matters specifying the invention" includes cases of making some or all matters specifying the invention into a subordinate concept and cases of further limiting numerical ranges when some of the matters specifying the invention are numerical ranges, in addition to the cases of adding another matter specifying an invention to the invention.

Example:

The inventions claimed in claims 2 and 3 before the amendment are those in the same category that include all matters specifying the invention claimed in 1 or 2 respectively. The inventions claimed in claims 1 and 2 before the amendment do not have any special technical feature, and a special technical feature was found in the invention claimed in claim 3 before the amendment. Regarding this application, the first notice of reasons for refusal was given for the inventions claimed in claims 1 and 2 based on lack of novelty and for the invention claimed in claim 3 based on lack of inventive step. Through amendment after said notice of reasons for refusal was given, claimed inventions were changed to inventions claimed in claim 3 before the amendment, and invention claimed in claim , which does not include some of the matters specifying the invention claimed in claim 3.



Claims in shaded boxes include all matters specifying the invention claimed in claim 3 with a special technical feature.

(Explanation)

In this example, the inventions claimed in claims to after the amendment, which include all matters specifying the invention claimed in claim 3 before the amendment, will be the subject of the examination without questioning the requirements under Article 17bis(4) since the invention claimed in said claim 3 has a special technical feature. In addition, the invention claimed in claim after the amendment will not be the subject of the examination since it does not include some of the matters specifying the invention claimed in claim 3 before the amendment.

Regarding this application, the examiner shall notify the applicant of reasons for refusal on the grounds of violation of Article 17bis(4) for the invention claimed in claim after the amendment and the result of examination on inventions claimed in claims to after the amendment in the second notice of reasons for refusal.

4.3.2 Where All Claimed Inventions before an Amendment that Were the Subject of the Examination Do Not Have Special Technical Features

Where all of the inventions in the claims before the amendment that were the subject of the examination by following [Procedure for deciding the subject of the examination] in 4.2 in Part I, Chapter 2 "Requirements of unity of Invention" do not have any special technical feature, the existence of a special technical feature will be determined with respect to inventions in the claims after the amendment through [Procedure for deciding the subject of the examination after the amendment] below. Thereby the subject of the examination shall be decided.

[Procedure for deciding the subject of the examination after the amendment]

① Following the procedure for deciding the subject of the examination in 4.2 in Part I, Chapter 2 "Requirements of unity of Invention," the existence of a special technical feature is assessed with respect to the invention to which the smallest claim number is attached out of the inventions claimed after the amendment in the same category, which include all matters specifying the invention before the amendment for which the existence of a special technical feature has been assessed in the last place.

② Where there is no special technical feature in the inventions in the claims for which the existence of a special technical character have already been assessed, the existence of a special technical feature will be assessed by selecting an invention to which the smallest claim number is attached out of inventions in the claims in the same category, which include all matters specifying the invention in the claim for which the existence of a specific technical feature was just assessed.

③ The procedure mentioned in is repeated until an invention with a special technical feature is found. If an invention with a special technical feature is found, inventions in the claims after the amendment for which the existence of a special technical feature has been assessed until then and inventions in the same category that include all matters specifying said invention with a special technical feature will be the subject of the examination.

(4) In the procedure mentioned in and , if the claimed invention for which the existence of a special technical feature is to be assessed next is an invention that has made by adding a technical feature that has little technical relevance to the invention for which the existence of a special technical feature has been just assessed (including the invention for which the existence of a special technical feature has been assessed in the last place in the

inventions in the claims before the amendment), and the specific problem to be solved by the invention, which is understood from said technical feature, also has little relevance, the inventions for which the existence of a special technical feature has been assessed until then will be the subject of the examination without further assessing the existence of a special technical future.

(5) Other inventions of which examination has been substantially completed as a result of examination on inventions that were the subject of the examination in (3) or (4) (for example, inventions that differ only in terms of category expression) will also be added to the subject of the examination.

6 Furthermore, inventions of which examination has been substantially completed through examination before the amendment will also be added to the subject of the examination.

In the above procedure, where a matter specifying the invention is expressed by alternatives in a claim (including multiple dependent claims), such a claim is treated as if each invention understood by choosing each alternative is described as a separate claim in the order of said alternatives. In determining if the claim includes all matters specifying an invention, it doesn't mater whether a claim is formally an independent claim or a dependent claim.

Inventions in the claims after the amendment that become the subject of the examination through the above procedure will be the subject of the examination without questioning the requirements under Article 17bis(4). If any invention that does not become the subject of the examination is included in the claims, a reason for refusal shall be notified on the grounds of violation of Article 17bis(4).

Example:

Inventions claimed in claims 2 and 3 before the amendment are inventions in the same category, which include all matters specifying the invention claimed in claims 1 and 2 respectively. The inventions claimed in claims 1 to 3 before the amendment do not have any special technical feature. For this application, the first notice of reasons for refusal was given for the inventions claimed in claims 1 to 3 based on the lack of novelty. Through amendment after said notice of reasons for refusal was given, the claims were amended to to claims , which include all matters specifying the invention of claim 3 before the amendment. Claims and after the amendment include all matters specifying the invention claimed in claim after the amendment. A technical feature added to the after the amendment has close technical relevance to the invention claimed in claim invention claimed in claim 3 before the amendment.



(Explanation)

In this example, firstly, the existence of a special technical feature is assessed for claim after the amendment. The claim includes all matters specifying the invention claimed in claim 3 before the amendment and the smallest claim number is attached thereto. Since a special technical feature is found in said claim , the inventions claimed in claims

and , which include all matters specifying the invention claimed in said claim , are the subject of the examination without questioning the requirements under Article 17bis(4). Claim after the amendment is not the subject of the examination since it is not a claim to which the smallest claim number is attached in the claims that include all matters specifying the invention claimed in claim 3 before the amendment without any special technical feature and it also does not include some of the matters specifying the invention claimed in claim after the amendment with a special technical feature.

Regarding this application, the examiner shall notify the applicant of the reasons for refusal on the grounds of violation of Article 17bis(4) for the invention claimed in claim after the amendment and the result of examination on the inventions claimed in claims to

after the amendment in the second notice of reasons for refusal.

5. Remarks

(1) The requirements under Article 17bis(4) make the requirements of unity of invention extend to the inventions claimed after amendment. The determination on whether or not the requirements under Article 17bis(4) are met includes the determination on whether or not the requirements of unity of invention are met among the claims after amendment. Therefore, the determination on the requirements under Article 37 can be omitted after the first notice of reasons for refusal.

(2) In light of what is indicated in 4.1 or 4.3 above, if there is a claimed invention that does not become the subject of the examination, the invention shall be clearly indicated in a notice of reasons for refusal along with reasons thereof.

(3) If it is clear that a reason for refusal notified before the amendment has not been dissolved yet in the inventions described in the claims after the amendment, the examiner may render a decision of refusal notwithstanding "4. Procedure of Examination."

(4) An amendment that changes technical features of the inventions (Article 17bis(4)) constitutes a reason for refusal (Article 49) but does not constitute a ground for invalidation (Article 123). This is because there is no substantial defect in the invention but only a formal defect (two or more patent applications should have been filed to receive examination on the inventions after the amendment) and the third parties' benefits will thus not be directly harmed to a significant extent even if the invention is patented as it is. Considering such circumstances, the requirements under Article 17bis(4) shall not be applied in an unnecessarily strict manner to other inventions of which examination has been substantially completed as a result of examination on inventions of which examination has been substantially completed through examination before the amendment, and inventions for which it is not easy to determine whether a special technical feature thereof has been changed.

Section III Amendment of Claims after Final Notice of Reasons for Refusal

1. Basic Concept

Patent Act Article 17bis (5) was introduced with the purport that the amendment to the claims to the final notice of reasons for refusal shall be made within the degree that the examination results already obtained are effectively usable for the purpose of establishing such examination procedures that enable the prompt and precise grant of patent rights, taking into consideration the fundamental objective of the patent system to fully protect inventions. Amendments against this provision, different from those adding new matter, do not cause substantial defects to the content of the invention, thus the amendment shall not retroactively be dismissed after the decision of refusal or the decision to grant a patent even if amendments against this provision were overlooked. Consequently, the nature of Article 17bis (5) differs from that of Article 17bis (3). Taking full consideration of the purport of this provision, Article 17bis (5) should not be strictly applied to such inventions as are deemed to be protected in cases where the examination results already obtained are effectively usable for the examination to be made after notifying the final notice of the reasons for refusal.

2. Practical Application

2.1 Prohibition of Addition of New Matter (Patent Act Article 17bis (3))

"...any amendment of the description, scope of claims or drawings... shall be made within the scope of the matters described in the description, scope of claims or drawings originally attached to the application..."

The judgment on whether or not the amendment meets the requirements of Article 17bis (3) shall be made by following "Secion 1. New Matter."

2.2 Amendment that Changes a Special Technical Feature of an Invention (Patent Act Article 17bis (4))

"...where any amendment of the scope of claims is made in the cases listed in the items of paragraph (1), the invention for which determination on its patentability is stated in the notice of reasons for refusal received prior to making the amendment and the invention constituted by the matters described in the amended scope of claims shall be of a group of inventions recognized as fulfilling the requirements of unity of invention set forth in Article 37."

The judgment on whether or not the amendment meets the requirements of Article 17bis (4) shall be made by following "Secion 2. Amendment that Changes a Special Technical Feature of an Invention."

3. Cancellation of Claim(s) (Patent Act Article 17bis (5)(i))

3.1 Purport

The cancellation of a part of the plural number of claims is allowable, since it does not cause the necessity of making a second examination or trial examination.

3.2 Practical Application

Not only the cancellation of a part of claims but also an formal amendment of other claims accompanying the former shall be deemed as an amendment for the cancellation of claims.

For example:

Changes that inevitably occur together with the cancellation of claims such as:

changes in the cited number of other claims that have cited the cancelled claim; or changes from a dependent form to an independent form.

4. Restriction of Claim(s) (Patent Act Article 17bis (5)(ii) and (6))

4.1 Purport

Among the amendments corresponding to restriction of the claim(s), since the amendment for restricting a matter specifying the invention without changing the field of industrial applicability and the problem to be solved by the invention does not drastically alter the subject of the examination as well as the trial examination, and the examination results already obtained are generally utilized, such amendment is treated as allowable.

However, even when this type of amendments are made, there may be cases where a second reasons for refusal shall be notified if the invention in the amended claim is not to be granted a patent. In such cases there may arise a need for another examination or trial examination if an amendment is made in response to the second notice of reasons for refusal. Consequently, from the viewpoint of securing the promptness of the examination and the fairness among patent applications, the amendment is limited in such cases where patents are to be granted.

4.2 Requirements for Restriction of Claim(s)

For the amendment of the claim(s) to fall under Article 17bis(5)(ii), the following requirements shall be satisfied:

- (1) restriction of the claim(s);
- (2) restriction of matters specifying the invention claimed in the claim(s) before the amendment (hereinafter referred to as "invention before the amendment"); and
- (3) the industrial applicability and problems to be solved by the inventions after amendment are the same as those before the amendment).

(Explanation)

The requirements mentioned in the parenthesized part of 17bis(4)(ii) provides that the amendment for the restriction of all or some of the matters specifying the invention before the amendment shall be made so that the field of the industrial applicability and the problem to be solved by the invention is the same as those before the amendment. In another word, the inventions before and after the amendment must have the same industrial applicability and problems to be solved.

4.3 Practical Application

4.3.1 Restriction of Claim(s)

Regardless of whether or not the requirements mentioned in the parenthesized part are satisfied, the amendment which enlarges the claim(s) does not fall under Article 17bis(5)(ii), because the amendment does not correspond to the restriction of the claims.

Since "the claims" are a collection of claims specifying the invention, the judgment on "whether the amendment restricts the claim(s)" shall be made for each claim in general.

Concrete examples deemed as not correspond to restriction of the claim(s):
 deletion of a part of matters specifying an invention described in series;
 addition of an element described in alternative form;
 amendment to increase the number of claims (excluding the cases mentioned in (2) below).

 (2) Concrete examples deemed as corresponding to restriction of claim(s): deletion of an element described in alternative form; serial addition of matters specifying the invention; change from a generic concept to a more specific concept; reduction of the number of claims cited in the multiple dependent form claims; Example: Amendment of the claim from "air conditioners comprising a mechanism A claimed in one of the claims from 1 to 3" to "air conditioners comprising a mechanism A claimed in claim 1 or claim 2."
 change of the multiple dependent form claims citing n claims into claims the number of which is (n-1) or below (n-1).
 Example: Amendment of the claim from "air conditioners comprising a mechanism

Example: Amendment of the claim from "air conditioners comprising a mechanism A claimed in one of the claims from 1 to 3" to two separate claims, "air conditioners comprising a mechanism A claimed in claim 1," and "air conditioners comprising a mechanism A claimed in claim 2."

4.3.2 Restriction of Matters Necessary to Specify the Invention

(1) Interpretation of "matters necessary to specify the invention"

Since "matters necessary to specify the invention" as laid down in 17bis(5)(ii) are matters described in the claim(s) before the amendment, the finding thereof shall be based on the description of the claim(s) before the amendment.

In the practical application of Article 36(4)(i), if deemed necessary to carry out the claimed invention, the operation (function/role) of matters necessary to specify the invention shall be described in the detailed description of the invention.

Therefore, "matters necessary to specify the invention" as stated in Article 17bis(5)(ii) must be found based on the claims before the amendment in correspondence with the function described in the description and drawings.

(2) Interpretation of "restriction"

The amendment to "restrict" "matters necessary to specify the invention" is interpreted as follows.

To amend one or more "matters necessary to specify the invention" in the claim before the amendment to "matters necessary to specify the invention" of a more specific concept.

"Matters specifying the invention" having the operation different from the operation below is usually not to be deemed as a more specific conception of "matters specifying the invention" which specify a product in operative terms ("function-realization means" etc.).

To delete a part of alternatives in cases where "matters necessary to specify the invention" is expressed alternatively in such as Markush-Type.

(3) Method of judgment

The judgment of whether nor not the amendment is restricting "matters necessary to specify the invention" shall be made by comparing "the matters specifying the invention" before the amendment with those after the amendment.

4.3.3 Same Industrial Applicability and Problems to be Solved

(1) Finding of "problems to be solved" and "industrial applicability"

In finding "problems to be solved" and "industrial applicability," the problems to be solved and the field of industrial applicability shall be concretely specified based on "the matters necessary to specify the invention" as are understood from the description in the claim(s) taking into account the description on the problems to be solved and the technical field to which the invention pertains in the detailed description of the invention. In this case, the problems to be solved are not necessarily those having not been unsolved.

(2) Same problems to be solved

Besides cases where the problems to be solved by the inventions before and after amendment are the same, the cases where the problems to be solved by the invention after amendment are closely related to those before the amendment (in judging the sameness of the problems to be solved, "...be closely related to..." means the cases where the problems to be solved after the amendment are more specific concepts than those before the amendment, or the cases where the problems to be solved by the inventions before and after the amendment are of the same kind, etc.) are also to be regarded as the cases where the problems to be solved is the same. (For example, "increase in strength" and "increase in strength for pulling," or "making compact" and "making light.")

If the amendment makes the problems to be solved by the invention after the amendment not to be the same as those of the invention before the amendment, such amendment shall be deemed as not complying with these requirements.

When applying the Ministerial Ordinance in accordance with Article 36(4)(i), in cases where the problems to be solved had not originally been conceived, such as inventions developed under novel ideas utterly different from the prior art and inventions based on discoveries as the result of trial and error, the description of the problems to be solved is not mandatory. In such cases, since it is considered that the examination had been carried out regardless of the problems to be solved, it is deemed that these requirements are satisfied.

(3) Same industrial applicability

"The industrial applicability of the invention after the amendment is the same as that of the invention before the amendment" means the cases where the fields of industrial application of the inventions before or after the amendment are the same, or the cases where the field of the technology the invention after the amendment is technologically closely related to that of the invention before the amendment.

(Explanation)

The reason why the problems to be solved and the industrial applicability before the amendment shall be the same as those after the amendment as required in (2) and (3) above is because the examination procedures for the invention after the amendment having such relationships as mentioned above are considered to be proceeded without further substantial burden to the examination by effectively utilizing the examination results already obtained before the final notice of reasons for refusal.

4.3.4 Independently Patentable

Notwithstanding the amendment being deemed as falling under Article 17bis(5)(ii), the invention specify by the matters stated in the amended claim shall be patentable.

This requirement is applied only to claim(s) which was amended to be restricted. The claim(s) which was amended solely in terms of "the correction of errors in the description" or "the clarification of an ambiguous description" as well as claim(s) that has not been amended must not be refused by the reason that they cannot independently be granted patents.

Patent Act Articles 29, 29bis, 32, 36(4)(i) or (6) (except (iv)), and 39 (1) to (4) are applied with respect to the requirements of independently patentable. The other handling shall follow "Part IX: Procedure of Examination Section 2" 6.2.3.

4.4 Notes in Cases where Plural Amendments are Made after Final Notice of Reasons for Refusal

In cases where the plural number of amendments of the description, claims or drawings are made within the time limit designated in the last notice of reasons for refusal, the description, claims or drawings to be the basis for judging whether the second or following amendment complies with the requirements under Article 17bis(5) and (6) shall be those that were legally amended immediately before the second or following amendment concerned. However, the description, claims or drawings to be based under Article 17bis(3) are those originally attached to the request.

5. Clarification of Ambiguous Description (Patent Act Article 17bis(5)(iv))

5.1 Purport

Where deficiency in the description is indicated in the final notice of reasons for refusal, since an minor amendment for correcting the said deficiency does not alter the subject for the examination or the trial examination, and the applicant for a patent, if such

amendment is not allowable, will have difficulty in responding to the reasons for refusal, therefore it cannot be said to be appropriate not to admit such kind of the amendment from the viewpoint of protecting inventions. Thus the amendment "to clarify an ambiguous description" "with respect to the matters mentioned in the reasons for refusal concerned" in the notice of the reasons for refusal shall be allowable.

5.2 Meaning of "Clarification of Ambiguous Description"

"An ambiguous description" means a description causing deficiency in the description such as a description whose meaning is not clear.

"An ambiguous description" with respect to the claim(s) corresponds to such cases where the description of the claim itself is ambiguous in meaning, or where the description of the claim itself is not consistent with the other descriptions of the claim, or where the claimed invention, although the description of the claim itself is clear, cannot be said to be technologically accurately specified. "Clarification" is meant to clear "the intended meaning of the description" by correcting the ambiguity.

Consequently, where the description of the claim itself is clear, and the invention is technologically accurately specified, the amendment to clear that the claimed invention is involving the novelty, inventive step, etc. in response to the notice of the reasons for refusal with respect to novelty, inventive step, etc. does not fall under "the clarification of ambiguous description."

For example, where the amendment is deemed to resolve the reasons for refusal with respect to novelty, inventive step, etc., and is deemed as restricting the matters specifying the invention without altering the problems to be solved, or the amendment is deemed as adding new technological matters to solve new problems, the amendment concerned does not fall under "the clarification of ambiguous description."

Such amendment is to be subjected by the further examination as to whether it falls under the requirement such as "the restriction of the claim(s)" in each Paragraph under Article 17bis(5).

5.3 Relation to Matters Mentioned in Reasons for Refusal

In order to prevent the arising of new reasons for refusal as the result of the amendment of matters for which the examination or trial examination has already been carried out, the amendment for clarification of an ambiguous description is limited only to the cases where the amendment is made for the matters mentioned in the reasons for refusal in the notice of the reasons for refusal.

The amendment to resolve the reason for refusal with respect to the deficiency of the description mentioned in the last notice of the reasons for refusal under Article 36 falls under the parenthesized part in Article 17bis(4)(iv) stating "with respect to the matters mentioned in the reasons for refusal."

In contrast, the amendment restricting the matters specifying the invention, or the amendment adding new technological matters for solving new problems to the claim, made irrelevant to the deficiency in the description mentioned in the last notice of the reasons for refusal, do not fall under "the matters mentioned in the reasons for refusal."

6. Correction of Errors in Description (Patent Act Article 17bis(5)(iii))

6.1 Purport

Since a minor amendment for correction of errors in the description in response to the final notice of reasons for refusal does not alter the subject for the examination or trial examination, and the applicant for a patent, if such amendment is not allowable, will have difficulty in responding to the reasons for refusal, therefore it cannot be said to be appropriate not to admit such kind of the amendment from the viewpoint of protecting inventions. Consequently, the amendment for "correction of errors in the description" is treated to be allowable.

6.2 Meaning of "Correction of Errors in Description"

"The correction of errors in the description" means to "correct the errors of the wording or phrasing to the original meaning thereof" in cases where "the original meaning of the said wording and phrasing is apparent from the description, claims or drawings."

7. Procedure of Judgment

The procedures for the examination with respect to the requirements prescribed in each of the Paragraphs under Article 17bis shall be made by following 6.2 in Section 2 of "Part IX: Procedure of Examination."

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

SectionIV Examples Concerning Amendments

of Specifications or Drawings

1. Examples Concerning Judgment of New Matter

To be prepared

2. Examples Concerning Judgment of Restriction under Patent Act 17-2(4)(ii)

Example 1 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Prediction type electronic clinical thermometer	[Title of the Invention]
[Claims] An electronic clinical thermometer comprising <u>a sensor</u> to convert body temperature to electric signals and an operation circuit to predict stabilized body temperature based on characteristics of change in output from the sensor.	[Claims] <u>a sensor consisting of a thermocouple</u>
[Excerpt from Detailed Description of the Invention] The purpose of the invention is to provide aclinical thermometer for permitting quickmeasurement. Examples of the sensor for converting body temperature to an electric signal include a magnetic temperature-sensing element, a temperature measuring resistor, a thermocouple, and the like. The sensor output is lead to the body temperature prediction operation circuit, and is converted to a predicted stabilized temperature value. In order to minimize the measuring time, a sensor having high sensitivity is necessary to be used. The experimental result showed that the thermocouple is optimal. [Drawings]	[Excerpt from Detailed Description of the Invention] The purpose of the invention is to provide aclinical thermometer for permitting quickmeasurement. The sensor output is led to the body temperature prediction operation circuit, and is converted to a predicted stabilized temperature value. In order to minimize the measuring time, a sensor having high sensitivity is necessary to be used.

1 sensor part

2 operation circuit 3 display

[Conclusion] Falls under restriction.

[Explanation]

In the amendment, matters defining the invention described in claims before amendment, that is, "An electronic clinical thermometer comprising a sensor to convert body temperature to electric signals" which is one of means for solving the problems is limited to a more specific concept. Further, in the amendment, problems to be solved by the invention and industrial applicability are not changed.

Example 2 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Developing device	[Title of the Invention]
[Claims] A developing device which makes an electrostatic latent image visible by forming a thin film of developer on a developer sustaining body 2 by contacting a layer thickness regulating member 20 to the developer sustaining body which feeds developer to an electrostatic latent image keeping body, to adhere the thin film developer onto the electrostatic latent image keeping body, comprising <u>roughing</u> the surface of said layer thickness regulating member (20).	[Claims]
[Excerpt from Detailed Description of the Invention]	[Excerpt from Detailed Description of the Invention]
by the roughing, the problem of the invention that a thin film of uniform thickness should be made can be solved. The roughness is desirable to be in the rage from 0.5D to 1.5D when the average particle diameter of the developer is D.	
[Drawings]	[Drawings]
S 1 m	



[Conclusion]

Falls under restriction.

[Explanation]

In the amendment, matters defining the invention described in claims before amendment, that

is one of means to solve the problems, "comprising roughing the surface of said layer thickness regulating member (20)" is limited to a more specific concept. Further, in the amendment, problems to be solved by the invention and industrial applicability are not changed.

Example 3 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Transmission gearbox	[Title of the Invention]
[Claims] A transmission gearbox wherein a reinforcing ring is cast into a circumferential wall part of a <u>light-alloy</u> gearbox in which a bearing for rotatably supporting an output axis is fitted.	[Claims] A transmission gearbox wherein reinforcing <u>steel</u> ring is cast into a circumferential wall part of an <u>aluminum-alloy</u> gearbox in which a bearing for rotatably supporting an output axis is fitted.
[Excerpt from Detailed Description of the Invention] the gearbox is made of aluminum alloy, the ring is made of steel	[Excerpt from Detailed Description of the Invention]
[Drawings]	[Drawings]
4: output axis 7: bearing 8: ring 9: gearbox	

[Conclusion]

Falls under restriction.

[Explanation]

The amendment specifies the material of the gearbox and the material of the reinforcing ring, respectively. In this, matters defining the invention before amendment, that is, means to solve the problems "a light-alloy gearbox in a transmission gearbox" and "reinforcing rings in a transmission gearbox" are limited to a more specific concept.

Further they are the same in problems to be solved by the invention that the lightweight of the gearbox and improvement in the strength of the bearing points of the gearbox should be achieved, and industrial applicability (transmission gearbox).

Example 4 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment

[Title of the Invention] Output circuit

[Claims]

An output circuit comprising a first transistor wherein a collector is connected through connecting means to a power source line, and a base is connected to an input terminal, a second transistor in which a base is connected to an emitter of said first transistor, a collector is connected to an output terminal, and an emitter is connected to a reference potential source, and <u>a diode</u> inserted between the collectors of said first transistor and said second transistor so that an electric current flows when said first and second transistors are conductive, and an electric current is stopped when said first and said second transistors are not conductive.

[Excerpt from Detailed Description of the Invention]

.....As the diode, it is possible to use in addition to a typical p-n diode shown in Fig.1, an equivalent diode for short-circuiting the base and collector of the transistor as shown in Fig.2.

[Drawings]

Fig.1



Fig.2



Specification after amendment

[Title of the Invention]

[Claims]

....., and <u>an equivalent diode shorted</u> between transistor base and collector inserted

[Excerpt from Detailed Description of the Invention]

.....As the diode, an equivalent diode for inserted transistors, which shorted between the base and collector shown in Fif.2 is recommended for use.

[Drawings]

.....

[Conclusion] Falls under restriction.

[Explanation]

By the amendment, "diode" before amendment is amended to "an equivalent diode shorted between transistor base and collector". Herein, "diode" specifically includes both the p-n junction diodes shown in Fig.1 and the equivalent diode shown in Fig.2.

Thus, in the amendment, "diode" before amendment is limited to a more specific concept "equivalent diode", which is admitted to be limitation of a part of matters defining the invention. Further problems to be solved by the invention and industrial applicability are not changed before and after the amendment. Thus, the amendment is judged to be restriction of the claim.

Example 5 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Knob	[Title of the Invention]
[Claims] A knot mounted on a closing body having a grip part gripped when the closing body is opened or closed, wherein copper fine particles are exposed from at least a part of the surface of the grip part, and a large number of the exposed fine particles are scattered with a space interval to prevent bacteria on the surface from being grown.	[Claims]
[Excerpt from Detailed Description of the Invention] The space interval between these copper fine particles exposed is set to be a value which is sufficiently smaller than the diameter of a region required for bacteria adhered onto the surface of the grip part to form a colony and to grow, and preferably is set to below 100µm in general.	[Excerpt from Detailed Description of the Invention]

[Drawings]





1 door consisting of one portion of an opened/closed body

2 knob

6 grip portion

8 copper fine particle

[Conclusion]

Falls under restriction.

[Explanation]

Claims after amendment limit the interval between the fine particles. However, the limitation limits a part of matters defining the invention described in claims before amendment, "a space interval to prevent bacteria on the surface from being grown". Further, industrial applicability and problems to be solved by the invention before and after the amendment are the same.

Example 6 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment Specification after amendment [Title of the Invention] [Title of the Invention] Serial type thermal printer [Claims] [Claims] A serial type thermal printer wherein a thermal print head equipped with a head substrate and a heat evolution resistor group provided with a large number of heat evolution resistors in parallel with one side thereof is pressed into contact with platen rubber by interposing there between a thermal transfer ribbon and a transferred sheet or a thermal sheet for printing, comprising setting the thermal printcomprising setting the thermal print head as it is slanted to the sliding direction of head as it is slanted to the sliding direction of the platen rubber. the platen rubber at an angle in the range from 1° to 15°. Excerpt from Detailed Description of the [Excerpt from Detailed Description of the Invention] Invention] The thermal print head of the printer of the present invention is slanted to the platen rubber, and an appropriate angle to the slide direction of the surface of the head of the head substrate is in the range from 1° to 15°. When the angle is less than 1°, the side of the head substrate is pressed into contact with the platen rubber, so as not to achieve the object of the invention. Further, when the angle exceeds 15°, the heat evolution resistor adhered onto the surface of the head substrate is not in contact with the thermal transfer ribbon or the thermal sheet, so that sharp printed letters and images cannot be expected.

[Drawings]



[Conclusion] Falls under restriction.

[Explanation]

Claims after amendment specify the contact angle of the head with the platen rubber. In the amendment, a part of matters defining the invention described in the claims before amendment, "setting the thermal print head as it is slanted to the sliding direction of the platen rubber" is limited to a more specific concept by specifying the angle. Further, industrial applicability and problems to be solved by the invention before and after the amendment are the same.

Example 7 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment

[Title of the Invention] Bucket conveyor

[Claims]

A bucket conveyor comprising setting a drive pulley and a following pulley in the upper and lower sides of a tube-shaped case having a supply port in its lower part and a discharge part in its upper part, setting an endless belt equipped with a plurality of buckets at a predetermined interval around said drive pulley and following pulley for rotation, and setting a fan having <u>an ejection nozzle</u> <u>protruding in the tangent direction</u> of the following pulley in the upper part of said follower pulley. Specification after amendment

[Title of the Invention]

[Claims]

[Drawings]

.....

setting a fan having <u>an ejection nozzle in</u> which its opening is reduced in diameter and protruding in the tangent direction of the following pulley in the upper part of said following pulley.

[Drawings]



- 1 endless belt
- 2 supply port
- 3 ejection nozzle
- 4 tube-shaped case
- 5 drive pulley
- 6 discharge port
- 7 fan
- 8 bucket
- 9 following pulley

[Conclusion]

Falls under restriction.
[Explanation]

In the invention before the amendment and that after the amendment, industrial applicability and problems to be solved (particles dropped between the following pulley and the endless belt are discharged and removed) are the same.

Further, the point that the ejection nozzle is amended to reduce the diameter of its opening specifies the shape of the ejection nozzle, and matters defining the invention before the amendment (one of means to solve the problems, "ejection nozzle") is limited to a more specific concept.

Example 8 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Two-way transmission method of optical signals	[Title of the Invention]
 [Claims] A method wherein a signal is emitted each time from an optical transmitter set in a station and received by an optical receiver formed integrally with the transmitter at the termination of a transmission section formed of the optical wave guide, to make the two-way transmission of optical signals between the two stations connected through the optical wave guide, comprising: a) interconnecting the transmitter and the receiver as an integrated member; b) Transmitting the signal of one way of the transmission through the optical wave guide during transmission stop in the other way of transmission 	 [Claims] a) using an LED as the transmitter, and a photodiode as the receiver, and interconnecting both as an integrated member; b) Transmitting the signal of one way of the transmission through the optical wave guide during transmission stop in the other way of transmission
[Excerpt from Detailed Description of the Invention] Advantageous is the construction such that the optical transmission portion constructed as an LED is inserted in the optical reception hole constructed as a photodiode. As the LED, it is possible to use GaAs LED, or GaAlAs LED of Barus type. On the other hand, as the photodiode, a pin	[Excerpt from Detailed Description of the Invention]

[Conclusion]

Falls under restriction.

[Explanation]

The amendment specifies that "transmitter" is "LED", and "receiver" is "photodiode", and a part of matters defining the invention before amendment is limited to a more specific concept. Industrial applicability and problems to be solved before and after the amendment is the same.

Example 9 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment	Specification after amendment
[Title of the Invention] Production method of compound C	[Title of the Invention]
[Claims] A production method of compounds C comprising reacting compound A to compound B.	[Claims] A production method of compound C comprising reacting compound A to compound B at the temperature <u>above 80</u> .
[Excerpt from Detailed Description of the Invention] The reaction temperature is preferably above 80.	[Excerpt from Detailed Description of the Invention]

[Conclusion]

Does not fall under restriction

[Explanation]

The amendment does not limit matters defining the invention described in claims before the amendment, that is any of the matters of means to solve the problems.

Specification of the temperature can not be said to make the means to solve the problems wherein the temperature conditions are not mentioned and "reacting compound A to compound B" is merely described, more specific.

Example 10 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment

[Title of the Invention] Abnormal operation prevention device

[Claims]

An abnormal operation prevention device comprising setting a vapor-liquid state detecting means in a refrigeration medium inlet and a refrigeration medium output of a vapor-liquid separator respectively, and setting a control means for determining the exceeded or insufficient refrigeration medium in a refrigerator according to the detected values of the detection means and for intermittently operating a compressor for a predetermined period of time.

[Excerpt from Detailed Description of the Invention]

......The compressor is intermittently operated for a predetermined period of time, so that a user can easily recognize the exceeded or insufficient refrigeration medium showing the abnormal state of the refrigerator. Further, a means notifying the abnormal state when the exceeded or insufficient refrigeration medium is determined by using alarm devices such as a lamp and a buzzer will be effective.

[Drawings]



1 compressor 3 vapor-liquid separator 3a inlet Specification after amendment

[Title of the Invention]

.....

[Claims]

for intermittently operating a compressor for a predetermined period of time, <u>and for operating an alarm</u> <u>device</u>.

[Excerpt from Detailed Description of the Invention]

.....As the compressor is intermittently operated for a predetermined period of time, and an alarm device such as a lamp and a buzzer is also operated, a user can easily recognize the exceeded or insufficient refrigeration medium as the abnormal state of a refrigerator.

[Drawings]

.....

3b outlet 10 detecting means 11 detecting means 17 determining means 18 alarm display means

[Conclusion] Does not fall under restriction.

[Explanation]

Problems to be solved by the invention to make a user easily recognize the exceeded or insufficient refrigeration medium as the abnormal state of a refrigerator is not changed after the amendment. "Alarm device" added to claims after the amendment, however, is not admitted as any of limitations of matters defining the invention (the means to solve the problems) before the amendment. (It can not be said that "control means for determining the exceeded or insufficient refrigeration medium in a refrigerator according to the detected values of the detection means and for intermittently operating a compressor for a predetermined period of time" is led to a more specific concept.)

Example 11 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before amendment Specification after amendment [Title of the Invention] [Title of the Invention] Locking device for door [Claims] [Claims] A locking device for door comprising a lock A locking device for door comprising a lock position detecting means for preventing position detecting means for preventing burglars for detecting the fixed position of a burglars for detecting the fixed position of a lock by using a pair of a light emitting element lock by using a pair of a light emitting element and a light receiving element, an approach and a light receiving element, an approach detecting means for detecting the approach of detecting means for detecting the approach of a hand of a person holding a key for said lock a hand of a person holding a key for said lock by using a pair of a light emitting element and by using a pair of a light emitting element and a light receiving element, and a lighting a light receiving element, and a lighting means for lighting the lock when the hand of means for lighting the lock when the hand of the person holding the lock approaches the the person holding the lock approaches the lock. lock, and a timer for turning on the timer contact for a predetermined period of time by operation of the detecting means so as to light for a fixed period of time. [Excerpt from Detailed Description of the [Excerpt from Detailed Description of the Invention1 Invention1As a pair of a light receiving element and a light emitting element is used to detect the position of the lock and the approach of a hand of a person, it is unnecessary to find the doorknob, and the key cylinder can be easily opened or closed in a dark place. Further, a timer for turning ON the timer contact for a predetermined period of time by operation of the detecting means is set so as to light for a fixed period of time. Consequently, the power source consumption can be reduced. (Brief Description of the Drawings) (Brief Description of the Drawing) 1 door 3 key cylinder (lock) 9 kev (lock) 12 light emitting element 13 light receiving element 15 lighting means 17 timer 18 light receiving element 20 lock position detecting means

21 approach detecting means

[Drawings]



[Conclusion]

Does not fall under restriction.

[Explanation]

As an added "timer" by the amendment cannot be considered to make any of the means to solve the problems of the invention before the amendment, that is, matters defining the invention (for example, "a lock position detecting means " and "a lighting means") more specific, is can not be recognized as the limitation of matters defining the invention.

Further, to the problem to be solved by the invention before the amendment, "the key cylinder can be easily opened or closed in a dark place", that "the power source consumption can be reduced" is added to the problem to be solved by the invention after the amendment. As the problem to be solved by the invention after the amendment does not limit the problem to be solved by the invention before the amendment to a more specific concept, nor is the same kind, they can not be deemed to be closely related technically, and the problems to be solved by the invention before and after the amendment are not the same.

[Drawings]

.....

Example 12 concerning judgment of restriction

Type: Limitation of matters defining the invention

Specification before Amendment	Specifications after Amendment
[Title of the Invention] Input device with guidance system	[Title of the Invention]
[Claims] An input device to input requiring data by touching a part of display that correspond to the display position, wherein the input device is equipped with guidance system that indicates the next item of input by flashing the space into which the datum is to be inserted.	[Claims] An input device to input requiring data by touching a part of display that correspond to the display position, wherein the input device is equipped with guidance system that indicates the next item of input by flashing the space into which the datum is to be inserted, <u>and has a speaker to instruct the next</u> item to be input by voice
[Excerpt from Detailed Description of the Invention] An input device to input requiring data by touching a part of display that correspond to the display position, wherein the input device is equipped with guidance system that indicates the next item of input by flashing the space into which the datum is to be inserted. That indicates the exact item of input to the operator. An addition of a device to issue instruction by voice, more effective results are obtained.	[Excerpt from Detailed Description of the Invention] An input device to input requiring data by touching a part of display that correspond to the display position, wherein the input device is equipped with guidance system that indicates the next item of input by flashing the space into which the datum is to be inserted.That indicates the exact item of input to the operator, and the guidance system is more effective because the device is equipped with a device to issue instruction by voice.

[Conclusion]

Does not fall under restriction.

[Explanation]

This amendment limits the claims by adding voice instructions as a part of the guidance system; As an added "speaker" by the amendment cannot be considered to make any of the means to solve the problems of the invention before the amendment more specific, it can not be recognized as the limitation of matters defining the invention. ("speaker" does not fall under more specific concept of "guidance system that indicates the next item of input by flashing the space into which the datum is to be inserted")

Example 13 concerning judgment of restriction

Type: Limitation of matters defining the invention / Same problems to be solved

Specification before Amendment	Specifications after Amendment
[Title of the Invention] Squid cracker	[Title of the Invention]
[Claims] Squid cracker using as ingredients powdered soybean protein spices, condiments, and wheat flour added to pulped squid meat.	[Claims] Squid cracker, <u>shaped into a form of squid</u> , using as ingredients powdered soybean protein, spices, condiments, and wheat flour added to pulped squid meat.
[Excerpt from Detailed Description of the Invention] Adding an ingredients and kneading to shape into a form of squid	[Excerpt from Detailed Description of the Invention]

[Conclusion]

Does not fall under restriction.

[Explanation]

Limiting the shape of the squid cracker cannot be considered to make any of matters defining the invention in claims before the amendment, that is, means to solve the problems(any of the pulped squid meat, powdered soybean protein, spice, condiments, wheat flour, or the like used as the ingredient for the squid cracker) more specific.

Thus, the amendment does not considered to amend the entire part of means to solve the problem, " Squid cracker added to pulped squid meat" to more specific concept. ("Squid cracker" in itself will not fall under means to solve the problem. Thus, it cannot qualify as limitation, nor is it deemed as a more specific concept with respect to the "squid cracker.")

In addition, problem to be solved by the invention before amendment is to provide the squid cracker whetting a good appetite. Meanwhile, the invention after amendment adds the statement in that its shape clearly tells that the major ingredient use is the squid. The problems to be solved after amendment does not make the problems before amendment more specific, nor is it a similar concept. It is not considered to have a close technical relation in terms. This amendment is meant to change problems to be solved by the invention.

Example 14 concerning judgment of restriction

Type: Limitation of matters defining the invention / Same problems to be solved

Specifications before Amendment	Specifications after Amendment
[Title of the Invention] Electric power tool	[Title of the Invention]
[Claims] A power tool comprising two handles (3, 4) in its housing (2) and battery packs (7,8) deployed in free ends (5,6) of the said handles (3,4).	[Claims] in free ends (5,6) of the said handles (3,4), <u>and having a selector switch to select</u> the higher-charged batteries from the said battery packs (7,8).
[Excerpt from Detailed Description of the Invention] able to balance its weighta switching circuit	[Excerpt from Detailed Description of the Invention] able to balance its weighta switching circuit
[Drawings]	[Drawings]

[Conclusion] Does not fall under restriction.

[Explanation]

The switching circuit is not considered as a more specific concept of means to solve the problems, namely, the matters defining the invention (for example " battery packs deployed in free ends of the said handles" or " two handles in its housing") before amendment. Thus, limitation of matters defining the invention is not applicable.

In addition, in the invention before amendment, the problem to be solved by the invention, the application states that weight balance is attained because the battery packs were appropriately placed. Furthermore, deriving power from the well-charged battery after amendment has a problem in that batteries may efficiently uses the invention. The problem provides the problem before amendment with no more specific concept, nor the same kind of

concept. It is not considered that a close relationship exists in terms of a technical point of view. This amendment is to change problems to be solved by the invention.

Example 15 concerning judgment of restriction

Type : Limitation of matters defining the invention / Same problems to be solved

Specifications before amendment	Specifications after amendment
[Title of the Invention] Electronic wristwatch with pressure altimeter	[Title of the Invention]
[Claims] An electronic wristwatch comprising a semiconductor diaphragm forming a distortion sensor for measuring fluid pressure, an arithmetic circuit for converting output from said distortion sensor to an altitude signals, and a timer circuit in the movement mechanism.	[Claims] An electronic wrist watch comprising a semiconductor diaphragm forming a distortion sensor for measuring fluid pressure, an arithmetic circuit for converting output from said distortion sensor to altitude signals, and a timer circuit, <u>which are formed of a</u> <u>semiconductor thin film circuits on said</u> <u>diaphragm</u> , in the movement mechanism.
[Excerpt from Detailed Description of the Invention] This invention <u>is to provide a wristwatch</u> which indicates time and altitude information convenient for diving, mountain climbing, hang glider riding. The distortion sensor deployed in the semiconductor diaphragm tells the depth of water by detecting hydraulic pressure in water and altitude by detecting air pressure on land. The thinner and lightweight movement is made possible by the use of thin film circuits of semiconductors to form the arithmetic circuit for converting the output signal from the distortion sensor into the altitude signal and the clock circuit on film	[Excerpt from Detailed Description of the Invention] This invention <u>is to achieve thinness and a</u> <u>lightweight in the movement of a wristwatch</u> , which indicates time and altitude information convenient for diving, mountain climbing and hang glider riding.
[Drawings] wrist watch	
movement' semiconductor diaphragm	

[Conclusion] Does not fall under restriction.

[Explanation]

The problem to be solved by the invention before the amendment states "to provide the wrist watch indicating the time and the altitude information". The problem to be solved by the invention after amendment, on the other hand, states "thinness and lightweight". Thus, the problem to be solved by the invention after the amendment provides the problem to be solved by the invention before amendment with no more specific concept, nor the same kind of concept. It is not considered that a close technical relationship exists between the problem before the amendment and the problem after the amendment. There exists a difference in problem to be solved by the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention between the invention before the amendment and the invention after the amendment.

In addition, "in the electronic wristwatch, an arithmetic circuit and a timer circuit, which are formed of a semiconductor thin film circuits on said diaphragm" is not deemed as more specific concept of matters defining the invention before the amendment. It is not, therefore, considered that the matters defining the invention have been limited.

Example 16 concerning judgment of restriction

Type: Same problems to be solved

Specifications before Amendment

[Title of the Invention] Cover sheet

[Claims]

A cover sheet made of a translucent material, with which a boat equipped with solar battery cells connected to a battery charger on its upper face is covered.

[Drawings]



Specifications after Amendment

[Title of the Invention]

[Claims]

A cover sheet made of a translucent material, which excluding parts positioned on the upper faces of solar batteries is made of a light-shielding material,

.....

[Drawings]

.....

1 solar battery 2 boat

[Conclusion]

Does not fall under restriction.

[Explanation]

The problem to be solved by the invention before the amendment states that the use of this cover sheet "prevents the battery from losing its charge, while protecting a solar battery against wind and rain." The problem to be solved by the invention after the amendment adds a new problem stating "protects a boat only against the effects of ultraviolet rays." Therefore, as the problem is not the more specific concept of the problem before neither the amendment nor the same kind, it is not considered to be technically closely related, and the amendment is deemed to change the problem to be solved.

Example 17 concerning judgment of restriction

Type: Same problems to be solved

Specifications before Amendment	Specifications after Amendment
[Title of the Invention] Flat light emitter	[Title of the Invention]
[Claims] A flat light emitter formed of a transparent electrode, light emitting layers, a dielectric layer and a back electrode which are laid in order on a glass substrate, comprising being covered with a moisture-proof film.	[Claims] , comprising being covered with a moisture-proof film and having said light emitting layers formed of plurality of light emitting layers showing different colors respectively.
[Brief Description of the Drawing] 1 glass substrate 2 transparent electrode 3a, 3b, 3c light emitting layer 4 dielectric layer 5 back electrode 6 moisture-proof film	
[Drawings]	[Drawings]

[Conclusion]

Does not fall under restriction.

[Explanation]

The problem to be solved by the invention states moisture proofing in the invention before the amendment. The invention after amendment adds a statement concerning multicolor light emission. The problems to be solved after amendment does not make the problems before amendment more specific, nor the concept of the same kind. It is not considered that a close technical relation exists. This amendment is to change the problem to be solved by the invention.

Example 18 concerning judgment of restriction

Type: Same problems to be solved



Does not fall under restriction.

[Explanation]

The problem to be solved by the invention before the amendment is to evenly distribute the heat of the exhaust gas in the filter. The problem to be solved by the invention after the

amendment adds a statement that the filter is prevented from local heating at the flame exit hole of the burner. The problems to be solved by the invention after amendment does not make the problems to be solved by the invention before amendment more specific, nor is it the same type of concept. A close technical relation does not exist. This amendment is to change the problem to be solved by the invention.

Example 19 concerning judgment of restriction

Type: Same problems to be solved

Specifications before Amendment	Specifications after Amendment
[Claims] A tap with a constriction in its shank	[Claims] A tap with a constriction in its shank wherein the <u>squared portion of the shank is extended</u> over the both sides of the constriction.
[Excerpt from Detailed Description of the Invention] When the tap is overloaded, the force breaks the shank at the constriction due to concentration of stress thereby preventing the broken piece to damage the work. Turning a tap handle after it breaks at the constriction can pull out the tap.	[Excerpt from Detailed Description of the Invention]
[Drawings]	[Drawings]
1 blade portion 2 shank 3 squared pillar portion	

- 4 constriction
- [Conclusion]

Does not fall under restriction.

[Explanation]

The problem to be solved by the invention states in invention before the amendment that the tap is broken at the shank portion by stress concentration on the constricted portion of the shank, preventing only the blade portion to be broken and left in the work. That is, causing to break the tap on a point outside of the work allows an easy identification of the broken portion of the tap. In invention after the amendment, however, the constriction is placed in the central portion of the squared pillar portion of the shank, thereby allowing to grip the remaining piece of the tap by its squared shank, rendering removal of the broken tap an easy task by rotating the tap handle. Invention after the amendment adds a problem, that of easy hold on the broken tap to facilitate the tap removal. The problem to be solved by the invention after the amendment under more specific concept, nor is it the conceptually the same. Hence a close technical relation cannot be said to exist. This amendment is to change the problem to be solved by the invention.

Example 20 concerning judgment of restriction

Type: Same problems to be solved

Specifications before Amendment

[Title of the Invention]

Combination playing card game machine

[Claims]

Combination playing card game machine, comprising momentarily spinning a plural number of display drums with playing cards attached on the surface by operating a control circuit <u>by means of a starting signal</u> <u>generating means</u>, drive connecting the display drums and a drive shaft through a one-way clutch, freely rotating them even after the stop of the motor by the inertia of the display drums, and randomly changing the display cards on the display drums.

[Excerpt from Detailed Description of the Invention]

In a playing card combination game using multiple display drums, by altering the point at which each drum stops its spin, the card display was randomized even though the same motor was used to start the spin, achieving a greater randomness of the combination of cards displayed.

As for means to cause the start signal, it is possible to equip the machine with a light sensor. The light sensor signal can be used as a machine start signal or it can be used to detect the light emitted by a light ray gun for starting games.

[Conclusion]

Does not fall under restriction.

[Explanation]

Claims after the amendment restates " a starting signal generating means" to "a starting signal generating means which cause the starting signal by detecting the light emitted by the light ray gun". The limitation restates "a starting signal generating means in the combination playing card game machine", part of matters defining the invention described in the claim before amendment.

In the amendment, however, a the problem to be solved by the invention modifies "to obtain the playing card combination game machine having a high chance" in the specification before amendment to "obtain the playing card combination game machine capable of using the light ray gun." The problems to be solved after amendment can not be considered to make the problems before amendment more specific, or the concept of the same kind. It is not considered that a close technical relation exists in matters. This amendment is to change problems to be solved by the invention.

[Claims] [Claims] circuit <u>by means of a starting signal</u> <u>generating means which cause the starting</u> <u>signal by detecting the light emitted by the</u> <u>light ray gun.</u>

Specifications after Amendment

[Excerpt from Detailed Description of the Invention]

.....

The uniqueness of the present invention is, by the use of light emitted by the light ray gun to start the spin of the drums, it rendered possible a new game in which cards can be used as the gun's target.

Example 21 concerning judgment of restriction

Type: Same industrial applicability

Specifications before Amendment

[Title of the Invention] Clutch

[Claims] A <u>clutch</u> comprising a rotary shaft.....

[Drawings]



Specifications after Amendment

[Title of the Invention] Clutch for automatic transmission

[Claims]

A <u>clutch for automatic transmission</u> comprising a rotary shaft.....

.....

[Drawings]

[Conclusion]

Does not fall under restriction.

[Explanation]

Automatic transmission is one of the most representative devices incorporating a clutch. Thus, a clutch and a clutch for automatic transmission are technically closely related and fall under the relevant fields of industrial application of the inventions

This amendment can be considered to make the entire means to solve the problem before the amendment, "A clutch comprising a rotary shaft...." more specific. Therefore this amendment can be considered to restrict the matters defining the invention before the amendment. In addition, the same problem to be solved by the invention exists in statements before and after the amendment.

Example 22 concerning judgment of restriction

Type: Same industrial applicability

Specifications before amendment	Specifications after amendment
[Title of the Invention] Chord for electrical <u>stringed musical</u> instrument	[Title of the Invention] Chord for electrical <u>guitar</u>
[Claims] A chord <u>for electrical stringed musical</u> <u>instrument</u> comprising a bronze plating on a steel wire, cast iron and a film made of an anticorrosive alloy, and a nickel-plated layer formed on said plated layer. [Excerpt from Detailed Description of the Invention] chord for the electrical stringed musical instrument of the present invention has a high anticorrosion property. Thus, said chord is suitable as chord for an electrical stringed musical instrument, including electrical guitar, violin, and other stringed instruments because of problems from corrosion caused by hand perspiration. Said chord for the electrical stringed musical instrument has less room environment related corrosion and is also suitable as a chord for electrical piano.	[Claims] A chord <u>for an electrical guitar</u> [Excerpt from Detailed Description of the Invention] chord for electrical guitar of the present invention has a high anticorrosion property. Thus, it is suitable for use in the electrical guitar, which has problems of corrosion caused by hand perspiration.

[Conclusion]

Falls under restriction.

[Explanation]

In the amendment, the fields of industrial application of the inventions modifies the chord for the electrical stringed musical instrument to the chord for the electrical guitar. However, since the most typical of various stringed musical instruments is the guitar. It is, therefore, considered that a close technical relationship exists between the fields of industrial application of the inventions before modification and that of the invention after amendment. Thus, it is considered that industrial applicability for the invention before amendment and the invention after amendment are the same. In addition, the amendment can be considered to make " A chord for the electrical stringed musical instrument....on said plated layer" the entire means for solving the problem of the invention before amendment, more specific. Therefore this amendment can be considered to restrict matters defining the invention before amendment. In addition, problems to be solved by the invention is not amended in the invention before amendment and the invention before amendment.

Example 23 concerning judgment of restriction

Type: Same industrial applicability

Specifications before amendment	Specifications after amendment
[Title of the Invention]	[Title of the Invention]
Flat display panel	Plasma display panel
[Claims]	[Claims]
<u>A flat display panel having terminal for</u>	<u>A plasma display panel</u> having a terminal
control and	for control
[Excerpt from Detailed Description of the	[Excerpt from Detailed Description of the
Invention]	Invention]
<u>Where the foregoing example is a</u>	<u>As described above, applying the</u>
case applying the present invention to a	present invention to the plasma display panel
plasma display panel, yet it is clear that application of the present invention to other flat panel displays would result in the same effect.	produces a superior effect.

[Conclusion]

Falls under restriction.

[Explanation]

The amendment modifies "A flat display panel" to "A plasma display panel." However, "A plasma display panel" falls under a category of "A flat display panel." It is, therefore, considered that a close technical relation exists between the fields of industrial application of the inventions before amendment and that in the invention after amendment. Thus, it is considered that industrial applicability in the invention before amendment is the same as that of the invention after amendment.

In addition, this amendment can be considered to make the entire means to solve the problem in the invention before amendment," A flat display panel having terminal for control and......" more specific. Therefore this amendment can be considered to restrict the matters defining the invention. In addition, problems to be solved by the invention is not amended in the invention before amendment and the invention after amendment.

Example 24 concerning judgment of restriction

Type: Same industrial applicability

Specifications before amendment	Specifications after amendment
[Title of the Invention] Toiletries	[Title of the Invention] Lotion
 [Claims] <u>Toiletries</u> comprising: (a) a poly-hydric alcohol (b) urea (c) an anionic surfactant (d) A cationic surfactant blended. 	 [Claims] <u>Lotion</u> comprising: (a) a poly-hydric alcohol (b) urea (c) an anionic surface active agent (d) A cationic surface-active agent blended.
[Excerpt from Detailed Description of the Invention] Toiletries include, for example, latex lotion, cream, lotion, hair tonic, cleansing cream, shampoo, hair rinse and others.	[Excerpt from Detailed Description of the Invention]

[Conclusion]

Falls under restriction.

[Explanation]

In the amendment, the fields of industrial application of the inventions is modified from toiletries to lotion. However, the most typical of various toiletries falls under more specific concept of lotion. It is,therefore, considered that a close relationship in terms of a technical point of view exists between the fields of industrial application of the inventions before and after amendment. Thus, it is considered that the same industrial applicability of the invention exists between the invention before amendment and the invention after amendment. In addition, the amendment can be considered to make "Toiletries comprising: (a) a poly-hydric alcohol..... (d)A cationic surfactant blended " the entire specified item of the invention before amendment, more specific. Therefore this amendment can be considered to restrict the matters defining the invention before amendment. In addition, the same problem to be solved by the invention exists before amendment and after amendment.

Example 25 concerning judgment of restriction

Type: Same industrial applicability

Specifications before amendment	Specification after amendment
[Title of the Invention] Surfactant A	[Title of the Invention] Surfactant A for <u>insecticide</u>
[Claims] A surfactant comprising substance A.	[Claims] A surfactant <u>for an insecticide</u> comprising substance A.
[Excerpt from Detailed Description of the Invention] This surfactant is used in detergents	[Excerpt from Detailed Description of the Invention]
emulsifiers, dispersants, and others, and falls under the category of ordinary application	
addition, this surfactant activity may be used advantageously in an insecticide.	

[Conclusion]

Does not fall under restriction

[Explanation]

Surfactant for insecticide falls under the specific application of surfactant, and is not a typical application for a surfactant. In addition, no special relation exists between the fields of industrial application of the "the surfactant" and the fields of industrial application of "insecticide." It is, therefore, not considered that a close technical relation exists between the fields of industrial application of "the surface active agent" and the fields of industrial application between the application of "surfactant for an insecticide." Thus, industrial applicability of the invention before amendment is not the same as industrial applicability of the invention after amendment.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part IV: Priority

Chapter 1 Priority under the Paris Convention

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Chapter 1 Priority under the Paris Convention

Patent Act Article 43 (1)

A person desiring to take advantage of the priority under Article 4.D(1) of the Paris Convention regarding a patent application shall, along with the patent application, submit to the Commissioner of the Patent Office a document stating thereof, and specify the country of the Union of the Paris Convention in which the application was first filed, deemed to have been first filed under C(4) of the said Article, or recognized to have been first filed under A(2) of the said Article, and the date of filing of the said application.

Paris Convention Article 4

- A (1) Any person who has duly filed an application for a patent, or for the registration of a utility model, or of an industrial design, or of a trademark, in one of the countries of the Union, or his successor in title, shall enjoy, for the purpose of filing in the other countries, a right of priority during the periods hereinafter fixed.
 - (2) Any filing that is equivalent to a regular national filing under the domestic legislation of any country of the Union or under bilateral or multilateral treaties concluded between countries of the Union shall be recognized as giving rise to the right of priority.
 - (3) By a regular national filing is meant any filing that is adequate to establish the date on which the application was filed in the country concerned, whatever may be the subsequent fate of the application.
- B. Consequently, any subsequent filing in any of the other countries of the Union before the expiration of the periods referred to above shall not be invalidated by reason of any acts accomplished in the interval, in particular, another filing, the publication or exploitation of the invention, the putting on sale of copies of the design, or the use of the mark, and such acts cannot give rise to any third-party right or any right of personal possession. Rights acquired by third parties before the date of the first application that serves as the basis for the right of priority are reserved in accordance with the domestic legislation of each country of the Union.
- C. (1) The periods of priority referred to above A (1) shall be twelve months for patents and utility models, and six months for industrial designs and trademarks.
 - (2) These periods shall start from the date of filing of the first application; the day of filing shall not be included in the period.
 - (3) If the last day of the period is an official holiday, or a day when the Office is not open for the filing of applications in the country where protection is claimed, the period shall be extended until the first following working day.

- (4) A subsequent application concerning the same subject as a previous first application within the meaning of paragraph (2), above, filed in the same country of the Union shall be considered as the first application, of which the filing date shall be the starting point of the period of priority, if, at the time of filing the subsequent application, the said previous application has been withdrawn, abandoned, or refused, without having been laid open to public inspection and without leaving any rights outstanding, and if it has not yet served as a basis for claiming a right of priority. The previous application may not thereafter serve as a basis for claiming a right of priority.
- D. (1) Any person desiring to take advantage of the priority of a previous filing shall be required to make a declaration indicating the date of such filing and the country in which it was made. Each country shall determine the latest date on which such declaration must be made.
 - (2) These particulars shall be mentioned in the publications issued by the competent authority, and in particular in the patents and the specifications relating thereto.
 - (3) The countries of the Union may require any person making a declaration of priority to produce a copy of the application (descriptions, drawings, etc.) previously filed. The copy, certified as correct by the authority that received such application, shall not require any authentication, and may in any case be filed, without fee, at any time within three months of the filing of the subsequent application. They may require it to be accompanied by a certificate from the same authority showing the date of filing, and by a translation.
 - (4) No other formalities may be required for the declaration of priority at the time of filing the application. Each country of the Union shall determine the consequences of failure to comply with the formalities prescribed by this Article, but such consequences shall in no case go beyond the loss of the right of priority.
 - (5) Subsequently, further proof may be required. Any person who avails himself of the priority of a previous application shall be required to specify the number of that application; this number shall be published as provided for by paragraph (2), above.
- E. (1) Where an industrial design is filed in a country by virtue of a right of priority based on the filing of a utility model, the period of priority shall be the same as that fixed for industrial designs.
 - (2) Furthermore, it is permissible to file a utility model in a country by virtue of a right of priority based on the filing of a patent application, and vice versa.

F. No country of the Union may refuse a priority or a patent application on the ground that the applicant claims multiple priorities, even if they originate indifferent countries, or on the ground that an application claiming one or more priorities contains one or more elements that were not included in the application or applications whose priority is claimed, provided that, in both cases, there is unity of invention within the meaning of the law of the country.

With respect to the elements not included in the application or applications whose priority is claimed, the filing of the subsequent application shall give rise to a right of priority under ordinary conditions.

- G. (1) If the examination reveals that an application for a patent contains more than one invention, the applicant may divide the application into a certain number of divisional applications and preserve as the date of each the date of the initial application and the benefit of the right of priority, if any.
 - (2) The applicant may also, on his own initiative, divide a patent application and preserve as the date of each divisional application the date of the initial application and the benefit of the right of priority, if any. Each country of the Union shall have the right to determine the conditions under which such division shall be authorized.
- H. Priority may not be refused on the ground that certain elements of the invention for which priority is claimed do not appear among the claims formulated in the application in the country of origin, provided that the application documents as a whole specifically disclose such elements.

(I. is omitted.)

1. Purport of priority under the Paris Convention

Where patent applications etc. are filed in multiple countries for the same invention, simultaneous filing of patent applications etc. places a great burden on an applicant because preparation of translation etc. or different procedures for each country are required.

To reduce the burden of an applicant, the Paris Convention (meaning the Paris Convention for the Protection of Industrial Property of March 20, 1883, as revised at Brussels on December 14, 1900, at Washington on June 2, 1911, at Hague on November 6, 1925, at London on June 2, 1934, at Lisbon on October 31, 1958, and at Stockholm on July 14, 1967 — hereinafter referred to as "Paris Convention") prescribes the priority.

The priority for patent application (Note) under the Paris Convention (hereinafter referred to as the "priority" in this chapter) is the right of a person who has filed a patent application in one of the member countries of the Paris Convention (the first country) to receive the same treatment as that at the time when the patent application has been filed in the first country in determination of novelty, inventive step, etc. for patent applications in another member country of the Paris Convention (the second country) regarding the content described in the filing documents of the first patent application, provided that the period ranging from the date of filing of the first patent application to

the first country to the date of filing of the patent application to the second country is within 12 months, and in response to the above, Patent Act Article 43 prescribes the cases where priority is claimed under the Paris Convention.

(Note) Though this chapter describes the typical cases where both the first and second applications are patent applications, priority can be claimed also where patent application is filed to the second country, based on an application for utility model registration to the first country, and where an application for utility model registration is filed to the second country, based on a patent application or an application for utility model registration to the first country, based on a patent application or an application for utility model registration to the first country (Paris Convention Article 4 E).

2. Requirements of priority claim under the Paris Convention

2.1 Person who can claim priority

A person who can claim priority under the Paris Convention shall be the national of one of the member countries of the Paris Convention (including a person who is recognized as the national of one of the member countries by the provision of Paris Convention Article 3) and who has regularly filed a patent application to one of the member countries of the Paris Convention or his/her successor (Paris Convention Article 4 A (1)).

Therefore, a person who assigns his/her right to obtain a patent to others and has not filed the patent application by himself/herself may file the regular patent application in the second country, but he/she may not claim priority based on the patent application assigned to others even if he/she is an inventor.

2.2 Period when priority can be claimed

The period when priority can be claimed under the Paris Convention (the period of priority) shall be 12 months from the date of filing of the first application to the first country (Paris Convention Article 4 C (1)).

This period shall start from the date of filing of the first application and the day of filing shall not be included in the period (Paris Convention Article 4 C (2)).

In addition, if the last day of the period is an official holiday, or a day when the Office is not open for the filing of applications in the second country, the period shall be extended until the first following working day (Paris Convention Article 4 C (3)).

2.3 Application that can serve as a basis of priority claim

(1) Regular application

An application claiming priority under the Paris Convention, regularly filed in one of the member countries, shall be an application that is equivalent to a national application under the domestic legislation of any country of the Union or a regular national application under bilateral or multilateral treaties concluded between countries of the Union and that is adequate to establish the date on which the application was filed (requirements to establish the date of filing is satisfied), whatever may be the subsequent fate of the application.

Therefore, even applications withdrawn, abandoned or rejected after filing of the patent application can serve as a basis for claiming a right of priority (Paris Convention Article 4 A (3)).

(2) First application

Only the first application in one of the member countries of the Paris Convention can serve as a basis of priority claim under the Paris Convention (Paris Convention Article 4C (2)).

This is because the period of priority will be substantively extended if the right of priority is recognized again (that means cumulatively) for the invention disclosed in the first application.

However, even if two applications for the same subject in the same member country are filed, where the previous application has been withdrawn, abandoned, or refused at the time of filing the subsequent application, without having been laid open to public inspection and without leaving any rights outstanding, and if it has not yet served as a basis for claiming a right of priority, the subsequent application will be considered to be the first application (Paris Convention Article 4 C (4)).

3. Effects of priority claim under the Paris Convention

Any subsequent filing shall not be invalidated by reason of any acts accomplished in the period from the date of filing of the first application to one of the member countries of the Paris Convention to the date of filing of a subsequent application claiming priority to one of other member countries, in particular, another filing, the publication or exploitation of the invention. And such acts cannot give rise to any third–party right (Paris Convention Article 4B).

Since the priority under the Paris Convention has such effects, among inventions relating to a patent application in Japan claiming priority under the Paris Convention (hereinafter referred to as "the application in Japan"), for the inventions disclosed in the whole filing documents (description, scope of claims and drawings) of the application in the country of the Union which served as a basis of priority claim concerned (hereinafter referred to as "the patent application in the first country" or "the first application"), the patent application concerned shall be treated as if it has been filed on the date of filing of the first application, in applying the following provisions of the Patent Act in connection with substantive examination (hereinafter the date of filing of the first application in these cases is referred to as "priority date").

- (1) Article 29 (novelty, inventive step)
- (2) The principle sentence of Article 29bis (what is called, prior art effect)
- (3) Article 39 (1) to (4) (precedent application)
- (4) Article 126 (5) (requirements for independent patentability of correction trial (except for requirements prescribed in Article 36)) (including its application under Article 17bis(5))

However, in application of the provisions of the other clauses in connection with substantive examination (for example, Article 36) on patent application claiming priority under the Paris Convention, determination shall be made, based on the date of filing of the patent application concerned. And in the case of application of the provisions of 29bis as precedent application prescribed in the clause concerned on patent application claiming priority under the Paris Convention, see "Part II, Chapter 3, 2.2(3)".

4. Determination on effects of priority claim under the Paris Convention

4.1 Basic idea

The Paris Convention defines that the "certain elements of the invention" shall be disclosed by the application documents as a whole relating to the first application for recognition of the effects of priority claim (Paris Convention Article 4H).

For saying that the claimed invention of the application claiming priority in Japan is disclosed by the whole application documents of the first application, the claimed invention of the application in Japan understood by consideration of the whole description of the application documents of the application in Japan shall be within the scope of the matters disclosed in the whole filing documents of the first application.

It shall be determined whether the claimed invention of the application in Japan is within the scope of the matters disclosed in the whole filing documents of the first application or not, depending on the examples of new matters (for determination of new matter, see "Part III, Section I New Matter").

The effects of priority claim shall be determined on a claim-by-claim basis in principle. Also where the matters for defining the invention in one claim (hereinafter referred to as "Invention-defining matters") are expressed by formal or actual alternatives (hereinafter referred to as "alternatives". For "formal alternatives" and "actual alternatives", see "Part II, Chapter 2, 1.5.5 Determining whether a Claimed Invention is Novel (Note1)"), the effects of priority claim shall be determined by each alternative. Furthermore where modes for carrying out the claimed invention are newly added, the effects of priority claim shall be determined by each newly added part.

Typical cases where the claimed invention of the application in Japan is not considered to be within the scope of the matters disclosed in the whole filing documents of the first application are shown as follows;

(1) Where matters which are not disclosed in the whole filing documents of the first application are disclosed as invention-defining matters in the claims of the application in Japan

Where the claimed invention of the application in Japan is not disclosed in the whole filing documents of the first application by disclosing invention-defining matters that were not disclosed in the whole filing documents of the first application, the effects of priority claim cannot be recognized. For example, the cases where a patent application for a combined invention that combines structural elements disclosed in the filing documents of the first application with those newly added to the application in Japan or selection invention that selects the elements of more specific concept from the invention of generic concept disclosed in the filing documents of the first application in Japan correspond to the above (Reference: Decision of Tokyo High Court, November 27, 1986, 1983 (Gyo Ke), No.54, Suit against appeal "Manufacturing method of texture yarn").

(2) Where parts beyond the scope of the matters disclosed in the whole filing documents of the first application are included in the claimed invention of the application in Japan (the cases where modes for carrying out the invention are added to the application in Japan etc.) Where parts beyond the scope of the matters disclosed in the whole filing documents of the first application are included in the claimed invention of the application in Japan by disclosing the matters that were not disclosed in the whole filing documents of the first application (new modes for carrying out the invention etc.) or deleting the described matters (partial deletion of the invention-defining matters etc.), the effects of priority claim cannot be recognized for the parts concerned (Reference: Decision of Tokyo High Court, October 8, 2003, 2002 (Gyo ke) No.539, Suit against appeal "artificial nipple").

In this case, an invention recognized to be within the scope of the matters disclosed in the whole filing documents of the first application is included in the claimed invention of the application in Japan, the effects of priority claim can be recognized for the parts concerned (partial priority) (for details, see "4.3 Treatment of partial priority or multiple priorities" that is mentioned later).

(3) Where the claimed invention of the application in Japan come to be carried out and not to be disclosed in the whole filing documents of the first application by the addition of modes for carrying out the claimed invention and so on, though the first application describes the invention so that a person skilled in the art cannot carry it out.

Where the invention that was impossible to be carried out by a person skilled in the art based on the matters disclosed in the whole filing documents of the first application comes to be carried out by the addition of modes for carrying out the claimed invention, the effects of priority claim cannot be recognized because the claimed invention of the application in Japan come not to be within the scope of the matters disclosed in the whole filing documents of the first application (Reference: Decision of Tokyo High Court, October 20, 1993, 1992 (Gyo ke) No.100, Suit against appeal, "MB-530A derivative", Decision of Tokyo High Court, March 15, 2001, 1998,(Gyo ke) No.180, Suit against appeal, "Immunoassay").

(Cases where the claimed invention of the application in Japan comes to be carried out by changing common general technical knowledge shall be dealt with in the same manner as above.)

Here, it shall be determined whether the claimed invention of the application in Japan is applicable or not, depending on the examples of enablement requirement (for specific determining methods, see "Part I, Chapter 1, 3.2 Enablement requirement").

4.2 Examples of determination of the effects of priority claim

[Example 1] Where the claimed invention of the application in Japan is changed within the scope of the matters disclosed in the whole filing documents of the first application **The first application**: The claimed invention of the first application concerns a specified compound, and the mode of operation of an anticancer drug containing this compound as an effective ingredient is disclosed in the whole filing documents.

The application in Japan: The claimed invention of the application in Japan was considered to concern the anticancer drug containing the relevant compound as an effective ingredient, but the detailed description and description of drawings of the

invention are within the scope of matters disclosed in the whole filing documents of the first application.

Determination of priority: Since it is described in the whole filing documents of the first application that the specified compound is used as an anticancer drug, the effects of priority claim are recognized.

[Example 2] Where the invention disclosed in the whole filing documents of the first application is combined with other specified matters of invention that are not disclosed in the above

The first application: Only a "damping structure that combines low and upper layers of the structure by a damping system" is disclosed in the whole filing documents of the first application.

The application in Japan: The claimed invention of the application in Japan is considered to concern the "damping structure that combines the low and upper layers of the structure by a damping system and sets up the control means to control the combination".

Determination of priority: Since the claimed invention of the application in Japan is not within the scope of the matters disclosed in the whole filing documents of the first application by combining the invention disclosed in the whole filing documents of the first application with other invention-defining matters that were not disclosed in the whole filing documents of the first application, the effects of priority claim are not recognized.

[Example3] Where a mode for carrying out the invention is newly added to the invention that can be carried out from the description of the whole filing documents of the first application

The first application: The claimed invention of the first application is a light scanning system containing mirror angle adjustability, and only the light scanning system adjusting the mirror angle by a screw is disclosed as a mode for carrying out the invention.

The application in Japan: Though the expression of the claimed invention of the application in Japan is the same light scanning system with mirror angle adjustability as that of the first application, a light scanning system that adjusts automatically the mirror with a piezoelectric element is newly added as a mode for carrying out the invention.

Determination of priority: In the claimed invention of the application in Japan, the effects of priority claim on the part corresponding to the light scanning system that adjusts automatically the mirror with a piezoelectric element are not recognized, and the effects of priority claim are recognized for only matters within the scope of the matters disclosed in the whole filing documents of the first application.

(Explanation)

In the case of this example, since the mode of carrying out adjusting automatically the mirror with a piezoelectric element is not disclosed in the whole filing documents of the first application, meaning that the parts in the claimed invention of the application in Japan corresponding to the mode of carrying out the invention is not recognized to be within the scope of matters disclosed in the whole filing documents of the first application, the effects of priority claim are not recognized for the parts.

[Example 4] Where the claimed invention of the application in Japan becomes

applicable by addition of the mode of carrying out the invention

The first application: Since a mode of operation is not disclosed in the whole filing documents of the first application, the claimed invention of the first application is not recognized to be applicable.

The application in Japan: Though the expression of the claimed invention of the application in Japan is the same as that of the first application, the claimed invention of the application in Japan comes to be carried out by addition of the mode carrying out the invention to the detailed description or drawings of the invention.

Determination of priority: Since the claimed invention of the application in Japan is not within the scope of matters disclosed in the whole filing documents of the first application by addition of a new mode for carrying out the invention, the effects of priority claim are not recognized.

(Explanation)

Where the description of a new mode for carrying out the invention is added to the whole filing documents of the first application to make the application in Japan, resulting that the claimed invention of the application in Japan comes to be newly carried out, the effects of priority claim are not recognized for the claimed invention of the application in Japan because the invention is not within the scope of the matters disclosed in the whole filing documents of the first application.

[Example 5] Where the addition of description of the experiment results showing that the invention is usable makes it possible to carry out the claimed invention of the application in Japan

The first application: The claimed invention of the first application is a gene, and since the functions of the gene concerned are unknown though it can be produced according to the description of the whole filing documents, the claimed invention of the first application is recognized impossible to be carried out.

The application in Japan: Though the claimed invention of the application in Japan is the same gene as the claimed invention of the first application, the claimed invention of the application in Japan is made it possible to be carried out by adding for the first time the description of the functions based on the experiment results on the gene concerned to the whole filing documents of the second application.

Determination of priority: Since the invention relating to the gene of the application in Japan is not within the scope of matters disclosed in the whole filing documents of the first application, the effects of priority claim are not recognized.

(Explanation)

Where the description of a new mode for carrying out the invention is added to the whole filing documents of the first application to make the application in Japan, resulting that it becomes possible to carry out the claimed invention of the application in Japan, the effects of priority claim are not recognized for the claimed invention of the application in Japan because the invention is not within the scope of the matters disclosed in the whole filing documents of the first application.

[Example 6] Where it becomes possible to carry out the invention by changes in common general technical knowledge

The first application: The claimed invention of the first application is a genetically modified plant, and only a dicotyledonous plant is disclosed as a mode of operation in the whole filing documents of the first application. It cannot be said that a genetically

modified plant could be produced with respect to monocotyledons from the description of the whole filing documents concerned and common general technical knowledge at the time when the first application was filed.

The application in Japan: Though the description of the whole filing documents of the application in Japan is the same as the description of the whole filing documents of the first application, technical improvement in gene recombination after filing of the first application enabled the gene recombination of monocotyledons, if it is possible for dicotyledonous plants, which becomes a common general technical knowledge now, resulting that the invention relating to the genetically-engineered plant of the application in Japan was applicable also with respect to monocotyledons.

Determination of priority: Since the parts relating to the monocotyledons come not to be within the scope of matters disclosed in the whole filing documents of the first application without changes in common general technical knowledge, the effects of priority claim are not recognized, and only with respect to the parts relating to dicotyledonous plants, the effects of priority claim are recognized.

(Explanation)

While the description of the whole filing documents of the application in Japan was the same as the description of the whole filing documents of the first application, the parts of the application in Japan which it becomes possible to carry out by further changes in common general technical knowledge is not within the scope of the matters disclosed in the whole filing documents of the first application, so the effect of priority claim relating to the part is not recognized.

4.3 Treatment of partial priority or multiple priorities

The application in Japan sometimes contains one or more elements that were not included in the first application, and in this case, the Paris Convention recognizes the claim of priority (Article 4F). In addition, the priority under the Paris Convention can be claimed and filed, based on the multiple first applications (including the applications filed in two or more countries), respectively (Article 4F). In this case, the effects of priority claim shall be determined as follows;

(1) Where the application in Japan claims the priority under the Paris Convention based on the first application, and the invention relating to a part of claims or alternatives of the application in Japan is disclosed in the first application (partial priority), presence/absence of the effects of priority claim based on the first application corresponding to the parts concerned shall be determined.

[Example 1] Where only the invention relating to a part of claims of the application in Japan is disclosed in the whole filing documents of the first application

The first application: Only corrosion-resisting steel containing chrome is disclosed in the whole filing documents of the first application.

The application in Japan: The claimed invention of the application in Japan is considered to be corrosion-resisting steel containing chrome, and the invention related to other claims considered to be corrosion-resisting steel containing chrome and aluminum.

Determination of priority: Since the invention regarding one claim of the application in Japan, corrosion-resisting steel containing chrome, is disclosed in the whole filing documents of the first application, the effects of priority claim are recognized.

On the other hand, for the other claimed invention, corrosion-resisting steel containing chrome and aluminum, is not within the scope of the matters disclosed in the whole filing documents of the first application, the effects of priority claim are not recognized.

[Example 2] Where only a part of alternatives of the claimed invention of the application in Japan are described in the whole filing documents of the first application

The first application: The claimed invention of the first application is the one containing the condition where the carbon number of alcohol is 1-5, and only the mode of operation of 1-5 of carbon number of alcohol is disclosed in the whole filing documents.

The application in Japan: The claimed invention of the application in Japan contains the condition where the number of alcohol is 1-10 (actual alternative).

Determination of priority: Since the invention regarding one claim of the application in Japan, the condition where the carbon number of alcohol is 1-5, is disclosed in the whole filing documents of the first application, the effects of priority claim are recognized.

On the other hand, since the condition where the carbon number of alcohol is 6-10 is not within the scope of the matters disclosed in the whole filing documents of the first application, the effects of priority claim are not recognized.

(2) Where the application in Japan claims the priority under the Paris Convention based on two or more first applications (multiple priorities), the invention relating to a part of claims or alternatives of the application in Japan is disclosed in the first application and the invention relating to another part of claims or alternatives is disclosed in the first application, presence/absence of the effects of priority claim based on the first application corresponding to each part shall be determined.

[Example 3] Where the matters disclosed in the first multiple applications are disclosed in the individual claim of the application in Japan, respectively

The first application: The corrosion-resisting steel containing chrome is disclosed in the whole filing documents of the first application A, while the corrosion-resisting steel containing chrome and aluminum is disclosed in the whole filing documents of the first application B.

The application in Japan: The invention regarding one claim of the application in Japan claiming priority based on both of the first applications A and B is the corrosion-resisting steel containing chrome and the another claimed invention is the corrosion-resisting steel containing chrome and aluminum.

Determination of priority: For one claimed invention of the application in Japan, the effects of priority claim based on the first application A are recognized, while for another claimed invention, the effects of priority claim based on the first application B are recognized.

[Example 4] Where the matters described in the multiple first applications are combined and described in one claim of the application in Japan

The first application: The condition where the carbon number of alcohol is 1-5 is disclosed in the whole filing documents of the first application A, while the condition where the carbon number of alcohol is 6-10 is disclosed in the whole filing documents of
the first application B.

The application in Japan: The invention filed to Japan, claiming priority based on the first application A and B, contains the condition where the carbon number of alcohol is 1-10 (actual alternative).

Determination of priority: Since the invention relating to the patent application in Japan has actual alternatives, determination shall be made by each alternative, and for the condition where the carbon number of alcohol is 1-5, the effects of priority claim based on the first application A are recognized, while for the condition where the carbon number of alcohol is 6-10, the effects of priority claim based on the first application B are recognized.

(3) Where the application in Japan claims the priority under the Paris Convention based on two or more first applications (multiple priorities), and invention-defining matters of the application in Japan are commonly disclosed in the first applications, the examination should be made, considering the date of filing of the earliest application that discloses the invention-defining matters of the invention as the priority date.

[Example 5] Where the invention-defining matters of the application in Japan are commonly disclosed in multiple first applications

The first application: A digital camera equipped with a specially structured image pickup device and auto-focusing device is disclosed in each of the whole filing documents of the first application A and the first application B filed later than the first application A, and the claimed invention of the first application A is the digital camera equipped with a specially structured image pickup device, while the claimed invention of another first application B is a digital camera equipped with an auto-focusing device.

The application in Japan: The claimed invention filed, claiming priority based on both the first application A and B, is the digital camera equipped with a specially structured image pickup device and auto-focusing device.

Determination of priority: The claimed invention of the application in Japan concerned is disclosed in both of the whole filing documents of the first application A and B, examination shall be performed, considering the date of filing of the first application A that is the earlier one of the first application A and B as the priority date.

(4) Where the claimed invention of the application claiming the priority under the Paris Convention based on two or more first applications is a combination of the matters disclosed in the whole filing documents of the first applications, and the combination is not disclosed in either of the whole filing documents of the first applications, the effects of priority claim based on either of the applications are not recognized.

[Example 6] Where the claimed invention of the application in Japan is not disclosed in either of the first applications

The first application: A "greenhouse equipped with a temperature sensor and shading curtain opening/shutting system that opens/shuts the shading curtain in response to the signals from the temperature sensor" is disclosed in the whole filing documents of the first application A, and a "greenhouse equipped with a humidity sensor and ventilating window opening/shutting system that opens/shuts the ventilating window in response to the signals from the humidity sensor" is disclosed in the whole filing documents of the signals from the humidity sensor" is disclosed in the ventilating window in response to the signals from the humidity sensor" is disclosed in the whole filing documents of the

other first application B.

The application in Japan: The claimed invention of the patent application claiming priority based on both of the first applications A and B concerns the "greenhouse equipped with a temperature sensor and ventilating window opening/shutting system that opens/shuts the ventilating window in response to the signals from the temperature sensor".

Determination of priority: Since the greenhouse equipped with a temperature sensor and ventilating window opening/shutting system that opens/shuts the ventilating window in response to the signals from the temperature sensor is not disclosed in either of the whole filing documents of the first application A or B, the effects of priority claim based on either of the applications are not recognized.

4.4 Treatment of the cases where an application that serves as a basis of priority claim claims priority

Where the earlier application that served as the basis of the priority under the Paris Convention (the second application) claims the priority based on the application filed prior to the above application (the first application), for the parts disclosed in the whole filing documents of the first application among the second application, the second application cannot be "the first application" prescribed by the provision of the Paris Convention Section 4 C(2). Therefore the effects of priority claim are not recognized for the parts that have been already disclosed in the whole filing documents of the first application are recognized only for the parts that are not disclosed in the whole filing documents of the first application.

4.5 Deposit of microorganisms and priority claim

For treating cases where an application requiring deposit of microorganisms claims priority, see "Part VII, Chapter 2, 5.1 (iii) Application claiming priority".

5. Treatment of priority claim under the Paris Convention in examination

5.1 Where determination on effects of priority claim is required

In application claiming priority under the Paris Convention, it is sufficient to be determined the effects of priority claim only when a prior art document that can be the ground of reasons for refusal is found during the period from the date of filing of the first application that serves as a basis of priority claim to the date of filing of the application in Japan claiming priority.

However where determination is easily made etc., it is not avoided to determine the effects of priority claim in advance of prior art search.

(Explanation)

Since determination of the effects of priority claim is required only when there is a prior art document etc. that can be a ground for a reason for refusal during the period from the date of filing of the first application to the date of filing of the application in Japan, it is sufficient for examination practices to determine the effects of priority claim only when a prior art document etc. that can be a reason for refusal is found during the period from the date of filing of the first application to the date of filing of the application in Japan.

However, since determination of the effects of priority claim in advance of prior art

search sometimes may contribute to effective examination due to restriction of the time range of prior art search, the effects of priority claim can be determined in advance of prior art search where the effects of priority claim can be easily determined etc.

5.2 Treatment of patent application for which reasons for refusal exist because effects of priority claim are not recognized

Where in the examination of the application claiming priority under the Paris Convention, a reason for refusal arises because the effects of priority claim are not recognized for the invention relating to the patent application concerned, the notification of reasons for refusal shall specify the claims, and describe that the effects of priority claim are not recognized, with their reasons. When a written opinion is submitted or correction of description, claims or drawings is made, presence/absence of the effects of priority claim shall be newly determined.

6. Other points of concern

6.1 Division or conversion of application claiming priority under the Paris Convention

For divisional or converted application claiming priority under the Paris Convention to Japan, the priority claimed at the original application can be claimed (Paris Convention, Article 4G).

(Hereinafter, applied to the divisional or converted applications filed since January 1 in 2000)

Statements or documents certifying the priority submitted with respect to the original application are considered to have been submitted simultaneously with the new patent application (Patent Act Article 44 (4), Patent Act Article 46 (5)).

6.2 Priority declared as governed by the Paris Convention

The followings can de declared as governed by the Paris Convention (Patent Act Article 43bis (i)):

1) The priority based on the application made by Japanese nationals or nationals of a member country of the Paris Convention (including nationals deemed to be the nationals of the member country in accordance with Article 3 of the Paris Convention) in one of the member countries of the World Trade Organization (WTO):

2) The priority based on the application made by the nationals of a member country of WTO in one of the member countries of the Paris Convention or WTO.

In addition, where a national of a country that is neither a country of the Union of the Paris Convention nor a member of the World Trade Organization (limited to the country allows Japanese nationals to declare a priority under the same conditions as in Japan, and is designated by the Commissioner of the Patent Office, hereinafter referred to as a "specified country"), a Japanese national, a national of a country of the Union of the Paris Convention or a national of a member of the World Trade Organization may declare a priority claim in the patent application based on the application filed in the specified country (Patent Act Article 43bis (2)).

These applications claiming priority shall be treated, as well as the cases of the applications claiming priority under the Paris Convention, in accordance with the above 4 and 5.

6.3 International application of the Patent Cooperation Treaty and its priority

Where Japan is contained in the designated countries in the international application claiming priority based on the national application to Japan (so-called "self designation"), internal priority can be claimed for the parts relating to designation of Japan (Patent Cooperation Treaty (PCT) Article 8 (2)(b)).

On the other hand, in the international application claiming priority based on the international application having designated Japan and other PCT contracting countries, the priority under the Paris Convention can be claimed with respect to the parts relating to designation of Japan when Japan is contained in the designated country (PCT Article 8 (2) (a)).

Earlier application as a	Later application	Priority that can be
basis of priority claim	claiming priority	claimed
National application	International	Internal priority
	application containing	
	Japan	
	as a specified country	
	(self designation)	
International	National application	Internal priority or
application having		priority under the
designated		Paris Convention
Japan and		(Selection by
other countries		applicants)
	International	Priority under the
	application containing	Paris Convention
	Japan	
	as a specified state	

(For details, see the attached table)

6.4 Treatment of priority claim under the Paris Convention based on special application

6.4.1 Treatment of priority claim based on divisional or converted application

Since only the first application in one of the member countries of the Paris Convention can serve as a basis of priority claim (Paris Convention Article 4C (2)), where the application in Japan is filed claiming the priority based on a divisional or converted application, the effects of priority claim are not recognized for matters disclosed in the whole filing documents of the original application, while the matters are disclosed in the whole filing documents of the divisional or converted application concerned.

Where the priority is claimed based on both divisional or converted application and its original application, the effects of priority claim based on the original application are recognized for the matters disclosed in the description etc. of the original application, while the effects of priority claim based on the divisional or converted application are recognized for the matters disclosed only in the whole filing documents of the divisional or converted application, respectively.

In these cases, where one year has passed from the filing date of the original application, the priority cannot be claimed based on the application concerned while the priority is claimed based on the divisional or converted application of the original application.

6.4.2 Treatment of priority claim based on continuation-in-part application in the US

Since only the first application in one of the member countries of the Paris Convention can serve as a basis of priority claim (Paris Convention Article 4C(2)), where the application in Japan is filed claiming the priority based on the continuation-in-part (CIP) application in the US, the effects of priority claim are not recognized for the matters disclosed in the whole filing documents of the original application, while the matters are disclosed in the whole filing documents of CIP application.

Therefore, where the priority is claimed based on the CIP application or both of CIP application and its original application, presence/absence of the effects of priority claim shall be determined in the following manner;

(1) Where only CIP application in the US serves as a basis of priority claim:

- Where the claimed invention of a patent application claiming priority defines the matters disclosed only in the whole filing documents of the CIP application as the specified matters of invention, the effects of priority claim are recognized.
- ii) Where the claimed invention of a patent application claiming priority defines the matters commonly disclosed in the whole filing documents of the original application in the US and in the whole filing documents of the CIP application as the specified matters of invention, the effects of priority claim are not recognized.
- iii) Where the claimed invention of a patent application claiming priority contains both the matters commonly disclosed in the whole filing documents of the original application in the US and filing documents of the CIP application and the matters disclosed only in the whole filing documents of the CIP application, the effects of priority claim are recognized only for the matters disclosed only in the whole filing documents of the CIP application.

However, where only filing documents of the CIP application are submitted as a priority certificate, the effects of priority claim are not recognized tentatively, and when reasons for refusal is notified, the tentative recognition is added to the notification of reasons for refusal to request submission of the filing documents of the original application.

When the filing documents of the original application are submitted, presence/absence of the effects of priority claim shall be determined after reference of the above documents.

(2) Where both of the original application in the US and CIP application based on the original application concerned serve as a basis of priority claim:

The effects of priority claim based on the original application are recognized for the matters disclosed in the whole filing documents of the original application, and the effects of priority claim based on the CIP application are recognized for the matters disclosed only in the whole filing documents of the CIP application, respectively.

However, where one year has passed from the filing date of the original application, the priority cannot be claimed based on the application concerned while the priority is

claimed based on the CIP application of the original application.

6.4.3 Treatment of priority claim based on preliminary application in the US etc.

The application that can serve as a basis of priority claim under the Paris Convention is a formal national application defined by the internal laws of each member country (Paris Convention 4A (2) and (3)).

Provisional application based on the system of provisional application or provisional specification in the US, UK and Australia can serve as a basis of priority claim because it is considered to be a normal national application in the country concerned.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part IV: Priority

Chapter 2 Internal priority

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Chapter 2 Internal priority

(A provision applied to an application on or before March 31, 2005) Patent Act Article 41

1 A person requesting the grant of a patent may make a priority claim for an invention claimed in the patent application, based on an invention disclosed in the description or scope of claims for a patent or utility model registration, or drawings in the case where the earlier application was a foreign language written application, foreign language documents originally attached to the application of an earlier application filed for a patent or utility model registration which the said person has the right to obtain hereinafter referred to as "earlier application", except in the following cases:

- (i) where the said patent application is not filed within one year from the date of the filing of the earlier application;
- (ii) where the earlier application is a new divisional patent application extracted from a patent application ..., a patent application converted from a patent application ..., or a new divisional utility model registration application extracted from a utility model registration application ... or a utility model registration application converted from a utility model registration application ...;
- (iii) where at the time of the filing of the said patent application, the earlier application had been waived, withdrawn or dismissed;
- (iv) where, at the time of the filing of the said patent application, the examiner's decision or the trial decision on the earlier application had become final and binding; and
- (v) where, at the time of the filing of the said patent application, the registration establishing a utility model right under Article 14 2 of the Utility Model Act with respect to the earlier application had been effected.

2 For inventions among those claimed in a patent application containing a priority claim under paragraph 1, for those that are stated in the description, scope of claims for a patent or utility model registration or drawings (in the case where the earlier application was a foreign language written application, foreign language documents) originally attached to the application of the earlier application on which the priority claim is based (...), the said patent application shall be deemed to have been filed at the time when the earlier application was filed, in the case of the application of Article 29, the main clause of Article 29-2, Articles 30(1) to (3), 39(1) to (4), 69(2)(ii), 72, 79, 81, 82(1), 104(...) and 126(5)(...),

3-4 (omitted)

(A provision applied to an application on or after April 1, 2005) Patent Act Article 41 1 (omitted)

- (i) (omitted)
- (ii) where the earlier application is a new divisional patent application

extracted from a patent application ..., a patent application converted from a patent application ... or a patent application based on a utility model registration under Article 46-2(1)..., or a new divisional utility model registration application extracted from a utility model registration application ... or a utility model registration application converted from a utility model registration application converted from a

(iii)-(v) (omitted)

2-4 (omitted)

1. Purport of internal priority

In the priority system based on a patent application prescribed by the provision of Patent Act Article 41 (so-called, "internal priority". Hereinafter referred to as "priority" in this chapter), in cases where the patent application claiming priority is filed as a comprehensive invention (hereinafter referred to as "later application") containing the invention of its own patent application or application for utility model registration that has been already filed (hereinafter referred to as "earlier application"), for inventions stated in the description, scope of claims or drawings (hereinafter referred to as "description etc.") of the earlier application among the later application, prioritized treatment to deem the later application to have been filed at the time when the earlier application was filed, in the case of the application of Article 29 etc.

The system brought about the following results; 1) a patent application can be flied as a comprehensive invention collecting the content of the invention concerned and later invention of improvement so that the results of technical development can be easily and smoothly protected as a patent right in a complete form; 2) the effects of designation are recognized also in Japan even where the priority is claimed based on a patent application or application for utility model registration that has been filed earlier and Japan is designated in the international application based on the Patent Cooperation Treaty (PCT) (so-called, "self designation").

2. Requirements of claim of internal priority

2.1 Person who can claim priority

A person who can claim priority is the one who desires a patent and the applicant of the earlier application (including his/her successor) (Patent Act Article 41 (1) main paragraph).

Therefore, the applicant of the earlier application and the applicant of the later application shall be the same at the time when the later application is filed.

Moreover, in case of the application by multiple applicants (joint application), the applicant of the earlier application and the applicant of the later application shall be completely the same.

2.2 Period when priority can be claimed

The period when priority can be claimed shall be one year from the filing date of the earlier application (Patent Act Article 41 (1)(i)).

2.3 Earlier application that can serve as a basis of priority claim

The earlier patent application or application for utility model registration, except in

the following cases of (1) to (4), can serve as a basis of claim of internal priority.

However, the application that can be a basis of claim of internal priority is only a patent application or an application for utility model registration, and an application for design registration cannot serve as a basis of claim of internal priority (Patent Act Article 41 (1)).

- (1) Where the earlier application is a new patent application divided out from or converted from a patent application, or a new patent application based on a utility model registration. (Patent Act Article 41(1) (ii))
- (2) Where the earlier application has been abandoned, withdrawn or dismissed at the time when the patent application concerned is filed (Patent Act Article 41 (1) (iii))
- (3) Where the examiner's decision or the trial decision on the earlier application has become final and binding at the time when the patent application concerned is filed (Patent Act Article 41 (1)(iv))
- (4) Where the registration of establishment of the utility model right has been effected at the time when the patent application concerned is filed (Patent Act Article 41 (1) (v))

3. Effects of claim of internal priority

For inventions amongst those claimed in a patent application containing a priority claim, for those that are stated in the descriptions etc originally attached to the request of an earlier application on which the priority claim is based, the patent application concerned shall be deemed to have been filed at the time when the earlier application was filed, in application of the following provisions in connection with substantive examination (Patent Act Article 41bis);

- (1) Article 29 (novelty, inventive step)
- (2) The principle sentence of Article 29bis (so-called, prior art effect)
- (3) Article 30 (1) to (3) (exceptions to lack of novelty of invention)
- (4) Article 39 (1) to (4) (precedent)
- (5) Article 126 (5) (requirements for independent patentability of correction trial (except requirements prescribed in for Article 36)) (including its application under Article 17bis(5))

However, in application of the provisions of the other clauses in connection with substantive examination (for example, Article 36) on patent application claiming priority, determination shall be made, setting the date of filing of the later application to be the standard. And in the case of application of the provisions of 29bis on patent application claiming priority as a precedent application, see "Part II, Chapter 3, 2.2(3)".

4. Determination of effects of claim of internal priority

4.1 Basic idea

The subject of priority claim is the "invention that is disclosed in the description etc. originally attached to the request of an earlier application" (Article 41(2)).

It cannot be said that the claimed invention of the later application claiming priority is disclosed in the description etc. originally attached to the request of the earlier application unless the claimed invention of the later application, which is understood by

considering what is disclosed in the description etc. of the later application, is within the scope of matters disclosed in the description etc. originally attached to the request of the earlier application.

It is determined whether the claimed invention of the later application is within the scope of matters disclosed in the description etc. originally attached to the request of the earlier application or not, depending on the examples of new matters (for determination of new matter, see "Part III, Section I New Matter").

The effects of priority claim shall be determined on a claim-by-claim basis in principle.

Also where the matters for defining the invention in one claim (hereinafter referred to as "Invention-defining matters") are expressed by formal or actual alternatives (hereinafter referred to as "alternatives". For "formal alternatives" and "actual alternatives", see "Part II Chapter 2. 1.5.5 Determining whether a Claimed Invention is Novel (Note 1)"), the effects of priority claim shall be determined by each alternative, respectively. Furthermore where modes for carrying out the claimed invention are newly added, the effects of priority claim shall be determined by each newly added part.

For typical cases, see "Chapter 1, 4.1 Basic Idea".

4.2 Treatment of partial priority or multiple priorities

- (1) Where the later application claims internal priority based on the earlier application and the invention relating to a part of claims or alternatives of the later patent application is disclosed in the earlier application, presence/absence of the effects of priority claim based on the earlier application corresponding to the parts shall be determined.
- (2) Where the later application claims internal priority based on two or more earlier applications, the invention relating to a part of claims or alternatives of the later application is disclosed in one of the earlier applications and another invention relating to another part of claims or alternatives is disclosed in another earlier application, presence/absence of the effects of priority claim based on the earlier application corresponding to each part shall be determined.
- (3) Where the later application claims internal priority based on two or more earlier applications and invention-defining matters of the later application are commonly disclosed in the earlier applications, the examination shall be made, setting the date of filing of the earliest one of the earliest application disclosing the invention-defining matters of the invention as the priority date.
- (4) Where the claimed invention of a patent application claiming the priority based on two or more earlier applications is a combination of the matters disclosed in the description etc. of each earlier application, and the combination is not disclosed in any of description etc. of the patent applications, any of the effects of priority claim are not recognized.

For examples of determination, see "Chapter 1, 4.3 Treatment of partial priority or multiple priorities".

4.3 Treatment of cases where application that serve as a basis of claim of priority claims priority

Where the earlier application that served as a basis of claim of internal priority (the second application) claims internal priority based on the earlier application (the first application) or priority under the Paris Convention (including priority declared by the Paris Convention. See "Chapter 1, 6.2 Priority declared as governed by the Paris Convention"), if the priority is recognized again for the invention disclosed in the first application (cumulatively), the period of priority will be substantively extended. Therefore, among the matters disclosed in the description etc. of the second application, the effects of priority claim are not recognized for the matters already disclosed in the description, etc. of the first application, and the effects of priority claim are recognized only for the parts that are not disclosed in the description, etc. of the first application (Patent Act Article 41 (2),(3)).

4.4 Deposit of microorganisms and its priority claim

For treating cases where an application requiring deposit of microorganism claims priority, see "Part VII, Chapter 2, 5.1 (iii) Application claiming priority".

5. Treatment of claim of internal priority in examination

Claims of internal priority shall be treated in examination as in case of priority claim under the Paris Convention in examination.

For details, see "Chapter 1, 5 Treatment of priority claim under the Paris Convention in examination".

6. Other points of concern

6.1 Division or conversion of application claiming internal priority

For divisional application of a patent application claiming internal priority or an application converted from application for utility model registration claiming internal priority to a patent application, the priority claimed at the time when original application was filed can be claimed.

(The following shall be applied to the divisional or converted application filed since January 1, 2000).

The statements or documents certifying the priority submitted with respect to the original patent application are considered to have been submitted to the Commissioner of the Patent Office simultaneously with the said new patent application (Patent Act Article 44 (4), Article 46 (5)).

6.2 Withdrawal of an application that serves as a basis of claim of internal priority

(1) The earlier application that served as a basis of claim of internal priority shall be deemed to have been withdrawn when one year and three months has lapsed from the filing date of the earlier application. However, however, that this shall not apply to the case where the earlier application has been waived, withdrawn or dismissed, where the examiner's decision or trial decision on the earlier application has become final and binding, where the registration establishing a utility model right under Article 14 2 of the Utility Model Act with respect to the earlier application have been effected or where all priority claims based on the earlier application have been withdrawn (Patent Act Article 42 (1)).

- (2) The applicant of a patent application containing a priority claim may not withdraw the priority claim after the period of one year and three months has passed from the filing date of the earlier application. (Patent Act Article 42(2)). In addition, where the patent application containing a priority claim is withdrawn within one year and three months from the filing date of the earlier application, the said priority claim shall be deemed to have been withdrawn simultaneously (Patent Act Article 42 (3)).
- (3) Where the international application containing Japan as a designated country serves as a basis of claim of internal priority, the application shall be deemed to have been withdrawn at the later of the time of the National Processing Standard Time (the time of the expiration of the Time Limit for the Submission of National Documents) or the time when one year and three months has lapsed from the International Application Date (Patent Act Article 184 –15 (4)).

Attached Table: Relation of international application based on Patent Treaty Cooperation and priority

Earlier application that	Later application	Priority that can be	Withdrawal deemed	Period when priority
serves as the basis of	claiming priority	claimed	time of the earlier	claim can be withdrawn
priority claim			application	
National application	International application	Internal priority (PCT	At the expiration of one	Before the expiration of
	containing Japan as a	Article 8 (2)(b), Patent	year and three months	30 months from the
	specified country (self	Act Article 184-3 (1) and	from the filing date of	priority date (*) (PCT
	designation)	41 (1))	the earlier application	regulations 90, 2.3 (a)
			(Patent Act Article 42	and Patent Act Article
			(1))	184-15 (1))
International application	National application	Internal priority or	Internal priority \rightarrow the	Internal priority→before
designating Japan		priority under the Paris	later of the time of the	the expiration of one
and other countries		Convention (Selection	National Processing	year and three months
		by applicant)	Standard Time or the	from the date of filing of
		(Patent Act Article 184-3	time when one year and	the earlier application
		(1), 184-15 (4) and 41 or	three months has lapsed	(Patent Act Article 42
		Paris Convention Article	from the International	(2))
		4A)	Application Date (Patent	Paris Convention \rightarrow
			Act Article 184 –15 (4)	withdrawal is not
			and 42 (1))	possible
			Paris Convention→not	
			specified.	
	International application	Priority under the Paris	Not specified	Before the expiration of
	containing Japan as a	Convention		30 months from the
	specified country	(PCT Article 8 (2) (a)		priority date (PCT
		and Paris Convention		regulations 90, 2.3(a))
		Article 4A)		

* Claim of priority can be withdrawn after the expiration of one year and 3 months from the filing date of the earlier application, however

the earlier application never be during the pendency before the JPO again.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part V: SPECIAL APPLICATIONS

Chapter 1 Division of Application

Section 1 Requirements for Division of Application

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Chapter 1 Division of Application

Section 1 Requirements for Division of Application

(corresponding to the 2008 Revised Patent Act)

* This Section is described according to the 2008 Revised Patent Act. In the case where a new patent application is filed after a certified copy of decision of refusal to the original patent application has been transmitted, the requirements are applicable where the said transmission is made on or after April 1, 2009 (See p.19, (Reference) Case3,4).

* In the case where a new patent application is filed after a certified copy of decision of refusal to the original patent application has been transmitted and that the said transmission is made on or before March 31, 2009, please refer to "Requirements for Division of Application" in the 2008 Patent Act before the revision (pp. 8~14).

[Provisions applicable to applications filed on or before March 31, 2007] Patent Law Article 44

- (1) An applicant for a patent may divide part of a patent application comprising two or more inventions into one or more new patent applications only within the time limit by which the description, claims or drawings attached to the request may be amended.
- (2) In the case of referred to in the preceding paragraph, the new patent application shall be deemed to have been filed at the time of filing of the original application. However, this shall not apply to the provisions where the new application is either another patent application as stipulated in Article 29bis of this Law or a patent application stipulated in Article 3bis of the Utility Model Act, and of Articles 30(4), 36bis(2), 41(4) and 43(1) (including its application *mutatis mutandis* under Article43(3)).

(Articles (3) and (4) are omitted)

[Provisions applicable to applications filed on or after April 1, 2007] Patent Law Article 44

(1) An applicant for a patent may extract one or more new patent applications out of a patent application containing two or more inventions only within the following cases:

- (i) at the time for or within the allowable time limit for amendments of the description, scope of claims or drawings attached to the application;
- (ii) within 30 days from the date on which a certified copy of the examiner's decision to the effect that a patent is to be granted (excluding the examiner's decision to the effect that a patent is to be granted under Article 51 as applied *mutatis mutandis* under Article 163(3) and the examiner's decision to the effect that a patent is to be granted with regard to a patent application that has been subject to examination as provided in Article 160(1)) has been served; and
- (iii) within 3 months from the date on which a certified copy of the examiner's initial decision to the effect that the application is to be refused has been served.

(2) In the case referred to in the preceding paragraph, the new patent application shall be deemed to have been filed at the time of filing of the original patent application; provided, however, this shall not apply for the purpose of applications of Article 29bis of the Patent Law where the new patent application falls under another patent application in the said Article; Article 3bis of the Utility Model Law where the new patent application falls under a

patent application in the said Article; and Articles 30(4), 41(4) and 43(1) of the Patent Law (including its *mutatis mutandis* application under paragraph (3) of the preceding Article). (Articles (3) and (4) are omitted.)

(5) Where the period as provided in Article 108(1) is extended under Article 4 or Article 108(3), the 30-day period as stipulated in paragraph (1)(ii) shall be deemed to have been extended only for that period as extended.

(6) Where the period as stipulated in Article 121(1) is extended under Article 4, the 3-month period as stipulated in paragraph (1)(iii) shall be deemed to have been extended only for the period as extended.

Hereinafter in this section, the provisions of Article 44 shall be represented by the provisions applicable to applications filed on or after April 1, 2007.

1. Purport of the Provisions for Division of Application

Even when a patent application includes two or more inventions which do not satisfy the requirement for unity of the application, or when a patent application includes an invention which is not defined in the original claims but is described in the detailed description of the invention or drawings, such inventions are also disclosed to the public by filing of the application. Thus, considering the object of the patent system where inventions are patented as a reward for such disclosure, an opportunity for protection should be extended to such inventions. This is the purport of stipulating the provisions for division of application.

The provisions for division of application enable an applicant to extract one or more new patent applications out of a patent application concerning two or more inventions. When the new application satisfies the requirements mentioned hereafter, it shall be deemed to have been filed at the time of filing of the original application (see Note).

(Note) Hereinafter, the original application from which new applications are divided is referred to as "the original application," and irrespectively as to whether or not the new application is valid, the new application is referred to as "the divisional application," in so far as there is no particular remarks otherwise stated.

2. Requirements for Division of Application

The requirements for division of application are those under which division of an application is considered to be valid, and consist of formal requirements and substantive requirements.

2.1 Formal Requirements

2.1.1 Persons who may Divide an Application

As Article 44(1) provides that "An applicant for a patent may extract one or more new patent application...," the applicant of the divisional application must be identical to that of the original application at the time of division.

2.1.2 Time Requirements

Division of an application may be made only at the time of or within the period in (1) below for applications filed on or before March 31, 2007 and only within the period as mentioned in (1) to (3) below for applications filed on or after April 1, 2007.

(1) Within the time limit by which the description, claims or drawings attached to the request may be amended (Article 44(1)(i))

The time limit for amendments of the description, claims or drawings attached to the request is the period as mentioned in (1) to (2) below.

- Before the transmittal of a certified copy of an examiner's decision that a patent is to be granted (except after the applicant receives the first notice of reasons for refusal)(main text of Article 17bis (1))
- ② Designated period of time where the applicant receives the notice of reasons for refusal from the examiner (including the appeal for examiner after a trial is demanded)(Article 17bis (1) (i) and (iii))
- ③ Designated period of time where the applicant receives the notice under Article 48septies after receiving a notice of reasons for refusal (Article 17bis (1)(ii))
- ④ Simultaneously with the demand for trial under Article 121(1)(Article 17bis(1)(iv))
- (2) Within 30 days from the date on which a certified copy of an examiner's decision that a patent is to be granted has been transmitted (excluding such decisions listed in and below) (Article 44(1)(ii)) (See Note)
- ① A decision that a patent is to be granted made in reconsideration by the examiner before appeal (provision of Article 51, as applied *mutatis mutandis* pursuant to Article 163(3))
- ② A decision that a patent is to be granted in the case where an application was put into further examination based on an appeal decision (Article 160(1))

However, even within 30 days from the date on which a certified copy of an examiner's decision that a patent is to be granted has been transmitted, division of an application cannot be made after registration that establishes a patent right. This is because a patent application is not pending before the Patent Office through such registration.

Where the period as provided in Article 108(1) is extended under Article 4 or Article 108(3), the period mentioned in (2) shall be deemed to have been extended only for that period as extended (Article 44(5)).

(3) Within 3 months from the date on which a certified copy of an examiner's initial decision of refusal has been transmitted (Article 44(1)(iii)) (See Note)

Where the period as provided in Article 121(1) is extended under Article 4, the period mentioned in (3) shall be deemed to have been extended only for that period as extended (Article 44(6)).

(Note) The period mentioned in (2) and (3) does not include the period after the transmittal of a certified copy of an appeal decision since an appeal decision on an appeal against an examiner's decision of refusal is neither a decision that a patent is to be granted nor a decision that the patent application is to be refused.

2.2 Substantive Requirements

In order to be deemed to have been filed at the time that the original application was filed,

a divisional application needs to meet the following substantive requirements depending on whether or not it is filed within the time limit for amendments, in addition to the formal requirements described under 2.1.

(1) Where division of an application is made within the time limit for amendments (Article 44(1)(i))

- (i) The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided.
- (ii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.

(2) Where division of an application is made within 30 days after transmittal of a certified copy of an examiner's decision to grant a patent, or within 3 months after transmittal of certified copy of a an examiner's decision of refusal. These periods must be at the time of or within the period in which amendments can be made (simultaneously with the demand for trial or the designated period under the provisions of Article 50 in a notification of results for refusal (Article 44(1)(ii) and (iii))

- (i) The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided
- (ii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing
- (iii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being divided

Whether or not matters described in the description, claims or drawings of a divisional application are within the scope of matters described in "the description, claims or drawings of the original application immediately prior to being divided" or in the "description, claims or drawings of the original application as of the filing" shall be determined in the same way as determination on new matter (Regarding determination on new matter, refer to "Part III: Section I. New Matter.")

In the case of either (1) or (2), since the description, claims or drawings generally contains two or more inventions, the requirement (i) is satisfied except in very unusual cases wherein all of the two or more inventions described in the description, claims or drawings of the original application are considered to have been made to be the claimed inventions of its divisional application.

(Explanation)

According to the provisions of Article 44(1), in order to be deemed to have been filed at the time that the original application was filed, a divisional application is required to meet both of the following two requirements ① and ②:

- ①Two or more inventions shall be described in the description, claims or drawings of the original application immediately prior to being divided
- (2) The claimed inventions of the divisional application shall be derived from a part of the inventions described in the description, claims or drawings of the original application immediately prior to being divided

Requirement ② can be divided into the following two separate requirements:

- ②-1 The claimed inventions of the divisional application shall be inventions described in the description, claims or drawings of the original application immediately prior to being divided
- ②-2 The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided

In this regard, matters described in the description or drawings of the divisional application can be made to be the claimed inventions of the divisional application by describing them in the claims of the divisional application through amendments after the division. In consideration of this, not only the claimed inventions of the divisional application but also matters described in the description or drawings of the divisional application are limited to fit within the scope of matters described in the description, claims and drawings of the original application immediately prior to being divided. Combining this point and the requirement (2)-1, the following requirement (2)-3 arises.

②-3 Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being divided.

Considering the effect of division of an application as stipulated in Article 44(2), that is, a divisional application is deemed to have been filed at the time that the original application was filed, a divisional application must be permissible within the scope of the valid amendment of the original application. Therefore, the following condition ③ also becomes another requirement:

③ Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.

As mentioned above, regarding the substantive requirements for division of an application, assessment has to be made for four requirements, specifically, the requirements (1, 2)-2, (2)-3 and (3). However, if the requirement (2)-2 is satisfied, then the requirement (1) is also satisfied, as mentioned below.

Regarding the requirement ①

If an applicant intends to file a divisional application in the case where the description, claims or drawings of the original application describe only one invention, the divisional application inevitably contains the whole invention described in the description, claims or drawings of the original application.

Therefore, if a part of the inventions described in the description, claims or drawings of the original application had been divided into a divisional application, there had to be two or

more inventions described in the description, claims or drawings of the original application. Thus, if requirement O-2 is satisfied, then requirement O is also satisfied.

In addition, in the case of division of an application within the time limit for amendments of the original application, if the requirement ③ is satisfied, then the requirement ②-3 shall also be satisfied, as follows.

Regarding the requirement 2-3

At the time of or within the time limit for amendments of the original application, it is possible to file a divisional application for matters that are not described in the description, claims or drawings of the original application immediately prior to being divided, by describing them in the description, claims or drawings of the original application through amendment, if they are described in the description, claims or drawings of the original application application application as of the filing.

Therefore, taking into consideration that an amendment as mentioned above may be made to the original application at the time that the application is divided where the application was divided within the time limit for amendments of the original application, if matters described in the description, claims or drawings of the divisional application do not exceed the scope of matters described in the description, claims or drawings or drawings of the original application as of the filing (that is, if requirement ③ is satisfied), then requirement ②-3 shall also be satisfied.

Consequently, regarding the substantive requirements for division of an application, (1) it is sufficient to make assessment on the requirements 2-2 and 3 in the case where division of an application was made at the time of or within the time limit for amendments (Article 44(1)(i)), while (2) it is sufficient to make assessment on the requirements 2-2, 2-3 and 3 in the case where division of an application was submitted outside of such time limit (Article 44(1)(ii) and (iii)).

3. Other Remarks

3.1 Examiner's Approach where Claimed Invention of Divisional Application is the Same as Claimed Invention of Original Application after Division

Where a divisional application is made legally and a claimed invention of a divisional application is identical to a claimed invention of the original application after the division, the applications shall be subject to the provision of the Patent Law Article 39(2).

Determination whether the applications fall under the provision of Article 39(2) shall be made in accordance with "Part II: Chapter 4. Patent Law Article 39."

(Explanation)

Granting patents to both a divisional application and its original application runs counter to the doctrine of "one patent for one invention" when both contain the same claimed invention. Thus, the approach as described above is taken.

3.2 Examiner's Approach where a Divisional Application Is Filed on the Same Date on which a Request for an Appeal Against an Examiner's Decision of Refusal is Made

Where a divisional application is filed on the same date on which a request is made for an appeal against an examiner's decision that the original application is to be refused, the fulfillment of the substantive requirements for the division of an application shall be assessed deeming that the divisional application was filed pursuant to the provision of Article 44(1)(i), except where it is clear that the divisional application was not filed simultaneously with the said request for the appeal against an examiner's decision was made.

3.3 Amendments of Divisional Application

If the amendment of the description, claims or drawings of a divisional application is made, whether the amendment is legal or not is determined first. And where the amendment is legal, the requirements for divisional application are assessed on the assumption that the amended description, claims or drawings are attached to the application at the time of filing of the divisional application.

3.4 Divisional Application whose Original Application is also Divisional Application

Where an original application (hereinafter referred to as "the parent application") is divided into a divisional application (hereinafter referred to as "the child application") and the child application is divided into another divisional application (hereinafter referred to as "the grandchild application"), the grandchild application is deemed to have been filed at the time of filing of the parent application, provided that the child application meets all the requirements for division as to the parent application, and that the grandchild application meets all the requirements for division as to the child application, and that the grandchild application meets all the substantive requirements for division as to the parent application.

(Explanation)

There are no particular provisions which prohibit making a further divisional application (a grandchild application) on the basis of a divisional application (a child application) as an original application. Further, in certain situations, an applicant has no choice but to undertake repeated procedures for division (e.g., where a parent application cannot be divided due to the time limit but only the child application can be divided). Thus, insofar as both the child and the grandchild applications satisfy the prescribed requirements, the grandchild application is deemed to have been filed at the time of filing of the parent application.

3.5 Conversion of Divisional Application

Where a divisional patent application is validly converted into an application for utility model registration, the converted application is deemed to be a divisional application and the requirements for division described above are assessed on the converted application.

4. The Proviso of Patent Law Article 44(2)

The proviso of Patent Law Article 44(2) is stipulated to eliminate inconsistencies caused by deeming that a divisional application is filed simultaneously with the original application. In the following cases, therefore, the time of filing of the divisional application shall be the actual time of filing the divisional application.

- ① Where a divisional application falls under Patent Law Article 29bis or as "another application for a patent" or under Utility Model Act 3bis as "an application for a patent."
- 2 Where an applicant is to submit a written statement to the Commissioner of the Patent

Office for the application of the stipulation under Patent Law Article 30(1) or (3) for his divisional application, or where an applicant is to submit a document that proves that the claimed invention of his divisional application is an invention stipulated under Article 30(1) or (3)

- ③ Where an applicant declares an internal priority claim for the divisional application, submitting to the Commissioner of the Patent Office a document stating to that effect and indicating the earlier application
- ④ Where an applicant declares a priority claim under the Paris Convention for his divisional application, submitting to the Commissioner of the Patent Office a document stating to that effect and indicating the name of a member party to the Paris Convention where the earlier application was first filed, and where the applicant submits to the Commissioner a certified document issued by the government of the country indicating the filing date of the earlier application, and a copy of the description, claims of patent or claims of utility model, and drawings of the earlier application, or an official gazette or a certificate containing the same contents thereof, issued by that government.

Also in the case of submitting the translations of a foreign language document and of a foreign language abstract for a divisional application in a foreign language that was divided from a patent application filed on or before March 31, 2007, the time of filing of the divisional application shall be the actual time of filing of the divisional application.

5. Request for Submission of Explanatory Documents Necessary for Examination on a Divisional Application

(1) When filing a divisional application, the applicant is required to explain in a written statement that the divisional application meets the substantive requirements for division and that the claimed inventions of the divisional application are not identical to the claimed inventions of the original application or of other divisional applications, as well as required to clearly indicate changes from the description, claims or drawings of the original application, by underlining relevant parts after transcribing the description, claims or drawings of the divisional application.

(Explanation)

The applicant knows well descriptions in the description, claims or drawings of the original application that were changed in the divisional application, matters described in the description, claims or drawings of the original application from which the claimed inventions of the divisional application were derived, and the difference between the claimed inventions of the divisional application and the claimed inventions of the original application. Such information is quite helpful in promptly and precisely determining whether or not a divisional application meets the substantive requirements for division and the requirements for patentability. Therefore, in dividing an application, the applicant is requested to sufficiently explain such information in a written document.

(2) In examination on a divisional application, where a written statement based on (1) above has not been submitted and the examiner cannot easily determine whether or not the divisional application meets the substantive requirements for division or where it requires considerable time to determine whether or not the claimed inventions of the divisional application are identical to the claimed inventions of the original application or other divisional applications, the examiner may request, pursuant to Article 194(1), that the applicant submit a document explaining the descriptions in the description, claims or drawings of the original application that were changed, and matters described in the description, claims or drawings of the original application were derived, as well as the fact that the claimed inventions of the divisional application are not identical to the claimed inventions of the divisional application are not identical to the claimed inventions of the divisional application.

Where the examiner cannot easily determine whether or not a divisional application meets the substantive requirements for division or where it requires considerable time to determine whether or not the claimed inventions of the divisional application are identical to the claimed inventions of the original application or of other divisional applications, even after careful examination of the content of a written statement submitted based on (1), the examiner may request, pursuant to Article 194(1), that the applicant submits another explanatory document.

(3) Where an applicant does not give any substantive explanation in response to a request from the examiner based on (2) above and it is thus considerably difficult to determine that a divisional application meets the substantive requirements for division, the examiner may conduct examination deeming that said divisional application does not meet the substantive requirements for division.

Chapter 1 Division of Application

Section 1 Requirements for Division of Application

* This Section is described according to the 2008 Patent Act before the revision. In the case where a new patent application is filed after a certified copy of decision of refusal to the original patent application has been transmitted, the requirements are applicable where the said transmission is made on or before March 31, 2009 (See p.19, (Reference) Case1,2).

[Provisions applicable to applications filed on or before March 31, 2007] Patent Act Article 44

(1) An applicant for a patent may divide a patent application comprising two or more inventions into one or more new patent applications only within the time limit by which the description, claims or drawings attached to the request may be amended.

(2) In the case referred to in the preceding paragraph, the new patent application shall be deemed to have been filed at the time of filing of the original application. However, this provision shall not apply where the new application is either another application for a patent as referred to in Article 29bis of this Act or an application for a patent as referred to in Article 3bis of the Utility Model Act for the purposes of those Articles and of Articles 30(4), 36bis(2), 41(4) and 43(1) (including its application under Article 43bis(3)).

(Articles (3) and (4) are omitted.)

[Provisions applicable to applications filed on or after April 1, 2007]

Patent Act Article 44

(1) An applicant for a patent may extract one or more new patent applications out of a patent application containing two or more inventions only within the following time limits:

- (i) within the allowable time limit for amendments of the description, scope of claims or drawings attached to the application;
- (ii) within 30 days from the date on which a certified copy of the examiner's decision to the effect that a patent is to be granted (excluding the examiner's decision to the effect that a patent is to be granted under Article 51 as applied mutatis mutandis under Article 163(3) and the examiner's decision to the effect that a patent is to be granted with regard to a patent application that has been subject to examination as provided in Article 160 (1)) has been served; and
- (iii) within 30 days from the date on which a certified copy of the examiner's initial decision to the effect that the application is to be refused has been served.

(2) In the case referred to in the preceding paragraph, the new patent application shall be deemed to have been filed at the time of filing of the original patent application; provided, however, that this shall not apply for the purposes of applications of: Article 29bis of the Patent Act where the new patent application falls under another patent application in the said Article; Article 3bis of the Utility Model Act where the new patent application falls under a patent application in the said Article; and Article; 30(4), 41(4) and 43(1) of the Patent Act (including its mutatis mutandis application under paragraph (3) of the preceding Article). (Articles (3) and (4) are omitted.)

(5) Where the period as provided in Article 108(1) is extended under Article 4 or Article 108(3), the 30-day period as provided in paragraph (1)(ii) shall be deemed to have been extended only for that period as extended.

(6) Where the period as provided in Article 121(1) is extended under Article 4, the 30-day period as provided in paragraph (1)(iii) shall be deemed to have been extended only for that period as extended.

Hereinafter in this section, the provisions of Article 44 shall be represented by the provisions applicable to applications filed on or after April 1, 2007.

1. Purport of the Provisions for Division of Application

Even when a patent application includes two or more inventions which do not satisfy the requirement of unity of application, or when a patent application includes an invention which is not defined in the original claims but is described in the detailed description of the invention or drawings, such inventions are disclosed to the public by filing of the application. Thus, considering the object of the patent system where inventions are patented as a reward for such disclosure, an opportunity for protection should be extended to such inventions. This is the purport of stipulating the provisions for division of application.

The provisions for division of application enable an applicant to extract one or more new patent applications out of a patent application containing two or more inventions. When the new application satisfies the requirements mentioned hereafter, it shall be deemed to have been filed at the time of filing of the original application. (see Note)

(Note) Hereinafter, the original application from which new applications are divided is referred to as "the original application," and, irrespectively as to whether or not the new application is valid, the new application is referred to as "the divisional application," insofar as there is no particular remarks otherwise stated.

2. Requirements for Division of Application

The requirements for division of application are those under which division of an application is considered as valid, and consist of formal requirements and substantive requirements.

2.1 Formal Requirements

2.1.1 Persons who may Divide an Application

As Article 44(1) provides that "An applicant for a patent may extract one or more new patent applications...," the applicant of the divisional application must be identical to that of the original application at the time of division.

2.1.2 Time Requirements

Division of an application may be made only within the period as mentioned in (1) below for applications filed on or before March 31, 2007 and only within the period as mentioned in (1) to (3) below for applications filed on or after April 1, 2007.

(1) Within the time limit by which the description, claims or drawings attached to the request may be amended (Article 44(1)(i))

The time limit for amendments of the description, claims or drawings attached to the

request is the period as mentioned in ① to ④ below.

- Before the transmittal of a certified copy of an examiner's decision that a patent is to be granted (except after the applicant receives the first notice of reasons for refusal)(main text of Article 17bis (1))
- ② Within the designated time limit where the applicant receives the notice of reasons for refusal from the examiner (including the appeal examiner after a trial is demanded)(Article 17bis(1)(i) and (iii))
- ③ Within the designated time limit where the applicant receives a notice under Article 48septies after receiving a notice of reasons for refusal (Article 17bis(1)(ii))
- (4) Within 30 days of such demand where the applicant demands a trial under Article 121(1)(Article 17bis (1)(iv)).

(2) Within 30 days from the date on which a certified copy of an examiner's decision that a patent is to be granted has been transmitted (excluding such decisions listed in ① and ② below) (Article 44(1)(ii)) (see, Note)

- A decision that a patent is to be granted made in reconsideration by the examiner before appeal (provision of Article 51, as applied mutatis mutandis pursuant to Article 163(3))
- ② A decision that a patent is to be granted in the case where an application was put into further examination based on an appeal decision (Article 160(1))

However, even within 30 days from the date on which a certified copy of an examiner's decision that a patent is to be granted has been transmitted, division of an application cannot be made after registration that establishes a patent right. This is because a patent application is not pending before the Patent Office through such registration.

Where the period as provided in Article 108(1) is extended under Article 4 or Article 108(3), the period mentioned in (2) shall be deemed to have been extended only for that period as extended (Article 44(5)).

(3) Within 30 days from the date on which a certified copy of an examiner's initial decision of refusal has been transmitted (Article 44(1)(iii)) (see, Note)

Where the period as provided in Article 121(1) is extended under Article 4, the period mentioned in (3) shall be deemed to have been extended only for that period as extended (Article 44(6)).

(Note) The period mentioned in (2) and (3) does not include the period after the transmittal of a certified copy of an appeal decision since an appeal decision on an appeal against an examiner's decision of refusal is neither a decision that a patent is to be granted nor a decision that the patent application is to be refused.

2.2 Substantive Requirements

In order to be deemed to have been filed at the time that the original application was filed, a divisional application needs to meet the following substantive requirements depending on whether or not it is filed within the time limit for amendments, in addition to the formal requirements described under 2.1.

(1) Where division of an application is made within the time limit for amendments (Article 44(1)(i))

- (i) The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided.
- (ii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.

(2) Where division of an application is made after a decision that a patent is to be granted is made (that is, not within the time limit for amendments) or during the period after a decision of refusal is made but before a request for an appeal against an examiner's decision of refusal is made (Article 44(1)(ii) and (iii))

- (i) The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided.
- (ii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.
- (iii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being divided.

Whether or not matters described in the description, claims or drawings of a divisional application is within the scope of matters described in the "description, claims or drawings of the original application immediately prior to being divided" or in the "description, claims or drawings of the original application as of the filing" shall be determined in the same way as determination on new matter. (Regarding determination on new matter, refer to "Part III: Section I. New Matter.")

In the case of either (1) or (2), since the description, claims or drawings generally contains two or more inventions, requirement (i) is satisfied except in very unusual cases wherein all of the two or more inventions described in the description, claims or drawings of the original application are considered to have been made to be the claimed inventions of its divisional application.

(Explanation)

- According to Article 44(1), in order to be deemed to have been filed at the time that the original application was filed, a divisional application is required to meet both of the following two requirements ① and ②:
- ① Two or more inventions shall be described in the description, claims or drawings of the original application immediately prior to being divided
- (2) The claimed inventions of the divisional application shall be derived from a part of the inventions described in the description, claims or drawings of the original application immediately prior to being divided.

Requirement ② can be divided into the following two separate requirements:

- 2-1 The claimed inventions of the divisional application shall be inventions described in the description, claims or drawings of the original application immediately prior to being divided
- 2 The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided.

In this regard, matters described in the description or drawings of a divisional application can be made to be the claimed inventions of the divisional application by describing them in the claims of the divisional application through amendment after the division. In consideration of this, not only the claimed inventions of the divisional application but also matters described in the description or drawings of the divisional application are limited to fit within the scope of matters described in the description, claims and drawings of the original application immediately prior to being divided. Combining this point and requirement (2)-1 together, the following requirement (2)-3 arises.

- ② -3 Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being divided.
- Considering the effect of division of an application as stipulated in Article 44(2), that is, a divisional application is deemed to have been filed at the time that the original application was filed, a divisional application must be permissible within the scope of the valid amendment of the original application. Therefore, the following condition (3) also becomes another requirement:
- ③ Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.

As mentioned above, regarding substantive requirements for division of an application, assessment has to be made for four requirements, specifically, requirements (1), (2)-2, (2)-3, and (3). However, if requirement (2)-2 is satisfied, then requirement (1) is also satisfied, as mentioned below.

Regarding requirement ①

If an applicant intends to file a divisional application in the case where the description, claims or drawings of the original application describe only one invention, the divisional application inevitably contains the whole invention described in the description, claims or drawings of the original application.

Therefore, if a part of the inventions described in the description, claims or drawings of the original application had been divided into a divisional application, there had to be two or more inventions described in the description, claims or drawings of the original application. Thus, if requirement 2-2 is satisfied, then requirement 1 is also satisfied.

In addition, in the case of division of an application within the time limit for amendments of the original application, if requirement ③ is satisfied, then requirement ②-3 shall also be satisfied, as follows.

Regarding requirement 2-3

Within the time limit for amendments of the original application, it is possible to file a divisional application for matters that are not described in the description, claims or drawings of the original application immediately prior to being divided, by describing them in the description, claims or drawings of the original application through amendment, if they are described in the description, claims or drawings of the original application as of the filing.

Therefore, taking into consideration that an amendment as mentioned above may be made to the original application at the time that the application is divided where the application was divided within the time limit for amendments of the original application, if matters described in the description, claims or drawings of the divisional application do not exceed the scope of matters described in the description, claims or drawings of the original application as of the filing (that is, if requirement ③ is satisfied), then requirement ④-3 shall also be satisfied.

Consequently, regarding substantive requirements for division of an application, (1) it is sufficient to make assessments on requirements (2)-2 and (3) in the case where division of an application was made within the time limit for amendments (Article 44(1)(i)), while (2) it is sufficient to make assessments on requirements (2)-2, (2)-3 and (3) in the case where division of an application was submitted outside of such time limit (Article 44(1)(ii) and (iii)).

3. Other Remarks

3.1 Examiner's Approach where Claimed Invention of Divisional Application is the Same as Claimed Invention of Original Application after Division

Where the division of application is made legally and a claimed invention of a divisional application is identical to a claimed invention of the original application after the division, the applications shall be subject to the provision of Patent Act Article 39(2).

Determining whether the applications fall under the provision of Article 39(2) shall be made in accordance with "Part II: Chapter 4. Patent Act Article 39."

(Explanation)

Granting patents to both a divisional application and its original application runs counter to the doctrine of "one patent for one invention" when both contain the same claimed invention. Thus, the approach as described above is taken.

3.2 Examiner's Approach Where a Divisional Application Is Filed on the Same Date on Which a Request for an Appeal Against an Examiner's Decision of Refusal Is Made

Where a divisional application is filed on the same date on which a request is made for an appeal against an examiner's decision that the original application is to be refused, the fulfillment of the substantive requirements for division of an application shall be assessed

deeming that the divisional application was filed pursuant to the provision of Article 44(1)(i), except where it is clear that the divisional application was filed before said request for an appeal against an examiner's decision was made.

3.3 Amendments of Divisional Application

If the amendment of the description, claims or drawings of a divisional application is made, whether the amendment is legal or not is determined first. And where the amendment is legal, the requirements for divisional application is assessed on the assumption that the amended description, claims or drawings is attached to the application at the time of filing of the divisional application.

3.4 Divisional Application whose Original Application is also Divisional Application

Where an original application (hereinafter referred to as "the parent application") is divided into a divisional application (hereinafter referred to as "the child application") and the child application is divided into another divisional application (hereinafter referred to as "the grandchild application"), the grandchild application is deemed to have been filed at the time of filing of the parent application, provided that the child application meets all the requirements for division as to the parent application, and that the grandchild application meets all the requirements for division as to the child application, and that the grandchild application meets all the substantive requirements for division as to the parent application.

(Explanation)

There are no particular provisions which prohibit making a further divisional application (a grandchild application) on the basis of a divisional application (a child application) as an original application. Further, in certain situations, an applicant has no choice but to undertake repeated procedures for division (e.g., where a parent application cannot be divided due to the time limit but only the child application can be divided). Thus, insofar as both the child and the grandchild application satisfy the prescribed requirements, the grandchild application is deemed to have been filed at the time of filing of the parent application.

3.5 Conversion of Divisional Application

Where a divisional patent application is validly converted into an application for utility model registration, the converted application is deemed to be a divisional application and the requirements for division described above are assessed on the converted application.

4. The Proviso of Patent Act Article 44(2)

The proviso of Patent Act Article 44(2) is stipulated to eliminate inconsistencies caused by deeming that a divisional application is filed simultaneously with the original application. In the following cases, the time of filing of the divisional application shall be the actual time of filing the divisional application.

- ① Where a divisional application falls under Patent Act Article 29bis as "another application for a patent" or under Utility Model Act Article 3bis as "an application for a patent."
- 2 Where an applicant is to submit a written statement to the Commissioner of the

Patent Office for the application of the stipulation under Patent Act Article 30(1) or (3) for his divisional application, or where an applicant is to submit a document that proves that the claimed invention of his divisional application is an invention under Article 30(1) or (3).

- ③ Where an applicant declares a internal priority claim for the divisional application, submitting to the Commissioner of the Patent Office a document stating to that effect and indicating the earlier application.
- ④ Where an applicant declares a priority claim under the Paris Convention for his divisional application, submitting to the Commissioner of the Patent Office a document stating to that effect and indicating the name of the country party to the Paris Convention where the earlier application was first filed, and where the applicant submits to the Commissioner a certified document issued by the government of the country indicating the filing date of the earlier application, and a copy of the description, claims of patent or claims of utility model, and drawings of the earlier application or an official gazette or a certificate containing the same contents thereof, issued by that government.

Also in the case of submitting the translations of a foreign language document and of a foreign language abstract for a divisional application in foreign language that was divided from a patent application filed on or before March 31, 2007, the time of filing of the divisional application shall be the actual time of filing of the divisional application.

5. Request for Submission of Explanatory Documents Necessary for Examination on a Divisional Application

(1) When filing a divisional application, the applicant is required to explain in a written statement that the divisional application meets the substantive requirements for division and that the claimed inventions of the divisional application are not identical to the claimed inventions of the original application or of other divisional applications, as well as required to clearly indicate changes from the description, claims or drawings of the original application, by underlining relevant parts after transcribing the description, claims or drawings of the divisional application.

(Explanation)

The applicant knows well descriptions in the description, claims or drawings of the original application that were changed in the divisional application, matters described in the description, claims or drawings of the original application from which the claimed inventions of the divisional application were derived, and the difference between the claimed inventions of the divisional application application and the claimed inventions of the original application or other divisional applications. Such information is quite helpful in promptly and precisely determining whether or not a divisional application meets the substantive requirements for division and the requirements for patentability. Therefore, when dividing an application, the applicant is requested to sufficiently explain such information in a written statement.

(2) In examination on a divisional application, where a written statement based on (1) above

has not been submitted and the examiner cannot easily determine whether or not the divisional application meets the substantive requirements for division or where it requires considerable time to determine whether or not the claimed inventions of the divisional application are identical to the claimed inventions of the original application or other divisional applications, the examiner may request, pursuant to Article 194(1), that the applicant submit a document explaining the descriptions in the description, claims or drawings of the original application that were changed, and matters described in the description, claims or drawings of the divisional application application application are not identical to the claimed inventions of the divisional application were derived, as well as the fact that the claimed inventions of the divisional application are not identical to the claimed inventions of the divisional applications.

Where the examiner cannot easily determine whether or not a divisional application meets the substantive requirements for division or where it requires considerable time to determine whether or not the claimed inventions of the divisional application are identical to the claimed inventions of the original application or of other divisional applications, even after careful examination of the content of a written statement submitted based on (1), the examiner may request, pursuant to Article 194(1), that the applicant submit another explanatory document.

(3) Where an applicant does not give any substantive explanation in response to a request from the examiner based on (2) above and it is thus considerably difficult to determine that a divisional application meets the substantive requirements for division, the examiner may conduct examination deeming that said divisional application does not meet the substantive requirements for division.

(Reference) Relationship between time and substantive requirements of a divisional application after the submittal of a copy of decision of refusal of the original application and a date on which the original application was filed and a copy of decision of refusal of the original application has been transmitted

The time and substantive requirements for a divisional application are different according to a filing date of the original application and a date on which a copy of decision of refusal of the original application has been transmitted. The time and substantive requirements for a divisional application are described below by limiting to divisional applications after the transmittal of a copy of decision of refusal of the original application.



Substantive Requirement A:

(1) Where division of an application is made within the time limit for amendments (refer to 2.2(1))

- (i) The claimed inventions of the divisional application shall not comprise all of the inventions described in the description, claims or drawings of the original application immediately prior to being divided
- (ii) Matters described in the described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing

Substantive Requirement B: Where division of an application is made within the time limit
amendments cannot be made (refer to 2.2 (2))

In addition to (i) and (ii) above, the following requirement (iii) arises.

(iii) Matters described in the description, claims or drawings of the divisional application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being divided

(Appendix) Immediate Operation of Determination on Substantive Requirements for Division of Application

1. "Requirements for division of application" corresponding to the 2008 Revised Patent Act

In the case where an application of the original application was filed on or after April 1, 2007, a copy of decision of refusal of the original application has been transmitted on or after April 1, 2009, and the application is divided after a copy of decision of refusal of the original application has been transmitted, the substantive requirements vary depending on whether or not a request for appeal against examiner's decision of refusal of the original application was made simultaneously with the division of application (refer to (Reference) Case 4).

Regarding the case where a request for appeal against examiner's decision of refusal of the original application was made on the same date as division of an application, there is the following description in "3.2 Examiner's Approach where a Divisional Application is Filed on the Same Date on which a Request for an Appeal Against an Examiner's Decision of Refusal is Made."

"Where a divisional application is filed on the same date on which a request is made for an appeal against an examiner's decision that the original application is to be refused, the fulfillment of the substantive requirements for division of the application shall be assessed deeming that the divisional application was filed pursuant to the provision of Article 44(1)(i), except where it is clear that the divisional application was not filed on the same date as the said request for the appeal against an examiner's decision was made.

Regarding this point, the requirement will be operated as follows for the time being.

Where a divisional application is submitted on the same date on which a request is made for a demand for trial of the original application, the substantive requirements for division of an application shall be assessed deeming that the divisional application was filed within the allowable time limit for amendments.

2. "Requirements for division of application" corresponding to the 2008 Patent Act before the revision

In the case where the original application was filed on or after April 1, 2007, a copy of decision of refusal of the original application has been transmitted on or before March 31, 2009, and the application is divided after the copy of decision of refusal of the original application has been transmitted, the substantive requirements vary depending on whether or not a request for appeal against examiner's decision of refusal of the original application was made simultaneously with the division of application (refer to (Reference) Case 2).

Regarding the case where a request for appeal against examiner's decision of refusal of the original application was made on the same date as division of an application, there is the following description in "3.2 Examiner's Approach where a Divisional Application is Filed on the Same Date on which a Request for an Appeal Against an Examiner's Decision of Refusal is Made."

Where a divisional application is filed on the same date on which a request is made for an

appeal against an examiner's decision that the original application is to be refused, the fulfillment of the substantive requirements for division of an application shall be assessed deeming that the divisional application was filed pursuant to the provision of Article 44(1)(i), except where it is clear that the divisional application was filed before the said request for the appeal against an examiner's decision was made.

Regarding this point, the requirement will be operated as follows for the time being.

Where a divisional application is submitted on the same date on which a request is made for a demand for trial of the original application, the substantive requirements for division of the application shall be assessed deeming that the divisional application was filed within the allowable time limit for amendments without making a judgment on which procedure was made first.

3. Points of concern

The relevant operation is applicable when the substantive requirements for divisional application are assessed. Therefore, it is not deemed that the divisional application was simultaneously made with the demand for trial just because the divisional application and the written demand for trial were submitted on the same date.

Section 2 Notice under Article 50bis

Article 50bis of the Patent Act

Where the examiner intends to give a notice of reasons for refusal for a patent application under the preceding Article, and these reasons for refusal are the same as the reasons for refusal stated in the previous notice under the preceding Article (including its application mutatis mutandis under Article 159(2) (including its application mutatis mutandis under Article 163 (2)) with regard to another patent application (limited to the case where both patent applications are deemed to have been filed simultaneously by applying the provision of Article 44(2) to either or both of them) (excluding such a notice of reasons for refusal of which the applicant of the patent application could have never known the content prior to the filing of a request for examination of the patent application), the examiner shall also give a notice to that effect.

Article 17bis(5) of the Patent Act

In addition to the requirements provided in the preceding two paragraphs, in the cases of items (i), (iii) and iv of paragraph (1) (in the case of item (i) of the said paragraph, limited to the case where the applicant has received a notice under Article 50bis along with the notice of reasons for refusal), the amendment of the scope of claims shall be limited to those for the following purposes:

((i) to (iv) are omitted)

An amendment to be made to a patent application in response to a notice under Article 50bis given along with a notice of reasons for refusal must meet the requirements prescribed in Article 17bis(3) to (6) as in the case of making an amendment in response to the final notice of reasons for refusal; an amendment that fails to meet these requirements may be dismissed (Article 53, Article 159(1), Article 163(1)).

1. Purport of the Provisions of Article 50bis

The purport of the provisions of Article 50bis (and Article 17bis(5)) is to encourage an applicant to closely examine the reason for refusal notified in the examination of the original application, etc., thereby preventing him from filing a divisional application without overcoming the reason for refusal, of which he has already been notified.

2. Notice under Article 50bis

2.1 "Another patent application (limited to the case where both patent applications are deemed to have been filed simultaneously by applying the provision of Article 44(2) to either or both of them)"

In the case there is any of the relationships ① to ③ below between a patent application for which the reason for refusal is to be notified (hereinafter referred to as the "application concerned") and another patent application, the "the case where both patent applications are deemed to have been filed simultaneously by applying the provision of Article 44(2) to either or both of them."

① The other patent application is included in a group of divisional applications

(see, Note) based on the application concerned.

② The application concerned is included in a group of divisional applications based on the other patent application.

③ The application concerned and the other patent application are included in a group of divisional applications based on the same patent application.

(Note) "A group of divisional applications based on a patent application" refers to a series of divisional applications deriving from one patent application. This includes divisional applications based on the patent application, as well as divisional applications (grandchild applications) based on a divisional application (child applications).

(Point to Consider)

Article 44(2) shall not apply to a patent application filed as a divisional application if it fails to meet the substantive requirements for division of application. Therefore, in order to determine whether or not there are any of the relationships (1) to (3) above between the application concerned and the other patent application, it is necessary to check whether either the application concerned or the other patent application, which is filed as a divisional application, meets the substantive requirements for division of application.

For the substantive requirements for division of application, see: "Section 1 Requirements for Division of Application", "2.2 Substantive Requirements."

2.2 "the same as the reasons for refusal stated in the previous notice under the preceding Article (including its application mutatis mutandis under Article 159(2) (including its application mutatis mutandis under Article 174(1)) and Article 163 (2))"

(1) "Notice under the preceding Article" includes not only a notice of reasons for refusal given in the examination but also a notice of reasons for refusal given during an appeal against examiner's decision, retrial or reconsideration by an examiner before appeal.

(Point to Consider)

Since a decision to dismiss the amendment and a decision of refusal cannot be deemed to be a "notice under the preceding Article" (a notice of reasons for refusal), a notice under Article 50bis shall not be given even where the reason for refusal of the application concerned is the same as that stated in the decision to dismiss the amendment or decision of refusal made to the other patent application.

(2) In order that the reason for refusal of the application concerned is deemed to be the same as that stated in the notice given to the other patent application, the provision stipulating the reason for refusal of the application concerned (e.g. Article 29(1)(iii), Article 29(2), Article 36(4)(i), Article 36(6)(i)) shall be the same as that stated in the notice given to the other patent application and, in addition, the details of the reason for refusal of the application concerned shall substantially be the same as that stated in the notice given to the other patent application.

(3) To determine whether the reason for refusal of the application concerned is the same as that stated in the notice given to the other patent application, one must examine whether

the description, claims or drawings (hereinafter referred to as the "description, etc.") of the application concerned are unable to overcome the reason for refusal stated in the notice of reasons for refusal given to the other patent application on the assumption that the description, etc. of the application concerned is the description, etc. of the other patent application amended in response to the notice of reasons for refusal.

If the description, etc. of the application concerned is found to be unable to overcome the reason for refusal stated in the notice of reasons for refusal given to the other patent application, the reason for refusal of the application concerned is the same as that stated in the notice of reasons for refusal given to the other patent application. The reason for refusal of the application concerned is found to be the same as that stated in the notice given to the other patent application in the following cases.

Example 1:

On the assumption that an invention claimed in the application concerned is the invention that was amended in response to the notice of reasons for refusal indicating lack of inventive step to the other patent application, if the invention claimed in the application concerned is unable to bring about a new effect because it is made merely by adding well-known art or commonly used art to the invention claimed in the other patent application, and is therefore found to be unable to overcome the lack of inventive step, the reason for refusal of the application concerned arising from the lack of inventive step based on the same reference document is the same as that stated in the notice given to the other patent application.

However, on the assumption that an invention claimed in the application concerned is the invention that was amended in response to the notice of reasons for refusal indicating the lack of inventive step, if the invention claimed in the application concerned is made by adding any matters that do not fall under the scope of well-known art or commonly used art to the invention claimed in the other patent application and therefore it is required to notify an additional reason for refusal to indicate the lack of inventive step by citing another reference, the reason for refusal of the application concerned arising from the lack of inventive step cannot be deemed to be the same as the reason for refusal arising from the lack of inventive step stated in the notice given to the other patent application.

Example 2:

On the assumption that the description of an application concerned is the description of the other patent application that was amended in response to the notice of reasons for refusal indicating the violation of the enablement requirement. If the description of the application concerned is found to be unable to overcome the reason for refusal arising from the violation of the enablement requirement because it contains the working example due to which there was a violation of the enablement requirement, the reason for refusal of the application concerned arising from the violation of the enablement requirement, the reason for refusal of the application concerned arising from the violation of the enablement requirement is the same as the reason stated in the notice given to the other patent application.

2.3 "Such a notice of reasons for refusal of which the applicant of the patent application could have never known the content prior to the filing of a request for examination of the patent application"

"Such a notice of reasons for refusal that the applicant of the patent application could have never become aware of prior to a request for examination of the patent application" means a notice of reasons for refusal that has not yet been received or made available for inspection by the applicant prior to a request for examination of the application concerned.

Where the applicant of the application concerned is different from the applicant of the other patent application, the notice of reasons for refusal given to the other patent application is not addressed to the applicant of the application concerned. However, even in such a case, the applicant of the application concerned can inspect the notice of reasons for refusal given to the other patent application if the other patent application has been published before he files a request for examination of the application concerned. Therefore, the applicant of the application concerned could have become aware of such a notice of reasons for refusal before filing a request for examination of the application concerned.

Where the notice of reasons for refusal given to the other patent application is received by the applicant of the application concerned on the same day on which a request for examination is filed with regard to the application concerned, or where the notice of reasons for refusal given to the other patent application is made available for inspection on the same day on which a request for examination is filed with regard to the application concerned, the applicant of the application concerned is deemed unable to become aware of the notice of reasons for refusal given to the other patent application before filing a request for examination of the application concerned, unless it is obvious that a request for examination of the application concerned has been filed before the notice of reasons for refusal is received or made available for inspection by the applicant of the application concerned.

3. Amendment Made in Response to a Notice under Article 50bis Given Along with a Notice of reasons for Refusal

An amendment to be made to a patent application for which a notice under Article 50bis has been given along with a notice of reasons for refusal must meet the requirements prescribed in Article 17bis(3) to (6). An amendment that fails to meet these requirements may be dismissed.

For the specific practice where the requirements prescribed in Article 17bis(3) to (6) are applied, see: "Part III Amendment of Description, Claims and Drawings."

4. Procedure of Examination

4.1 Examination When Giving a Notice Under Article 50bis

4.1.1 Determination of Whether or Not to Give a Notice under Article 50bis

Where the application concerned is a divisional application or the original application of a divisional application, the examiner determines whether the application concerned and the other patent application meet all requirements (1) to (3) below. The examiner takes into consideration a written statement, if any, that explains that the description, etc. of the application concerned successfully overcome the reason for refusal stated in the notice of reasons for refusal given to the other patent application.

① The application concerned and the other patent application are deemed to have been filed simultaneously by applying Article 44(2) to either of them (either the

application concerned or the other patent application, which is filed as a divisional application, meets the substantive requirements for division of application).(see, Note 1)

② The reason for refusal of the application concerned is the same as that stated in the notice of reasons for refusal given to the other patent application. (see, Note 2)

③ The applicant of the application concerned could have become aware of the notice of reasons for refusal given to the other patent application before filing a request for examination of the application concerned.

If all requirements ① to ③ above are met, the examiner shall give a notice under Article 50bis to the application concerned, along with a notice of reasons for refusal.(see, Note 3)

On the other hand, if any of these requirements is not met, the examiner shall not give a notice under Article 50bis to the application concerned.

- (Note 1) Whether the application concerned and the other patent application are deemed to have been filed simultaneously by applying Article 44(2) to either of them shall be determined based on the contents of the description, etc. of the application concerned and those of the other patent application as of notifying the reasons for refusal to the application concerned.
- (Note 2) In case an application concerned involves two or more reasons for refusal and the notice of reasons for refusal given to the other patent application states two or more reasons for refusal if one of the reasons for refusal of the application concerned is the same as any one of the reasons for refusal stated in the notice of reasons for refusal given to the other patent application, the reason for refusal of the application concerned deemed to be the same as that stated in the notice of reasons for refusal given to the other patent application.
- (Note 3) It may be uncertain that the description, etc. of the application concerned are unable to overcome the reason for refusal stated in the notice of reasons for refusal given to the other patent application (e.g. it may be impossible to clearly identify the reason for refusal based on the contents of the notice of reasons for refusal given to the other patent application). Or the reason for refusal stated in the notice of reasons for refusal given to the other patent application may be a clerical error or other minor defect. In these cases, the examiner should refrain from applying Article 50bis in unnecessarily formal way.

4.1.2 Points to Note When Giving a Notice under Article 50bis

When giving a notice under Article 50bis, the examiner shall state, in the notice, the application number of the other patent application that has the same reason for refusal as well as the date of drafting of the notice of reasons for refusal given to the other patent application. If the notice of reasons for refusal given to the other patent application contains two or more reasons for refusal, the examiner shall, in addition to the application number and the date of drafting, state the information by which the relevant reason for refusal that is found to be the same as the reason for refusal of the application concerned can be identified

(e.g. the number attached to the relevant reason for refusal, the claim mentioned in the relevant reason for refusal).

(Point to Consider)

In the notice of reasons for refusal to be given to the application concerned along with a notice under Article 50bis, the examiner shall point out the reason for refusal specifically so that the applicant will be able to clearly understand the gist of the reason for refusal. (See "Part IX Procedure of Examination, Section 2, 4.2") The examiner shall not omit the details of the reason for refusal by only indicating the information necessary for identifying the relevant reason for refusal stated in the notice of reasons for refusal given to the other patent application.

4.2 Examination Where an Amendment Is Made in Response to the Notice of reasons for Refusal Given Along with a Notice under Article 50bis

4.2.1 Where the Notice of reasons for Refusal Is the "First Notice of reasons for Refusal"

Where an amendment is made in response to the "first notice of reasons for refusal" given along with a notice under Article 50bis, the examiner shall reconsider whether or not it was appropriate to give a notice under Article 50bis, while taking into account the applicant's assertion stated in the written opinion. (see, Note)

- (Note) Where the notice under Article 50bis indicates that two or more reasons for refusal of the application concerned are the same as the reason for refusal stated in the notice of reasons for refusal given to the other patent application, the examiner shall determine that it was appropriate to give a notice under Article 50bis if at least one of the reasons for refusal indicated is appropriate.
- (1) Where it was appropriate to give a notice under Article 50bis

Where it was appropriate to give a notice under Article 50bis, the examiner shall consider whether the amendment made in response to the notice of reasons for refusal given along with the notice under Article 50bis complies with the provisions of Article 17bis(3) to (6). If the amendment is found to be in violation of any of these provisions, the examiner shall decide to dismiss it (Article 53).

(Point to Consider)

Where it was appropriate to give a notice under Article 50bis as of giving a notice under Article 50bis, any amendment subsequently made to the application concerned must comply with the provisions of Article 17bis(3) to (6). This applies even if, due to the amendment, the application concerned no longer meets the substantive requirements for division of application and therefore the application concerned and the other patent application are no longer deemed to have been filed simultaneously.

The same shall apply where the other patent application no longer meets the substantive requirements for division of application and therefore the application concerned and the other patent application are no longer deemed to have been filed simultaneously, due to any amendment made to the other patent application after a notice under Article

50bis was given to the application concerned.

The determination on an amendment, the approach to an application where an amendment is dismissed, and the approach to an application where an amendment is accepted shall be subject to the respective provisions of 6.2, 6.3, 6.4 in Section 2 of "Part IX Procedure of Examination" replacing the phrase "final notice of reasons for refusal" with "first notice of reasons for refusal given along with a notice under Article 50bis."

Where an additional reason for refusal is notified by following 6.3 (3) or 6.4 (3) in Section 2 of "Part IX Procedure of Examination," the examiner shall consider whether or not to give a notice under Article 50bis by following "4.1 Examination When Giving a Notice Under Article 50bis."

(2) Where it was inappropriate to give a notice under Article 50bis

Where it was inappropriate to give a notice under Article 50bis, Article 53 cannot be applied. Therefore, the examiner shall not make a decision to dismiss the amendment but accept it. Even where the application after the amendment is unable to overcome the reason for refusal stated in the previous notice, the examiner shall not immediately make a decision of refusal but give the "first notice of reasons for refusal" again. Also, even when notifying only additional reasons for refusal caused by the amendment, the examiner shall give the "first notice of reasons for refusal" instead of the "final notice of reasons for refusal." Furthermore, even when notifying the same reason for refusal as the reason stated in a notice of reasons for refusal given to the other patent application, the examiner shall not give a notice under Article 50bis.

(Point to Consider)

However, where the applicant asserts that the notice under Article 50bis should not have been given on the grounds that the reason for refusal of the application concerned is not the same as the reason for refusal of the other patent application, and it is found that it made the amendment based on such an assertion, the notice under Article 50 shall be deemed to have never been given. It follows that if the amendment is unable to overcome the reason for refusal, the examiner shall make a decision of refusal, and if the amendment has caused an additional reason for refusal, the examiner shall give the "final notice of reasons for refusal" to notify only such an additional reason for refusal. Furthermore, when notifying the same reason for refusal as the reason stated in the notice of reasons for refusal given to the other patent application, the examiner shall also give a notice under Article 50bis.

4.2.2 Where the Notice of reasons for Refusal Is the "Final Notice of reasons for Refusal"

Where an amendment is made in response to the "final notice of reasons for refusal" given along with a notice under Article 50bis, the examiner shall reconsider whether or not it was appropriate to give a notice under Article 50bis and to give the "final notice of reasons for refusal," while taking into account the applicant's assertion stated in the written opinion. (See the note in 4.2.1.)

Whether it was appropriate to give a notice under Article 50bis shall be determined

by following "4.2.1 Where the Notice of reasons for Refusal Is the "First Notice of reasons for Refusal"."

Whether it was appropriate to give the "final notice of reasons for refusal" shall be determined by following "Part IX Procedure of Examination, 4.3.3.1."

(1) Where it was appropriate at least either to give a notice under Article 50bis or to give the "final notice of reasons for refusal"

Where it was appropriate at least either to give a notice under Article 50bis or to give the "final notice of reasons for refusal," the examiner shall consider whether the amendment made in response to the notice of reasons for refusal given along with the notice under Article 50bis complies with the provisions of Article 17bis(3) to (6). If the amendment is found to be in violation of any of these provisions, the examiner shall decide the dismissal of amendment (Article 53).

Where it was appropriate at least either to give a notice under Article 50bis or to give the "final notice of reasons for refusal," the determination on an amendment, the approach to an application where an amendment is dismissed, and the approach to an application where an amendment is accepted shall be subject to the respective provisions of 6.2, 6.3, 6.4 in Section 2 of "Part IX Procedure of Examination" replacing the phrase "final notice of reasons for refusal" with "final notice of reasons for refusal given along with a notice under Article 50bis."

Where an additional reason for refusal is notified by following 6.3 (3) or 6.4 (3) in Section 2 of "Part IX Procedure of Examination," the examiner shall consider whether or not to give the "final notice of reasons for refusal," and shall also consider whether or not to give a notice under Article 50bis along with the notice of reasons for refusal by following "4.1 Examination When Giving a Notice Under Article 50bis."

(2) Where it was inappropriate both to give a notice under Article 50bis and to give the "final notice of reasons for refusal"

Where it was inappropriate both to give a notice under Article 50bis and to give the "final notice of reasons for refusal," Article 53 cannot be applied. Therefore, the examiner shall not decide the dismissal of amendment but accept it. Even where the application as amended is unable to overcome the reason for refusal stated in the previous notice, the examiner shall not immediately make a decision of refusal but give the "first notice of reasons for refusal" again. Also, even when notifying only additional reasons for refusal" instead of the "final notice of reasons for refusal." Furthermore, even notifying the same reason for refusal as the reason stated in a notice of reasons for refusal given to the other patent application, the examiner shall not give a notice under Article 50bis.

(Point to Consider)

However, where the applicant asserts that the notice under Article 50bis should not have been given on the grounds that the reason for refusal of the application concerned is not the same as that of the other patent application and also asserts that the "first notice of reasons for refusal" should have been given, and it is found that it made the amendment based on such an assertion, the notice under Article 50bis shall be deemed to have never been given, and the notice of reasons for refusal actually given shall be deemed to be the "first notice of reasons for refusal." It follows that if the amendment is unable to overcome the reason for refusal, the examiner shall make a decision of refusal, and if the amendment has caused an additional reason for refusal, the examiner shall give the "final notice of reasons for refusal" to notify only such an additional reason for refusal. Furthermore, when notifying the same reason for refusal as the reason stated in the notice of reasons for refusal given to the other patent application, the examiner shall also give a notice under Article 50bis.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part V: SPECIAL APPLICATIONS

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Chapter 2 Conversion of Application

Patent Act Article 46 (Note)

An applicant of a utility model registration may convert the application into a patent application; provided, however, that this shall not apply after the expiration of 3 years from the date of filing of the utility model registration application.

2. An applicant of a design registration may convert the application into a patent application; provided, however, that this shall not apply after the expiration of 3 months from the date the certified copy of the examiner's initial decision to the effect that the application for a design registration is to be refused has been served or after the expiration of 3 years from the date of filing of the design registration application excluding the period of a maximum of 3 months after the date the (certified copy of the examiner's initial decision to the effect that the application for a design registration is to be refused has been served).

3. Where the period as provided in Article 46 1 of the Design Act is extended under Article 4 of the Patent Act as applied mutatis mutandis under Article 68(1) of the Design Act, the 3-month period as provided in the proviso to the preceding paragraph shall be deemed to have been extended only for that period as extended.

4. Where an application is converted under paragraph (1) or (2), the original application shall be deemed to have been withdrawn.

5. Paragraphs (2) to (4) of Article 44 shall apply mutatis mutandis to the case of conversion of an application under paragraph (1) or (2).

(Note) With regaed to an application for design registration for which a certified copy of an examiner's initial decision of refusal was transmitted on or before March 31, 2009, "3 months" in Article 46(2) and (3) is read as "30 days."

1. Purport of the provisions for conversion of application

An applicant may wish to amend an application to a more favorable application after the filing of the application based on such reasons as the applicant chose a wrong application format (patent application, application for utility model registration or application for design registration) or converted the business plan after the filing of the original application. Therefore, conversion of the application is permitted and a new application shall be deemed to have been filed at the time of filing of the original application.

(Note) In this Chapter, explanation is made mainly on conversion from applications for utility model registration to patent applications. Conversion from applications for design registration to patent applications will be explained in "3.2 Points to be Noted Regarding Conversion from Application for Design Registration to Patent Application."

Hereinafter, "the original application" from which new applications are divided is referred to as "the original application" and "the new application" as the "converted application," insofar as there is no particular remark otherwise stated.

2. Requirements for Conversion of Application

2.1 Formal Requirements

2.1.1 Persons who may convert to patent application

A person who may convert an application is an applicant of the original application or its successor. That is, the applicant of the original application or its successor must be identical to the applicant of the converted application at the time of filing of the converted application (Article 46(1)).

2.1.2 Time Requirements

An application may be converted excluding the following cases:

(1) After establishment and registration of utility model right

(2) After 3 years from the date on which an application for utility model registration was filed((2) is applicable to converted applications whose original application was filed on or after October 1, 2001).

2.2 Substantive Requirements

In order to be deemed to have been filed for a converted application at the time that the original application was filed, the converted application must meet the following substantive requirements.

(1) Matters described in the description, claims or drawings of the converted application shall be within the scope of matters described in the description, claims or drawings of the original application immediately prior to being converted.

(2) Matters described in the description, claims or drawings of the converted application shall be within the scope of matters described in the description, claims or drawings of the original application as of the filing.

Determination of whether or not matters described in the description, claims or drawings of the converted application are within the scope of matters described in "the description, claims or drawings of the original application immediately prior to being converted" or "the description, claims or drawings of the original application as of the filing" will be made in the same way as determination on new matter (regarding determination on new matter, refer to "Part III Section I New Matter")

However, a converted application filed when an amendment of the description, claims of utility model or drawings of the original application can be made (the period from filing of the application for utility model registration until as stipulated by the ordinance of the cabinet) does not require that the requirement (1) is met if the requirement (2) is met.

(Explanation)

Since conversion of an application is conversion of application formats between the original application and the converted application, the requirement (1) above must be met. Furthermore, considering the effect of conversion of an application as stipulated in Section 44(2) as applied mutatis mutandis under Section 46(5), that is, the converted application is deemed to have been filed at the time of original application, the requirement (2) must also be met.

However, regarding a converted application filed at the time that an amendment of the description, claims of utility model or drawings of the original application can be made, it is possible to file the converted application for matters not described in the description, claims of utility model registration or drawings of the original application immediately prior to being filed, by describing them in the description, claims of utility model registration or drawings of the original application the description, claims of utility model registration or drawings of the original application or drawings of the original application at the description, claims of utility model registration or drawings of the original application at the time of filing in order that the requirements (1) and (2) are

met. Therefore, it is suitable that the requirement (1) does not need to be met if the requirement (2) is met.

3. Other Remarks

3.1 The Proviso of Patent Law Article 44(2)

A converted application which meets "2. Requirements for Conversion of Application" above is in principle deemed to have been filed at the time of filing of the original application. However, it is dealt as if it was filed at the actual time of filing in the following cases (Article 44(2) as applied mutatis mutandis under Article 46(5)).

- (1) Application as "Another patent application" stipulated in the Patent Law Article 29-2 or "Patent Application" stipulated in the Utility Model Law Article 3-2.
- (2) Application of the stipulations in Article 30(4), Article 36-2(2), Article 41(4) and Article 43(1).(Refer to "Chapter 1 Division of Application 4. The Proviso of Patent Law Article 44(2)")

3.2 Points to be noted when converting from an application for design registration to a patent application

3.2.1 Restriction of Timing

A converted application may be filed except the following cases.

- (1) After establishment and registration of design right.
- (2) After 3 months from the date on which an initial certified copy of decision of refusal of an application for design registration has been transmitted (where the period is extended under Section 46(3), after the extended period).
- (3) After 3 years (Note 2) from the date on which the application for design registration was filed (excluding the period within 3 months from the date on which the first certified copy of decision of refusal has been transmitted).
- (Note 1) With regard to an application for design registration for which a certified copy of an examiner's initial decision of refusal was transmitted on or before March 31, 2009, "3 months" is read as "30 days."

(Note 2) This is applicable to converted applications whose original application date is on or after October 1, 2001. 7 years in the case of concerted applications filed before that date.

3.2.2 Substantive Requirements

Judgment is made by changing from "The description, claims of an application for utility model registration or drawings" in "2.2 Substantive Requirements" to "Details of request or drawings attached to the request."

(Reference: Tokyo High Court Decision October 9, 2002,Hei 13 (Gyo Ke) 311 "Storage Box," and Tokyo High Court Decision January 20, 1998, Hei 6 (Gyo Ke) 153 "Hooded outer.")

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part V: SPECIAL APPLICATIONS

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Chapter 3 Patent Application Based on Utility Model Registration

Patent Act Article 46-2

Except for the following cases, a holder of utility model right may file a patent application based on his/her own utility model registration as provided by Ordinance of the Ministry of Economy, Trade and Industry.; in such a case, the utility model right shall be waived:

- (i) where 3 years have lapsed from the date of filing of an application for the said utility model registration;
- (ii) where a petition requesting the examiner's technical opinion as to the registrability of the utility model claimed in the utility model registration application or of the utility model registration, in the following paragraph simply referred to as "utility model technical opinion", is filed by the applicant of the utility model registration or the utility model right holder;
- (iii) where 30 days have lapsed from the date of receipt of initial notice under Article 13(2) of the Utility Model Act pertaining to a petition requesting the utility model technical opinion on the application for the utility model registration, or on the utility model registration filed by a person who is neither the applicant of the said utility model registration nor the said holder of Utility Model right;
- (iv) where the time limit initially designated under Article 39(1) of the Utility Model Act for a utility model registration invalidation trial filed against the said utility model registration under Article 37(1) of the Utility Model Act has expired.

(2) A patent application under the preceding paragraph shall be deemed to have been filed at the time of filing of the application for the said utility model registration, provided that matters stated in the description, scope of claims or drawings attached to the application in the said patent application are within the scope of the matters stated in the description, scope of claims or drawings attached to the application on which the said patent application is based; provided, however, that this shall not apply for the purpose of application of Article 29-2 of the Patent Act or Article 3-2 of the Utility Model Act, where the patent application under the said Article of the Utility Model Act, or for the purpose of application of Articles 30(4), the proviso to 36-2(2), 41(4), 43(1) (including its mutatis mutandis application under Article 43-2(3)) and 48-3(2).

(3) Notwithstanding item(iii) of paragraph (1), where, due to reasons beyond the control of the applicant for a patent under paragraph (1), the applicant is unable to file an application for a patent within the time limit as provided in the said item, the applicant may file a patent application within 14 days (where overseas resident, within two months) from the date on which the reasons ceased to be applicable, but not later than six months following the expiration of the said time limit.

(4) Where there is an exclusive licensee, a pledgee or, in the case where Article 35(1) of the Patent Act as applied under Article 11(3) of the Utility Model Act or Article 77(4) of the Patent Act as applied under Article 18(3) of the Utility Model Act or Article 19(1) of the Utility Model Act is applicable, a non-exclusive licensee, the holder of a utility model right may file a patent application under paragraph (1), provided that the consent of the said exclusive licensee, pledgee or non-exclusive licensee is obtained.

(5) Articles 44(3) and 44(4) shall apply mutatis mutandis to the case where a patent application is filed under paragraph (1).

1. Purport of the provisions for patent applications based on utility model registration

Although an application for utility model registration is permitted to be converted to a patent application, the application for utility model registration is registered without going through substantive examination. Therefore, the period in which an application can be actually converted is very short. Patent application based on that registration is permitted after the utility model registration under certain requirements, because opportunities for conversion are limited even if one wishes to convert to a patent due to changes in the technical trend.

2. Requirements for patent applications based on the utility model registration

2.1 Formal Requirements

2.1.1 Persons who may file applications for patent based on utility model registration

An owner of utility model right may file a patent application based on utility model registration (Article 46-2 (1)).

However, the owner of utility model right has to obtain consent of an exclusive licensee, a pledgee, or a non-exclusive licensee, if any.

2.1.2 Time Requirements

A patent application based on utility model registration can be filed except for the following cases.

- (1) where 3 years have lapsed from the date of filing of an application for the said utility model registration. (Article 46-2(1) (i))
- (2) where a petition requesting the examiner's technical opinion as to the registrability of the utility model is filed by the applicant of the utility model registration or the utility model right holder. (Article 46-2(1) (ii)).
- (3) where 30 days have lapsed from the date of receipt of initial notice pertaining to a petition requesting the utility model technical opinion by a person who is neither the applicant of the said utility model registration nor the said holder of Utility Model right. (Article 46-2(1) (iii)).
- (4) where the time limit initially designated for a utility model registration invalidation trial filed against the said utility model registration has expired. (Article 46-2(1) (iv)).

2.1.3 Abandonment of utility model right

Where a patent application is filed based on utility model registration, that utility model right must be abandoned (Article 46-2(1), Regulations 27(6)).

2.2 Substantive Requirements

In order for a patent application based on utility model registration to be deemed to have been filed at the time of application for the utility model registration of the registration, the following two substantive requirements must be met.

(1) Matters described in the description, claims or drawings attached to the patent application shall be within the scope of matters described in the description, claims of utility model or drawings attached to the request for utility model registration on which the said patent application is based (Article 46-2(2)).

(2) Matters described in the description, claims or drawings attached to the patent application shall be within the scope of matters described in the description, claims of utility model or drawings as of the filing of the application for utility model registration of the utility model registration on which the said patent application is based.

Determination of whether or not matters described in the description, claims or drawings attached to the patent application are within the scope of matters described in "the description, claims of utility model or drawings attached to the request for utility model registration" or "the description, claims of utility model or drawings as of the filing of the application for utility model registration" will be made in the same way as determination on new matter (regarding determination on new matter, refer to "Part III Section I New Matter").

In the requirement (1), where a correction is made to the description, claims of utility model or drawings after the utility model registration, the description, claims of utility model or drawings "after the correction" shall be the description, claims of utility model or drawings attached to the request for utility model registration.

(Explanation)

Considering the effect as stipulated in Article 46-2(2), that is, a patent application based on utility model registration of the utility model registration is deemed to have been filed at the time of filing of the application for utility model registration, the requirement (2) as well as the requirement (1) above have to be met.

3. Other Remarks

3.1 The Provisio of Patent Act Article 46-2(2)

A patent application based on utility model registration which meets "2. Requirements for Patent Application Based on Utility Model Registration" is deemed to have been filed at the time of filing of the application for utility model registration (Article 46-2(2)). However, it is dealt as if it has been filed at the actual time of filing in the following cases (the proviso of Article 46-2(2)).

- (1) Application as "Another patent application" as stipulated in the Patent Act Article 29-2 or "Patent Application" as stipulated in the Utility Model Act Article 3-2.
- (2) Application of the stipulations of Article 30(4), Article 36-2(2), Article 41(4), Article 43(1) and Article 48-3(2).

3.2 Relationship between claimed invention of patent application based on utility model registration and claimed device of the based utility model registration on which the patent application is based

A patent application based on utility model registration shall not be reasons for refusal stipulated in Article 39(4) of the Patent Act even if the claimed invention of patent application based on utility model registration is identical to the claimed device of utility model registration (remarks in the bracket of Article 39(4) of the Patent Act).

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

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(Applied to applications for registration of patent term extension filed on January 1, 2000 or later.)

However, 2.2 and 3.1.3 of this chapter shall be applied to applications for registration of patent term extension filed on December 31, 1999 or before, while the case is pending before the Patent Office (See the Decision of the Supreme Court in 1998 (Gyo Hi) No. 43, 44).

1. Purport of the System

1.1 Necessity

One of the purposes of the patent system lies in protecting and encouraging inventions by granting exclusive fights to inventors for a certain period in return for the disclosure of the arts pertaining to their inventions, and thus contributing to industrial development. However, problems exist in certain fields, such as pharmaceuticals, where long periods are necessarily consumed in the testing and examinations required for obtaining approvals provided under legal regulations designed for ensuring product safety, during which periods the benefit of exclusive rights cannot be enjoyed despite the validity of patent rights.

Although the legal regulations themselves are indispensable in view of their purposes, they nonetheless preclude working of the patent which otherwise could have been exploited during the period affected by said regulations. In the interest of product safety, the possibility of shortening the periods devoted to drug examinations is limited.

Such situations pose problems affecting the basis of the patent system, and a measure of extending the patent terms is therefore necessary in order to resolve the situation.

1.2 Purport

As such, an extension to the patent term by up to five years is made available through application for registration of patent term extension, if the invention could not be worked for the necessity of obtaining an approval or other disposition prescribed by Cabinet Order, such as an approval provided under legal regulations designed for ensuring product safety.

The dispositions prescribed by Cabinet Order shall be limited to those which necessarily require considerable time to be rendered properly, in view of their objectives and procedures involved.

2. Application

2.1 Applicant Eligibility

The applicant applying for registration of patent term extension is limited to the patentee concerned (Patent Act 67ter(1)(iv)). However, where a patent is owned jointly, each of the joint owners may not, except jointly with the other owners, apply for registration of patent term extension (Patent Act 67bis(4)). In addition, it is required that the patentee, exclusive licensee or registered non-exclusive licensee under the patent obtain the disposition as prescribed by Cabinet Order, referred to in Article 67(2) (Patent Act 67ter(1)(ii)).

2.2 Filing Date Requirements

The application for registration of patent term extension must be filed within a 3 month period following and including the rendered date of the disposition prescribed by Cabinet Order referred to in Patent Act Article 67(2). However, if the application could not be filed within 3 months following the rendered date of the disposition due to reason beyond control of

the applicant, the application must be filed within 14 days after the extinguishment of said reason (or within 9 months following the rendered date of the disposition, whichever period expires earlier). "The date of obtaining the disposition prescribed by Cabinet Order," means the date when an approval or a registration reaches a requester, i.e., the date when it is accepted by the requester, or it is placed in an acceptable state. (Note)

However, the application shall not be accepted after the expiration of the original patent term (Patent Act 67bis(3), Patent Act Enforcement Order Article 4).

Where it is expected that the applicant cannot obtain the disposition, as prescribed by Cabinet Order, by the day before six months prior to the expiration of the original patent term, he/she shall submit by that day a document stating the following matters (Patent Act Article 67bis-bis(1)):

(i) the name and the domicile or residence of the person desiring the application;

(ii)the Patent Number; and

(iii)the disposition as prescribed by Cabinet Order referred to in Patent Act Article 67(2).

If the aforementioned document is not submitted, an application for patent term extension may not be accepted for after six months prior to the expiration of patent term.

(Note) "The date of obtaining the disposition prescribed by Cabinet Order, i.e., the date when it is accepted by the requester, or it is placed in an acceptable state." does not necessarily mean the arrival of the "written approval" or the "written registration." In cases where the applicant knows of the approval or registration before any "written approval" or "written registration" actually arrives, the date when the applicant actually knew of the approval or registration becomes the date of obtaining the disposition.

2.3 Patents Eligible for Application

A patent, whose patented invention could not be worked for the necessity of obtaining an approval or other disposition, prescribed by Cabinet Order in Patent Act Article 67(2), are eligible as a subject of application to the registration of patent term extension.

2.4 Description of Application

Those who wish to apply for registration of patent term extension shall submit to the Commissioner of the Patent Office an application stating the following matters (Patent Act Article 67bis(1), Regulations under the Patent Act Article 38quindecies):

- (i) the name and the domicile or residence of the applicant;
- (ii) the Patent Number;
- (iii) the term of the extension applied for (limited to a period not exceeding five years);
- (iv) contents of the disposition as prescribed by Cabinet Order referred to in Patent Act Article 67(2); and
- (v) the date of obtaining the disposition prescribed by Cabinet Order referred to in Patent Act Article 67(2).

For "contents of the disposition prescribed by Cabinet Order referred to in Patent Act Article 67(2)," the contents of the disposition constituting the grounds for extension, obtained by the patentee (or exclusive licensee or registered non-exclusive licensee), are stated.

More specifically, it is required to state the disposition constituting the grounds for extension (e.g., approval under the Pharmaceutical Affairs Act Article 14(1) for pharmaceuticals referred under the same), the number specifying the disposition (e.g., the approval number), the product which obtained the disposition (e.g., active ingredients and the manufacturing process of active ingredients where necessary) and use for the product if

specified in the disposition (e.g. efficacy/effect).

2.5 Description of Material Describing the Grounds for Extension

A request shall be accompanied by material describing the grounds for extension. (Patent Act Article 67bis(2)).

The material describing the grounds for extension which are to be attached to the request, are as follows (Regulations under Patent Act Article 38sedecies):

- (i)Material necessary for certifying the necessity of obtaining the disposition, prescribed by Cabinet Order referred to in Patent Act Article 67 (2) for working of the patented invention for which registration of extension is applied (Item 1);
- (ii) Material describing the period during which the patented invention for which registration of extension is applied for, could not be worked due to the necessity of obtaining the disposition referred in the previous Item (Item 2); and
- (iii) Material necessary for certifying that the person obtaining the disposition of No.1 is exclusive licensee, registered non-exclusive licensee, or patentee of the patented invention for which registration of extension is applied (Item 3).

Since all the above material are either material necessary for proving or material indicating the certification, they must include material which support their description.

For example, in a case of pharmaceuticals, the material describing the grounds for extension shall contain the following matters, and shall be accompanied by supporting material (e.g., a copy of a written approval or a notification of a trial case plan, etc., issued by the Ministry of Health, Labor and Welfare).

- (1) Material necessary to show that it was necessary to obtain a disposition prescribed by Cabinet Order for working of the patented invention, indicating:
 - (i) that the invention has been patented (date of registration, date of expiration, payment state of annual registration fee, etc.)
 - (ii) that approval under the Pharmaceutical Affairs Act has been granted (matters necessary in identifying the approval, active ingredients, efficacy/effect, manufacturing process for the active ingredients where necessary etc.)
 - (iii) that the approved active ingredients (or active ingredients and efficacy/effect) have been described in the original claim
 - (iv) that the approval is the earliest for the active ingredients or efficacy/effect
- (2) Materials expressing the period during which the patented invention could not be worked, due to the necessity of obtaining a disposition prescribed by Cabinet Order, indicating:

(i) circumstances leading to the approval (major facts and their dates)

- (ii) the period during which the patented invention could not be worked
- (3) Materials necessary for proving that the person obtaining the disposition prescribed by Cabinet Order is the exclusive licensee, registered non-exclusive licensee, or patentee of the patented invention, indicating:

(i)that the patentee has obtained the approval, or

(ii)that the exclusive licensee or registered non-exclusive licensee of the patent right has obtained the approval.

2.6 Effect of Application

When an application for registration of patent term extension is filed, the patent term shall be deemed extended until the decision of refusal becomes final and conclusive, or registration of extension is made (Patent Act Article 67bis(5)).

2.7 Publication in the Patent Gazette

When an application for registration of patent term extension is filed, matters stated in Patent Act Article 67bis(1), the application number, and the application date shall be published in the Patent Gazette (Patent Act Article 67bis(6)).

Where the document provided for in Patent Act Article 67bis-bis(1) is submitted, the matters set forth under each of the paragraphs in Paragraph (1) shall be published in the Patent Gazette (Patent Act Article 67bis-bis(3)).

3.Examination

3.1 Decision of Refusal

The examiner shall make a decision of refusal, when an application for registration of patent term extension comes under any of the Conditions prescribed in the Items of Article 67ter(1) (Patent Act Article 67ter(1)).

Furthermore, before making a decision of refusal, the examiner shall issue a notification of reasons for refusal to the applicant, and designate a due period for the applicant to submit a written argument (Article 50 applied mutatis mutandis under Article 67 quater).

The reasons for refusal are explained below.

3.1.1 When it is Found that Obtaining the Disposition as Prescribed by Cabinet Order Referred to in Article 67(2) was Unnecessary for the Working of the Patented Invention (Patent Act Article 67ter(1)(i))

(1) Cases in which obtaining the disposition as prescribed by Cabinet Order are decided necessary for working of the patented invention

In view of its purpose, the essence of legal regulations such as the Pharmaceutical Affairs Act lies in regulating the manufacture and sales of particular products (or products for particular use). Therefore, the most important factor among the matters specified in the disposition is the product (or the product and its use).

As a result, if the product (or the product and its use) specified in the disposition is described in the Claims, the necessity to obtain a disposition in working the patented invention would be assumed.

Actual examination in fields such as pharmaceuticals shall be carried out by comparing the product (or the product and its use) specified in the disposition and the product defined in the Scope of Claims in the following manner:

(i) If the claimed invention is a product (use not specified), comparison shall be made between the product and the product specified in the disposition. The use of the product will not be considered, even if it is specified in the disposition.

(ii) If the claimed invention is a use for a product, comparison shall be made between the product and use described in the Scope of Claims, and those specified in the disposition.
(iii) If the claimed invention is a manufacturing process of a product, comparison shall be made between the product obtained by such process and the product specified in the disposition. Comparison of manufacturing processes is not made. The use for the product will not be considered in examination as well, even if it is specified in the disposition.

When several dispositions relate to the same product (or for the same product and use if the dispositions specify the use), dispositions other than the earliest disposition are not considered necessary for working the patented invention, since the earliest disposition would be sufficient for working the product (or product for the specified use) of the patented invention. For example, when approvals are granted to pharmaceuticals with the same active ingredient (product) and efficacy/effect (use) and differing only in manufacturing processes, dosage forms, etc., patent term extension shall be granted on basis of the earliest approval only.

(2) Where there are multiple patents corresponding to one disposition

Where there are multiple patents corresponding to one disposal, the application for the registration of an extension of the term of each of these patent rights is individually allowable, as long as there is a necessity to obtain a disposition for the working of the all of the patented inventions concerned.

For example, where there are a patent for a chemical compound which is the active ingredient of an approved pharmaceutical, a use patent for applying the said active ingredient to an approved medical use and a process patent for the manufacturing process of the said active ingredient, then patent term extension shall be registered for each patent, provided that approval is found to be necessary for the working of each patent.

(3) Where there are multiple dispositions corresponding to one patent

In a case where there are multiple dispositions corresponding to one patent right, patent term extension shall be granted on basis of each disposition, provided that the products (or the products or their uses, if the uses are specified) specified in the dispositions differ from one another.

For example, if several approvals for different active ingredients or efficacy/effect are granted against a single patent for pharmaceutical, then plural registrations of patent term extension shall be made on basis of each approval.

(Note) As for applications concerning products substantially identical with the product obtaining the disposition prescribed by Cabinet Order, refer to (4) below.

In contrast, an application for patent term extension based on a later approval of a pharmaceutical with active ingredient and efficacy/effect both identical to those specified in another earlier approval (differing only in dosage form, manufacturing process etc.) shall be refused, since obtaining of the later approval is not considered necessary in the working of the patented invention.

(4) Where a product is substantially identical with the product obtaining the approval of pharmaceuticals, etc.

If a product is substantially identical with the product obtaining the disposition prescribed by Cabinet Order, and the use of the former is similar to the use for product already specified in the earlier disposition, the obtaining of disposition for the latter product shall not be considered necessary in working the patented invention.

For example, in a case where there is a patent right in which a compound as well as its salt are claimed, and an approval has already been given to a pharmaceutical containing the sodium salt of that compound as active ingredient, an application for registration of patent term extension based on the approval of a pharmaceutical containing the potassium salt of that compound as active ingredient and with similar efficacy/effect would be refused.

(5) Use for approved products such as pharmaceuticals

When the use for a product which has obtained an disposition earlier partly overlaps the use for the same product which has received an disposition later, working of the patented invention for use not common among those specified in the two dispositions becomes possible only upon rendering of the second disposition, Therefore, obtaining of the second disposition shall be considered as having been necessary for the working of the patented invention.

For example, if an active ingredient with specified use belonging to generic concept (e.g. pharmaceutical for use against allergic rhinitis) is approved after approval of the same active ingredient with specified use belonging to specific concept (e.g. pharmaceutical for use against chronic allergic rhinitis), the second approval would be considered as having been necessary for working of the patented invention.

(6) Pharmaceutical related patents excluded from patent term extension

Patents relating to intermediates, or catalysts and manufacturing equipment used in the manufacture of final product, are excluded from patent term extension.

Acts designed for ensuring product safety such as the Pharmaceutical Affairs Act regulate the manufacture and sales of end products, but not the manufacture and sales of intermediates synthesized in the process of manufacture. Hence, obtaining of disposition is not considered necessary in working the patented invention relating to intermediates.

Patents relating to intermediates are therefore excluded from registration of extension, even if the final products are subject to disposition.

The same applies to patents relating to catalysts and manufacturing equipment, which are also excluded from patent term extension.

3.1.2 When Neither Patent Owner, nor Exclusive or Registered Non-Exclusive Licensee has Obtained the Disposition Prescribed by Cabinet Order under Article 67(2) (Patent Act Article 67ter(1)(ii))

To avoid such situation, the registration of non-exclusive license need only be made by the time the decision is made to register the extension of patent term.

Also, the condition for refusal provided under Article 67ter(1)(ii) shall not apply when any person among those who have jointly obtained the disposition holds an exclusive license or registered non-exclusive license to the patent, because the fact remains unchanged that the disposition has been rendered against the patent owner or the holder of exclusive or registered non-exclusive license.

3.1.3 When the Term of Extension being Sought Exceeds the Period During which the Patented Invention could not be Worked (Patent Act Article 67ter(1)(iii))

The "period during which the patented invention could not be worked" refers to the period during which working of the invention has been precluded for reason of requirement to obtain an disposition prescribed by Cabinet Order (Patent Act Article 67(2)).

This period is calculated either from the starting date of tests meeting the conditions mentioned below and required for obtaining an disposition prescribed by Cabinet Order, or on the registration date of the patent, whichever is later, to the day before an approval or a registration has reached a requester, namely, when the requester actually accepts it or it is placed into an acceptable state (Note).

(Note) "The date of obtaining the disposition prescribed by Cabinet Order, i.e., the date when it is accepted by the requester, or it is placed in an acceptable state." does not necessarily mean the arrival of the "written approval" or the "written registration." In cases where the applicant knows of the approval or registration before any "written approval" or "written registration" actually arrives, the date of obtaining the disposition becomes the date when the applicant actually knew of the approval or registration.

Acts designed for ensuring product safety such as the Pharmaceutical Affairs Act provide that dispositions be rendered upon examination of data on the results of tests, and testing is

necessary to obtain the data. Hence, the "period during which the patented invention could not be worked" is defined as the period after registration of the patent, of the combined period required in performing the tests and in obtaining the disposition.

Although the periods required in performing the tests would vary according to the objectives, purposes and contents of various legal regulations, the "period during which the patented invention could not be worked" shall not include the period consumed in tests which do not satisfy the requirements 1 to 3 set out below, since the time consumed in such tests are not considered necessary in obtaining the disposition:

- 1 The examination must be indispensable for obtaining the disposition.
- 2 The degree of freedom in tests made by enterprises must be restricted for reason of requirements to conform with standards established by the authority regarding the method and contents of tests.
- 3 The examination must be closely related to the obtaining of the disposition

As a patented invention is defined as the invention pertaining to a registered patent, the "period during which the patented invention could not be worked" occurs only on registration of the patent.

Furthermore, the reason the period shall be completed on a previous day of a date when the approval or the registration reached a requester, i.e., the date when the requester actually accepts it or it is put in an acceptable state, is that the "prohibited" condition due to the legal regulation is lifted when the approval or the registration reached the requester.

In the field of pharmaceuticals, the "period during which the patented invention could not be worked" commences on the day clinical tests are started, or on the date of patent registration, whichever is later, and expires on the day before the day when the approval reached the requester, i.e., the day when it is accepted by the requester, or is placed in an acceptable state (Supreme Court Judgment in1998 (Gyo Hi) No. 43, 44).

(Note) The period devoted to pre-clinical tests is not included in the period during which the patented invention could not be worked, because such tests take on the character of research and development on the effectiveness of the chemical substances contained in a pharmaceutical as active ingredient, and is considered to be equivalent to the product development stage in other industrial fields, and therefore could not necessarily be considered as being closely related to the obtaining a disposition.

For agricultural chemicals, the "period during which the patented invention could not be worked" means a period from the starting date of supervised field trial on efficacy wherein the name of the compound is explicitly stated, or on the date of patent registration, whichever is later, to the day previous to the date when the registration reaches a requester, namely, when it is accepted by the requester or is placed in an acceptable state.

When a requester files an application for the registration of patent term extension, he/she shall submit "a document expressing a period of the time during which the patented invention related to application of register of its extension could not be worked because of the necessity to obtain a disposition prescribed by Cabinet Order" prescribed under Regulations under Patent Act Article 38sedecies(1)(ii).

As a document expressing the aforementioned period, for example, the following documents can be submitted with respect to the invention of the pharmaceuticals.

- 1 A copy of the written approval
- 2 In cases where the requester did not know the approval at the date of approval, a document objectively expressing the first date when a requester accepted the approval or it was placed into an acceptable state, along with the copy of the written approval.

As a document expressing the aforementioned period, for example, the following documents can be submitted with respect to the invention of the agricultural chemicals

- 1 A copy of the written registration
- 2 In cases where the requester did not know the approval at the date of approval, a document objectively expressing the first date when a requester accepted the approval or it was placed into an acceptable state, along with the copy of the written approval.

In cases where the necessity of obtaining the disposition was not admitted, the period shall not be extended, since the intention of the extension system is to solely extend the period during which the patented invention could not be worked, due the necessity to obtain a disposition prescribed by Patent Act Article 67(2).

As to the judgment of the "period of time during which the patented invention could not be worked" under the Article 67ter(1)(iii), a general arrival process of the disposition prescribed by Cabinet Order shall be taken into consideration as well as the document submitted by an applicant. As a result of considering the submitted documents and the general arrival process of the disposition prescribed by Cabinet Order, if the term for extension of an applicant is judged to exceed the period during which the patented invention could not be worked, due to the necessity of obtaining a disposition provided for in the Patent Act Article, it shall be rejected under the provisions referred to in Patent Act Article 67ter(1)(iii).

The term seeking extension is admissible so far as it does not exceed the period during which the patented invention could not be worked. The two periods need not be equal.

If the disposition prescribed by Cabinet Order is obtained before registration of the patent, the application for registration of patent term extension shall be refused on grounds of provision under Article 67ter(1)(iii), since there would exist no period during which the patented invention could not be worked.

3.1.4 When the Applicant is not the Patentee Concerned (Patent Act Article 67ter(1) (iv)) 3.1.5 When the Application Does Not Comply With the Requirements of Article 67bis(4) (Patent Act Article 67ter(1)(v))

An application for registration of patent term extension for a jointly owned patent shall be refused unless all joint owners apply in conjunction.

3.2 Decision of Registration

The examiner shall make a decision to register the extension of patent term, if no reason of refusal is found in an application for registration of patent term extension (Patent Act Article 67ter(2)).

3.3 Publication in the Patent Gazette

The following information shall be published in the Patent Gazette when registration of patent tern extension has been made (Patent Act Article 67ter(4)):

- (1) the name and the domicile or residence of the patentee;
- (2) the Patent Number;
- (3) the date of the registration of the extension;
- (4) the term of the extension; and
- (5) particulars of the disposition as prescribed by Cabinet Order referred to in Article 67(2).

3.4 Amendments

3.4.1 Period During which Amendments could be Made

Applicants for registration of patent term extension may submit amendments at any time so far as the application is pending before the Patent Office, as Patent Act provides that amendments are allowable while the case is pending before the Patent Office (Patent Act Article 17(1)).

While Article 17(1)proviso prescribes periods during which amendments can be made, this provision applies only to amendments to the specification and drawings, and not to amendments to application for registration of patent term extension.

3.4.2 Scope of Amendment Allowed

In the examination of applications for registration of patent term extension, amendments to the request or to the documents describing the grounds for extension shall be allowed, so long as the information necessary in identifying the patent and the disposition (e.g. patent number and contents of disposition) are supplied at the time of filing on the request, or in the documents describing the grounds for extension, since most importance is placed on the determination of which patent to allow an extension, and on which disposition to form the basis of the extension.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

PartVII: EXAMINATION GUIDELINES FOR INVENTIONS IN SPECIFIC FIELDS

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Chapter 1 Computer Software-Related Inventions

This Chapter mainly explains matters which require special judgment or treatment in examining patent applications relating to computer software-related inventions (hereinafter referred to as "software-related inventions").

Refer to Part I or Part II for those matters not explained in this Chapter in relation to description requirements of the specification ("Claim(s)" and "Detailed Description of the Invention") and determination of whether the claimed invention is "statutory" or involves "inventive step."

Definitions of Terms used in this Chapter:

Information processing:

arithmetic operation or manipulation of information in order to achieve a particular result depending on a use purpose

Software:

program for information processing on a computer

Program:

a set of numbered instructions given to a computer to make it perform a particular information processing (the following "program listings" are excluded)

Program listings:

presentation of program codes printed on paper, displayed on a screen, etc.

Computer-readable storage medium having a program recorded thereon:

computer-readable storage medium having a program recorded thereon to install, execute or distribute the said program

Procedure:

a sequence of processes or operations connected in time series to achieve an intended object

Data structure:

logical structure of data defined by interrelationship among data elements

Hardware resources:

physical devices or physical elements used for processing, operation or realization of functions (i.e. a computer as a physical system and constituent elements thereof, such as a CPU, memory, an input device, an output device, or other physical devices connected to the computer)

1. Description Requirements of the Specification

1.1 Claim(s)

This section deals with description requirements of claim(s), especially focusing on categories of inventions which require special judgment or treatment in examining patent applications relating to software-related inventions.

1.1.1 Categories of Software-Related Inventions

(1) Invention of a process

When a software-related invention is expressed in a sequence of processes or operations connected in time series, namely procedure, the invention can be defined as an invention of a process (including an invention of a process of manufacturing a product) by specifying such a procedure.

(2) Invention of a product

When a software-related invention is expressed as a combination of multiple functions performed by the invention, the invention can be defined as an invention of a product by specifying such functions.

A program or data can be defined in the following manners:

(a) "A computer-readable storage medium having a program recorded thereon" can be defined as "an invention of a product." "A computer-readable storage medium having structured data recorded thereon" can also be defined as an invention of a product, where processing performed by a computer is specified by the data structure recorded thereon.

[Example 1] "A computer-readable storage medium having a program recorded thereon; where the program makes the computer execute procedure A, procedure B, procedure C, \dots "

[Example 2] "A computer-readable storage medium having a program recorded thereon; where the program makes the computer operate as means A, means B, means C, ..."

[Example 3] "A computer-readable storage medium having a program recorded thereon; where the program makes the computer realize function A, function B, function C..."

[Example 4] "A computer-readable storage medium having data recorded thereon; where the data comprise data structure A, data structure B, data structure C, ..."

(b) "A program" which specifies a multiple of functions performed by a computer can be defined as "an invention of a product."

[Example 5] "A program which makes a computer execute procedure A, procedure B, procedure C, ..."

[Example 6] "A program which makes a computer operate as means A, means B, means C, \dots "

[Example 7] "A program which makes a computer realize function A, function B, function C, \dots "

1.1.2 Notes

(1) Even when an invention is claimed using a term other than 'a program', if it is obvious, by taking into consideration the common general knowledge as of the filing, that the invention for which a patent is sought is "a program" which specifies a multiple of functions performed by a computer, the invention shall be treated as "a program."

However,

- (a) when a patent is sought for "program signal(s)" or "data signal(s)," since they cannot be classified into a statutory category, namely "an invention of a process" nor "an invention of a product," it violates Article 36(6)(ii) of the Patent Act; and
- (b) when an invention is claimed using the terms 'a program product' or 'a program "seihin" (Japanese translation of "product")', since they use terms whose technical scope are not clear, and thereby causing the technical scope of the claimed invention not to be clear, it violates Article 36(6)(ii) of the Patent Act. However, this is not a case where the explicit definition is provided for such a term in the specification without surpassing the ordinary meaning thereof, and thus the scope of the claimed invention results in clear.
- (2) Inventions claimed as 'shi-su-te-mu' (Japanese pronunciation of "system") or 'hoshiki' (Japanese translation of "system") is deemed to be an invention of a product (see Part I: Chapter 1, 2.2.2.1(3)).

1.1.3 Examples of Unclear Claimed Inventions

Article 36(6)(ii) of the Patent Act prescribes "an invention for which a patent is sought must be clearly stated." Examples of unclear claimed inventions violating this Act are shown below.

(1) The invention for which a patent is sought is unclear resulting from the statement of the claim itself being unclear (see Part I: Chapter 1, 2.2.2.1(1))

[Example 1] (Claimed invention)

An order-receiving method using a computer, comprising the steps of: accepting a commodity order from a customer, checking the inventory of the ordered commodity, and

responding to the customer as to whether the commodity can be delivered or not depending on inventory status.

(Explanation)

The expression "using a computer, comprising the steps of" does not necessarily specify the subject for the operation in each step. Therefore, the claim can be interpreted in the following two manners:

- as an order-receiving method (by a human) using a computer as a mere calculation tool, comprising the steps of: accepting a commodity order from a customer (by human operation of a computer), checking the inventory of the ordered commodity (by human operation of a computer); and responding to the customer as to whether the commodity can be delivered or not depending on the inventory status (by human operation of a computer); or

- as an information processing method by computer software in the constructed order-receiving system, comprising the steps of: accepting a commodity order from a customer (by means A equipped with a computer), checking the inventory of the ordered commodity (by means B equipped with a computer), and responding to the customer as to whether the commodity can be delivered or not depending on the inventory status (by means C equipped with a computer).

Consequently, since the two different concepts of "order-receiving method (by a human) using a computer as a mere calculation tool" and "information processing method by software in the constructed order-receiving system" are both included in a single claim, the claimed invention identified on the basis of the statements in the claim cannot be clearly grasped.

<u>Remark:</u> According to the gist of Article 36(6)(ii) of the Patent Act, a single invention must be clearly grasped from a single claim. (see Part I: Chapter 1, 2.2.2.1(4))

[Example 2]

(Claimed invention)

A program equipped with an order-receiving means to accept a commodity order from a customer, an inventory search means to check the availability of the ordered commodity, and a means to respond to the customer if the commodity can be delivered or not, depending on the inventory condition.

(Explanation)

A program makes a computer operate as a means, but the program itself does not operate as a means. Therefore the program itself is not equipped with an operational means, so that the claimed invention identified on the basis of the definition of the claim cannot be clearly grasped.

On one hand, if the invention is claimed as "a program to make the computer operate as an order-receiving means to accept a commodity order from a customer, an inventory search means to check the availability of the ordered commodity, and a means to respond to the customer if the commodity can be delivered or not depending on the inventory condition," the program is clear as an invention since it makes the computer operate as a functional means.

(2) The invention for which a patent is sought is unclear resulting from the technical meaning of matters defining the invention being not comprehensible (see Part I: Chapter 1, 2.2.2.1(2))

[Example 3]

(Claimed invention)

A computer to solve a puzzle using the right-brain inference rule. ('The right-brain inference rule' is not defined in the Detailed Explanation of the Invention.) (Explanation)

Since 'the right-brain inference rule' is not defined in the Detailed Explanation of the Invention nor is the common general knowledge as of the filing, the technical meaning of the matter to define the invention is not clear.

(3) The invention for which a patent is sought is unclear resulting from matters defining the invention are not related technically (see Part I: Chapter 1, 2.2.2.1(2)).

[Example 4]

(Claimed invention)

An information transmission medium transmitting a certain computer program. (Explanation)

Since 'an information transmission medium' such as a communication network inherently has an information transmission function, the mere statement that 'a certain computer program is being transmitted to anywhere on the information transmission medium at any moment' cannot clearly define "an information transmission medium" as an invention of a product.

(4) The category of an invention for which a patent is sought is unclear, or something that falls in neither products nor processes is stated in a claim (see Part I: Chapter 1, 2.2.2.1(3))

[Example 5]

(Claimed invention)

A string of program signals to make a computer execute procedure A, procedure B, procedure C, ...

(Explanation)

It cannot be determined whether the claimed invention constitutes "a product invention" or "a invention of a process."

(5) When the scope of the invention is unclear as a result of using su expression where there the standard or degree of comparison is unclear (see Part I: Chapter1, 2.2.2.1(5))

[Example 6]

(Claimed invention)

A compiler apparatus comprising a means to perform lexical analysis at high speed and a means to perform syntax analysis, in which the both means are enabled to run in parallel.

(Explanation)

Even taking into consideration the common general knowledge as of the filing, since comparison criterion or degree of "high speed" is obscure, the scope of the claimed invention is unclear.

If the invention is stated as 'comprising a means to perform lexical analysis and a means to perform syntax analysis...', the scope of the claimed invention is clear.
(6) Where "an intended result to be achieved" is used to define an invention for which a patent is sought whereas nothing concrete (concrete means, concrete articles or concrete processes, etc.) can be conceived even if taking into consideration the common general knowledge as of the filing (see Part I: Chapter 1, 2.2.2.1(6) (ii))

[Example 7]

(Claimed invention)

An aircraft control-computer to predict generation of "down-burst" phenomena in advance.

<u>Note</u>: "Down-burst" is such phenomena that an air stream explosively blows down from the bottom of a cloud, and destructively blows back up. (Explanation)

Even taking into consideration the common general knowledge as of the filing, the concrete computers which predict "down-burst" phenomena cannot be conceived, thus causing the scope of a claimed invention to be unclear. It cannot usually be said that the invention described in the specification cannot be more clearly defined by any other way than using such expression.

On one hand, the claimed invention is clear when defined by concrete means or procedure stated in the detailed description of the invention.

1.2 Detailed Description of the Invention

1.2.1 Enabling Requirements

The detailed description of the invention shall be stated... in such a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains. (Patent Act Article 36(4))

The detailed description of the invention shall be stated in such a manner that a person who has ability to use ordinary technical means for research and development, and has ability to exercise ordinary creative activity in the field of software-related inventions can carry out the claimed invention on the basis of the description in the specification (other than claim(s)) and drawings taking into consideration the common general knowledge as of the filing.

1.2.1.1 Examples of Violations of Enabling Requirements

(1) When not commonly used technical terms, abbreviations, symbols, etc. are used in the specification without definition, so that the invention cannot be carried out

(2) When the procedure or function corresponding to those stated in a claim is described merely in an abstract or functional manner in the detailed description of the invention, so that it is unclear how the procedure or function is implemented or realized by hardware or software

[Example 1]

When an information processing system to execute mathematical solutions, business methods or game rules is stated in a claim, there is no description in the detailed description of the invention on how to realize such methods or rules on a computer, so that the invention cannot be carried out.

[Example 2]

When procedures to operate a computer are explained based only on a computer display screen (e.g., input format using GUI (Graphical User Interface)), there is no description how to realize the said operational procedure on the computer, so that the invention cannot be carried out.

(3) When hardware or software which realizes the function of the invention is explained with functional block diagrams or general flow charts in the detailed description of the invention, since the explanation is not sufficient to understand how hardware or software is structured, the invention cannot to be carried out.

(4) When an invention is defined using functional terms whereas the embodiment of an invention is explained using a flow chart, the relationship between the said function defined in the claim and the said flow chart in the detailed description of the invention is unclear. As a result, the invention cannot to be carried out.

[Example 3]

When an invention of an information processing system for business support is defined in a claim by specifying a multiple of functional means whereas only the work-flow for the said business is described in the detailed description of the invention, since the relationship between the said functional means defined in the claim and the said work-flow in the detailed description of the invention is unclear, the invention cannot be carried out.

1.2.1.2 Notes

(1) When the detailed description of the invention is described by using functional or operational terms, particular attention must be given as to whether the detailed description of the invention is sufficiently clear and complete to the degree that the claimed invention can be carried out by a person skilled in the art on the basis of the common general knowledge as of the filing. If it is found that a person skilled in the art would not carry out the invention, the examiner should notify the reason for refusal under Patent Act Article 36(4) (violation of enabling requirements) by indicating the said function or operation (See Part I: Chapter 1, 3.2).

(2) When there is no concrete explanation about the matters described in the detailed description of the invention, particular attention must be given as to whether the detailed explanation of the invention is sufficiently clear and complete to the degree that the claimed invention can be carried out on the basis of the common general knowledge as of the filing. If it is found that a person skilled in the art would not carry out the invention, the examiner should notify the reason for refusal under Patent Act Article 36(4) (violation of enabling requirements) (See Part I: Chapter 1, 3.2).

1.2.2 Ministerial Ordnance Requirement

Statements of the detailed description of the invention which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry under Patent Act Article 36(4) shall state "the problem to be solved by the invention" and "its solution," or other matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention (Article 24bis of Regulation under Patent Act).

(1) The problem to be solved by the invention and its solution

The applicant should state "technical field to which the invention pertains," "the problem to be solved by the invention" and "its solution" as matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention (See Part I: Chapter 1, 3.3.2(1)).

In the section of "its solution," how procedure or means has been embodied should be explained using flow charts etc..

It is a violation of the Ministerial Ordinance Requirement, if a person having ordinary skill in the art cannot understand "the problem to be solved by the invention" and "its solution" on the basis of the detailed description of the invention, drawings or the common general knowledge as of the filing.

(2) Prior Art

A description of prior art is not required under the Ministerial Ordinance Requirement. However, in cases where a detailed description of prior art can be substituted for the description of "the problem to be solved by the invention," an applicant, as far as he or she knows, should describe the background prior art deemed to contribute to understanding the technical significance of the claimed invention and examining the patentability of the invention. If applicants know any documents relevant to a claimed invention deemed to be important for evaluation of patentability thereof, it is especially invited that a bibliographic information on the documents be provided (See Part I: Chapter 1, 3.3.2(3)).

(3) Program Listings

In principle, program listings should not be included in the specification or drawings. However, if they are short excerpts written in a computer language generally known to a person skilled in the art and helpful for understanding the invention, such listings are allowed to be included. ("Program listings" can be submitted and filed as reference material. However, the specification cannot be amended on the basis of such reference material.)

2. Requirements for Patentability

This section explains requirements for patentability, statutory invention and inventive step which are particularly important in examining patent applications for software-related inventions.

However, it is not necessary to refer to this chapter when it can be judged based on "Part II: Chapter 1," whether the claimed invention qualifies as a statutory invention.

2.1 Inventions ruled by Patentability Requirements

(1) Patentability requirements are applied to "claimed inventions".

(2) The claimed invention is identified on the basis of the statement in a claim. In this case, the significance of matters (terms) to define the invention is interpreted taking into consideration the descriptions of the specification (other than claim(s)), drawings and the common general knowledge as of the filing.

2.2 Statutory Invention

To be qualified as a "statutory invention" prescribed in the Patent Act, the claimed invention shall be "a creation of technical ideas utilizing a law of nature." (See Part II: Chapter 1, 1)

2.2.1 Basic Concept

The basic concept to determine whether software-related invention constitutes "a creation of technical ideas utilizing a law of nature" is as follows.

(1) Where "information processing by software is concretely realized by using hardware resources," the said software is deemed to be "a creation of technical ideas utilizing a law of nature." (See 3. Examples 2-1 to 2-5 in this Chapter.)

[Explanation]

"Information processing by software is concretely realized by using hardware resources" means that, as a result of reading the software into the computer, the information processing equipment (machine) or operational method thereof particularly suitable for a use purpose is constructed by concrete means in which software and hardware resources are cooperatively working so as to realize arithmetic operation or manipulation of information depending on the said use purpose.

Since "the said information processing equipment (machine) or operational method thereof particularly suitable for the use purpose" can be said to be qualified as "a creation of technical ideas utilizing a law of nature," where "information processing by software is concretely realized by using hardware resources," the said software is deemed to be "a creation of technical ideas utilizing a law of nature."

<u>Reference:</u> To be qualified as "a creation of technical ideas utilizing a law of nature," a claimed invention must be concrete enough to accomplish a certain purpose. (A

technology must possess sufficient concrete means to accomplish a certain purpose and can be practically used, ... so that it is objective.) [Hei 9 (Gyo Ke) 206 (Judgement: May 26, 1999)]

(2) Furthermore, the information processing equipment (machine) and operational method thereof which cooperatively work with the said software satisfying the above condition (1), and the computer-readable storage medium having the said software recorded thereon are also deemed to be "creations of technical ideas utilizing a law of nature."

2.2.2 Actual Procedure for Judgment

The actual procedure to judge whether a software-related invention is "a creation of technical ideas utilizing a law of nature" (statutory invention) or not is as follows.

(1) Identify the claimed invention based on the definitions in a claim. When the identified invention does not require special judgment and treatment for software-related inventions in judging whether the claimed invention constitutes "a creation of technical ideas utilizing a law of nature," "Part II: Chapter 1. 'Industrially Applicable Inventions'" shall be referred to. (Note*)

(2) Where information processing by software is concretely realized by using hardware resources (e.g. an arithmetic unit such as a CPU, a storage means such as memory) in the claimed invention, in other words, when information processing equipment (machine) or its operational method particularly suitable for the use purpose is constructed by concrete means in which software and hardware resources are cooperatively working so as to include arithmetic operation or manipulation of information depending on the said use purpose, the claimed invention constitutes "a creation of technical ideas utilizing a law of nature."

(3) Where information processing by software is not concretely realized by using hardware resources, the claimed invention does not constitutes "a creation of technical ideas utilizing a law of nature."

Examples where information processing by software is not concretely realized by using hardware resources

[Example 1]

(Claimed invention)

A computer comprising an input means to input document data, a processing means to process the inputted document data and an output means to output the processed document data; wherein the said computer prepares a summary of the inputted document by using the said processing means. (Explanation)

It can be said that there exists a flow of information processing of document data on a computer in the order of input means, processing means and output means. However, since the said information processing to prepare a summary of the inputted document and the said processing means cannot be said to be cooperatively working, it cannot be said that the said information processing is concretely realized. Consequently, the claimed invention does not constitute "a creation of technical ideas utilizing a law of nature," since the information processing by software is not concretely realized by using hardware resources.

[Example 2]

(Claimed invention)

A computer to calculate the minimum value of formula y=F(x) in the range of a x b.

(Explanation)

It cannot be said that the information processing to calculate the minimum value of formula y=F(x) is concretely realized by the fact that the computer is used "to get the minimum value of formula y=F(x) in the range of a x b." This is because information processing to calculate the minimum value of formula y=F(x) and the computer cannot be said to be cooperatively working by only saying "a computer to calculate the minimum value..." Consequently, the claimed invention does not constitutes "a creation of technical ideas utilizing a law of nature," which means that it does not constitute "a statutory invention," since the information processing by software is not concretely realized by using hardware resources.

(Note*) Examples where special judgment and treatment for software-related inventions described above are not required in judging whether the claimed invention is statutory so that judgement can be made by referring to "Part II: Chapter 1. 'Industrially Applicable Inventions'" are given below.

(1) Examples not constituting "a creation of technical ideas utilizing a law of nature"

When the claimed invention corresponds to any one of the "non-statutory inventions" listed in "Part II: Chapter 1, 1.1 Non-statutory Inventions," such as

- (a) economic laws, arbitrary arrangements, mathematical methods, mental activity; or
- (b) mere presentation of information such as image data taken with a digital camera, program for athlete meeting made by a word processor, computer program listings, etc.;

the claimed invention does not constitute "a creation of technical ideas utilizing a law of nature."

(2) Examples which constitute "a creation of technical ideas utilizing a law of nature"

When the claimed invention concretely performs:

- (a) control of an apparatus (rice cooker, washing machine, engine, hard disk drive, etc.), or processing with respect to the control; or
- (b) information processing based on the physical or technical properties of an object (rotation rate of engine, rolling temperature, etc.);

the claimed invention constitutes "a creation of technical ideas utilizing a law of nature."

2.2.3 Notes

(1) It should be noted that the invention to be judged is the claimed invention. Therefore, even if an invention wherein "information processing by software which is concretely realized

by using hardware resources" is described in the detailed description of the invention or drawings, when the same effect is not stated in a claim, the claimed invention is deemed as "non-statutory."

(2) Even if the current claimed invention does not constitute "a creation of technical ideas utilizing a law of nature," when it can be turned into "a creation of technical ideas utilizing a law of nature" by amending the definition of the claim on the basis of the statements in the detailed description of the invention, it is recommendable that the examiner suggest how to amend the definition of the claim simultaneously when notifying the applicant of the reason for refusal.

(3) (3) It should be noted that the judgement whether the claimed invention is "a creation of technical ideas utilizing a law of nature", should be made interpreting the significance of the matters (terms) to define the invention noting that the category of the invention is irrelevant ("an invention of a process" or "an invention of a product").

(4) When a claimed invention is sought for "a program language" so that it is deemed to be an artificial arrangement, it is not "a creation of technical ideas utilizing a law of nature." (See Part II: Chapter 1, 1.1 (4))

(5) When a claimed invention is sought for "program listings" so that it is deemed to be a mere presentation of information, it is not "a creation of technical ideas utilizing a law of nature." (See Part II: Chapter 1, 1.1 (5)(b))

[Example]

"Computer program listings for multiplication of natural numbers, comprising:

```
var x, y, z, u : integer ;
begin z := 0 ; u := x ;
repeat
z := z + y ; u := u - 1
until u = 0
end."
```

2.2.4 "Structured Data" or "Data Structure"

"Structured data" (including "a computer-readable storage medium having structured data recorded thereon") or "data structure" should be judged based on "2.2.1 Basic Concept" in this Chapter.

2.3 Inventive Step (Nonobviousness)

2.3.1 Basic Concept

(1) Whether or not a claimed invention involves an inventive step is determined whether the reasoning that a person skilled in the art could have easily arrived at a claimed invention based on cited inventions can be made by constantly considering what a person skilled in the art would do after precisely comprehending the state of the art in the field to which the invention pertains as of the filing. (See Part II: Chapter 2, 2.4 (1))

(2) Concretely, after finding the claimed invention and one or more cited inventions (Note*), one cited invention most suitable for the reasoning is selected. And comparison of the claimed invention with the cited invention is made, and the identicalness and the difference in matters defining the inventions are clarified. Then, the reasoning for lacking an inventive step of the claimed invention is attempted on the basis of the contents of the selected invention, other cited inventions (including well-known or commonly used art) and the common general knowledge. The reasoning can be made from various and extensive aspects. For example, the examiner evaluates whether the claimed invention falls under a selection of an optimal material, a workshop modification of design, a mere juxtaposition of features on the basis of cited inventions, or whether the contents of cited inventions disclose a cause or a motivation for a person skilled in the art to arrive at the claimed invention.

(Note*) Since the invention should be viewed as a whole, it is inappropriate to identify the claimed invention separating the aspect of artificial arrangement and that of automation technique.

(3) If advantageous effects of the claimed invention over a cited invention can be clearly found in the description in the specification, etc., it is taken into consideration as facts to support to affirmatively infer the involvement of an inventive step. (See Part II: Chapter 2, 2.4(2))

(4) When the reasoning can be made as a result of the above method, the claimed invention should be denied its inventive step. When the reasoning cannot be made, the claimed invention should not be denied its inventive step. (See Part II: Chapter 2, 2.4(2))

(5) Attempts are usually made in the field of software technology to combine methods or means used in different fields or apply them to another field in order to achieve an intended object. Consequently, combining technologies used in different fields and applying them to another field is usually considered to be within the exercise of an ordinary creative activity of a person skilled in the art, so that when there is no technical difficulty (technical blocking factor) for such combination or application, the inventive step is not affirmatively inferred unless there exist special circumstances (such as remarkably advantageous effects).

2.3.2 Problems to be solved by the Invention

The problems in connection with "software-implementation" or "computerization" are often mere general problems common to such computer technologies. "In order to improve the level of decision by using AI (Artificial Intelligence) or Fuzzy Logic," or "in order to make input -operation easier by using GUI (Graphical User Interface)" are examples of such problems to be solved by the invention. The judgement of "inventive step" should be made taking into consideration these generally known problems as of the filing.

2.3.3 A Person having Ordinary Skill in the Art

A person skilled in the art of software-related inventions is expected:

to have common general knowledge both of the applied field of the said software-related inventions and computer technology (e.g., systematization technology);

to use ordinary technical means for research and development;

to exercise ordinary creative activity in changing design; and

to be able to comprehend all the state of the art in the field of technology to which the invention pertains (state of the art in the applied field of the said software and the computer technology) as of the filing.

In addition, a person skilled in the art is supposed to be able to comprehend as his/her own knowledge all technical matters in the field of technology relevant to a problem to be solved by an invention.

Further, there may be cases where it is more appropriate to think in terms of "a group of persons" than a single person. (See Part II: Chapter 2, 2.2 (2))

2.3.4 Examples of Exercising Ordinary Creative Activity expected of a Person having Ordinary Skill in the Art

(1) Application to other fields

There are a lot of cases in which procedure or means for realizing the function used in software-related inventions are often common in function or operation, regardless of the applied field to which the invention belongs. In such cases, it is within the ordinary creative activity expected of a person skilled in the art to apply such procedure or means of software-related inventions used in certain applied fields to other fields to realize the same function or operation.

[Example 1]

Where there exists the cited invention of "file retrieval system," to apply the concrete means for retrieving in said "file retrieval system" to "medical file retrieval system" as the means for retrieving is deemed to be within the ordinary creative activity expected of a person skilled in the art, since the function of the means for retrieving is common to both systems.

[Example 2]

Where there exists the cited invention of "medical information retrieval system," to apply the concrete means for retrieving in said "medical information retrieval system" to a "commodity information retrieval system" is deemed to be within the ordinary creative activity expected of a person skilled in the art, since the function of the means for retrieving is common to both systems. (2) Addition of a commonly known means or replacement by equivalent

It is within the ordinary creative activity expected of a person skilled in the art to add a commonly known means for systematization as a constituent element thereof, or to replace part of constituent elements of the system with a well known means equivalent thereof.

[Example]

In addition to a keyboard as an input means, to add a means for inputting numerical codes by selecting items displayed on the screen with a mouse or by bar code is deemed to be within the ordinary creative activity expected of a person skilled in the art.

(3) Implementation by software of functions which are otherwise performed by hardware

It is within the ordinary creative activity expected of a person skilled in the art to try to realize such function by means of software that has been so far performed by hardware, such as circuits.

[Example]

To realize function of code comparison performed by circuit so far by software.

(4) Systematization of human transactions

There is a case where the cited prior art describes human transactions but not describe how to systematize them.

Even in such situation, it is within the ordinary creative activity expected of a person skilled in the art to systematize existing human transactions in an applied field in order to realize on a computer, if the said systematization can be realized by a routine activity of usual system analysis method and system design methods.

[Explanation]

System development is usually performed through the processes of:

planning (preparation) system analysis system design.

In the stage of system analysis, for example, the existing work is analyzed and put into written form. Human transactions can also be analyzed for systematization.

In view of the actual processes of such system development, it is within the ordinary creative activity of a person skilled in the art to systematize existing human transactions, provided that the said systematization would have been made by a routine work by using usual system analysis and system design technologies.

[Example 1]

Merely to replace a telephone or a fax previously used in order to receive orders from customers with a home page on the Internet is within the ordinary creative activity of a person skilled in the art.

[Example 2]

Merely to change the way of managing a classified section in a magazine into a way of managing such information via the home page on the Internet is within the ordinary creative activity of a person skilled in the art.

(5) Reproduction of a known event in computerized virtual space

It is within the ordinary creative activity of a person skilled in the art to reproduce a known event in a computerized virtual space, provided that the said reproduction would have been made by a routine work by using usual system analysis and system design methods.

[Example 1]

In a tennis game machine, merely to set the speed of a tennis ball after bouncing on a hard court faster than the speed on a clay court is within the ordinary creative activity of a person skilled in the art.

[Example 2]

In a racing game machine, merely to change the probability of spinning depending on the condition of the surface on the road is within the ordinary creative activity of a person skilled in the art.

[Example 3]

Merely to regenerate graphically on the computer screen the known I/O interface conditions (forms of buttons and display, and their positional relationship) of a calculator or copying machine is within the ordinary creative activity of a person skilled in the art.

(6) Design modification on the basis of known facts or customs

When different features between the claimed invention and the cited invention are based on known facts or customs, and as a result of considering other publicly known cited inventions and the common general knowledge (including "evident facts"), the said different feature is of the nature to be decided at the discretion of a person skilled in the art, and there is no blocking factor for combination, the difference is no more than a design modification decided depending on the need of a person skilled in the art, therefore, it is within the ordinary creative activity expected of a person skilled in the art.

[Example 1]

It is common general knowledge to express one's feeling of gratitude when a contract for sale is concluded. It is mere addition of commonly known means to add a message-outputting means to an electronic transaction machine. Therefore, in an electronic transaction machine having a display means, to add a message-outputting means saying "Thank you!" after receiving purchase orders is within the ordinary creative activity expected of a person skilled in the art.

[Example 2]

It is commonly known that there is a "cooling off system" (the buyer can retract the purchase order in a certain period of time, even after placing the purchase order) in non-electronic business transactions. It is also commonly known that adding a "cooling off system" is preferred for electronic transactions as well as non-electronic transactions from the view point of consumer protection. To add such a "cooling off system" to an electronic transaction machine is therefore within the ordinary creative activity expected of a person skilled in the art.

2.3.5 Effects of the Invention

Since alleged general effects such as "can be processed quickly", "can process a large amount of data", "can obtain uniform results" are often obtained as a result of computerization, the said results cannot usually be said to be unforeseeable from the knowledge of the state of the art.

2.3.6 Notes

(1) Reference to the fact of commercial success or the equivalent

The fact of commercial success or the equivalent can be referenced as the fact effective to affirmatively infer the existence of an inventive step. However, it is limited to cases where conviction is gained to believe that the fact is based on the feature of the claimed invention according to the assertion or the proof of the applicant, rather than other causes such as selling techniques or advertisement.

(2) Treatment of a case where a different feature merely exists in data contents

The novelty of the claimed invention cannot be affirmatively inferred when it is ascertained that a different feature between the claimed invention and the cited invention merely exists in data contents.

[Example 1]

Where there exists the cited invention of "record management apparatus for processing data structure A," since whose performance data is stored thereon, "student performance data" or "racehorse performance data," do not change such features as "a performance record management apparatus for processing 'data structure A'," novelty is to be denied in both cases.

[Example 2]

Where there exists "information processing apparatus including computer-readable storage medium having music C recorded thereon where the data structure is B," since changing "the said medium having music C" to "computer-readable storage medium having music D where the data structure is B" has nothing to do with the feature of "information processing apparatus including computer-readable storage medium having music recorded thereon where the data structure is B," novelty is to be denied.

(3) Recording a program or data on a computer-readable storage medium

Where the different feature between the original claimed invention and the cited invention is within the scope of the ordinary creative activity of a person skilled in the art, inventive step cannot be affirmatively inferred, even if a limitation of "recording a program or data on a computer-readable storage medium" is added to the claim.

(4) A medium which can transmit information

When the claimed invention is only specified by a feature inherent to the information transmission medium, for example, "a medium which transmits, or can transmit certain information," the claimed invention cannot be patented because of a lack of "novelty" or "inventive step."

Since the feature "a medium which can transmit certain information such as a program or data" is a feature inherent to an ordinary communication network, "a medium

which can transmit certain information" is not effective to specify the "information transmission medium" as a product. There is thus no difference between the claimed invention and an ordinary communication network, causing the claimed invention to lack novelty.

[Example 1]

(Claimed invention)

An information transmission medium which transmits a program which make a computer execute procedure A, procedure B and procedure C...

(Detailed Description of the Invention (extract))

The executable program to realize the above procedure is stored on a computer-readable storage medium such as a hard disk drive on a host computer. The said host computer is connected to plural user terminals with 100 BASE-T Ethernet cable and constructed to operate based on the TCP/IP protocols.

The executable program is distributed to any user terminal from the host computer responding to such request command transmitted by the said user terminal, and stored on a computer-readable storage medium in the said user terminal. As a result, the above procedure can be realized from any user terminal by executing the distributed program. (Explanation)

Since the definition "transmits a program" is not given in the detailed description of the invention, the limitation of the claim "(a transmission medium which) transmits a program" can be interpreted to mean "can transmit a program" which is an inherent function for a usual information transmission medium. Because the claimed invention has no different features as a product from the cited invention (any transmission medium which can transmit any computer-program) or has been easily arrived at based on the cited invention, it cannot be patented on the ground of Article $29(1)(i) \sim (iii)$ or Article 29(2) of the Patent Act.

[Example 2]

(Claimed invention)

An information transmission medium which can transmit certain digital information at the speed of more than 128 kbps.

(Explanation)

The limitation of "can transmit certain digital information" is not effective to specify the invention of "an information transmission medium which can transmit digital information at the speed of more than 128 kbps," since the performance for communication is not peculiar to "such certain information the transmission medium transmits." Because the claimed invention has no different features as a product from the cited invention (any information transmission medium which has the same performance as the claimed invention) or has been easily arrived at based on the cited invention, it cannot be patented on the ground of Article $29(1)(i) \sim (iii)$ or Article 29(2) of the Patent Act).

3. Examples

Examples shown below are prepared as supplemental means to assist understanding of the text of these Guidelines (hereinafter referred to "the text") for examination of software-related inventions. Since the examples should be referred only for the purpose of understanding the text, matters not described in the text should not be drawn out by interpreting the statements in the examples.

Furthermore, examples are only for the purpose of judgment on statutory invention and the inventive step and but are not for illustrating models for the specification.

Example	Title of the invention	Remarks
1-1	Program transmission medium	The statements of the claim and description in the detailed description of the Invention are not consistent
1-2	Information transmission medium	The definition of "information transmission medium" is unclear
1-3	Information recording transmission medium	There are two alternatives not of similar nature ("recording medium" and "transmission medium") to define the claimed invention
1-4	Information provision medium	Same as above
1-5	Computer-readable storage medium containing a program thereon	Same as above

(1) Examples of violating description requirements (related to "information transmission medium")

(2) Examples for determination of whether the claimed invention is "statutory" or not

(a) Examples where Information Processing by Software is concretely realized by using Hardware Resources

Example	Title of the invention	Remarks
2-1	Calculation method and calculation apparatus	Mathematical calculation process by software is concretely realized by using hardware resources (Mathematical field)
2-2	Storing method of articles distributed via network	Article storing process by software is concretely realized by using hardware resources (Business field)
2-3	Apparatus for predicting daily sales of commodities	Predicting process by software of daily sales of commodities is concretely realized by using hardware resources

		(Business field)
2-4	Points service method	Point servicing process by software is concretely realized by using hardware resources (Business field)
2-5	Game machine	"Hand scoring" process by software in a game machine is concretely realized by using hardware resources (Game field)

(b) Reference Examples

Example	Title of the invention	Remarks
2-6	Apparatus and method for controlling rate of fuel injection for an automobile engine	 Control for an apparatus or processing associated with the control is concretely realized, or Information processing based on the physical or technical properties of an object is concretely realized
2-7	Image processing method by computer	Information processing based on the physical or technical properties of an object is concretely realized

(3) Examples for determination of whether the claimed invention involves "inventive step" or not

Example	Title of the invention	Remarks
3-1	Apparatus for retrieving chemical substances	Application to other specific fields is easy
3-2	Invoice approval system	Systematization of human transaction is easy
3-3	Points service method	Systematization of human transaction or design modification based the known fact or customs is easy

3.1 Examples of violating Description Requirements (Related to "Information Transmission Medium")

Example 1-1 Program transmission medium

(Example where the description of the claim and the detailed description of the invention are not consistent)

[Title of Invention]

Program transmission medium

[Claim]

[Claim 1]

A program transmission medium to transmit a program which make a computer realize function A, function B, function C...

[Detailed Description of the Invention (extract)]

A portable information storage medium, such as CD-ROM, is a computer-readable storage device and records a program which makes a computer realize functions as described in the preferred embodiment.

Such a medium is traded independently from the information processing apparatus and can be distributed in the market. It can, for example, be traded not only domestically but also overseas when orders are electronically received via the Internet.

[Explanation]

According to the statement of claim 1, the claimed invention is apparently clear as a " medium to transmit" a certain program. However, the detailed description of the invention says that a portable information recording medium "records" a program. The word "transmit" (statement of Claim 1) which indicate the relationship between the program and medium are not consistent with the word "records" (statement of the "detailed description of the invention"), thus causing the claimed invention to be unclear. Therefore, it violates Article 36(6)(ii) of the Patent Act.

The detailed explanation of the invention also mentions other words such as "traded," "distributed" and "dispatched." These terms, however, mean trading, distribution and dispatch of "a recording medium" such as CD-ROM on which information is recorded. It should be noted that those words are not to be taken into consideration for the purpose of interpreting the meaning of "transmit" in the claim.

Although this example indicates a case where the claim says "a medium to transmit" while the detailed explanation of the invention states "medium records a program," the same inconsistency occurs when the claim says "a medium to record" and the detailed description of the invention states "medium transmits a program."

Example 1-2 Information transmission medium

(Example where the definition of "information transmission medium" is unclear)

[Title of Invention]

Information transmission medium

[Claim]

[Claim 1]

An information transmission medium used for an information processing system, the said transmission medium transmitting a program which makes the said system operate as means A, means B, means C...

[Detailed Description of the Invention (extract)]

The said transmission medium also includes a transmission medium, such as "optical fiber" or "radio link" used in networks, "LAN," "WAN" or "radio communication network," which transmits a program in a carrier wave, in addition to a computer-readable storage medium, such as "semi-conductor memory," "flexible disk," "hard disk," "CD-ROM" or "DVD."

[Explanation]

Although the description of claim 1 itself is apparently clear by defining the medium for transmitting a certain program, the detailed description of the invention uniquely defines that "transmission" mentioned in claim 1 also includes "recording" in addition to "transmitting." Since it is unclear whether the word "transmission" mentioned in claim 1 should be interpreted in a normal sense or in a sense uniquely defined in the detailed description of the invention, the claimed invention is unclear. This invention therefore does not comply with Article 36(6) (ii) of the Patent Act.

Example 1-3. Information recording transmission medium

(Example where there exist two alternatives not of similar nature ("recording medium" and "transmission medium") related to matters which define the invention for which a patent is sought.)

[Title of Invention]

Information recording transmission medium

[Claim]

[Claim 1]

An information recording transmission medium recording or transmiting a program which makes a computer execute procedure A, procedure B, procedure C...

[Detailed Description of the Invention (extract)]

When executing a program to realize the processes stated in preferred embodiment on a computer, the program stored on a storage apparatus, such as a hard disk inside the computer is loaded onto main memory and executed. The said program can also be traded through a portable recording medium, such as a CD-ROM. In addition, the program can be stored on storage apparatus in the computer and transmitted to another computer via a communication network.

[Explanation]

Since there are two alternatives of neither similar nature nor function ("records" and "transmits") related to matters which define the invention for which a patent is sought, one specific technical idea cannot be grasped on the basis of the definitions of a single claim. The invention therefore does not comply with Article 36(6)(ii) of the Patent Act.

It should be noted that the said storage apparatus does not correspond to "a medium (which) records or transmits a program" in claim1 but corresponds to "a medium (which) records a program," since the statement "the program...can be transmitted (from storage apparatus) to..." in the detailed description of the invention does not mean that the said apparatus itself has a program transmission function.

Example 1-4. Information provision medium

(Example where there exist two alternatives not of similar nature ("recording medium" and "transmission medium") related to matters which define the invention for which a patent is sought)

[Title of Invention] Information provision medium

[Claim]

[Claim 1]

An information provision medium to provide a program which makes a computer execute step A, step B, step C...

[Detailed Description of the Invention (extract)]

"The information provision medium" to provide users with a program for executing the processes described in the preferred embodiment can be distributed as a computer-readable storage medium in a variety of forms, and the claimed invention can be applied regardless of specific types of medium used for actual distribution. Examples for such medium include storage type of medium such as a floppy disk, CD-ROM, and transmission type of medium such as digital and analog communication links.

[Explanation]

Since the definition "medium to provide a program" in claim 1 itself is not clear enough to specify the relationship between "information (program)" and "medium," it can be interpreted to include two alternatives, namely "medium to transmit a program" and "medium to record a program" by taking into consideration the statements of the detailed description of the invention with the common general knowledge of a person skilled in the art. Since there exist two alternatives of neither similar nature nor function ("to record" and "to transmit") related to matters which define the invention for which a patent is sought, one specific technical idea cannot be grasped on the basis of the definitions of a single claim. The invention therefore does not comply with Article 36(6)(ii) of the Patent Act.

Example 1-5. Computer-readable storage medium containing a program

(Example where there exist two alternatives not of similar nature ("recording medium" and "transmission medium") related to matters which define the invention for which a patent is sought)

[Title of Invention]

Computer-readable storage medium containing a program

[Claim]

[Claim 1]

A computer-readable storage medium containing a program to make a computer execute procedure A, procedure B, procedure C...

[Detailed Description of the Invention (extract)]

A computer program for realizing the processes in the preferred embodiment can be provided to a computer by means of medium which holds a program in a fixed manner, such as a hard disk or semiconductor memory, or by means of a medium which holds a program in a fluid manner, such as a communication network.

[Explanation]

Although it is clear that the ordinary meaning of the word "containing" in claim 1 is "recording," the description of the invention sates that "medium contains a program in a fluid manner" and the meaning of the word "containing" in claim 1 is expanded to almost mean "transmit." Since there exist two alternatives of neither similar nature nor function ("records" and "transmits") related to matters which define the invention for which a patent is sought, one specific technical idea cannot be grasped on the basis of the definitions of a single claim. The invention does not therefore comply with Article 36(6)(ii) of the Patent Act.

3.2 Examples for determination of whether the claimed invention is "statutory" or not

3.2.1 Examples for determination of whether Information Processing by Software is concretely realized by using Hardware Resources

Example 2-1 Calculation method and calculation apparatus (mathematical area) (Example where mathematical calculation process by software is concretely realized by using hardware resources)

[Title of Invention]

Calculation method and calculation apparatus

[Claims]

[Claim 1]

A calculation method to calculate multiplication 's' of natural numbers 'n' and 'm' (where, 1 n m < 256) by the formula

$$s = \frac{(m + n)^2 - (m - n)^2}{4}$$

[Claim 2]

A calculation apparatus to calculate multiplication 's' of natural numbers 'n' and 'm' (where, 1 n m < 256) by the formula

$$(m + n)^2 - (m - n)^2$$

s = $-\frac{4}{4}$

[Claim 3]

A calculation apparatus to calculate formula $\frac{(m + n)^2 - (m - n)^2}{s} = \frac{1}{\sqrt{1 + (m - n)^2}}$

comprising means for inputting natural numbers 'n' and 'm' (where, 1 n m < 256), arithmetic means, and means for outputting the sum 's' by the said arithmetic means.

[Claim 4]

A calculation apparatus to calculate formula $\frac{(m + n)^{2} - (m - n)^{2}}{s} = \frac{4}{a}$

comprising, means for inputting natural numbers 'n' and 'm' (where, 1 n m < 256), a square function table wherein 'k' square value k^2 (where, 0 k < 511) is stored, arithmetic means comprising of an adder-subtracter and bit shift arithmetic unit, and a means for outputting the sum of 's' by said arithmetic means, wherein the said arithmetic means refers to the said square function table in order to obtain square value, without using a multiplier-divider unit.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention relates to a calculation apparatus to realize high-speed calculation of multiplication, where the said calculating apparatus has just an adder-subtracter and a bit shift arithmetic unit, such as an early 8-bit CPU with limited memory, without a multiplier-divider unit so as to make the said calculation procedure manageable directly by the said CPU.

[Prior art]

In order to enable a program to perform calculation process of multiplication by using a CPU with small memory space, and not using multiplier-divider unit, so that the said process can be directly managed by the said CPU, it is necessary to perform process of multiplication by software. To date, (i) the method to add the natural number 'm' n-times, or (ii) the method to refer to a multiplication table of 'm x n' have been known for realizing the said calculation process.

[Problems to be solved by the invention]

Although the method (i) does not occupy a great deal of memory due to the relatively small size of the calculation program, it takes more time to calculate depending on the value of the natural number n.

On the other hand, method (ii) requires less calculation time than method (i) because one only needs to refer to the table. However, memory becomes more limited as the table becomes larger. Especially when 1 n m < 256, if results of multiplication are stored on multiplication table of 255 x 255 in two bytes, about 128 k is required for memory. This exceeds the 64k memory capacity of an early 8-bit CPU.

The problems to be solved by the invention is therefore to realize high-speed calculation process of multiplication by using the calculation apparatus, where the early date 8-bit CPU with limited memory has only an adder-subtracter and bit shift arithmetic unit but does have a multiplier-divider unit, so that the said calculation process can be directly managed.

[Means for solving the problem]

A calculating apparatus of the invention solves the said problem to adopt a program which makes a calculation apparatus perform calculation of the following formula

$$s = \frac{(m + n)^2 - (m - n)^2}{4}$$

by utilizing a square function table of $0\sim510$, instead of using a multiplication table of 255×255 .

[Mode for carrying out the invention]

The invention performs calculation of values $(m + n)^2$ and $(m - n)^2$ by referring to a square function table of 0~510, without using a multiplier device. It therefore requires shorter time for calculation than adding natural number m n-times, and guarantees to perform such calculation process within a certain time. In addition, since memory space required for the square function table is about 1 k bytes (511 x 2 bytes), this is much less than the 128 k bytes (256 x 256 x 2 bytes) required for a multiplication table of 255 x 255. This can therefore be accommodated within a memory space of 64 k bytes which an early date 8-bit CPU can directly manage.

Furthermore, division by 4 can be realized by performing right bit shift arithmetic twice (i.e., for 2 bit columns). The procedure for right bit shift of the decimal number 12 (1100 in binary) is as follows.



As can be understood above, when right bit shift operation is carried out twice, 12 (decimal) becomes 3 (decimal) which means division by 4 is realized.

Therefore, calculation process of multiplication is realized by a calculation apparatus including an early date 8-bit CPU which has an adder-subtracter and bit shift arithmetic unit with limited memory within less calculation time, so that the said process can be directly managed by the said CPU and does not need a multiplier-divider unit.

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[Brief description of drawings]
(Omitted)
[Drawings]
(Omitted)
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[Conclusion]

[Claim 1] The invention of claim 1 does not constitute a "statutory invention." [Claim 2] The invention of claim 2 does not constitute a "statutory invention." [Claim 3] The invention of claim 3 does not constitute a "statutory invention." [Claim 4] The invention of claim 4 constitutes a "statutory invention."

[Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of claim 1 is: "A calculation method to calculate multiplication 's' of natural numbers 'n' and 'm' (where 1 n m < 256) by the formula

s =
$$\frac{(m + n)^2 - (m - n)^2}{4}$$

The claimed invention is "calculation of a numerical formula itself" and corresponds to what does not utilize the a law of nature. Therefore, the claimed invention does not constitute a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is: "A calculation apparatus to calculate multiplication 's' of natural numbers 'n' and 'm' (where 1 n m < 256) by the formula

$$s = \frac{(m + n)^{2} - (m - n)^{2}}{4}$$

Since only stating that "calculation process of the following multiplication formula
$$s = \frac{(m + n)^{2} - (m - n)^{2}}{4}$$

is performed by a calculation apparatus" cannot be said that the said calculation process and hardware resources are working cooperatively, the claimed invention cannot be said that information processing by software is concretely realized by using hardware resources. Therefore, the claimed invention does not constitute a "statutory invention."

[Claim 3]

The claimed invention identified on the basis of the definition of claim 3 is: "A calculation apparatus to calculate formula

 $s = \frac{(m + n)^2 - (m - n)^2}{4}$

comprising, means for inputting natural numbers 'n' and 'm' (where 1 n m < 256), arithmetic means, and means for outputting the sum of 's' by the said arithmetic means."

Although the claimed invention comprises means for inputting, arithmetic means and means for outputting, since those hardware resources are not cooperatively working with software in calculating multiplication, it cannot be said that information processing by software is concretely realized by using hardware resources. Therefore, the claimed invention does not constitute a "statutory invention."

[Claim 4]

The claimed invention identified on the basis of the definition of claim 4 is:

comprising, means for inputting natural numbers 'n' and 'm' (where 1 n m < 256), square function table wherein 'k' square value k^2 (where 0 k < 511) is stored, arithmetic means comprising of an adder-subtracter and bit shift arithmetic unit, and means for outputting calculation result 's' by said arithmetic means, the said arithmetic means refer to the said square function table in order to obtain square value, without using a multiplier-divider unit."

The claimed invention enables the said calculation process to be performed by a calculation apparatus, which has arithmetic means comprising an adder-subtracter and bit shift arithmetic unit but does not have multiplier-divider unit, wherein the arithmetic means, after introducing the square values of $a = (m + n)^2$ and $b = (m - n)^2$ using the said square function table, performs subtraction using the adder-subtracter unit according to the following formula

s =
$$\frac{(m + n)^2 - (m - n)^2}{4}$$
 = (a-b)>>2 (>>2 = two right bit shifts)

and in turn carries out right bit shift operation using the shift arithmetic unit, so that the information processing system is concretely realized wherein software and hardware

resources are cooperatively working. Thus, it can be said that information processing by software is concretely realized by using hardware resources. Therefore, the claimed invention is considered to be constitute a "statutory invention."

(Note) Judgement was made as to whether the invention of claim 1 is statutory based on "Part II: Chapter 1. Industrially Applicable Inventions", since special judgement and treatment for "software-related inventions" were not required.

Example 2-2 Storing method of articles distributed via network (business area)

(Example where articles storing process by software is concretely realized by using hardware resources)

[Title of Invention]

Storing method of articles distributed via network

[Claims]

[Claim 1]

A storing method of articles distributed via network, comprising the steps of: receiving articles distributed via communication network;

displaying the said received articles;

checking if intended keywords exist in texts of the said articles by users, and if exist, giving "save" command to an article storing execution means; and

storing the said article given "save" command on the article storage means.

[Claim 2]

A storing method of articles distributed via network, comprising the steps of: receiving articles distributed via communication network;

displaying the said received articles;

determining whether intended keywords exist in texts of the said articles by article storing determination means, and if exist, giving "save" command from the said determination means to an article storing execution means; and

storing the said article given "save" command on the article storage means.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

The invention relates to a storing method of articles distributed via communication networks such as the Internet.

[Prior art]

Methods to distribute articles via communication networks such as the Internet are already known, and technologies for storing these articles are also already known.

[Problems to be solved by the invention]

However, there are not so many articles necessary to be stored, and storing all the distributed articles is a waste of memory space.

The purpose of the invention is to save the memory space by selecting which distributed articles need to be stored.

[Means for solving the problem] (Omitted)

[Mode for carrying out the invention]

The most preferred embodiment of the invention is a method wherein users determine if the distributed article needs to be stored based on the criteria if an intended keyword is included in the text of the article.

First, a receiving means such as a modem receives an article distributed via communication network such as the Internet. The received article is stored in a temporal storage means of a computer system.

Second, the received article is displayed on a display means.

Then, users determine if an intended keyword exists in the text of the said displayed article, and if exists, give "save the article" command to the article storing execution means. This process can be realized in such manner that users determine if a prescribed keyword exists in the text by reading the articles, identify the article which include the said keyword using a keyboard or mouse and give "save the article" command to the said identified articles.

Furthermore, an article storing execution means executes storing the said identified articles on an article storage means, when the "save the article" command is given from an article storing determination means.

The second preferred embodiment of the invention is a method wherein a computer determines if the distributed article needs to be stored based on the criteria if an intended keyword is included in the text of the article.

First, a receiving means such as a modem receives an article distributed via communication network such as the Internet. The received article is stored in a temporal storage means of a computer system.

Second, the received article is displayed on a display means.

Then, an article storing determination means determines if a prescribed keyword exists in the contents of displayed article, and if exists, "save the article" command is given to an article storing execution means. This process can be realized in such manner that, previously storing a prescribed keyword on temporal storage means such as memory, the article storing determination means conducts matching between the contents of the stored article on the temporal storage means and the said prescribed keyword, and determines if the keyword exists in the said article.

Furthermore, an article storing execution means executes storing the said identified articles on an article storage means, when the "save the article" command is given from an article storing determination means.

[Advantageous effect of the invention]

According to this invention, memory space for storing articles can be saved, since only those necessary to be stored among the articles distributed via communication network will be stored.

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[Brief description of drawings]
(Omitted)
[Drawings]
(Omitted)
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[Conclusion]

[Claim 1] The invention of claim 1 does not constitute a "statutory invention." [Claim 2] The invention of claim 2 constitutes a "statutory invention."

[Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of claim 1 is: " A storing method of articles distributed via network, comprising the steps of: receiving articles distributed via communication network;

displaying the said received articles;

checking if intended keywords exist in the texts of the said articles by users, and if exist, giving "save" command to an article storing execution means; and

storing the said article given "save" command on the article storage means. "

The claimed invention includes a process wherein users check if intended keywords exist in the texts of the articles, and if exist, give "save" command to an article storing execution means. This process is performed based on the mental activity. Therefore, in spite of the fact that the claimed invention uses a "communication network," information processing cannot be said to be constructed by cooperative working of software and hardware resources. Namely, it cannot be said that information processing by software is concretely realized by using hardware resources.

Therefore, the invention of claim 1 does not constitute a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is;

" A storing method of articles distributed via network, comprising the steps of:

receiving articles distributed via communication network;

displaying the said received articles;

determining whether intended keywords exist in texts of the said articles by article storing determination means, and if exist, giving "save" command to an article storing execution means; and

storing the said article given "save" command on the article storage means."

In case of claim 2, the procedure wherein article storing determination means determine if a prescribed keyword exists in articles and, and if exists, store those articles, can be said being constructed by concrete means in which software and hardware resources are cooperatively working through the said determination means, execution means and article storage means. In another word, information processing by software is concretely realized by using hardware resources.

Therefore, the invention of claim 2 constitutes a "statutory invention."

Example 2-3. Apparatus for predicting daily sales of commodities

(Example where predicting process by software of daily sales of commodities is concretely realized by using hardware resources)

[Title of Invention]

Apparatus for predicting daily sales of commodities

[Claims]

[Claim 1]

A computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

means for inputting the date for which daily sales is predicted;

sales data storing means for storing data representing actual daily sales records;

variable condition rule storing means prepared for storing data representing variable conditions;

correction rule storing means prepared for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

means for reading variable condition data from the variable condition data storing means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storing means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value.

[Claim 2]

A computer-readable storage medium recording thereon a computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

means for inputting the date of which daily sales is predicted;

sales data storage means prepared for storing data representing actual daily sales records;

variable condition rule storage means prepared for storing data representing variable conditions;

correction rule storage means prepared for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value.

[Claim 3]

An apparatus for predicting daily sales of various commodities comprising:

means for inputting the date for which daily sales are predicted;

sales data storage means prepared for storing data representing actual daily sales records;

variable condition rule storage means prepared for storing data representing variable conditions;

correction rule storage means prepared for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention relates to a computer system for predicting daily sales necessary for ordering commodities at a retail shop, and more particularly, to a computer system for predicting daily sales suitable for predicting daily sales of various commodities at a large scale retail shop such as a supermarket whose demand changes greatly.

[Prior art]

Daily sales of commodities at a large scale retail shop such as a supermarket changes greatly, depending on various factors such as the day of the week, the date, weather, the selling status of competing shops (bargain or going out of business sale), and events held in the community. Therefore amounts of commodities to be ordered are determined depending on daily sales predictions based on inventory control experience.

Thus, carrying out a prediction took too much time especially in cases of little inventory control experience.

Moreover, overlooking of some factors of change often arose and prediction was not so accurate.

[Problems to be solved by the invention]

The problem to be solved by the invention is to provide a system for predicting daily sales which does not rely on human inventory control experience and which brings a stable result of predictions in a short time.

[Means for solving the problem] (Omitted) [Mode for carrying out the invention]

Fig. 1 shows the system constitution of the apparatus for predicting daily sales, and Fig. 2 shows a flow chart executed by said system.

At first, a worker inputs a date of which daily sales are predicted via an input device such as a keyboard.

Actual daily sales records are stored in advance in the sales data file associated with the date and the day of the week.

The central processing unit (CPU), being instructed by the control program stored in the main memory, reads data of the past few weeks, each being the same day of the week as that of the day of which daily sails is predicted, and calculates the average of the said data. The average of the said data is utilized as the first predicted value.

It is empirically known that using actual daily sales records in three to four weeks is preferable.

Then the CPU, being instructed by the control program stored in the main memory, reads variable condition data, such as the probability of rain obtained from the weather forecast, from the variable condition data file, said variable condition data being associated with the date of which daily sales of commodities are predicted, reads correction rule being stored in the correction rule file in advance.

(Note: An example of the correction rule is "If it rains all day, a 30% decrease in the sales is expected." It is assumed that details of the correction rules are fully supported by the detailed explanation of the invention.)

Finally, the CPU, being instructed by the control program stored in the main memory, corrects the first predicted value based on said correction rule corresponding to the variable condition data, and determines the second predicted value.

The second predicted value is used as the final predicted data and is obtained from an output device such as a printer.

[Working example]

(Note: It is assumed that all components of the mode for carrying out the invention, how to fix correction rules, etc. are fully supported by the working example.)

[Brief description of the drawings] (Omitted)

[Drawings]

[Figure 1] System Constitution of the Apparatus for Predicting Daily Sales



[Figure 2] Flow Chart



[Conclusion]

[Claim 1] The invention of claim 1 constitutes a "statutory invention." [Claim 2] The invention of claim 2 constitutes a "statutory invention." [Claim 3] The invention of claim 3 constitutes a "statutory invention." [Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of claim 1 is:

"A computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

means for inputting the date for which daily sales are predicted;

sales data storage means prepared for storing data representing actual daily sales records;

variable condition rule storage means prepared for storing data representing variable conditions;

correction rule storage means prepared for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value."

In the invention of claim 1, the process for predicting daily sales of commodities based on various variable conditions and correction rules is realized by a concrete means in which software and hardware resources are cooperatively working, the said concrete means comprising a multiple of storage means and control means to read and select data from the said storage means. In other words, information processing by software is concretely realized by using hardware resources.

Therefore, the invention of claim 1 constitutes a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is:

"A computer-readable storage medium containing thereon a computer program for predicting daily sales of commodities to make a computer for predicting daily sales of various commodities operate as:

means for inputting the date for which daily sales are predicted;

sales data storage means prepared for storing data representing actual daily sales records;

variable condition rule storage means for storing data representing variable condition;

correction rule storage means for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of the said data;

means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value."

The claimed invention identified on the basis of the definition of claim 2 is a computer-readable storage means containing thereon a computer program for predicting daily sales (the invention of claim 1), therefore, the invention of claim 2 is considered to constitute a "statutory invention" as in the case of claim 1.

[Claim 3]

The claimed invention identified on the basis of the definition of claim 3 is:

"An apparatus for predicting daily sales of various commodities comprising:

means for inputting the date for which daily sales are predicted;

sales data storage means prepared for storing data representing actual daily sales records;

variable condition rule storage means for storing data representing variable conditions;

correction rule storage means for storing correction data;

means for getting the first predicted value by reading data representing daily sales records of the past several weeks, each data being of the same day of the week as that of the day of which daily sales is predicted, and calculating the average of said data;

means for reading variable condition data from the variable condition data storage means, said variable condition data being related to the date for which daily sales of the commodities are predicted, and selecting correction rules to be applied based on said variable condition data, said correction rules being stored in the correction rule storage means;

means for determining the second predicted value by correcting the first predicted value based on said correction rule to be applied; and

means for outputting the second predicted value."

The claimed invention identified on the basis of the definition of claim 3 is an information processing apparatus (a machine) which is cooperatively working with a computer program for predicting daily sales (the invention of claim 1), therefore, the invention of claim 3 is considered to constitute a "statutory invention" as in the case of claim 1.
Example 2-4. Points service method (business area)

(Example where points servicing process by software is concretely realized by using hardware resources)

[Title of Invention]

Points service method

[Claims]

[Claim 1]

A service method for offering service points depending on an amount of commodity purchased in telephone shopping, comprising the steps of:

notifying via telephone of an amount of service points offered and a name of a person to whom the said service points are offered;

acquiring the telephone number of the said person from a customer list storage means based on the name of the said person;

adding the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying to the said person that the said service points have been given via telephone using the said telephone number of the said person.

[Claim 2]

A service method for offering service points depending on an amount of commodity purchased at a shop on the Internet, comprising the steps of:

notifying an amount of service points offered and a name of a person to whom the said service points are offered via the Internet;

acquiring the e-mail address of the said person from a customer list storage means based on the name of the said person;

adding the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying to the said person that the said service points have been given via e-mail using the e-mail address of the said person.

[Claim 3]

A service method for offering service points depending on an amount of commodity purchased at a shop on the Internet, comprising the steps of:

notifying a server of an amount of service points offered and a name of the person to whom the said service points are offered via the Internet;

acquiring by the said server, the e-mail address of the said person from a customer list storage means based on the name of the said person;

adding by the said server, the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying by the said server, to the said person that the said service points have been given, by e-mail using the said e-mail address of the said person.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

The present invention relates to a points service method used in mail-order business.

[Prior art]

There have been in the past services to give service points depending on an amount of commodity purchased at a shop by a customer and to exchange the total service points with goods, gift coupon or cash.

[Problems to be solved by the invention]

In the past, points service methods could not be realized in mail-order business because of the customer management problem etc. In addition, because of the same reason, only the customer herself or himself could use such service points and even the family members could not be assigned with such service points.

[Means for solving the problem]

In order to realize the points service method in the mail-order business, this invention is configured to manage the service points of each customer by providing a customer list (including, at least, customer names, total service points and customer addresses) at the shop side, and adding service points when a customer purchases goods by mail-order.

And, in order to give service points from a customer to another, when the name of the person to whom service points are offered are notified, the total service points of the designated person registered in a customer list are calculated by adding the said service points, and the fact that the said service points have been given is notified to the said person by using the registered address of the said person.

By the present invention, when making communication via telephone between a customer and the shop, it is recommendable that telephone numbers of customers are registered as the contact point in the customer list.

On one hand, when making communication between a customer and the shop via the Internet, it is better to register e-mail addresses of customers as the contact point in the customer list.

Furthermore, in the present invention, by providing a shop with a server, the following procedure can be realized on a computer.

A system is configured in such a way to manage service points of each customer by providing a database of customer lists (including at least, customer names, total service points and e-mail addresses of customers) on a shop server on the Internet, and to add service points when a customer purchases goods via the Internet.

And, when a customer wants to give service points to another, by notifying the server of the said service points and the name of the person by e-mail, the server retrieves the e-mail address of the said person from the database of customer lists by the name of the said person, adds up the said service points and automatically notifies the customer that the said service points were given.

[Mode for carrying out the invention] (Omitted) [Working example] (Omitted)

[Advantageous effect of the invention]

The present invention enables the points service method to easily be realized even in the mail-order business. In addition, since service points can be assigned to another customer, the utility of the points service method is increased.

[Brief description of the drawings] (Omitted) [Drawings] (Omitted)

[Conclusion]

[Claim 1] The invention of claim 1 does not constitute a "statutory invention." [Claim 2] The invention of claim 2 does not constitute a "statutory invention." [Claim 3] The invention of claim 3 constitutes a "statutory invention."

[Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of claim 1 is:

"A service method for offering service points depending on an amount of commodity purchased in telephone shopping, comprising the steps of:

notifying via telephone of an amount of service points offered and a name of a person to whom the said service points are offered;

acquiring the telephone number of the said person from a customer list storage means based on the name of the said person;

adding the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying the said person that the said service points have been given, via telephone using the said telephone number of the said person."

The invention of claim 1 is a method which uses means such as "a telephone" and "a customer list storage means," but considered as a whole, it is an artificial arrangement per se using those means as a tool, so that it does not constitute "a creation of technical ideas utilizing a law of nature."

Therefore it follows that the invention of claim 1 is considered as not constituting a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is:

"A service method for offering service points depending on an amount of commodity purchased at a shop on the Internet, comprising the steps of:

notifying an amount of service points offered and a name of a person to whom the said service points are offered;

acquiring the e-mail address of the said person from a customer list storage means based on the name of the said person;

adding the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying to the said person that the said service points have been given via e-mail using the e-mail address of the said person."

The invention of claim 2 is a method which uses means such as "the Internet," "a customer list storage means" and "e-mail," but considered as a whole, it is a artificial

arrangement per se using those means as a tool, so that it does not constitute "a creation of technical ideas utilizing a law of nature."

Therefore it follows that the invention of claim 2 is considered as not constituting a "statutory invention."

[Claim 3]

The claimed invention identified on the basis of the definition of claim 3 is:

"A service method for offering service points depending on an amount of commodity purchased at a shop on the Internet, comprising the steps of:

notifying a server of an amount of service points offered and a name of the person to whom the said service points are offered via the Internet;

acquiring by the said server, the e-mail address of the said person from a customer list storage means based on the name of the said person;

adding by the said server, the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying by the said server, to the said person that the said service points have been given by e-mail using the said e-mail address of the said person."

Since the invention of claim 3 is the procedure executed by a server, so that it can be said to execute information processing by software.

Furthermore, the invention of claim 3 can be said to be an operation method of the information processing system in which information processing by software is concretely realized by using hardware resources, wherein the said server acquiring the e-mail address of the person to whom service points are offered from a customer list storage means, adding the said service points to the accumulated service points of the said person of the said customer list storage means, and notifying the said person of the fact that the said service points have been given.

Therefore it follows that the invention of claim 3 is considered as constituting a "statutory invention."

(Note) Judgement on whether the invention of claim 1 or claim 2 is statutory was made based on "Part II: Chapter 1. Industrially Applicable Inventions," since special judgement and treatment for "software-related inventions" was not required.

Example 2-5. Game machine

(Example where "hand-scoring" process by software in a game machine is concretely realized by using hardware resources)

[Title of Invention]

Game machine

[Claims]

[Claim 1]

A computerized card game machine, comprising:

means for assigning specific points of a score to a set of cards dealt, according to the complexity of the hand involved.

[Claim 2]

A computerized card game machine, comprising:

means for memorizing a scoring hand data table (i.e. a hand of cards dealt that scores points) in which a given set of cards is matched to specific scoring hand data, and a score data table in which the scoring hand data are matched to the score data;

means for assigning corresponding scoring hand data by retrieving said scoring hand data table based on a set of cards selected, assigning corresponding score data by retrieving the score data table on the basis of the applicable scoring hand data, and outputting all of the scoring hand data and total points scored.

[Description of the invention]

[Technical field to which the invention pertains]

This invention relates to computerized card game machines.

[Prior art]

A conventional computerized card game machine extracts a hand of cards dealt, score the points from among a given set of five cards dealt by the computer, determines the scores based simply on the number of scoring hands, and displays the results obtained.

[Problems to be solved by the invention]

In fact, the degree of difficulty varies according to the type of "scoring hand." In this respect, the conventional practice of scoring the same points for any type of hands reduces the attractiveness of the game as well as players' enthusiasm for the game. Accordingly, the object of this invention is to create a card game machine that makes the game more exciting and arouses players' enthusiasm by assigning different points of scores to a set of cards depending on the complexity of the hand involved.

[Means for solving the problem]

The card game machine invented here separately stores the scoring hand data table, which keys a set of cards to specific scoring hand data, and the score data table, which keys scoring hand data to score data. The invention solves the problem described by using the scoring hand data table and the score data table in turn, and by presenting to players all the types of scoring hands and total scores in a set of cards dealt.

[Mode for carrying out the invention]

Figure 1 shows the configuration of the card game machine. Display unit 1 and input facilities 2 such as a keyboard or mouse are connected to a bus 9. The central processing unit (CPU) 3 specifies the image data to be displayed during execution of the game machine, and retrieves the scoring hand data and the corresponding score data based on a set of cards dealt.

RAM 4 temporarily stores the image data to be displayed, and the image processing unit 5 generates the image data required according to the instructions from CPU 3, and displays the image on the display unit 1.

The card game machine stores three types of files in its memory.

The first file 6 stores game program 61, card image data 62, random number table 63, etc. The second file 7 stores the scoring hand data table, which keys the scoring hand data to card sets. In addition, the third file 8 stores the score data table, which keys the scoring hand data to the score data. The second file 7 and third file 8 can be separately updated.

Figure 2 shows an example of a display screen. The screen illustrates five cards. At the top, it also displays the scoring hand data [A and B] retrieved from the scoring hand data table, and the score "6 points" that is output after retrieval of the score data table based on the scoring hand data.

The flowchart in Figure 3 explains the way in which the invented game program runs. When a prompt for "game start" is entered, the system selects (S1) five cards using the random number table, in accordance with the game program. The system retrieves (S2) a hand of cards that scores points by selecting an existing stored set of cards, and reads out the applicable scoring hand data detected.

In order to fetch the score data corresponding to the scoring hand data, the system retrieves (S3) the score data table, fetches the corresponding score data, and adds up the total scores earned. On the screen of display unit 1, the system displays (S4) the five cards selected, the retrieved scoring hand data, and the total scores earned, as shown in Figure 2.

The system checks (S5) whether the card change frequency has reached the maximum limit, and either aborts if the limit has been reached, or else proceeds to (S6). The system inquires (S6) from a player if he/she prefers to specify cards to be changed, and either aborts if no cards are specified or else proceeds to (S7) if cards are specified. The system selects (S7) new cards using the random number table and replaces specified cards with selected cards, with system control returning to (S2).

The second file 7 and third file 8 can be separately updated as appropriate.

Consequently, if scoring hand data and score data are changed to meet the specific needs of the countries or regions in which the card game machines are installed or marketed, the table can be rewritten to allow common use of the data in the first file 6 and a reduction in the number of processes in proportion to a reduction in the size of the rewritten table.

[Advantageous effect of the invention]

Since the invented card game machine extracts all scoring hands, and computes and displays the total points scored for the respective hands, the total scores vary with the type and number of scoring hands involved. The invention thus provides players with exciting games. Also, as a changeable scoring hand data table and score data table are separately provided, card game machines operating according to different rules can be installed and marketed flexibly in different situations of countries and regions by modifying the scoring hand table or the score data table.

[Brief description of drawings]

(Omitted)

[Drawings]



[Figure 2] Typical screen display



[Figure 3] Processing flowchart



[Conclusion]

[Claim 1] The invention of claim 1 does not constitute a "statutory invention." [Claim 2] The invention of claim 2 constitutes a "statutory invention."

[Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of the claim 1 is: "A computerized card game machine, comprising:

means for assigning specific points of a score to a set of cards dealt, according to the complexity of the hand involved."

The claimed invention identified on the basis of the definition of claim 1 is processing for computing scores by using hardware resources assigning different scores to a set of cards dealt according to the complexity of the hand involved, but it cannot be said that a card game machine in which the score computing processing software and hardware resources are cooperatively working is constructed, and information processing for score computing is not concretely realized, so that it cannot be said that information processing by software is concretely realized by using hardware resources.

It follows, therefore, the invention of claim 1 is not considered to be "a creation of technical ideas utilizing a law of nature" and does not constitute a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is;

"A computerized card game machine, comprising:

means for memorizing a scoring hand data table (i.e. a hand of cards dealt that scores points) in which a given set of cards is matched to specific scoring hand data, and a score data table in which the scoring hand data are matched to the score data;

means for assigning corresponding scoring hand data by retrieving said scoring hand data table based on a set of cards selected, assigning corresponding score data by retrieving the score data table on the basis of the applicable scoring hand data, and outputting all of the scoring hand data and total points scored."

The claimed invention identified on the basis of the definition of claim 2 is to provide a card game machine with a concrete means, in which software and hardware resources are cooperatively working, to perform information processing for assigning corresponding scoring hand data by retrieving the scoring hand data table based on a set of cards selected, assigning corresponding score data by retrieving the score data table on the basis of the applicable scoring hand data, and outputting all of the scoring hand data and total points scored, so that it can be said that information processing by software is concretely realized by using hardware resources.

It follows, therefore, the invention of claim 2 is considered to be "a creation of technical ideas utilizing a law of nature" and constitutes a "statutory invention."

3.2.2 Reference Examples

Examples 2-6 to 2-7 are those not requiring special judgment and treatment for software-related inventions in determining whether the claimed inventions are statutory.

Example 2-6. Apparatus and method for controlling the rate of fuel injection for an automobile engine

[Title of Invention]

Apparatus and method for controlling rate of fuel injection for an automobile engine

[Claims]

[Claim 1]

An apparatus for controlling rate of fuel injection for an automobile engine by a programmed computer, comprising:

first detector means for detecting the rate of engine revolutions;

second detector means for detecting transition of the rate of engine revolution; and

fuel injection rate decision means for determining the rate of fuel injection by said control program in accordance with the values detected in the first and second detector means.

[Claim 2]

A method for controlling the rate of fuel injection for an automobile engine by a programmed computer, comprising the steps of:

detecting the rate of engine revolutions;

detecting transition of the rate of engine revolutions; and

determining the rate of fuel injection by said control program in accordance with the rate of engine revolutions and transitions of the rate of engine revolutions.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention is related to a fuel injection rate controller for an automobile engine operated by a programmed computer.

[Prior art]

The existing models of electronic controller for controlling the rate of fuel injection for an automobile engine determine the rate of fuel injection on the basis of the detected rate of engine revolutions. This type of fuel injection controller is prone to supply a leaner fuel/air mixture than the theoretical ratio of optimum mixture at the transition stage during sudden increase in the rate of revolutions as in cases of hard acceleration since the intake of air cannot be increased as fast due to friction against the inner walls of intake manifolds. Conversely, richer fuel/air mixture often prevails at the transient stage during a sudden increase in the rate of revolutions as in the case of hard deceleration since the intake of air cannot be decreased as fast because of the inertia of airflow. This kind of behavior during sudden increase or decrease of the rate of engine revolutions deteriorates the combustion efficiency of the engine and leads to lower engine output than expected. [Problems to be solved by the invention]

This invention will improve the combustion efficiency and output power of the engine during the transition stages of hard acceleration or deceleration.

[Means for solving the problem]

In view of the above, this invention intends to achieve the optimum fuel/air mixture ratio by controlling the fuel injection rate in accordance with changing conditions so as to improve the combustion efficiency and the power output of the engine.

Specifically, in addition to a first detection means for detecting the rate of engine revolutions, the second detector means for detecting transition of the rate of revolutions, or the differential value of the rate of engine revolutions, has been established to enable detecting sudden increase or decrease of the rate of engine revolutions. Furthermore, the rate of fuel injection is to be determined by a control program electronically stored on the memory (e.g., ROM) of the fuel injection rate controller, in accordance with the detected values from the first and second detector means.

The actual procedure for determining the rate of fuel injection is as follows:

A two dimensional map is prepared in advance with the rate of engine revolutions on the X-axis and transition of the rate of engine revolutions on the Y-axis to plot corresponding values of experimentally obtained optimum rates of fuel injection on the respective intersections. The two dimensional map is then electronically stored on the memory (e.g., ROM) of the said fuel injection rate controller. The control program calculates the rate of engine revolutions and transition of the rate of engine revolutions from the values detected by the first and second detector means and then it determines the optimum rate of fuel injection by referring to the above-mentioned two dimensional map using the respective calculated values of the rate of engine revolutions and transition of the rate of engine revolutions.

[Mode for carrying out the invention] (Omitted) [Working example] (Omitted)

[Advantageous effect of the invention]

Combustion efficiency has been improved since the optimum fuel/air mixture can be maintained even during hard acceleration or deceleration of engine revolutions.

[Brief description of the drawings] (Omitted) [Drawings] (Omitted)

[Conclusion]

[Claim 1] The invention of claim 1 constitutes a "statutory invention." [Claim 2] The invention of claim 2 constitutes a "statutory invention."

[Explanation]

[Claim 1]

The claimed invention identified on the basis of the definition of claim 1 is:

"An apparatus for controlling rate of fuel for an automobile engine by a programmed computer, comprising:

first detector means for detecting the rate of engine revolutions;

second detector means for detecting transition of the rate of engine revolution; and fuel injection rate decision means for determining the rate of fuel injection by said control program in accordance with the values detected in the first and second detector means."

The claimed invention identified on the basis of the definition of claim 1 is an apparatus for concretely performing processing associated with the control of an engine as a device, so that it can be said as "a creation of technical ideas utilizing a law of nature." Also, since the claimed invention is an apparatus for concretely performing processing based on the physical and technical properties of an engine as the object, and it can be said as a "creation of technical concept utilizing the laws of nature."

It follows, therefore, the invention of claim 1 is considered to be "a creation of technical ideas utilizing a law of nature" and is considered as constituting a "statutory invention."

[Claim 2]

The claimed invention identified on the basis of the definition of claim 2 is:

"A method for controlling rate of fuel for an automobile engine by a programmed computer, comprising the steps of:

detecting the rate of engine revolutions;

detecting transition of the rate of engine revolutions; and

determining the rate of fuel injection by said control program in accordance with the rate of engine revolutions and transitions of the rate of engine revolutions.

The claimed invention identified on the basis of the definition of claim 2 is a method for concretely performing processing associated with the control of an engine as a device, so that it can be said as "a creation of technical ideas utilizing a law of nature." Also, since the claimed invention is a method for concretely performing processing based on the physical and technical properties of an engine as the object, and it can be said as a "creation of technical concept utilizing the laws of nature."

It follows, therefore, the invention of claim 2 is considered to be "a creation of technical ideas utilizing a law of nature" and is considered as constituting a "statutory invention."

(Note) Judgement on whether the invention of claim 1 or claim 2 is statutory was made based on "Part II: Chapter 1. Industrially Applicable Inventions," since special judgement and treatment for "software-related inventions" was not required.

Example 2-7. Image processing method by computer

(Example where information processing is concretely realized based on the physical or technical properties of an object)

[Title of Invention]

Image processing method by computer

[Claim]

[Claim 1]

An image processing method by computer for compensating the blurring of optically read image data comprising the steps of:

inputting a pixel matrix A of 3 rows and 3 columns obtained from image data picked up by an optical reading means;

computing a pixel matrix C = A * B;

using a matrix B, shown below, which formed by stored filter parameters of 3 rows and 3 columns, and

outputting the pixel matrix C.

	(0	-0.5	0)		(0	-0.5	0)
B =	-0.5	3	-0.5	or	в =	-0.5	2.75	-0.5
	0	-0.5	0)		0	-0.5	0)

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention relates to a picture quality improvement method in image processing by a computer.

[Prior art]

Generally, a blur depending on the characteristics of the reading means is produced in the image data which was picked up with an optical reading means.

Conventionally, each picked up pixel was multiplied by a digital filter (a kind of high-pass filter which passes high frequency ingredient) with parameters such as:

(0	-1	0)	(0	-1	0)
-1	4	-1	-1	5	-1
0	-1	0)		-1	0)

in accordance with the 3 * 3 filtering method, for instance. But the compensation became strong in the case of an image having an extensive area of half tone density, so that an improvement in the picture quality could not be achieved.

[Problems to be solved by the invention]

An object of this invention is to provide an image processing method which can achieve a required compensation sufficiently and easily.

[Means for solving the problem]

When executing digital computation of the filter and detected image using a computer, experiments were conducted by setting various parameters under the condition that the total energy of the image should not differ substantially before and after the arithmetic processing and that the values other than the center parameter should not be smaller than the center parameter, so that the image after the processing should not appear unnatural.

[Mode for carrying out the invention]

As a result of these experiments, a picture quality was improved when a filter having the following parameters was used.

$$\begin{pmatrix} 0 & -0.5 & 0 \\ -0.5 & 3 & -0.5 \\ 0 & -0.5 & 0 \end{pmatrix} \qquad \begin{pmatrix} 0 & -0.5 & 0 \\ -0.5 & 2.75 & -0.5 \\ 0 & -0.5 & 0 \end{pmatrix}$$

Digital computation of such a filter is realized by an image processing program and said program is provided by recording on a recording medium.

[Advantageous effect of the invention]

According to the present invention, it is possible to provide a high quality image picture image with a simple arrangement.

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[Brief description of drawings]
(Omitted)
[Drawings]
(Omitted)
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[Conclusion]

[Claim 1] The invention of claim 1 constitutes a "statutory invention."

[Explanation]

The claimed invention identified on the basis of the definition of the claim 1 is;

"An image processing method by computer for compensating the blurring of optically read image data comprising the steps of:

inputting a pixel matrix A of 3 rows and 3 columns obtained from image data picked up by an optical reading means;

computing a pixel matrix C = A * B;

using a matrix B, shown below, which formed by stored filter parameters of 3 rows and 3 columns, and

outputting the pixel matrix C.

$$\mathbf{B} = \begin{pmatrix} 0 & -0.5 & 0 \\ -0.5 & 3 & -0.5 \\ 0 & -0.5 & 0 \end{pmatrix} \quad \mathbf{or} \quad \mathbf{B} = \begin{pmatrix} 0 & -0.5 & 0 \\ -0.5 & 2.75 & -0.5 \\ 0 & -0.5 & 0 \end{pmatrix}$$

In relation to matrix B which is a filter parameter, it is clear that absolute values of parameters other than the central parameter are smaller than the absolute value of the central parameter, and by comprehensively grasping from the detailed description of the invention, parameters of such a matrix B have been set based on the physical characteristics of the reversed spatial frequency characteristics when blurring of image occurred and total energy of image before and after arithmetic operation.

In other words, considering the characteristics of said matrix B, the claimed invention identified on the basis of the definition of claim 1 is considered to be processing that utilizes the physical characteristics to output image data C from image data A obtained as data from an optical reading means by compensating blurring of image using matrix B as a filter parameter.

Then, since the claimed invention identified on the basis of the definition of claim 1 is a method to concretely performing processing utilizing the physical characteristics related to an image obtained as data by an optical reading means, it can be a creation of technical concept utilizing the laws of nature.

Therefore, the claimed invention identified on the basis of the definition of claim 1 as a whole is "a creation of technical ideas utilizing natural laws," and it is appropriate as an "invention."

(Note) Judgement on whether the invention of claim 1 is statutory or not could be made based on "Part II: Chapter 1. Industrially Applicable Inventions," since special judgement and treatment for "software-related inventions" was not required.

3.3 Examples for determination of whether the Claimed Invention involves "Inventive Step" or not

Example 3-1. Apparatus for retrieving chemical substances (Example where an application to another field is easy)

[Title of Invention]

Apparatus for retrieving chemical substances

[Claims]

[Claim 1]

An apparatus for retrieving chemical substances, comprising:

chemical substance characteristics data storage means for storing names, uses and structure formulae of a multiple of chemical substances in their correspondence;

chemical substance trading data storage means for storing names, prices per gram, and vendor names of a multiple of chemical substances in their correspondence;

input means for inputting a use of chemical substance or a structure formula as a retrieval key;

chemical substance characteristics data retrieval means for extracting the name, the use and the structure formula of the chemical substance corresponding to the retrieval key inputted from said chemical substance characteristics data storage means based on the retrieval key inputted by said input means;

chemical substance trading data retrieval means for extracting the price per gram and the vendor name of the corresponding chemical substance from said chemical substance trading data storage means based on the name of chemical substance extracted from said chemical substance characteristics data retrieval means; and

display means for displaying the name, the use and the structure formula of the chemical substance extracted by said chemical substance characteristics data retrieval means, and the price per gram and the vendor name of the chemical substance extracted from said chemical substance trading data retrieval means in their correspondence on a display screen.

[Claim 2]

An apparatus for retrieving chemical substance of claim 1, in which "detergent for circuit boards" as the use of chemical substance B represented by chemical structure formula A is stored in said chemical substance characteristics data storage means.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention relates to a system for retrieving and ordering chemical substances to be used for specific purposes in the chemical industry, pharmacies, and others.

[Prior art]

The information retrieval technology in general is applied for various purposes, and also in the field of retrieving chemical substances, the technology is known to store names of chemical substances, chemical structure formulae, purposes, etc. in correspondence to stored items, to retrieve them by one item as a retrieval key and to extract other related information.

However, in the conventional chemical substance retrieval system, since trading information such as prices and vendors which have no direct relationship with the chemical substance characteristics have not been stored, so that these information had to be acquired using other systems.

[Problems to be solved by the invention]

The purpose of this invention is to provide a chemical substance retrieval system, which is useful for ordering required chemical substances, enabled to extract trading information such as prices and vendors, by retrieving chemical substances based on required use purpose of chemical substance and chemical structure formula.

Further, by including a new use purpose "detergent for circuit boards" for a chemical substance B which had been found by the applicant in the retrieval object data, convenience of ordering, etc. can be increased.

[Means for solving the problem]

A chemical substance retrieval system of this invention is structured in such a manner that a storage means to store names of chemical substances, use purposes of chemical substances and chemical structure formulae in their correspondence and a storage means to store names of chemical substances, prices and vendors in their correspondence are separately provided, and after retrieving a name of chemical substance based on a use purpose of chemical substance or chemical structure formula as the retrieval, a price and vendor are retrieved by the retrieved name of chemical substance. This configuration is decided taking into consideration easiness of data transfer from a conventional type of chemical substance retrieval system and easiness of data maintenance.

[Mode for carrying out the invention]

This invention realizes a chemical substance retrieval system using a computer system constituted of a CPU, memory means, an input device such as a keyboard and a display means such as a display unit. A conceptual drawing is shown in Fig. 1.

A flow of the chemical substance retrieval system is as described below.

First, a storage means of the computer system is stored with chemical substance characteristics data including names of chemical substances, use purposes of said chemical substances, and chemical structure formulae in their correspondence, and another storage means is stored with chemical substance trading data including names of chemical substances, prices of said chemical substances per gram and vendor names in their correspondence. These storage means can use memory means such as a RAM and ROM or recording medium such as a magnetic disk and/or CD-ROM.

Then, when a chemical structure formula or a component of chemical substance is inputted from an input means, the CPU of the computer system retrieves the chemical substance characteristics data stored in one storage means of the computer system by the inputted retrieval key and extracts the data which includes the retrieval key.

Further, the CPU of the computer system, using the name of chemical substance existing in the extracted chemical substance characteristics data as the retrieval key, retrieves the chemical substance trading data stored in another storage means of the computer system, extracts the data which includes the retrieval key, and displays the

name of chemical substance, use purpose of chemical substance, chemical structure formula, price per gram and dealing vendor name on the display means.

[Advantageous effect of the invention]

According to this invention, by retrieving a use purpose of chemical substance or chemical structure formula for a certain chemical substance, and enabling to extract trading information such as prices, dealing vendors, it is possible to provide a chemical substance retrieval system which offers convenience for ordering or other trading activities of required chemical substance.

Furthermore, since a chemical substance retrieval system of this application is stored with a use purpose "detergent for circuit boards" newly found for a chemical substance B as chemical substance characteristics data, it is expected to increase the sales of chemical substance B by trading the chemical substance B as detergent for circuit boards.

[Brief description of drawings] (Omitted)

[Drawing]

[Fig. 1]



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< Examination of inventive step >

(1) Premise for determination of inventive step

(i) Problems to be solved by this invention

- to provide an apparatus for retrieving information of chemical substances by retrieving from the database based on the use purpose or chemical structure formula, and extracting trading information such as price, vendor name, etc. to offer convenience for ordering required chemical substances

- to include a newly found use purpose "detergent for circuit boards" in the database and to offer increased convenience for trading activities

(ii) Person skilled in the art

A person skilled in the art of the invention in this example has knowledge in chemical substance retrieval technology and computer technology.

- (2) State of the art (cited invention, well known art, etc.)
 - (I) Cited inventions

The cited inventions listed below have been publicly known before the application.

Cited invention 1:

An apparatus for retrieving chemical substances, comprising:

retrieval means to retrieve a chemical substance storage means for storing names of chemical substances, structure formulae of chemical substances and use purposes of chemical substances in their correspondence by a structure formula of chemical substance or use purpose of chemical substance as the retrieval key; and

means to display the retrieval result.

Cited invention 2:

An apparatus for retrieving books, comprising:

book information storage means to store names of books, genres of said books and keywords in their correspondence;

book marketing data storage means to store names of books, prices and publisher names in their correspondence;

input means to input a genre of book or keyword as the retrieval key;

book information retrieval means to extract a name of a book, a genre of a book and a keyword matching to the retrieval key from said book information storage means based on the retrieval key inputted by said input means;

book marketing data retrieval means to extract the price of the corresponding book and the publisher name from said book marketing data storage means based on the name of book extracted by said book information retrieval means; and

display means to display the name of the book, the genre of said book and the keyword extracted by said book information retrieval means and to display the price of book and the publisher name extracted by said book marketing data retrieval means in their correspondence on the display screen.

(II) Well known art, etc.

- A chemical substance B represented by chemical structure formula A was publicly known as of the filing.

- The fact that said chemical substance B is useful for the purpose of "detergent for circuit boards" was not publicly known nor of public use as of the filing, thus it would have not been easily perceived by a person skilled in the art.

- (3) Specific Determination
 - (i) Invention of Claim 1

By comparing the claimed invention with cited invention 1, the other features other than the following different features are common between them.

<u>Point of difference 1:</u> The claimed invention is comprising "a chemical substance trading data retrieval means for extracting the price per gram and the vendor name of the corresponding chemical substance from said chemical substance trading data storage means based on the name of chemical substance extracted from said chemical substance characteristics data retrieval means," while cited invention 1 is not comprising a means for retrieving information based on the name of chemical substance extracted by another retrieval means.

<u>Point of difference 2:</u> The claimed invention is comprising "a display means for displaying the name, the purpose and the structure formula of the chemical substance extracted by said chemical substance characteristics data retrieval means, and the price per gram and the vendor name of the chemical substance extracted from said chemical substance trading data retrieval means in their correspondence on a display screen," and displays the price per gram of the chemical substance and the vendor name as trading information, while cited invention 1 does not display such trading information.

<u>Point of difference 1:</u> Examination on inventive step constructing a "retrieval means of chemical substance marketing data"

Viewing from the standpoint of computer technology, cited invention 2 is identified as a technology to retrieve the second storage means further by the name of retrieval object (book name) as the retrieval key extracted from the first storage means, and to extract the trading information (price of book and publisher name) corresponding to said extracted information.

Here, the point in common both in cited inventions 1 and 2 is that they are retrieval systems, and there is no special technical difficulty to apply the constructing technology of retrieval system of cited invention 2 to the chemical substance retrieval system of cited invention 1.

Furthermore, what and how the extracted trading information would be is a matter to be decided accordingly by a person skilled in the art depending on the category of retrieval object, when the retrieval system of cited invention 2 is applied to the chemical substance retrieval system, thus the selection of "price of chemical substance per gram" and "vendor name" as trading information in the field of chemical substances is nothing more than an normal creative ability of a person skilled in the art.

Therefore, to apply the constructing technology of retrieval system of cited invention 2 to the chemical substance retrieval system of cited invention 1, and to provide a means for extracting "price of chemical substance per gram" and "vendor

name" as trading information from said chemical substance trading data storage means based on the name of chemical substance as one of retrieval objects are matters that a person skilled in the art would have easily perceived.

<u>Point of difference 2:</u> Examination on easiness of constructing "a display means to display price of chemical substance per gram and vendor name" as trading information

Taking into consideration the technical properties of "retrieval" operation performed to get information, displaying the obtained information as the result of retrieval is a matter that a person skilled in the art would have naturally perceived, and there is no special technical difficulty to display said trading information, therefore, constructing a system to display trading information obtained as the result of retrieval is a matter that a person skilled in the art would have naturally perceived.

(Reference of advantageous effect)

Advantageous effect "can extract trading information" of the invention of claim 1 would have been easily perceived by a person skilled in the art from cited inventions 1 and 2.

(Conclusion)

Therefore, the claimed invention identified on the basis of the definition of claim 1 is an invention that a person skilled in the art would have easily arrived from cited inventions 1 and 2.

(ii) Invention of Claim 2:

In addition to the said points of difference 1 and 2, the other different feature, namely the claimed invention is storing the use purpose "detergent for circuit board" for chemical substance B represented by chemical structure formula A on the said chemical substance characteristics data storage means, while cited invention 1 does not describe such information, is identified

Since the fact that the said data storage means stores the use purpose "detergent for circuit boards" for chemical substance B represented by chemical structure formula A" is only mentioning about the contents of data, the novelty and inventive step of the claimed invention cannot be affirmatively inferred based on this fact.

(Conclusion)

The claimed invention identified on the basis of the definition of claim 2 is an invention that a person skilled in the art would have easily arrived at by a person skilled in the art from cited inventions 1 and 2.

Example 3-2. Invoice approval system

(Example where systematization of human transaction is easy)

[Title of Invention] Invoice approval system

[Claims]

[Claim 1]

Invoice approval system comprising an invoice input preparation device which has the first input module for inputting the invoice data, the first output module which displays and prints out the invoice based on the data input to said first input module, the first communication control module, and the first control module which controls the entire device, and an invoice approval device which has a second output module which displays the invoice, the second input module for the approval data, the second communication control module, and the second control module which controls the entire device, characterized in that:

said first control module obtains the data for each item on the invoice from said first input module, checks each item on the invoice data obtained, transmits the invoice data requiring approval from said first communication control module to said invoice approval device, receives the approved invoice data transmitted from said invoice approval device via said first communication control module, and outputs from said first output module; and

said second control module receives via said second communication control module the invoice data requiring approval transmitted from said invoice input preparation device, inputs the approval data to be approved or disapproved from said second input module, and transmits the invoice data including said approval data from said second communication control module to said invoice input preparation device.

[Claim 2]

Invoice approval system of claim 1, characterized in that said second output device has a display screen and means for automatically indicating information that an incoming invoice has been received in a part of said display screen when an invoice requiring approval is received.

[Claim 3]

Invoice approval system of claim 1 or claim 2, characterized in that said first input module has an ID card reader.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

This invention is related to the clerical work of invoices preparation at the counter of a bank, etc.

[Prior art]

In invoice preparation at the counter of a bank, etc., the invoice was conventionally prepared for obtaining approval from a superior for transaction of a large sum, etc. according to their regulations.

[Problems to be solved by the invention]

To obtain approval from a superior, the operation was inefficient, in that it included leaving the counter and delivering the invoice all the way to the superior, this hampered concentration on the paper work, and it took much time, in particular, when the superior was unavailable.

An object of the present invention is to provide a system using a computer which enables obtaining an approval without going to the superior.

A notice of receiving an invoice requiring approval is indicated on the display screen, so that it dispenses with the manual operation of checking the notice.

Furthermore, approval data is inputted using an ID card (individual identification), so that only the person with the approving authority can input the approval data.

[Means for solving the problem] (Omitted)

[Working example] (Omitted)

[Advantageous effect of the invention]

The system of the present invention derives remarkable results, when compared to the conventional operation, such as efficient invoice processing to obtain approval without interrupting work.

[Brief description of the drawings] (Omitted)

[Drawings]



< Examination of inventive step >

- (1) Premise for determination of inventive step
 - (i) Problems to be solved by this invention

To systematize the clerical work process with computer technology is a common general problem publicly known. Invoice approval processing is also clerical work process, so that the attempt to systematize it is a general problem.

(ii) Person skilled in the art

A person skilled in the art of the invention in this example has knowledge in clerical work processing of invoices and computer technology, and an ordinary creative ability.

(iii) Systematization of human transactions (operation of invoice processing)

The inventive step of systematization of human transactions with software is determined, taking into considering the process of developing a system, namely, system analysis system design.

To systematize human transactions by common system development technology using publicly known computer engineering is considered as an exercise of ordinary creative activity expected of a person skilled in the art.

In the case of this example, the determination of inventive step is made from the viewpoint of the process from the system analysis on invoice processing to the system design based on the analysis.

- (2) State of the art (a cited reference, well known art, etc.)
 - (I) Common business data processing

(i) A preparer's work

- to prepare an invoice by writing the invoice data on the invoice form,
- to hand over the invoice requiring approval to the approver, and
- to complete the invoice preparation by receiving the invoice from the approver.
- (ii) An approver's work
 - to receive the invoice from the invoice preparer,
 - to check the invoice received from the invoice preparer and affix approval, and
 - to hand over the approved invoice to the preparer.
- (II) Computer technology
 - (i) Common general knowledge in the field of computers
 - (a) to install a computer with I/O modules for each person, connect it with a communication line via the communication control module, and transmit/receive the necessary data
 - (b) to edit the data in the computer and display or print out in the format required for the document
 - (c) to indicate a notice on the display screen if there is data received, and

- (d) to input one's ID code with the ID card (individual identification) and execute processing.
- (ii) Technology disclosed in a publication distributed prior to the application
 - (e) The input data is checked and transmitted only if necessary.

(3) Specific determination

Examination is made from the viewpoint whether or not it would be easy for a person skilled in the art to systematize invoice approval processing using the computer software engineering base on the functions required for invoice preparation and approval in invoice approval processing and clerical work which were extracted from system analysis.

(i) Invention of Claim 1

(A) It is clear from the analysis of said processing of invoice preparation that data I/O modules are necessary to prepare invoices, and a communication means is necessary for transmitting the invoice data requiring approval to the superior.

The same is necessary when approving the invoices.

Accordingly, from said computer technology (a), it would be easily conceived by a person skilled in the art using ordinary system design technology to select hardware resources for the system configuration, i.e., "invoice approval system comprising an invoice input preparation device which has the first input module for inputting the invoice data, the first output module which displays and prints out the invoice based on the data input to said first input module, the first communication control module, and the first control module which controls the entire device."

(B) Functions executed in each control modules which "obtains the data of each item on the invoice from the first input module, checks each item on the invoice data obtained, transmits the invoice data requiring approval from the first communication control module to the invoice approval device, receives the approved invoice data transmitted from the invoice approval device via the first communication control module, and outputs from the first output module" and "receives via the second communication control module the invoice data requiring approval transmitted from the invoice input preparation device, inputs the approval data to be approved or disapproved from the second communication control module, and transmits the invoice data including the approval data from the second communication control module to the invoice preparation device" are realized by software, but can be directly derivable by a parson skilled in the art by applying said computer technologies (a), (b) and (e) to invoice processing procedure.

In view of consideration to (A) and (B) above, to systematize invoice approval process as an invention of claim 1 would be easily conceived by a person skilled in the art by applying said computer technologies (a), (b) and (e) to the results of the system analysis.

(ii) Inventions of Claim 2 and Claim 3

To indicate data reception information on the display screen as receiving data, and to execute processing by inputting one's own ID code with the ID card are commonly used means as indicated in (c) and (d) of said common general knowledge in the field of computers, so that it would bee arbitrarily conceived by a person skilled in the art to provide means for

indicating information that there is an incoming invoice requiring approval, or to add an ID card reader to the input module.

Besides, the applicant asserts in the to the effect that this invention manifests a remarkable effect, but the effect asserted is found as nothing more than the natural results improvement in the efficiency) accompanying the use of computers, and thus there is no other fact to support to affirmatively infer an inventive step.

Therefore, as stated above, the inventions of claim 1, claim 2 and claim 3 would have been conceived by a person skilled in the art based on the publicly known above items (I) and (II).

Example 3-3. Points service method

(Example where "systematization of human transaction" or "design modification based on known facts or customs is easily perceived)

[Title of Invention]

Points service method

[Claims]

[Claim 1]

A service method for offering service points depending on an amount of commodity purchased at a shop on the Internet, comprising the steps of:

notifying a server of an amount of service points offered and a name of the person to whom the said service points are offered via the Internet;

acquiring by the said server, the e-mail address of the said person from a customer list storage means based on the name of the said person;

adding by the said server, the said service points to the accumulated points of the said person stored in the said customer list storage means; and

notifying by the said server, to the said person that the said service points have been given by e-mail using the said e-mail address of the said person.

[Claim 2]

A service method of claim 1, characterized in that said amount of commodity purchased includes the price of goods, the handling fee and consumption tax.

[Claim 3]

A service method of claim 1, characterized in that 10-times more service points than usual are offered once every 20 purchase opportunities.

[Claim 4]

A service method of claim 1, characterized in that the server prepares a list of commodity purchasable by the total service points which is made after adding the said service points to the accumulated service points stored in a commodity list storage means, wherein the said commodities are retrieved from a commodity list storage means which stores the names of commodity and exchange points thereof correspondingly, and sends the file of said list of purchasable commodity as attached file for the e-mail.

[Detailed Description of the Invention]

[Technical field to which the invention pertains]

The present invention relates to a points service method used in the transaction at shops on the Internet.

[Prior art]

There have been services providing service points depending on an amount of commodity purchased at a shop by a customer and to exchange the service points with goods, gift coupon or cash.

[Problems to be solved by the invention]

In the past, points service methods could not be realized in the transaction on the Internet because of the customer management problem etc. In addition, because of the same reason, only the customer herself or himself could use such service points and even the family members could not use such service points.

[Means for solving the problem]

In order to realize the points service method in the transaction on the Internet, the present invention is configured, by providing a shop with a server, in such a way to manage service points of each customer by providing database of customer lists (including, at least, customer names, total service points, and e-mail addresses of customers) with the said server possessed by the said shop on the Internet, and to add service points when a customer purchases commodities in the transaction on the Internet.

And, when a customer wants to give service points to another, by notifying to the server with the said service points and the name of the person by e-mail, the server retrieves the e-mail address of the said person from the database of customer lists by the name of the said person, adds up the said service points, and automatically notifies that the said service points have been given.

This invention can be modified as follows.

Firstly, as stated in claim 2, the amount of commodity purchased may include price of goods, handling fee and consumption tax.

Secondly, as stated in claim 3, the invention may offer service points 10-times more service points more than usual at certain frequency (for instance, once every 20 times) in order to increase repetitive customers. For instance, it may be useful to provide a field to store the number of purchases in the customer list storage means for that purpose.

Thirdly, as stated in claim 4, by providing the server with a commodity list storage means which stores the names of commodity and exchange points thereof correspondingly, when the total service points is increased by purchasing commodity. the server can prepare a list of commodity purchasable by the exchange points which is made after adding the said points to the accumulated service points stored in a commodity list storage means, wherein the said commodities are retrieved from a commodity list storage means which stores the names of commodity and exchange points thereof correspondingly, and sends the file of said list of commodity purchasable as attached file for e-mail, so that the service can be enhanced. As represented by Fig. 4, said commodity list storage means is prepared to store the names of commodity and exchange points thereof correspondingly. When the total service points is increased, the server prepares an appropriately-formatted file of the list of commodity purchasable by the current total service points, wherein the said commodity are retrieved from a commodity list storage means. The said file may be sent as attached file for e-mail. Since the total service points of other customers are also so increased by such functions, the said file of a commodity list is sent to other persons.

[Mode for carrying out the invention] (Omitted)

[Working example] (Omitted)

[Advantageous effect of the invention]

This invention enables the points service method to be easily realized in transactions on the Internet. Furthermore, since it enables the service points to be given to other customers, the utility of the service points are greatly increased. In addition, offering 10-times more service points than usual once every 20 times purchase opportunities, for instance, stimulates customer's incentive for purchasing, and gives a lot of fun to customers.

[Brief description of the drawings] (Omitted)

[Drawings]



Fig. 2 Structure of customer list storage means

Customer name	Authentication information	E-mail address	Points	Number of purchases
A	××	A@efg.com	100	5
В	××	<u>B@hij.com</u>	200	10
С	××	<u>C@klm.com</u>	500	15



Fig. 3 System configuration (Second embodiment)

Fig. 4 Structure of commodity list storage means

Commodity name	Exchange points		
Commodity 1	30		
Commodity 2	120		
Commodity 3	210		
Commodity 4	300		

< Examination of inventive step >

- (1) Premise for determination of inventive step
 - (i) Problems to be solved by this invention

Systematizing human transactions with computer technology (especially Internet technology) is a common general problem. Points service is also a human transaction, so that the attempt to systematize it is a general problem.

(ii) Person skilled in the art

A person skilled in the art of invention in this example has knowledge of human transactions (especially points services) and computer technology.

(iii) Systematization of human transactions (points services)

The inventive step of systematization of human transactions is determined, taking into consideration the process of system development, namely, system design based on the results of system analysis.

(2) State of the art (cited inventions, well known art, etc.)

(I) Cited inventions

The following cited inventions were publicly known as of the filing.

Cited invention 1:

A service method for offering service points depending on the amount of commodity purchased at a shop, where the said service points and the name of the person to receive are specified, comprising the steps of:

acquiring the address of the said person stored in the customer list based on the name of the said person;

adding said service points to the balance of points of the said person stored in the customer list; and

mailing a post card to the address of the said person for notifying the fact that the said service points have been given.

Cited invention 2:

A points service method where service points are calculated based on an amount of commodity purchased including tax and handling fee.

However, the matter that 10 times more service points than usual are offered once every 20 purchase opportunities is not explicitly stated.

(II) Common practices exercised in business transactions

It is common practice to offer special services to special customers, such as giving free gifts or discounts.

(III) Computer technology

- (i) Common general knowledge in the field of computer
 - (a) to manage information collectively by using database, and retrieve and extract necessary information therefrom
- (ii) Common technical knowledge on the Internet

- (b) to communicate with a terminal (including a server) via the network
- (c) to exchange necessary information by e-mail or attachment files thereof

(3) Specific determination

(i) Invention of Claim 1

By comparing the claimed invention with cited invention 1, points in common and points of difference between them are identified as follows.

(Points in common)

A service method for offering service points depending on the amount of commodity purchased at a shop, when the said service points and the name of the person to receive are specified, comprising the steps of:

acquiring the address of the said person stored in the customer list based on the name of the said person;

adding said service points to the balance of points of the said person stored in the customer list; and

notifying to the said person of the fact that the said service points have been given.

(Points of difference)

In the claimed invention, a shop is on the Internet, and the said common points service method is systematized using means such as "server," "e-mail" and "customer list storage means."

(Examination of points of difference)

When systematizing the points service method of cited invention 1 on the Internet, the following is considered as an exercise of ordinary creative activity expected of a person skilled in the art:

by applying state of the art (a) concerning the computer technology to use a customer list storage means as a means to store/manage the customer list;

by applying state of the art (b) concerning the Internet technology to communicate between a customer and the shop via the Internet and automatically perform transaction by using a terminal (i.e. a server); and

by applying state of the art (c) concerning the Internet, to notify the fact that service points have been given by e-mail instead of a post card.

(Conclusion)

The invention of claim 1 would have been easily perceived by a person skilled in the art, since it is nothing more than mere systematization of human transactions of cited invention 1 by ordinary system development methods using well known computer technology.

(ii) Invention of Claim 2

By comparing the claimed invention with cited invention 1, points in common and points of difference between them are identified as follows.

(Points in common)

A service method for offering service points depending on the amount of commodity purchased at a shop, when the said service points and the name of the person to receive are specified, comprising the steps of:

acquiring the address of the said person stored in the customer list based on the name of the said person;

adding said service points on the balance of points of the said person stored in the customer list; and

notifying the said person of the fact that the said service points have been given.

(Points of difference)

1. In the claimed invention, a shop is on the Internet, and the said common points service method is systematized using means such as "server," "e-mail" and "customer list storage means."

2. In the claimed invention, the service points are calculated based on an amount of commodity purchased including taxes and handling fee.

(Examination of points of difference)

a. Point of difference 1:

(Same as claim 1) When systematizing the points service method of cited invention 1 on the Internet, the following is considered as an exercise of ordinary creative activity expected of a person skilled in the art:

by applying state of the art (a) concerning the computer technology to use a customer list storage means as a means to store/manage the customer list;

by applying state of the art (b) concerning the Internet technology to communicate between a customer and the shop via the Internet and automatically perform transaction by using a terminal (i.e., a server); and

by applying state of the art (c) concerning the Internet, to notify the fact that service points have been given by e-mail instead of a post card.

b. Point of difference 2:

Since the fact that service points are calculated based on an amount of commodity purchased including taxes and handling fee is publicly known by cited invention 2, and there is no special difficulty in limiting the calculation method of cited invention 1 to the method of cited invention 2.

(Conclusion)

The invention of claim 2 would have been easily perceived by a person skilled in the art by systematizing human transactions of cited invention 1 by ordinary system development method using well known computer technology, and by limiting the calculation method of cited invention 1 to the method of cited invention 2.

(iii) Invention of Claim 3

By comparing the claimed invention with cited invention 1, points in common and points of difference between them are identified as follows.

(Points in common)

A service method for offering service points depending on the amount of commodity purchased at a shop, when the said service points and the name of the person to receive are specified, comprising the steps of:

acquiring the address of the said person stored in the customer list based on the name of the said person;

adding said service points to the balance of points of the said person stored in the customer list; and

notifying to the said person of the fact that the said service points have been given.

(Points of difference)

1. In the claimed invention, a shop is on the Internet, and the said common points service method is systematized using means such as "server," "e-mail" and "customer list storage means."

2. In the claimed invention, 10 times more service points than usual are offered once every 20 purchase opportunities.

(Examination of points of difference)

a. Point of difference 1:

(Same as claim 1) When systematizing the points service method of cited invention 1 on the Internet, the following is considered as an exercise of ordinary creative activity expected of a person skilled in the art:

by applying state of the art (a) concerning the computer technology to use a customer list storage means as a means to store/manage the customer list;

by applying state of the art (b) concerning the Internet technology to communicate between a customer and the shop via the Internet and automatically perform transaction by using a terminal (i.e. a server); and

by applying state of the art (c) concerning the Internet, to notify the fact that service points have been given by e-mail instead of a post card.

b. Point of difference 2:

Since offering services to special customers is common practices (see the sate of the art (II)), offering special points to certain customers in points service method can be easily perceived by a person skilled in the art. In this case, how frequently or in what rate such special service should be applied are matters of the nature to be decided at the discretion of a person skilled in the art. Therefore, in the points service method of cited invention 1, offering 10 times more service points than usual once every 20 purchase opportunities is nothing more than a matter of a degree that a person skilled in the art would have easily perceived.

(Conclusion)

The claimed invention identified on the basis of the definition of claim 3 is a systematization of a business performed by a person related to publicly known method 1 by a normal system development method using technology level of computer technology, and an addition of a special service to offer 10 times more service points than usual once every 20 times of purchases as to points offered depending upon the commodity purchase amount, considering business practices on a service points method of publicly

known method 1, therefore, it is an invention that a person skilled in the art could easily invent.

(iv) Invention of Claim 4

It is not a matter to be drawn from any publicly known methods nor state of the art that the server prepares a list of commodity purchasable by the total service points which is made after adding the said service points to the accumulated service points stored in a commodity list storage means, wherein the said commodities are retrieved from a commodity list storage means which stores the names of commodity and exchange points thereof correspondingly, and sends the file of said list of purchasable commodity as attached file for e-mail. Therefor, the invention of claim 4 would not have been easily perceived by a person skilled in the art.

[Reference]

Application of these Guidelines

Guidelines applied to applications filed on January 10, 2001 or later (Note1)

• Portions concerning "program" claim in "1. Description Requirements"

1.1.1(2)(b)

1.1.2(1)

- 1.1.3 Example 2
- Cases concerning "program" in "3. Examples"

(Note 1) "Applications filed on January 10, 2001 or later" include divisional applications in accordance with Article 44 of the Patent Act whose original applications are filed on January 10, 2001 or later, converted applications in accordance with Article 46 of the Patent Act whose original applications are filed on January 10, 2001 or later, and applications claiming priority (under the Paris Convention, priority declared as governed by the Paris Convention and priority based on patent application, etc.) filed on January 10, 2001 or later.

Guidelines applied to applications filed on April 1, 1997 or later (Note 2)

• Portions concerning "computer-readable storage medium" claim in "1. Description Requirements"

1.1.1(2)(a)

• Cases concerning "computer-readable storage medium" in "3. Examples"

(Note 2) "Applications filed on April 1, 1997 or later" include divisional applications in accordance with Article 44 of the Patent Act whose original applications are filed on April 1, 1997 or later, converted applications in accordance with Article 46 of the Patent Act whose original applications are filed on April 1, 1997 or later, and applications claiming priority (under the Paris Convention, priority declared as governed by the Paris Convention and priority based on patent application, etc.) filed on April 1, 1997 or later.
Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

PartVII: EXAMINATION GUIDELINES FOR INVENTIONS IN SPECIFIC FIELDS Chapter 2 Biological Inventions

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[Appendix 3] (Omitted)

Chapter 2 Biological Inventions

In this chapter, matters requiring special judgement and handling in examining patent applications relating to biological inventions are mainly explained.

Here, the term "organisms" means microorganisms, animals as well as plants, including reproducible animal or plant cells.

1. Genetic Engineering

This section deals with inventions relating to genetic engineering in biological inventions. The term "genetic engineering" here means the technology which manipulates genes artificially by gene recombination, cell fusion, etc.

Inventions relating to genetic engineering include those of a gene, a vector, a recombinant vector, a transformant, a fused cell, a protein which are obtained by transformation (hereinafter, referred to as "a recombinant protein"), a monoclonal antibody, etc.

Inventions relating to microorganisms, plants and animals, and which are obtained using genetic engineering are treated here in this section, in principle.

1.1 Description Requirements of the Specification

1.1.1 Scope of Claim

According to Section 36(6)(ii) of the Patent Act, the invention for which a patent is sought shall be clear, therefore, scope of claim shall be described so that an invention is clearly identified on the basis of statements of each claim.

In a claim, a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein and a monoclonal antibody should be described as indicated below.

(1) Genes

A gene may be described by specifying its nucleotide sequence.

A structural gene may be described by specifying an amino acid sequence of the protein encoded by the said gene.

Example:

A gene encoding a protein consisting of an amino acid sequence represented by Met-Asp-Lys-Glu.

A gene may be described by a combination of the terms "substitution, deletion or addition" or "hybridize" with functions of the gene, and if necessary, origin or source of the gene in a generic form as follows (provided that the claimed invention is clear and the enablement requirement is met (See 1.1.2.1 below)).

Example1:

A gene encoding a protein of (a) or (b) as follows:

- (a) a protein whose amino acid sequence is represented by Met-Tyr-Cys-Leu
- (b) a protein derived from the protein of (a) by substitution, deletion or addition of one or several amino acids in the amino acid sequence defined in (a) and having the activity of enzyme A.

[Note]

The protein (a) has the activity of enzyme A.

The gene encoding the protein (b) is described in the detailed description of the invention in such a manner that a person skilled in the art can make the said gene without large amount of trials and errors or complicated experimentation beyond the reasonable extent that can be expected from a person skilled in the art who is supposed to have ordinary skill.

Example 2:

A gene selected from the group consisting of:

- (a) a DNA whose nucleotide sequence is represented by ATGTATCGG···TGCCT
- (b) a DNA which hybridizes under stringent conditions to the DNA, whose nucleotide sequence is complementary to that of the DNA defined in (a) and encodes the human protein having the activity of enzyme B.

[Note]

A protein encoded by the DNA (a) has the activity of enzyme B.

"Stringent conditions" are described in the detailed description of the invention.

A gene may be described by specifying functions, physiochemical properties, origin or source of the said gene, a process for producing the said gene, etc. (provided that the claimed invention is clear and the enablement requirement is met (See 1.1.2.1 below)).

(2) Vectors

A vector should be described by specifying a base sequence of its DNA, a cleavage map of DNA, molecular weight, number of base pairs, source of the vector, process for producing the vector, function or characteristics of the vector, etc.

[Note] A cleavage map is a map which shows the relative location and distance of the cleavage sites by various restriction enzymes.

(3) Recombinant vectors

A recombinant vector may be described by specifying at least one of the gene and the vector.

Example:

A recombinant vector containing a DNA whose base sequence is represented by ACAGCA······AGTCAC.

(4) Transformants

A transformant may be described by specifying at least one of its host and the

gene which is introduced (or the recombinant vector) (provided the that the claimed invention is clear and enablement requirement is met (See 1.1.2.1 below)).

Example 1:

A transformant comprising a recombinant vector containing a gene encoding a protein whose amino acid sequence is represented by Met-Asp-....Lys-Glu.

Example 2:

A plant wherein a toxin gene having a base sequence of ATGACT..... is inserted and the said gene is expressed.

Example 3:

A transgenic non-human mammal, having a recombinant DNA obtained by linking a structural gene encoding any protein to the regulatory region of a gene involved in the production of milk protein, and secreting the said protein into milk.

(5) Fused cells

A fused cell may be described by specifying parent cells, function and characteristics of the fused cell, or a process for producing the fused cell, etc.

(6) Recombinant proteins

A recombinant protein may be described by specifying an amino acid sequence or a base sequence of structural gene encoding the said amino acid sequence.

Example:

A recombinant protein consisting of an amino acid sequence represented by Met-Tyr-Cys-Leu.

A recombinant protein may be described by a combination of the terms "substitution, deletion or addition" and functions of the recombinant protein, and if necessary, origin or source of the recombinant protein in a generic form as follows (provided that the claimed invention is clear and the enablement requirement is met (See 1.1.2.1 below)).

Example:

A recombinant protein of (a) or (b) as follows:

- (a) a protein whose amino acid sequence is represented by Met-Tyr-Cys-Leu
- (b) a protein derived from the protein of (a) by substitution, deletion or addition of one or several amino acids in the amino acid sequence in(a) and having the activity of enzyme A.

[Note]

A protein (a) has the activity of enzyme A.

The protein (b) is described in the detailed description of the invention in such a manner that a person skilled in the art can make the said protein without a large amount of trials and errors or complicated experimentation beyond the reasonable extent that can be expected from a person skilled in the art who is

supposed to have ordinary skill.

A recombinant protein may be described by specifying functions, physiochemical, origin or source of the said recombinant protein, a process for producing the said recombinant protein, etc. (provided that the claimed invention is clear and the enablement requirement is met (See 1.1.2.1 below)).

(7) Monoclonal antibodies

A claim directed a monoclonal antibody may be defined by specifying any of antigen recognized by it, hybridoma which produces it, or cross-reactivity, etc.

Example 1:

A monoclonal antibody to antigen A.

[Note] Antigen A is necessary to be defined by specifying as a substance.

Example 2:

A monoclonal antibody to antigen A, produced by a hybridoma having ATCC Deposit No. HB-xxxx.

[Note] Antigen A is necessary to be defined by specifying as a substance.

Example 3:

A monoclonal antibody which binds not to antigen B but to antigen A.

[Note] Antigen A and antigen B are necessary to be defined by specifying as substances.

1.1.2 Detailed Description of the Invention

The detailed description of the invention shall be stated in such a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains (the enablement requirement), and shall be stated that the problem to be solved by the invention and its solution, or other matters necessary for a person having ordinary skill in the art to understand the technical significance of the invention (the Ministerial Ordinance Requirement).

The detailed description of the invention which does not meet the above requirements violates Section 36(4)(i) of the Patent Act.

1.1.2.1 Enablement Requirement

Section 36(4)(i) of the Patent Act states that "the detailed description of the invention shall be stated....in such a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains." This means that "the detailed description of the invention shall be described in such a manner that a person who has ability to use ordinary technical means for research and development (including comprehension of document, experimentation, analysis and manufacture) and to exercise ordinary creativity in the art to which the invention pertains can carry out the claimed invention on the basis of matters described in the specification (excluding claims) and drawings taking into consideration the common general knowledge

as of the filing."

Therefore, if "a person skilled in the art" who is supposed to have ordinary skill cannot understand how to carry out the invention on the basis of teachings in the specification (excluding claims) and drawings taking into consideration the common general knowledge as of the filing, then, such a description of the invention should be deemed insufficient for enabling such a person to carry out the invention. For example, if a large amount of trials and errors or complicated experimentation are needed to find a way of carrying out the invention beyond the reasonable extent that can be expected from a person skilled in the art who is supposed to have ordinary skill, the detailed description of the invention is not described in such a manner that enables a person skilled in the art to carry out the invention.

(1) Invention of a Product

For an invention of a product, the definition of "being able to carry out the invention" is to make and use the product. Therefore, the "mode for carrying out the (claimed) invention" should be described in so that this becomes possible.

Also, the said invention of a product should be explained clearly in the detailed description of the invention.

Therefore, an invention of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein, a monoclonal antibody, etc. should be described as follows.

"An invention of a product" being explained clearly

If an invention of a product can be identified by a person skilled in the art based on the statements of a claim and can be understood from the statements and implications in the detailed description of the invention, then, the invention will be deemed as being explained clearly.

"Can be made"

For an invention of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein or a monoclonal antibody, the way of making the product shall be described in the detailed description of the invention except where the product could be made by a person skilled in the art without such description when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(i) Genes, vectors or recombinant vectors

A process for producing a gene, a vector or a recombinant vector should be described by respective origin or source, means for obtaining a vector to be used, an enzyme to be used, treatment conditions, steps for collecting and purifying it, or means for identification, etc.

If genes are claimed in a generic form (See 1.1.1(1)) and a large amount of trials and errors or complicated experimentation are needed to produce those genes beyond the reasonable extent that can be expected from a person skilled in the art, the detailed description of the invention is not described in such a manner that enables a person skilled in the art to make the product.

For example, in cases where a claimed invention includes the gene actually obtained and many of genes whose identity is extremely low to the said gene obtained and is specified by their function and that as a result, many of genes which do not have the same function as the said gene obtained are included in the genes whose identity is extremely low, a large amount of trials and errors or complicated experimentation are generally needed to select the genes with the same function as the said gene obtained among the genes whose identity is extremely low beyond the reasonable extent that can be expected from a person skilled in the art, and therefore, the detailed description of the invention is not described in such a manner that enables a person skilled in the art to make the product.

[Example]

A gene selected from the group consisting of:

- (a) a DNA whose nucleotide sequence is represented by ATGTATCGG...TGCCT
- (b) a DNA whose nucleotide sequence has more than X% identity to that of (a) and which encodes the protein having the activity of enzyme B.

[Note]

A protein encoded by the DNA (a) has the activity of enzyme B.

X% represents extremely low identity.

(Explanation)

Genes whose identity is extremely low to the gene actually obtained are included in the (b), although (b) is specified by its function. In case that " A DNA whose nucleotide sequence has more than X % identity to that of (a)" includes many of genes which do not have the activity of enzyme B, a large amount of trials and errors or complicated experimentation are generally needed to select the genes with the activity of enzyme B beyond the reasonable extent that can be expected from a person skilled in the art. Therefore, the detailed description of the invention is not described in such a manner that enables a person skilled in the art to make the product.

(ii) Transformants

A process for producing a transformant should be described by a gene or a recombinant vector introduced, a host (a microorganism, a plant or an animal), a method of introducing gene or the recombinant vector into the host, a method of selectively collecting the transformant, or means for identification, etc.

If the transformant is the one described by a generic taxonomical unit (e.g., a transformed plant, a transformed non-human vertebrate, a transformant (including microorganisms, plants and animals)), and if a large amount of trials and errors or complicated experimentation are needed to produce those transformants beyond the reasonable extent that can be expected from a person skilled in the art, the detailed description of the invention is not described in such a manner that enables a person

skilled in the art to make the product.

(iii) Fused cells

A process for producing a fused cell should be described by stating pretreatment of the parent cells, fusion condition, a method of selectively collecting the fused cell, or means for identification, etc.

(iv) Recombinant proteins

A process for producing a recombinant protein should be described by stating means for obtaining a gene encoding the recombinant protein means for obtaining, an expression vector used, means for obtaining a host, a method for introducing the gene into the host, steps for collecting and purifying the recombinant protein from the transformant into which the gene has been introduced, or means for identification of the obtained recombinant protein, etc.

(See "(i) Gene, vector or recombinant vector" mentioned above for the treatment of enablement requirement in cases wherein recombinant proteins are claimed in a generic form.)

(v) Monoclonal antibodies

A process for producing a monoclonal antibody should be described by stating means for obtaining or producing immunogen, a method for immunization, a process for selectively obtaining antibody producing cells, or means for identification of the monoclonal antibody, etc.

(vi) Deposit of microorganisms, etc. (For information on the deposit and furnishing of microorganisms, see "5.1 Deposit and Furnishing of Microorganisms")

(a) For an invention of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein, a monoclonal antibody, etc. produced by the use of a microorganism, etc. ("a microorganism, etc." here includes a microorganism, a plant and an animal), a process for producing the said product should be described in the specification as filed so that a person skilled in the art can make it. Further, the microorganism used in the process should be deposited and its accession number should be described in the specification as filed unless the microorganisms readily available to a person skilled in the art (See 5.1(ii)(b)).

(b) For an invention of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein, a monoclonal antibody, etc., when it is not possible to describe a process for producing the said product in the specification in such a manner that a person skilled in the art can make it, the obtained transformant (including a transformant which produces a recombinant protein) or the fused cell (including a hybridoma which produces a monoclonal antibody) into which the gene, the vector, the recombinant vector has been introduced, should be deposited and its accession

number should be described in the specification as filed.

(c) Generally, the acquisition of a hybridoma producing a monoclonal antibody which satisfies limitative conditions, (e.g., a monoclonal antibody whose affinity to the antigen A is specified by the limitative coupling constant,) is not reproducible. Therefore, in case that the claimed invention is related to a monoclonal antibody which satisfies limitative conditions or a hybridoma producing the said monoclonal antibody, the said hybridoma should be deposited and its accession number should be described in the specification as filed, except where the hybridoma can be created by a person skilled in the art on the basis of the description in the specification.

"Can be used"

An invention of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein, a monoclonal antibody, etc., must be described so that invention can be used by the person skilled in the art. Knowledge of how the invention can be used shall be described in the detailed description of the invention, except where it could be understood by the person skilled in the art without such description, when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

For instance, in order to show how an invention of a gene can be used, it should be described in the detailed description of the invention that the gene has a specific function (the "specific function" here means a "function from which a specific application with technical meanings can be assumed"; in case of a structural gene, the protein encoded by the said gene has the specific function).

In case that genes are claimed in a generic form and the function is not specified in the claim (genes specified only by "substituted, deleted or added," "hybridized" or "having more than X% identity," etc.), the genes claimed in a generic form contain the ones which do not have the said function and the part of the said genes cannot be used, and therefore, the detailed description of the invention is not described in such a manner that enables a person skilled in the art to use the product.

(2) Invention of a Process

For an invention of a process, the definition of "being able to carry out the invention" is that the process can be used. Further, the said invention of a process should be explained clearly in the detailed description of the invention. In order to describe the invention of the process in such a manner that the process can be used, the enablement requirement in "(1) Invention of a Product" should be referred to, if necessary. For instance, "5.1 Deposit and Furnishing of Microorganisms" should be referred to if deposit of microorganisms, etc. is necessary.

(3) Invention of a Process for Manufacturing a Product

Where an invention of a process is directed to "a process for manufacturing a product," the definition of "the process can be used" means that the product can be manufactured by the process. Further, the said invention of a process for manufacturing a product should be explained clearly.

Therefore, for an invention of a process for producing a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein, a monoclonal antibody, etc., the said process should be explained clearly and the description shall be stated so as to enable a person skilled in the art to produce the product by using the said process. In order to be stated so as to enable a person skilled in the art to produce the product by using the said process, the enablement requirement in "(1) Invention of a Product" should be referred to, if necessary. For instance, "5.1 Deposit of microorganisms, etc." should be referred to if deposit of microorganisms, etc. is necessary.

Further, it is necessary to describe how said process can be used or at least one use of the said product.

(4) How Specifically Must the Detailed Description of the Invention Be Described?

It is necessary for the applicant to describe at least one mode for showing how to carry out the claimed invention in the detailed description of the invention. When embodiments or working examples are necessary in order to explain the invention in such a way that a person skilled in the art can carry out the invention, "the mode for carrying out the invention" should be described in terms of embodiments or working examples. Embodiments or working examples are those which specifically show the mode for carrying out the invention (in case of an invention of a product, for instance, those which specifically show how to make the product, what structure it has, or how to use it, etc.)

In the case of inventions in technical fields where it is generally difficult to infer how to make and use a product on the basis of its structure, normally one or more representative embodiments or working examples are necessary which enable a person skilled in the art to carry out the invention.

Since this technical field (i.e., genetic engineering) is the one where it is difficult to infer how to make and use a product on the basis of its structure, normally one or more representative embodiments or working examples are necessary.

(5) Balance of the Claim and the Detailed Description of the Invention

In the detailed description of the invention, at least one mode for carrying out the invention needs to be described in terms of "claimed invention." For not all embodiments nor all alternatives within the extent (or the metes and bounds) of the claimed invention, the mode for carrying out the invention needs to be described.

However, when the examiner can show well-founded reason that a person skilled in the art would be unable to extend the particular mode for carrying out the invention in the detailed description of the invention to the whole of the field within the extent (or the metes and bounds) of the claimed invention, the examiner should determine that the claimed invention is not described in such a manner sufficiently clear and complete to be carried out by a person skilled in the art. In such a case, the examiner should specifically point out a concrete reason and preferably the reason above should be supported by reference documents.

1.1.2.2 Ministerial Ordinance Requirement

Matters required under the Ministerial Ordinance are (1) technical field to which an invention pertains and (2) problem to be solved by the invention and its solution.

(1) Technical field to which an invention pertains

As "technical field to which an invention pertains," at least one technical field to which a claimed invention pertains shall be stated in a specification, in principle.

In the inventions of genetic engineering, "technical field to which an invention pertains" should be described such as pharmaceuticals, analytical agents, production of plants, for example.

(2) Problem to be solved by the invention and its solution

As "problem to be solved by the invention," an application shall state at least one technical problem to be solved by a claimed invention, in principle. As "its solution," an application shall explain how the technical problem has been solved by the claimed invention.

For example, in the case of the invention of the process for the production of a plant resistant to disease A by using a vector into which disease A-resistant gene B has been inserted, the problem to be solved by the invention should be described as "to produce a plant resistant to disease A" and the means for solving the problem should be described as "cloning disease-resistant gene B from the chromosomal DNA of another plant resistant to disease A, obtaining a recombinant vector inserted by the said gene, and regenerating the plant body from the plant cell transformed by the said vector."

1.1.2.3 Prior Art and Advantageous Effects

(1) Prior art

An applicant should describe background prior art, as far as he knows, which is deemed to contribute to understanding the technical significance of the claimed invention and examination of patentability of the invention, because such descriptions of prior art could teach the problem to be solved and could substitute the descriptions of the problems.

Also, documents related to prior art are one of the important means for evaluating the patentability of the claimed invention. Therefore, when there exist any documents relevant to the claimed invention, it is strongly recommended to cite such documents.

(2) Advantageous effects over prior art

It is an applicant's advantage to describe an advantageous effect of a claimed invention over the relevant prior art because such advantageous effect, if any, is taken into consideration as a fact to support to affirmatively infer the existence of an inventive step. Therefore, an applicant should describe an advantageous effect of a claimed invention over the relevant prior art, if any, as far as he knows.

1.1.3 Sequence Listing

(1) When a nucleotide sequence consisting of 10 or more nucleotides, or an amino acid sequence of a protein or peptide consisting of 4 or more L-amino acids is described in a specification, a "Sequence Listing" of the sequence prepared in accordance with "Guidelines for the preparation of specifications which contain nucleotide and/or amino acid sequences" ([Appendix 3]; *omitted in this English translation*) published in the Public Notice of Japan Patent Office should be described at the end of the detailed description of the invention as a part of it (See Note 15"Ho" of Form 29, Section 24 of Regulations under the Patent Act).

(2) When a nucleotide sequence or an amino acid sequence is described in the scope of claim, the sequence described in the "Sequence Listing" prepared in accordance with "Guidelines for the preparation of specification which contain nucleotide and/or amino acid sequence" may be cited.

1.2 Unity of Invention

A single application may be filed for a set of claims describing inventions shown in the following examples, because these inventions have the same or corresponding special technical features among them.

These examples below are explained under the presumption that each invention in claims has a contribution over the prior art.

[Example 1]

Claim1: A protein X

Claim2: A structural gene Y encoding the protein X

Claim3: A recombinant vector Z containing the structural gene Y

Claim4: A transformant A containing the recombinant vector Z

(Explanation)

As a protein X was encoded and expressed by a structural gene Y, it can be said that they have a special technical feature. Further, a structural gene Y, a recombinant vector Z containing the structural gene Y, and a transformant A containing the recombinant vector Z also have a structural gene Y as a special technical feature. Therefore the inventions in claims 1 to 4 have special technical features, and they comply with the requirement of unity of invention.

[Example 2] Claim1: A parent cell A Claim2: A fused cell prepared from the parent cell A

(Explanation)

Since a fused cell contains essential genetic materials which express characteristics similar to a parent cell A, as a part of its genetic materials, A parent cell A and the fused cell have the same or corresponding special technical feature. Accordingly, the inventions in claims 1 and 2 have a special technical feature, and they comply with the requirement of unity of invention.

[Example 3]

Claim1: A transformant A

Claim2: A process for manufacturing a chemical substance X using the transformant A

(Explanation)

A process for producing a chemical substance X using a transformant A utilizes properties and functions particular to a transformant A. Accordingly, the inventions in claims 1 and 2 have a special technical feature, and they comply with the requirement of unity of invention.

[Example 4]

Claim1: A gene Y Claim2: A process for producing a recombinant vector Z using a gene Y

Claim3: A process for producing a transformant A using a recombinant vector Z

(Explanation)

the inventions in claims 1 to3 all have a gene Y as a special technical feature, Accordingly, they comply with the requirement of unity of invention.

[Example 5] Claim1: An antigenic protein X Claim2: A monoclonal antibody against the antigenic protein X

(Explanation)

A monoclonal antibody in claim 2 obtained for the frist time by using an antigenic protein X in claim 1. Further a monoclonal antibody in claim 2 is used for detecting and/or purifying an antigen protein X in claim 1. Therefore the invention of an antigenic protein X has a very close relationship with the monoclonal antibody. Accordingly the inventions in claims 1 and 2 have a special technical feature, and they comply with the requirement of unity of invention.

However, the patent application does not comply with the requirements of Section 37 of the Patent Act in the following case.

[Example 6]

Claim1: A transformant A

Claim2: A process using a chemical substance X produced with the use of the transformant A

(Note) a chemical substance X is publicly known.

(Explanation)

A process using a chemical substance X produced with the use of the transformant A does not utilize properties and functions particular to a transformant A, and providing a transformant A does not have a close relationship with using a chemical substance X. Therefore they do not have special technical features. Accordingly the inventions in claims 1 and 2 do not comply with the requirement of unity of invention.

1.3 Requirements for Patentability

1.3.1 Invention Not Falling under "Industrially Applicable Invention"

Inventions of a gene, a vector, a recombinant vector, a transformant, a fused cell, a recombinant protein and a monoclonal antibody whose utility is not described in a specification or cannot be inferred, do not meet the requirements set forth in the first sentence in Section 29(1) of the Patent Act.

1.3.2 Novelty

(1) Recombinant proteins

Where a protein X as an isolated and purified single substance is publicly known, a claimed invention concerning a recombinant protein X specified by a process of production, the said recombinant protein being identical as a chemical substance with the publicly known protein X, is not novel.

In case where a recombinant process inevitably leads to a different product, for example in its sugar chain or the like, due to the difference of the host cells, even though the recombinant protein has the same amino acid sequence as the publicly known one, a claimed invention concerning the recombinant protein specified by a process of production is novel.

(2) Monoclonal antibodies

If antigen A is novel, a monoclonal antibody to the antigen A is generally considered novel. However, if a monoclonal antibody to publicly known antigen A' is publicly known and if the antigen A has the same epitope as that of A' because the antigen A is partially modified from publicly known antigen A' or the like, a monoclonal antibody to antigen A' also binds to antigen A. Therefore, in such a case, the claimed invention of "a monoclonal antibody to antigen A" is not novel.

The claimed invention of a monoclonal antibody specified by a cross-reactivity, such as "a monoclonal antibody which binds not to antigen B but to antigen A" is not novel, if a monoclonal antibody to antigen A is publicly known and if there is no particular technical significance to specify the monoclonal antibody described by such a cross-reactivity (e.g., when it is clear that the publicly known monoclonal antibody to antigen A does not bind to antigen B either, because antigen B has no similarities to antigen A in the function, structure, etc.).

1.3.3 Inventive Step

(1) Genes

In invention of a gene encoding Protein A has an inventive step, if Protein A has novelty and an inventive step.

Where Protein A is publicly known but its amino acid sequence is not publicly known, an invention of a gene encoding Protein A does not have an inventive step, provided that a person skilled in the art could determine the amino acid sequence easily at the time of filing. However, when it is considered that the gene is specified by a specific base sequence and has advantageous effects that a person skilled in the art cannot foresee in comparison with other genes having a different base sequence encoding the Protein A, the invention of the said gene has an inventive step.

When an amino acid sequence of Protein A is publicly known, an invention of a gene encoding the Protein A does not have an inventive step. However, when it is considered that the gene is specified by a specific base sequence and has advantageous effects that a person skilled in the art cannot foresee in comparison with other genes having a different base sequence encoding the Protein A, the invention of the said gene has an inventive step.

When a structural gene is publicly known, an invention relating to a structural gene of naturally obtainable mutant (allelic mutant, etc.) of the said publicly known structural gene and which is derived from the same species as the said structural gene and has the same properties and functions as the said structural gene does not have an inventive step. However, if the claimed structural gene has advantageous effects that a person skilled in the art cannot foreseen in comparison with the said publicly known structural gene, the claimed invention of the structural gene has an inventive step.

(2) Recombinant vectors

In case where both a vector and a gene to be introduced are publicly known, a claimed invention concerning a recombinant vector obtained by a combination of them

does not have an inventive step. However, even if both a vector and a gene to be introduced are publicly known, a claimed invention concerning a recombinant vector with a specific combination of them, which leads to an advantageous effect that a person skilled in the art cannot foresee, has an inventive step.

(3) Transformants

If both a host and a gene to be introduced are publicly known, a claimed invention concerning the transformant obtained by a combination of them does not have an inventive step. However, even if both of a host and a gene to be introduced are publicly known, a claimed invention concerning a transformant with a specific combination of them, which leads to an advantageous effect that a person skilled in the art cannot foresee, has an inventive step.

(4) Fused cells

If both of parent cells are publicly known, a claimed invention concerning a fused cell produced by fusing both of the parent cells does not have an inventive step. However, if the fused cell has advantageous effects that a person skilled in the art cannot foresee, the claimed invention of the fused cell has an inventive step.

(5) Monoclonal antibodies

If antigen A is publicly known and it is clear that the antigen A has immunogenicity (for example, antigen A clearly has immunogenicity because a polyclonal antibody to the antigen A is publicly known or because the antigen A is a polypeptide with a large molecular weight, etc.), the claimed invention of "a monoclonal antibody to the antigen A " does not have an inventive step. However, if the claimed invention is further specified by other features, etc. which leads to an advantageous effect that a person skilled in the art cannot foresee, the claimed invention has an inventive step.

1.4 Amendment of Specification

Amendment of the specification relating to the deposit of microorganisms, etc. is handled as described in "2.3 Amendment of Specification" below.

2. Microorganisms

This section deals with inventions related to microorganisms per se as well as those related to the use of microorganisms, etc. Inventions relating to the use of microorganisms include not only those using a novel microorganism but also those based on finding of a method for using a publicly known microorganism (e.g., an invention of a process for producing a publicly known substance using a publicly known microorganism, an invention of a process for treating a material (e.g., water treatment, soil improvement) using a publicly known microorganism, an invention of use for a publicly known microorganism as a treating agent (e.g., water treating agent, soil improving agent).

The term "microorganisms" means yeasts, molds, mushrooms, bacteria, actinomycetes, unicellular algae, viruses, protozoa, etc. and further includes undifferentiated animal or plant cells as well as animal or plant tissue cultures.

Matters relating to genetic engineering are referred to "1. Genetic Engineering" even if they are inventions relating to microorganisms.

2.1 Description Requirements of the Specification

2.1.1 Designation of Microorganisms

In principle, microorganisms should be specified by scientific names in accordance with microbiological nomenclature. In case of designating a strain of a microorganism, it should be specified by the strain name following the species name (in accordance with microbiological nomenclature). When a microorganism cannot be specified by the species name, it may be specified by the strain name along with the genus name.

In case that a strain of a microorganism has been deposited, the said strain may be specified by the description of the accession number in addition to the species name or the strain name following the species name.

Example: Bacillus subtilis FERM P-xxxxx strain

Undifferentiated animal or plant cells should be specified, in principle, by scientific names in accordance with zoological or botanical nomenclature or standard Japanese names, respectively.

2.1.2 Scope of Claim

According to Section 36(6)(ii) of the Patent Act, the invention for which a patent is sought shall be clear, therefore, scope of claim shall be described that an invention shall be clearly identified on the basis of statements of each claim.

2.1.3 Detailed Description of the Invention

(See 1.1.2 above)

2.1.3.1 Enablement Requirement

(See 1.1.2.1 above)

(1) Invention of a Product

As to an invention of a product, a microorganism to be created or a microorganism to be used should be described as follows.

A microorganism being explained clearly

In order to explain a microorganism clearly, the microorganism should be described as indicated below.

As to a new microorganism, the microorganism should be specified by the species name or the strain name following the species name in accordance with microbiological nomenclature, and also the microbiological characteristics should be described. As microbiological characteristics, it is desirable that taxonomic characteristics generally used in the field (Appendix1) are described, however, other microbiological characteristics (e.g., selective productivity of metabolites) may be described.

A microorganism which cannot be specified by the species name should be specified by the strain name along with the genus name, after clarifying the reason why the species name cannot be specified.

Microbiological characteristics of a microorganism should be described as follows, depending on whether it is a new strain or a new species.

(i) New strain

It should be clearly described that the characteristics of the strain as well as the difference in the microbiological characteristics of the strain from the publicly known strains within the same species to which the new strain belongs.

(ii) New species

The taxonomic characteristics of the species should be described in detail, and the reason why the microorganism is judged to be a new species should be clarified. That is, the difference of the species from the existing similar species should be expressly described, and the relevant literature used on the basis of the judgement should be indicated.

"Can be made"

As to an invention relating to a microorganism per se or relating to the use of a novel microorganism, means for creating the microorganism should be described so that a person skilled in the art can create the said microorganism.

Means for creating microorganisms includes means for screening, means for mutagenesis, means for gene recombination, etc.

If the means for creating the microorganism cannot be described in the detailed description of the invention so that a person skilled in the art can create the said microorganism, it is necessary to deposit the microorganism in accordance with Section 27bis of Regulations under the Patent Act (For the details, see "5.1 Deposit and furnishing of microorganisms.").

"Can be used"

An invention of a microorganism per se or of the use of a microorganism must be described so that invention can be used by the person skilled in the art. Knowledge of how the invention can be used shall be described in the detailed description of the invention, except where it could be understood by the person skilled in the art without such description, when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(2) Invention of a Process

Of those inventions related to the use of a microorganism, an invention of a process for the use of a microorganism (e.g. an invention of a process for treating a material with a microorganism) should be described as follows.

For an invention of a process, the definition of "being able to carry out the invention" is that the process can be used. Further, "the said invention of a process" should be explained clearly in the detailed description of the invention.

In order to describe the invention of the process in such a manner that the process can be used, the enablement requirement in "(1) Invention of a Product" should be referred to, if necessary. For instance, "5.1 Deposit and Furnishing of Microorganisms." should be referred to if deposit of microorganisms, etc. is necessary.

(3) Invention of a Process for Manufacturing a Product

Of those inventions related to the use of a microorganism, an invention of a process for producing a substance using a microorganism should be described as follows.

Where an invention of a process is directed to "a process for manufacturing a product," the definition of "the process can be used" means that the product can be manufactured by the process. Further, the said invention of a process for manufacturing a product should be explained clearly in the detailed description of the invention.

Accordingly, for the invention of a process for producing a substance by using a microorganism, a process for producing the said substance shall be described in the detailed description of the invention so that a person skilled in the art can produce the said substance taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing. In order to describe the process in such a manner that a person skilled in the art can produce the said substance by the process, the enablement requirement described in "(1) Invention of a Product" should be referred to, if necessary. For instance, "5.1 Deposit and furnishing of microorganisms" should be referred to, if the deposit of microorganisms is necessary.

Further, it is necessary to describe how the said process can be used or at least one use of the said substance.

As to "How Specifically Must the Detailed Description of the Invention Be Described?" and "Balance of the Claim and the Detailed Description of the Invention," see the relevant

portions (1.1.2.1(4) and (5)) in "1. Genetic Engineering."

2.1.3.2 Ministerial Ordinance Requirement

Matters required under the Ministerial Ordinance are (1) technical field to which an invention pertains and (2) problem to be solved by the invention and its solution.

(1) Technical field to which an invention pertains

As "technical field to which an invention pertains," at least one technical field to which a claimed invention pertains shall be stated in a specification, in principle.

In the inventions related to a microorganism, "technical field to which an invention pertains" should be described such as pharmaceuticals, feed, food, water treatment, for example.

(2) Problem to be solved by the invention and its solution

As "problem to be solved by the invention," an application shall state at least one technical problem to be solved by a claimed invention, in principle. As "its solution," an application shall explain how the technical problem has been solved by the claimed invention.

As to "Prior Art and Advantageous Effects," see 1.1.2.3 in "1. Genetic Engineering."

2.2 Requirements for Patentability

2.2.1 Invention Not Falling under "Industrially Applicable Invention"

The following inventions do not meet the requirement provided in the first sentence in Section 29(1) of the Patent Act.

(1) A mere discovery which is not a creation

Example: A merely discovered microorganism existing in nature.

However, an invention of a microorganism which is isolated from nature artificially involves creativity.

(2) Inventions incapable of industrial application

An invention of a microorganism per se whose utility is not described or cannot be inferred.

2.2.2 Inventive Step

(1) Invention of a microorganism per se

An inventive step of an invention of a microorganism per se should be examined based on taxonomic characteristics of the microorganism as well as effects produced by the use of the microorganism.

An invention of a microorganism whose taxonomic characteristics are remarkably different from those of publicly known species (i.e., a new species) has an inventive

step.

An invention involving a microorganism producing advantageous effects that a person skilled in the art cannot foresee, though the taxonomic characteristics of the microorganism are not substantially different from those of publicly known species, has an inventive step.

Example:

A microorganism which was obtained by mutating a publicly known species and which has remarkably high productivity of metabolite.

(2) Invention relating to the use of a microorganism

An invention relating to the use of a microorganism (e.g., an invention of a process for producing a substance) does not have an inventive step, if the microorganism used in the invention is a taxonomically known species and belongs to the same genus as another microorganism for which the same mode of use (e.g., producing the aimed substance) is known. However, if it is found that the invention using the former microorganism has advantageous effects that a person skilled in the art cannot foresee in comparison with the invention using the latter microorganism, the invention using the former microorganism has an inventive step.

(Explanation)

Between publicly known species in the same genus, it is usually easy for a person skilled in the art to culture each microorganism and confirm its utility (e.g., substance productivity) and its effects.

An invention relating to the use of a microorganism (e.g., an invention of a process for producing a substance) has an inventive step, if the microorganism used in the invention is remarkably different from publicly known species in taxonomic characteristics (i.e., a new species), even if the mode of use (e.g., the aimed substance) is the same.

(Explanation)

Since the used microorganism per se has an inventive step as described (1) above, a process using the microorganism has also an inventive step.

2.3 Amendment of Specification

(1) An amendment of an accession number of a microorganism is not regarded as addition of new matter, if microbiological characteristics of the microorganism are described in the specification as filed, to the extent that the microorganism can be specified, and deposit of the microorganism can be specified based on the name of the depositary institution, etc.

In such a case, the applicant should make an amendment of the accession number without delay.

(2) An amendment converting a storage number of a microorganism to an accession number based on the deposit of the microorganism with a depositary institution for the purpose of patent procedure, is not regarded as addition of a new matter, if the microorganism used is stored at a reliable public culture collection and the storage number of the microorganism is explicitly stated in the specification as filed and that it is clear that the identity of the microorganism is not lost.

In such a case, the applicant should make an amendment of the accession number without delay.

(3) An amendment adding microbiological characteristics of a microorganism is regarded as addition of a new matter unless a person skilled in the art can directly and unambiguously derive those characteristics from what is described in the specification and drawings as filed, even if the accession number of the microorganism stated in the specification as filed is not changed and microbiological characteristics of the microorganism are described in the specification as filed to the extent that the taxonomic species of the microorganism can be specified.

3. Plants

This section deals with inventions of plants per se, those relating to parts of plants (e.g., a fruit), those of a process for creating plants, those relating to use of plants, etc. The term "plants" means the plants under the classification where organisms are classified into three groups, namely microorganisms, plants and animals.

As to undifferentiated plant cells as well as plant tissue cultures, which are treated as microorganisms, reference should be made to relevant parts in "2. Microorganisms."

Matters relating to genetic engineering are referred to "1. Genetic Engineering" even if they are inventions relating to plants.

3.1 Description Requirements of the Specification

3.1.1 Designation of Plants

In principle, plants should be specified by scientific names in accordance with the botanical nomenclature or standard Japanese names.

3.1.2 Scope of Claim

As to an invention relating to a plant, a claim should be described as follows.

In the case of an invention of a plant per se, the plant should be specified by, for example, a combination of any of the species, the distinctive gene of the plant, characteristics of the plant, etc. and may be further specified by the process for creating the plants.

Example 1:

A plant belonging to Castanea crenata (Japanese chestnut) having the ATCC Accession No. xxxx whose bark contains catechol tannin and pyrogallol tannin in the ratio of X1-X2: Y1-Y2 and has a catechol tannin content of z1-z2 ppm (weight ratio), or its mutatnt having the said characteristics.

Example 2:

A watermelon obtained by crossing a diploid watermelon with a tetraploid watermelon obtained by polyploidizing a diploid watermelon, whose somatic cell has 33 chromosomes.

As to an invention of a process for creating a plant, the process for creating the plant should be described in the claim step by step. In the case where selection is performed as one step of creation based on characteristics or the like, the characteristics or the like necessary for the selection should be additionally described. Where conditions such as environment are necessary for creating the plant, such conditions should be also described.

Example:

A process for creating a cabbage characterized by crossing a cabbage strain having the ATCC Accession No.xxxx as a seed parent with another cabbage as a pollen parent by

having resistance for the herbicide X.

3.1.3 Detailed Description of the Invention

(See 1.1.2 above)

3.1.3.1 Enablement Requirement

(See 1.1.2.1 above)

(1) Invention of a Product

An invention of a plant per se should be described as follows.

A plant being explained clearly

In order to explain a plant clearly, for example, (i) matters regarding species of the plant created and (ii) matters relating to characteristic properties of the created plant should be described.

(i) Species of the plant created

In principle, the created plant should be specified by the scientific name in accordance with the botanical nomenclature or standard Japanese name.

(ii) Characteristic properties of the plant created

In the case that properties of the created plant are characteristic, they should be described specifically stating by numeric values actually obtained by measuring or the like and it is desirable that they are described in comparison with those of publicly known plants, if necessary.

For instance, it should be described not by a mere statement that the plant is high-yielding, but concrete numeric values commonly used in conventional yield surveys, such as total number of fruits produced per stock, total weight of fruits produced per stock, gross yield per are, etc., and they should be described in comparison with those of publicly known plants, if necessary.

Colors, such as leaf color, fruit color, and flower color should be expressed in accordance with official standards, such as the color atlas JIS Z8721 which is a specification of colours according to their three attributes, JIS Z8102 concerning color names and the R.H.S. color chart.

Where characteristic properties of the created plant cannot be expressed by a conventional cultivation method which a person skilled in the art usually conducts, or where characteristic properties of the created plant are expressed only in specific environments and under specific cultivation method though the method is conventional, such specific cultivation conditions should be specifically described.

"Can be made"

As to an invention of a plant per se, a process for creating the plant should be described step by step including species of parent plant(s), a step of selecting the plant to be aimed at based on objective indicators or the like.

Where it is not possible to describe a process for creating the plant in the specification in such a manner that enables a person skilled in the art to create the plant, the created plant which is reproducible (seeds, cells, etc.) should be deposited with a depositary institution prior to filing and its accession number should be described in a specification as filed similarly to the deposit under Section 27bis of Regulations under the Patent Act. (For the details of the deposit and furnishing of plants, see "5.2 Deposit and Furnishing of Plants.")

"Can be used"

An invention of a plant per se must be described so that invention can be used by the person skilled in the art. Knowledge of how the invention can be used shall be described in the detailed description of the invention, except where it could be understood by the person skilled in the art without such description, when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(2) Invention of a Process for Manufacturing a Product

An invention of a process for creating a plant should be described as follows.

An invention of a process for creating a plant should be described in such a manner that enables a person skilled in the art to create the plant by the said process.

In order to describe the process in such a manner that a person skilled in the art can produce the said plant by the process, the enablement requirement described in "(1)Invention of a Product" should be referred to, if necessary. For example, in case that deposit of a plant is necessary, "5.2 Deposit and Furnishing of Plants" should be referred to.

Further, in an invention of a process for creating a plant, how the process or the plant created by the process can be used should be described in the detailed description of the invention, except where it could be understood by a person skilled in the art without such description when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(3) Invention of a Process

An invention of a process should be described as follows.

For an invention of a process, the definition of "being able to carry out the invention" is that the process can be used. Further, "the said invention of a process" should be explained clearly in the detailed description of the invention.

In order to describe for the person skilled in the art can use the process, the enablement requirement described in "(1)Invention of a Product" should be referred to, if necessary. For instance, "5.2 Deposit and furnishing of plants" should be referred to, if the deposit of plants are necessary.

As to "How Specifically Must the Detailed Description of the Invention Be Described?", "Balance of the Claim and the Detailed Description of the Invention," "Ministerial Ordinance Requirement" and "Prior Art and Advantageous Effects," see the relevant portions (1.1.2.1(4) and (5), 1.1.2.2 and 1.1.2.3) in "1. Genetic Engineering."

3.1.4 Drawings

When photographs are attached as drawings, black-and-white photographs should be used. Color photographs may be submitted as reference materials.

3.2 Requirements for Patentability

3.2.1 Invention Not Falling within "Industrially Applicable Invention"

The following inventions do not meet the requirement provided in the first sentence in Section 29(1) of the Patent Act.

- Mere discovery which is not a creation Example: A newly discovered plant per se.
- (2) Inventions incapable of industrial applicationInventions whose utility is not described or cannot be inferred.

3.2.2 Inventive Step

(1) An invention of a plant per se does not have an inventive step, where characteristics of the plant created can be easily predicted from the characteristics of publicly known plants within the species to which the plant belongs and where the invention does not have advantageous effects that a person skilled in the art cannot foresee.

Example 1:

A plant whose shape or color is similar to that of publicly known plants within the species to which the plant belongs.

Example 2:

Mere combination of the characteristics of publicly known plants within the species to which the plant belongs.

(Plants obtained by mere crossing: for instance, suppose that it is publicly known that *Pisum sativum* A (pea A) has a single-locus-controlling characteristics that the legume is yellow when premature and *Pisum sativum* B has a single-locus-controlling characteristics that it bears blossoms at each knot through the full length. In such a case, a new *Pisum sativum*, obtained by merely crossing *Pisum sativum* A and *Pisum sativum* B and fixing their characteristics, having characteristics that the legume is yellow when premature and it bears blossoms at each knot, does not have an inventive step.)

(2) An invention of a process for creating a plant does not have an inventive step, where the selection of parent plants, means, conditions or the like is not considered to be difficult and where the created plant does not have advantageous effects that a person skilled in the art cannot foresee.

3.3 Amendment of Specification

Amendment of the specification relating to the deposit of plants is handled as described in "2.3 Amendment of Specification" above.

4. Animals

This section deals with inventions of animals per se, those relating to parts of animals, those of a process for creating animals, those relating to use of animals, etc. The term "animals" means the animals (excluding humans) under the classification where organisms are classified into three groups, namely microorganisms, plants and animals.

As to undifferentiated animal cells as well as animal tissue cultures, which are treated as microorganisms, reference should be made to relevant parts in "2. Microorganisms."

Matters relating to genetic engineering are referred to "1. Genetic Engineering" even if they are inventions relating to animals.

4.1 Description Requirements of the Specification

4.1.1 Designation of Animals

In principle, animals should be specified by scientific names in accordance with the zoological nomenclature or standard Japanese names.

4.1.2 Scope of Claim

As to an invention relating to an animal, a claim should be described as follows.

In the case of an invention of an animal per se, the animal should be specified by, for example, a combination of any of the species, the distinctive gene of the animal, characteristics of the animal, etc. and may be further specified by the process for creating the animals.

Example:

A mouse having DSM Accession No.xxxxx characterized by the occurrence of degeneration and swelling of anterior lens cortical fibers at 8 weeks of age, appearance of opacity of the lens at 5 or 6 months of age and rapid completion of cataract immediately after that, or its mutant having the said characteristics.

As to an invention of a process for creating an animal, the process for creating the animal should be described in the claim step by step. In the case where selection is performed as one step of creation based on characteristics or the like, the characteristics or the like necessary for the selection should be additionally described. Where conditions such as environment are necessary for creating the animal, such conditions should be described.

4.1.3 Detailed Description of the Invention

(See 1.1.2 above)

4.1.3.1 Enablement Requirement

(See 1.1.2.1 above)

(1) Invention of a Product

An invention of an animal per se should be described as follows.

An animal being explained clearly

In order to explain an animal clearly, for example, (i) matters regarding species of the animal created and (ii) matters relating to characteristic properties of the created animal should be described.

(i) Species of the animal created

In principle, the created animal should be specified by the scientific name in accordance with the zoological nomenclature or standard Japanese name.

(ii) Characteristic properties of the animal created

In the case that properties of the created animal are characteristic, they should be described specifically stating by numeric values actually obtained by measuring or the like and it is desirable that they are described in comparison with those of publicly known animals, if necessary.

Where characteristic properties of the created animal cannot be expressed by a conventional breeding method which a person skilled in the art usually conducts and they are expressed only in specific environments or only under specific breeding method, such specific conditions should be specifically described.

"Can be made"

As to an invention of an animal per se, the process for creating the animal should be described step by step including species of parent animal(s), a step of selecting an animal to be aimed at based on objective indicators or the like.

Where it is not possible to describe the process for creating the animal in the specification in such a manner that enables a person skilled in the art to create the animal, the created animal which is reproducible (fertilized ovum, etc.) should be deposited with a depositary institution prior to filing and its accession number should be described in a specification as filed similarly to the deposit under Section 27bis of Regulations under the Patent Act. For the details of the deposit and furnishing of animals, see "5.3 Deposit and Furnishing of Animals."

"Can be used"

An invention of an animal per se must be described so that invention can be used by the person skilled in the art. Knowledge of how the invention can be used shall be described in the detailed description of the invention, except where it could be understood by the person skilled in the art without such description, when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(2) Invention of a Process for Manufacturing a Product

An invention of a process for creating an animal should be described as follows.

An invention of a process for creating an animal should be described in such a manner that enables a person skilled in the art to create the animal by the said process.

In order to describe the process in such a manner that a person skilled in the art can produce the said animal by the process, the enablement requirement described in "(1) Invention of a Product" should be referred to, if necessary. For example, in case that deposit of an animal is necessary, see "5.3 Deposit and Furnishing of Animals."

Further, in an invention of a process for creating an animal, how the process or the animal created by the process can be used should be described in the detailed description of the invention, except where it could be understood by a person skilled in the art without such description when taking into account the overall descriptions of the specification (excluding claims), drawings and common general knowledge as of the filing.

(3) Invention of a process

An invention of a process should be described as follows.

For an invention of a process, the definition of "being able to carry out the invention" is that the process can be used. Further, "the said invention of a process" should be explained clearly in the detailed description of the invention.

In order to describe for the person skilled in the art can use the process, the enablement requirement described in "(1)Invention of a Product" should be referred to, if necessary. For instance, "5.3 Deposit and furnishing of Animals" should be referred to, if the deposit of animals is necessary.

As to "How Specifically Must the Detailed Description of the Invention Be Described?", "Balance of the Claim and the Detailed Description of the Invention," "Ministerial Ordinance Requirement" and "Prior Art and Advantageous Effects," see the relevant portions (1.1.2.1(4) and (5), 1.1.2.2 and 1.1.2.3) in "1. Genetic Engineering."

4.1.4 Drawings

When photographs are attached as drawings, black-and-white photographs should be used. Color photographs may be submitted as reference materials.

4.2 Requirements for Patentability

4.2.1 Invention Not Falling under "Industrially Applicable Invention"

The following inventions do not meet the requirement provided in the first sentence in Section 29(1) of the Patent Act.

(1) Mere discovery which is not a creation

Example: A newly discovered animal per se.

(2) Inventions incapable of industrial application

Inventions whose utility is not described or cannot be inferred.

4.2.2 Invention Contravening Public Order, Morality or Public Health

When working of an invention inevitably contravenes public order, morality or public health, the invention falls under the invention as provided in Section 32 of the Patent Act.

4.2.3 Inventive Step

(1) An invention of an animal per se does not have an inventive step, where characteristics of the animal created can be easily predicted from the characteristics of publicly known animals within the species to which the animal belongs and where the invention does not have advantageous effects that a person skilled in the art cannot foresee.

(2) An invention of a process for creating an animal does not have an inventive step, where the selection of parent animal(s), means, conditions or the like is not considered to be difficult and where the created animal does not have advantageous effects that a person skilled in the art cannot foresee.

4.3 Amendment of Specification

Amendment of the specification relating to the deposit of animals is handled as described in "2.3 Amendment of Specification" above.

5. Deposit

This section deals with inventions related to microorganisms, plants, and animals which need to be deposited.

5.1 Deposit and Furnishing of Microorganisms

When describing inventions involving a microorganism itself or a use for a novel microorganism, and when it is impossible to describe how to originate the microorganism so that the person skilled in the art can produce the microorganism, the microorganism must be deposited according to Section 27bis of Regulations under the Patent Act. (For specific information, see below. Also see "(Reference) With Regard to the Change of Practices Related to the Expansion of Scope of Deposit by the Patent and Bio-Resource Center ")

Section 27bis of Regulations under the Patent Act (Deposition of microorganisms)

- 1 A person desiring to file a patent application for an invention involving or using a microorganism shall attach to the request a copy of the latest receipt referred to in Rule 7 of the Regulations under the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the purpose of Patent Procedure (hereinafter referred to as "Treaty") for the deposit of the microorganism issued by the International Depositary Authority defined in Article 2(viii) of the Treaty, or a document certifying the fact that the microorganism has been deposited with an institution designated by the Commissioner of the Patent Office, except where the microorganism is readily available to a person skilled in the art to which the invention pertains.
- 2 Where an accession number is newly given after the filing of a patent application to the deposit of a microorganism under the preceding paragraph, the applicant for a patent or the patentee shall notify the Commissioner of the Patent Office without delay.
- 3 The notification under the preceding paragraph shall be made in accordance with Form 32 with respect to a patent application, or Form 33 with respect to an International Patent Application.

Section 27ter of Regulations under the Patent Act (Furnishing of microbiological samples)

- 1 A person who intends to work for the purpose of tests or experiments an invention involving or using a microorganism deposited in accordance with the preceding section may be furnished with a sample of the microorganism provided that:
 - (i) registration for the establishment of a patent right to the invention involving or using the microorganism has been made;
 - (ii) the person received a warning given in the form of a document describing the contents of the invention involving or using the

microorganism in accordance with Section 65(1) of the Patent Act; or

- (iii) such is necessary in order to prepare a written argument referred to in Section 50 of the Patent Act (including its application under Section 159(2) (including its application under Section 174(2)) and Section 163(2)).
- 2 A person who has been furnished with a sample of the microorganism in accordance with the preceding paragraph shall not permit a third party to utilize the sample of the microorganism.
- (i) Deposit and Furnishing

A person desiring to file a patent application for an invention involving or using a microorganism (hereinafter "an applicant"), shall deposit the microorganism with a depositary institution designated by the Commissioner of the Patent Office or International Depositary Authorities (hereinafter, the both are referred to as "depositary institution for the purposes of patent procedure"), unless a person skilled in the art can easily obtain the microorganism, shall state the accession number in the specification as filed, and shall attach a document certifying the fact that the microorganism has been deposited (hereinafter referred to as a "copy of the Receipt of an Original Deposit") to the patent appliction.

The depositary institution for the purposes of patent procedure issues a receipt of a reception immediately after receiving the application of patent depositary, and then it issues a Receipt of an Original Deposit after testing the microorganism and finding them to be viable. As a receipt of a reception is not a document certifying the fact that the microorganism has been deposited, provided in Section 27bis of Regulations under the Patent Act, a receipt of a reception shall not be attached to the patent application.

An applicant may file a patent application stating a reference number which is written in a receipt of a reception, in the specification as filed. In this case, an applicant shall submit a copy of the Receipt of an Original Deposit immediately after being issued the Receipt of an Original Deposit.

When a copy of the Receipt of an Original Deposit is issued, the date of the original deposit shall be the date on which the microorganism was received by the depositary institution for the purposes of patent procedure.

The application is not treated as having been deposited from the received date, in case that the depositary institution for the purposes of patent procedure couldn't find the microorganism to be viable, and did not issue the Receipt of an Original Deposit.

When a new accession number is given to the microorganism after filing, for the reason that, e.g., re-deposit was made, samples of the microorganism were transferred to another International Depositary Authority or the deposit was converted from the deposit under the national act to that under the Budapest Treaty, the applicant or the patentee shall give a notice to that effect to the Commissioner of the Patent Office without delay.

Where a microorganism which was deposited with a depositary institution designated by the Commissioner of the Patent Office and was confirmed to be viable is found to be no longer viable, the depositor, upon receipt of the "Notice that the microorganism cannot be furnished" (Official Gazette of MITI No.178 Section 15) from the depositary institution, should deposit immediately the same microorganism as that originally deposited. Where the microorganism is related to a patent application or a patent, the applicant or the patentee should give a notice to that effect to the Commissioner of the Patent Office without delay. In such a case, the newly deposited microorganism is treated as having been deposited without intermission since the original deposit was made.

The deposited microorganism can be furnished simultaneously with the registration for establishment of a patent right. Even prior to the registration for establishment of a patent right, though, in the case where Section 27ter (1)(ii) or (iii) of Regulations under the Patent Act is applied, the microorganism can be furnished.

The deposit of a microorganism should be maintained at least during the term of the patent for the invention related to the microorganism so that the microorganism can be furnished.

For reference, a list of International Depositary Authorities and kinds of microorganisms accepted by the IDAs is shown in [Appendix 2]. (Omitted in this English translation version)

- (ii) Microorganisms Excluded from Obligation to be Deposited
 - (a) Microorganisms which cannot be stored or maintained by the depositary institution for the purpose of patent procedure for technical reasons or the like
 In such a case, however, furnishing of the microorganisms provided in Section 27ter
 of Regulations under the Patent Act should be guaranteed by the applicant. (Such microorganisms should be preferably deposited with a reliable culture collection.)
 - (b) Microorganisms readily available to the persons skilled in the art stated in "Section 27bis of Regulations under the Patent Act"

More specifically, the following microorganisms are included for example:

- (b-1) Commercially available microorganisms, such as baker's yeast, koji (*Aspergillus oryzae*), *Bacillus natto*, etc.
- (b-2) A stored microorganism in the case where it has been confirmed, prior to filing, that the microorganism has been stored at a reliable culture collection and is freely accessible from a catalog or the like issued by the said culture collection In this case, the storage number of the microorganism should be described in the specification as filed.
- (b-3) Microorganisms which can be created by a person skilled in the art on the basis of the description in the specification

(iii) Applications Claiming Priority Rights

Where a claimed invention in an application claiming priority relates to a microorganism which is not readily available to a person skilled in the art, the application can enjoy advantages of the priority provided that the microorganism has been deposited with a depositary institution for the purpose of patent procedure or a reliable public

culture collection, and that the accession number or storage number of the microorganism is stated in the specification contained in the first application being the basis for priority rights, or in the specification contained in the earlier application being the basis for internal priority rights.

(iv) Omission of submission of a "copy of the Receipt of an Original Deposit"

In cases when there are two or more applications concerning the same copy of the Receipt of an Original Deposit are made at the same time, or when making applications concerning a copy of the Receipt of an Original Deposit that has been already submitted, the applicant may omit the submission of the document by stating either of the two reasons above, according to Section 10 (1) and (2) of Regulations under the Patent Act.

For example, in cases like the ones below, the applicant may omit submission of a copy of the Receipt of an Original Deposit:

- (1) When dividing an application
- (2) When making an application claiming internal priority rights
- (3) When the same applicant is making a second application and the submission of the same copy of the Receipt of an Original Deposit is necessary.
- (4) When the applicant is making two or more applications and the submission of the same copy of the Receipt of an Original Deposit is necessary.
- (5) When the applicant is submitting a notice for the change of accession number

Section 10 (1) of Regulations under the Patent Act (Omission of submission of documents)

When two or more procedures (Utility Model Act (Act No.123 of 1959), Design Act (Act No.125 of 1959), Trademark Act (Act No.127 of 1959), Act Concerning the Special Provisions to the Procedure, etc. Relating to an Industrial Property Right (Act No.30 of 1990; hereinafter referred to as the "Special Provisions Act") or procedures prescribed in orders in accordance to the aforesaid Acts) are taken at the same time, and when the contents of certifying documents necessary to be submitted under Sections 4ter through 7, 8(1), 9(4) [Submission of Certifying Documents], or 27bis(1) [Deposition of microorganisms] are the same, it is possible to submit the document in one procedure, and by stating this fact, omit submission of the document in other procedures.

Section 10 (2) of Regulations under the Patent Act (Omission of submission of documents)

When an applicant has already submitted a certifying document concerned in a previous case, and when there is no change in the matters certified by the document, the applicant may state these facts and omit submission of the
certifying documents stated in Section 4ter through 7, 8(1), 9(4), the above Paragarph [Submission of Certifying Documents], or 27bis (1) [Deposition of microorganisms] in the procedure concerned.

5.2 Deposit and Furnishing of Plants

When describing inventions involving a plant itself, a part of a plant, a method of producing a plant, or a use for a novel plant, and when it is impossible to describe how to originate the plant so that the person skilled in the art can produce the plant, the plant must be deposited according to Section 27bis of Regulations under the Patent Act. (For specific information, see "5.1 Deposit and Furnishing of Microorganisms")

(a) Even when the specification describes the step-by-step process of producing a plant, in cases where the person skilled in the art cannot work the invention due to difficulties in obtaining the parent plant, the applicant must deposit the parent plant (its seeds, cells, etc.) prior to the application, and state the accession number in the original specification, according to Section 27bis of Regulations under the Patent Act.

(b) In cases when it is impossible to describe the process of producing a plant so that the person skilled in the art can produce the plant, the applicant must deposit the plant produced in a reproducible state (its seeds, cells, etc.), and state the accession number in the original specification, according to Section 27bis of Regulations under the Patent Act.

However, in cases when it is not possible to deposit the plant, due to technical reasons of the institution designated by the Commissioner of the Patent Office, the applicant shall guarantee the furnishing of the plant, in proportion with Section 27ter of Regulations under the Patent Act. (It is desirable to take measures such as storing the plant at a reliable public culture collection.)

5.3 Deposit and Furnishing of Animals

When describing inventions involving an animal itself, a part of an animal, a method of producing an animal, or a use for a novel animal, and when it is impossible to describe how to originate the animal so that the person skilled in the art can produce the animal, the animal must be deposited according to Section 27bis of Regulations under the Patent Act. (For specific information, see "5.1 Deposit and Furnishing of Microorganisms")

(a) Even when the specification describes the step-by-step process of producing an animal, in cases where the person skilled in the art cannot work the invention due to difficulties in obtaining the parent animal, the applicant must deposit the parent animal (its embryos, etc.) prior to the application, and state the accession number in the original specification, according to Section 27bis of Regulations under the Patent Act.

(b) In cases when it is impossible to describe the process of producing an animal so that the person skilled in the art can produce the animal, the applicant must deposit the animal produced in a reproducible state (its embryos, etc.), and state the accession number in the original specification, according to Section 27bis of Regulations under the Patent Act.

However, in cases when it is not possible to deposit the animal, due to technical reasons of the institution designated by the Commissioner of the Patent Office, the applicant shall guarantee the furnishing of the animal, in proportion with Section 27ter of Regulations under the Patent Act. (It is desirable to take measures such as storing the animal at a reliable public culture collection.)

(Reference)

With Regard to the Change of Practices Related to the Expansion of Scope of Deposit by the Patent and Bio-Resource Center

March 2001 Examination Standards Office Coordination Division

1. Expansion of the Scope of Deposit

Previously in our country, the Patent and Bio-Resource Center inside the National Institute of Advanced Industrial Science and Technology (AIST) has served as an International Depositary Authority as well as the depositary institution designated by the Commissioner of the Patent Office, accepting molds, yeasts, bacteria, actinomycetes, animal cells and plant cells for deposit. However, recently, the Patent and Bio-Resource Center has decided to expand the kinds of microorganisms accepted for deposit, considering the fact that the object of research has expanded, owing to recent advancements in science. More specifically, the kinds of microorganisms accepted has been expanded to include plasmids (not in hosts), embryos, protozoa, seeds and algae, in addition to molds, yeasts, bacteria, actinomycetes, animal cells and plant cells, previously accepted.

2. Corresponding Changes Made by the Patent Office

(1) Changes in Practice

Patent applications involving plasmids (not in hosts), embryos, protozoa, seeds and algae newly added to the list of organisms accepted (when the microorganisms are not easily available) shall be handled in the following way:

- Considering the time needed for the notification of the expansion, and technical problems associated, applicants wishing to file a patent application involving plasmids (not in hosts), embryos, protozoa, seeds and algae, after the dates for which the new practice applies, stated below, shall deposit said plasmids (not in hosts), embryos, protozoa, seeds and algae to an International Depositary Authority defined in Article 2(viii) of the Budapest Treaty or a depositary institution designated by the Commissioner of the Patent Office, state the accession number in the specification, and attach to the request, a copy of the latest receipt for the deposit of the microorganism referred to in Rule 7 of the Regulations under the Budapest Treaty, issued by the International Depositary Authority defined in Article 2(viii) of the Treaty, or a document certifying the fact that the microorganism has been deposited with an institution designated by the Commissioner of the Patent Office.

[Dates for which the New Practice Applies]

For inventions involving plasmids (not in hosts), protozoa and algae: <u>from April 1, 2001</u> For inventions involving embryos and seeds: <u>from April 1, 2002</u>

- In cases where there is an application filed after the above dates (hereinafter called an "application claiming priority rights"), which claim priority rights based on an application filed prior to the above dates (hereinafter called "application forming the basis of priority rights"), the deposit need not be made prior to the application forming the basis of priority rights, but the new practice shall be applied to the applications claiming priority rights.

- For applications filed prior to the above dates, the previous practice will be applied.

- For applications divided after the above dates, but with the original application having an application date prior to the above dates, the previous practice will be applied.

(2) Specific Practices

- For inventions of microorganisms stated in the present guidelines (yeasts, molds, mushrooms, bacteria, actinomycetes, unicellular algae, viruses, protozoa, undifferentiated animal or plant cells, etc.), and plasmids, seeds and embryos newly accepted by the depositary institution designated by the Commissioner, and for inventions that meet the enablement requirement upon deposit of bacteria, plasmids, seeds and embryos (*1), deposit must be made according to Section 27bis of Regulations under the Patent Act. In cases where deposit is not made prior to filing the application, the application lacks enablement.

*1: For example, inventions concerning the use of a microorganism, or plant inventions which meet enablement upon deposit of seeds, or animal inventions which meet enablement upon deposit of embryos.

- In cases when the institution designated by the Commissioner cannot, for technical reasons, accept the deposition, the applicant will be exempt from the obligation for deposition. However, in this case, the applicant shall guarantee the furnishing of the microorganism stated in Section 27ter of Regulations under the Patent Act. (It is desirable to take measures such as storing the animal at a reliable public culture collection.)

6. Examples of Inventions Relating to Genes

[Note]

The requirement of the first sentence of Patent Act Section 29(1) is not considered within the examples below.

Within each case, the method of calculating "homology" of sequences is described in the specification, and said method is technically proper.

6.1 Unity of Invention

For examples of unity of invention, see examples of unity of invention relating to biotechnological inventions (Part 1 Chapter 2 Requirements of Unity of Invention). (to be prepared)

6.2 Cases Lacking Enablement

Case 1 Full-length cDNA

[Claim1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO: 5.

[Description of the invention]

The claimed polynucleotide is 3000bp cDNA obtained from human liver cDNA library. It encodes a polypeptide of amino acid sequence of SEQ ID NO:6. As a result of similarity search, no known sequences showed over 30% similarity to the nucleotide sequence of SEQ ID NO:5 or the amino acid sequence of SEQ ID NO:6. The amino acid sequence of SEQ ID NO:6 was proved to have a potential site of glycosylation.

Therefore, the claimed polynucleotide is assumed to be a structural gene encoding a new glycoprotein, whose specific function is unknown, and may be used for obtaining a new drug.

[Result of the prior-art search]

There is no known nucleotide sequence with over 30% similarity to that of SEQ ID NO:5. There is no known amino acid sequence with over 30% similarity to that of SEQ ID NO:6.

[Reason for refusal]

Even if the claimed polynucleotide encodes glycoprotein, the corresponding glycoprotein's specific function cannot be recognized because there are so many glycoproteins whose specific function differs from each other. The specific function of the claimed polynucleotide also cannot be assumed with the common general knowledge. As the specific function of the claimed polynucleotide is not clear, it is not clear how to use the claimed polynucleotide.

Therefore, there is no disclosure concerning the use of the claimed polynucleotide,

thus, the description of the invention is deemed insufficient for enabling a person skilled in the art to carry out the invention.

[Responses to the Notice of reason for refusal]

The above mentioned reason for refusal normally shall not be overcome.

(Supplementary Explanation)

The "specific function" stated here means a "function from which a specific application with technical meanings can be assumed."

Case 2 Full-length cDNA

[Claim1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:7.

[Description of the invention]

The claimed polynucleotide is 2400bp cDNA obtained from human liver cDNA library. It encodes a polypeptide of 800 amino acids of SEQ ID NO.8. As a result of similarity search using a known DNA and amino acid database, the claimed polynucleotide showed 20 to 30% homology to the polynucleotides encoding factor WW1 of mammalians such as rats. The polynucleotides are written in document A, document B, etc. And the amino acid sequence of SEQ ID NO.8 showed 20 to 30% homology to the amino acid sequences of factor WW1 of mammalians such as rats. The amino acid sequences are also written in document A, document B, etc.

Therefore, the claimed polynucleotide was assumed to encode human factor WW1 and to be useful.

[Result of the prior-art search]

There is no known sequence with over 40% similarity to the nucleotide sequence of SEQ ID NO:7 or the amino acid sequence of SEQ ID NO:8.

[Reason for refusal]

The given reason by the applicant that this polynucleotide encodes human factor WW1 is only based on the fact that the claimed polynucleotide has 20 to 30% homology to other mammalian polynucleotides encoding factor WW1 and that the amino acid sequence of SEQ ID NO:8 has 20 to 30% homology to amino acid sequences of factor WW1 of other mammalians.

In general, when two polynucleotides (polypeptides) show only 20-30% homology to each other, they probably do not have any specific function in common. And there is no common general knowledge that the human polynucleotide, with only 20-30% homology to the polynucleotide of factor WW1, encodes human factor WW1. As the claimed polynucleotide probably does not encode human factor WW1, the specific function of the claimed nucleotide is not clear and no one can assume the specific function of the protein

encoded by the nucleotide.

Therefore, we consider there is no disclosure concerning the use of this polynucleotide in an industrial applicable way, thus the description of the invention is deemed insufficient for enabling a person skilled in the art to carry out the invention.

[Responses to the Notice of reason for refusal]

If the claimed polynucleotide is proved as encoding human factor WW1 by written argument describing the activity of the protein actually expressed, or describing a logical explanation, the above mentioned reason for refusal may be overcome.

(Supplementary Explanation)

In cases where the above mentioned "logical explanation" is based on publicly known knowledge of the preserved regions within the factor WW1 gene, it would be easy, on the other hand, for the person skilled in the art to obtain a nucleotide encoding "factor WW1" by constructing a DNA primer probe based on the DNA sequence of the preserved regions, and using the primer probe in methods such as PCR. Under these circumstances, unless it is found that the polynucleotide has unexpected advantageous effects, claim 1 lacks inventive step.

The "specific function" stated here means a "function from which a specific application with technical meanings can be assumed."

The "specific function," i.e. the "function from which a specific application with technical meanings can be assumed" of factor WW1, is known.

Case 3 Full-length cDNA

[Claim1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:9.

[Description of the invention]

The claimed polynucleotide is 2400bp cDNA obtained from human liver cDNA library. It encodes a polypeptide of 800 amino acids of SEQ ID NO:10. As a result of similarity search using a known DNA and amino acid database, the claimed polynucleotide showed 20 to 30% homology to the polynucleotide encoding factor ZZ1 of rat, factor ZZ2 of pig and an antagonist of factor ZZ1 receptor of monkey. And the amino acid sequence of SEQ ID NO:10 showed 20 to 30% homology to factor ZZ1 of rat, factor ZZ2 of pig and an antagonist of factor ZZ1 receptor.

Therefore, this polynucleotide encodes a human protein related to factor ZZ and may be used to diagnose patients with disease related to factor ZZ.

[Result of the prior-art search]

There is no known sequence with over 40% similarity to the nucleotide sequence of

SEQ ID NO:9 or the amino acid sequence of SEQ ID NO:10.

[Reason for refusal]

As factor ZZ1, factor ZZ2, and antagonist of factor ZZ1 receptor have a different specific function to each other, mere description that the claimed polynucleotide encodes protein relating to factor ZZ does not indicate any specific function of the claimed polynucleotide. And the specific function of the corresponding protein cannot be assumed considering the state of the art as of the filing.

Therefore we consider there is no disclosure concerning the use of this polypeptide, and thus the description of the invention is deemed as insufficient, for enabling a person skilled in the art to carry out the invention.

[Responses to the Notice of reasons for refusal]

Even if the claimed polynucleotide is proved as encoding human protein ZZ1 by written argument or certified experiment results, the reason for refusal above may not be overcome.

(Supplementary Explanation)

Even though the description states that polypeptide in this case "showed 20 to 30% homology to factor ZZ1 of rat, factor ZZ2 of pig and an antagonist of factor ZZ1 receptor", or that the nucleic acid "encodes a human protein related to factor ZZ", we cannot assume, taking into consideration common general knowledge as of the filing, that the nucleic acid encodes "human factor ZZ1."

The "specific function" stated here means a "function from which a specific application with technical meanings can be assumed."

Proteins related to factor ZZ, namely factors ZZ1 and ZZ2, and antagonist of factor ZZ1 receptor each are known to have different "specific functions," i.e. "functions from which a specific application with technical meanings can be assumed."

6.3 Case Lacking Inventive Step

Case 4 Full-length cDNA

[Claim 1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:11.

[Description of the invention]

The claimed polynucleotide is 2700bp cDNA obtained from human liver cDNA library. It encodes a polypeptide of 900 amino acids of SEQ ID NO:12. As a result of similarity search, the amino acid sequence of SEQ ID NO:12 showed 85% homology to rat factor XX1(written in document A) and the polynucleotide sequence of SEQ ID NO:11 showed

80% homology to the polynucleotide encoding rat factor XX1(written in document A).

Therefore, this polynucleotide was assumed to encode human factor XX1 and to be useful.

[Result of the prior-art search]

There was no other sequence detected with over 80% similarity to that nucleotide sequence or polypeptide sequence except for rat polynucleotide encoding rat factor XX1 or the amino acid sequence of rat factor XX1. It is a well-known fact that mammalians including human have factor XX1.

[Reason for refusal]

It is a well-known object to prepare human DNAs encoding proteins. It is also common general knowledge to isolate the human DNA encoding a certain protein by using a partial nucleotide sequence of a mammal other than human encoding the same protein as a primer probe. Since polynucleotide encoding proteins with the same biological activities are in general highly homologous between mammalian species.

Therefore, it is obvious that the DNA encoding human factor XX1 can be isolated from human cDNA library using the partial polynucleotide encoding rat factor XX1 written in document A as a primer. And any advantageous effect cannot be acknowledged from document A or common general knowledge, hence this invention cannot be regarded as involving an inventive step.

[Responses to the Notice of reason for refusal]

The reason for refusal above may be overcome if the applicant proves in written arguments that there was specific difficulty to obtain the claimed polynucleotide, considering the state of the art as of the filing.

(Supplement)

The "specific function," i.e., the "function from which a specific application with technical meanings can be assumed" for factor XX1, is known.

6.4 Cases Lacking Both Inventive Step and Enablement

Case 5 DNA fragment

[Claim 1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:13.

[Description of the invention]

A cDNA library was constructed from human liver using oligo (dT) primers. The nucleotide sequence of SEQ ID NO:13 is one of the sequences (500 bp) which were analyzed using an automated DNA sequencer. The polynucleotide consisting of the nucleotide sequence of SEQ ID NO:13 is part of a structural gene, and it can be used as

a probe in one of the steps to obtain the full-length DNA.

However, there is no working example indicating that the full-length DNA was actually obtained, and there is no description of the function or biological activity of the DNA and its corresponding protein.

[Result of the prior-art search]

There is no known sequence with over 30% similarity to the nucleotide sequence of SEQ ID NO:13 or the amino acid sequence of SEQ ID NO:14.

[Reason for refusal]

1. Inventive Step: No

It is a well-known object to obtain cDNAs from human cells and sequence them. It is also a well-known art to construct cDNA libraries from human organs, such as the liver, and to analyze the sequence of cDNA randomly chosen from the library with the use of an automated sequencer.

Therefore, for a person skilled in the art, it would have been easy to prepare cDNA library and to sequence cDNAs derived from the library using conventional methods. And the obtained DNA does not have an unexpected advantageous effect.

Hence, this invention cannot be regarded as involving an inventive step.

2. Enablement Requirement: No

An invention of a product should be described in a way enabling for a person skilled in the art to make and to use the product.

There is a description that the claimed DNA can be used as a probe in one of the steps to obtain a full-length DNA. However, there is no description on function or biological activity of the protein encoded by the corresponding full-length DNA. Moreover, function or biological activity of the full-length DNA cannot be assumed with common general knowledge as of the filing. The use of a DNA fragment in obtaining the full-length DNA, whose corresponding protein's function and biological activity are unknown, is not considered to be a "use" as stated above. We consider that the description of the invention is insufficient for enabling a person skilled in the art to carry out the invention.

[Responses to the Notice of reason for refusal]

Reason 2 above normally shall not be overcome.

Case 6 SNPs

[Claim1]

A polynucleotide of between 20 and 100 bases including position 100 (polymorphic site) of the nucleotide sequence of SEQ ID NO:14 or SEQ ID NO:15.

[Description of the invention]

The polynucleotide of the locus of the human genome DNAs derived from 10 persons was compared to each other. Six of 10 polynucleotide were SEQ ID NO:14 and four of 10 were SEQ ID NO:15. The nucleotide at position 100 of SEQ ID NO:14 is g. On the other hand, that of SEQ ID NO:15 is c. These two nucleotide sequences are the same except for the nucleotide at position 100. The claimed polynucleotide can be used as a forensic marker.

[Result of the prior-art search]

The nucleotide sequence of SEQ ID NO:14 and NO:15 are unknown. The claimed polyuncleotide is also unknown.

[Reason for refusal]

1. Inventive step: No

It is a well-known object to detect polymorphic site in human genome DNA. It is a well-known art to analyze and compare the sequences of genome DNAs of many persons, to detect a polymorphic site.

Therefore, for a person skilled in the art, it would have been easy to analyze and compare the sequences of a certain part of genome DNAs of several persons and to detect the polymorphic site.

And any unexpected advantageous effect cannot be acknowledged, hence this invention cannot be regarded as involving an inventive step.

2. Enablement requirement: No

An invention of a product should be described in a way enabling for a person skilled in the art to make and to use the product

Though, there is a description that the claimed nucleotide can be used as a forensic marker, only one SNP itself is not usually utilized as a forensic marker. Therefore, the mere description that the polynucleotide can be used as a forensic marker does not indicate any use of the claimed polynucleotide.

[Responses to the Notice of reason for refusal]

Reason 2 above normally shall not be overcome.

6.5 Cases Where Inventive Step is Involved and Enablement Requirement is Satisfied

Case 7 DNA fragment

[Claim 1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:16.

[Description of the invention]

The polynucleotide is one of the 500bp cDNAs which were found in a cDNA library derived from the hepatocyte of patients with disease Y, but not found in those of normal persons. It was confirmed by northern hybridization that the corresponding mRNAs were expressed only in the patients' hepatocyte. Therefore, the polynucleotide can be used to diagnose disease Y.

[Result of the prior-art search]

There is no known DNA and polypeptide which are unique in the patients with disease Y. There is no known sequence with over 30% similarity to the nucleotide sequence of SEQ ID NO:16.

[Reason for refusal] No reason for refusal

(Supplemental Explanations)

- 1. The polynucleotide in claim 1 has the unexpected advantageous effect that it can be used to diagnose disease Y.
- 2. There also may be cases in which claim 1 is "A polynucleotide <u>comprising</u> the nucleotide sequence of SEQ ID NO:16." In this case, the claim contains <u>any</u> polynucleotide which contains the DNA sequence of SEQ ID NO:16. We can logically assume that there should be <u>some</u> polynucleotides unsuitable for the diagnosis of disease Y, among polynucleotides belonging to claim 1, but contain a very long sequence that has nothing in common with the claimed sequence. Therefore, a notice of reason for refusal will be made to the effect that claim 1 in part is not workable. (This notice, however, does not mean that <u>all</u> polynucleotides which have polynucleotides attached to the sequence of SEQ ID NO:16 cannot be used as a diagnostic probe.)

Case 8 Full-length cDNA

[Claim1]

A polynucleotide consisting of the nucleotide sequence of SEQ ID NO:17.

[Description of the invention]

The claimed polynucleotide is 2700bp cDNA obtained from human liver cDNA library. It encodes a polypeptide of 900 amino acids of SEQ ID NO:18. This polypeptide was expressed and it showed the activity of human factor YY1.

[Result of the prior-art search]

There is no known sequence with over 80% similarity to the nucleotide sequence of SEQ ID NO:17 or the amino acid sequence of SEQ ID NO:18. And no prior art was found about the human factor YY1.

[Reason for refusal] No reason for refusal

(Supplementary Explanation)

The "specific function", i.e., the "function from which a specific application with technical meanings can be assumed" of the factor YY1 is known.

Case 9 SNP

[Claim1]

A polynucleotide of between 20 and 100 bases including position 50("g") (polymorphic site) of the nucleotide sequence of SEQ ID NO:19.

[Description of the invention]

A polynucleotide identical to SEQ ID NO:19 (500bp length DNA), except that the nucleotide "g" in position 50 of SEQ ID NO:19 is "c", is known. Position 50 of the polynucleotide of SEQ ID NO:19 is proved to be a polymorphic site, and a polynucleotide of between 20 and 100 bases including position 50 (g) of the nucleotide sequence of SEQ ID NO:19 is experimentally proved to be suitable to diagnose disease Z.

[Result of the prior-art search]

The polynucleotide sequence of SEQ ID NO:19 was not known. The claimed polynucleotide was neither known. Relationship between the polymorphic site at position 50 and disease Z was neither known as well. Though the polynucleotide of with "c" in position 50 is known to be a part of structural gene, the relationship between the protein encoded by the structural gene and disease Z was not known.

[Reason for refusal]

No reason for refusal

(Supplemental Explanation)

The polynucleotide in claim 1 has the advantageous effect that it can be used to diagnose disease Z.

7. Examples of Inventions Relating to Protein Conformtion

(to be prepared)

8. Examples Relating to Judgment of Necessity for Deposit of Microorganisms, etc.

This section explains about the judgment on whether microorganisms, etc. ("microorganisms, etc." here include microorganisms, plants and animals) are necessary to be deposited or not prior to filing of the application, based on specific cases.

For information on general matters relating to the judgment of necessity for Deposit, see "5. Deposit".

The present Examples include the following Cases.

8.1 Inventions Relating to Bacteria

Case 1-1 A case where the bacteria are readily available to a person skilled in the art (No need to deposit)

Case 1-2 A case where the bacteria are not readily available to a person skilled in the art (Need to deposit)

Case 1-3 A case of the invention relating to a DNA derived from bacteria (No need to deposit)

8.2 Inventions Relating to Antibodies

Case 2-1 A case where the hybridoma can be prepared by a person skilled in the art on the basis of the description in the specification (No need to deposit)

Case 2-2 A case where the hybridoma can be prepared by a person skilled in the art on the basis of the description in the specification (No need to deposit)

Case 2-3 A case where the hybridoma is not readily available to a person skilled in the art (Need to deposit)

8.3 Inventions Relating to Cells

Case 3-1 A case where the cells can be produced by a person skilled in the art on the basis of the description in the specification (No need to deposit)

Case 3-2 A case where the cells are not readily available to a person skilled in the art (Need to deposit)

8.4 Inventions Relating to Animals

Case 4-1 A case where the animal can be produced by a person skilled in the art on the basis of the description in the specification (No need to deposit)

Case 4-2 A case where the animal is not readily available to a person skilled in the art (Need to deposit)

(Points of concern)

In the present Examples, each case shall not mean that there are no other reasons for refusal such as lack of novelty/inventive step.

8.1 Inventions Relating to Bacteria

Case 1-1 A case where the bacteria are readily available to a person skilled in the art (No need to deposit)

[Claims]

1. A β -galactosidase derived from a Streptomyces lividans strain xyz-1; ATCC ******, having the following physicochemical properties:

(a) function and substrate specificity: to hydrolyze a substrate having β -D-galactoside bond and to release a D-galactoside group;

(b) optimum pH: 4.5;

- (c) stable pH: 3.0 to 5.5;
- (d) optimum temperature: 55°C;
- (e) stable temperature: 50°C; and

(f) molecular weight: 200 kD as measured by gel filtration chromatography.

[Outline of Description of the invention]

Since neutral or acidic material such as milk, cheese whey, lactose solution and the like is the subject of processing by a β -galactosidase, the β -galactosidase with sufficient enzyme activity in an acidic condition is required. But a microorganism that produces the β -galactosidase with sufficient enzyme activity in an acidic condition was not known at the filing.

The inventors isolated the β -galactosidase described in claim 1 from a *Streptomyces lividans* strain xyz-1 with a specific technique. Further, the *Streptomyces lividans* strain xyz-1 is listed in a catalog issued by ATCC with the storage number ATCC ******, and freely accessible prior to the filing.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, based on the Description of the invention, it was confirmed prior to the filing that the *Streptomyces lividans* strain xyz-1 was a microorganism stored in ATCC that is a reliable culture collection and freely accessible from the catalog issued by ATCC. Further, the storage ATCC number of xyz-1 was also described in the Description of the invention.

Therefore, the *Streptomyces lividans* strain xyz-1 is readily available to a person skilled in the art, and any person skilled in the art can isolate the β -galactosidase described in claim 1 with the specific technique described in the specification.

Accordingly, the Streptomyces lividans strain xyz-1 is not required to be deposited.

<u>Case 1-2 A case where the bacteria are not readily available to a person skilled in</u> the art (Need to deposit)

[Claims]

1. A Bacillus subtilis strain T-169 capable of decomposing dioxin.

[Outline of Description of the invention]

A *Bacillus subtilis* strain T-169 was isolated from the sample, which was collected from muddy sediment of seabed of Toyama Bay in Japan, with a method known to a person skilled in the art. The taxonomic characteristic of T-169 was analyzed in detail, and the difference between T-169 and any other strains in the same species was examined. The *Bacillus subtilis* strain T-169 proved to be a new strain, and with further experiments, it was verified that T-169 has an ability to decompose dioxin with high efficiency.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In general, variety and quantity of microorganisms inhabiting soil, seawater or the like are not always stable even though the soil and seawater were obtained from a certain area.

Therefore, even when a novel microorganism is isolated from a sample of the soil, seawater or the like from a certain area, it is difficult to obtain the same novel microorganism reproducibly in the absence of a reasonable ground that the novel microorganism is present in the sample collected again from the soil, seawater or the like.

In the present case, there is no description about the reasonable ground that the *Bacillus subtilis* strain T-169 is present in the sample collected again from muddy sediment of seabed of Toyama Bay in the Description of the invention.

Consequently, the *Bacillus subtilis* strain T-169 is not reproducible in confirmatory studies conducted by a person skilled in the art. Therefore, the *Bacillus subtilis* strain T-169 is not a microorganism that can be prepared by a person skilled in the art on the basis of the description in the specification.

Accordingly, the *Bacillus subtilis* strain T-169 is required to be deposited, since the *Bacillus subtilis* strain T-169 is not a microorganism readily available to a person skilled in the art.

Case 1-3 A case of the invention relating to DNA derived from bacteria (No need to deposit)

[Claims]

1. A DNA comprising the nucleic acid sequence represented by SEQ ID NO: 1, encoding an argininosuccinate synthase derived from a coryneform bacterium strain K-336.

2. An expression vector containing the DNA described in claim 1.

3. A transformant, retaining the vector described in claim 2 in a state that the vector is capable of expression.

[Outline of Description of the invention]

A coryneform bacterium strain K-336 producing L-arginine was isolated from soil based on the drug tolerance. Its taxonomic characteristic was analyzed in detail, and the difference between K-336 and the similar species was examined. The coryneform bacterium strain K-336 proved to be a new species.

It had been known at the filing that ArgA to ArgH genes are involved in an L-arginine biosynthetic pathway of the coryneform bacterium. The inventors for the first time identified an ArgG gene comprising the nucleic acid sequence represented by SEQ ID NO: 1 from the coryneform bacterium strain K-336, made to express the ArgG gene with a known genetic technology, and verified that the protein encoded by the ArgG gene is an argininosuccinate synthase.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, the invention described in claim 1 is not a coryneform bacterium strain K-336 but a DNA. Further, since the nucleic acid sequence of the DNA is specifically described in the specification, the DNA can be obtained based on the nucleic acid sequence by a person skilled in the art through an artificial synthesis method and the like. In addition, a person skilled in the art can incorporate the DNA into a suitable expression vector and prepare a transformant retaining the expression vector in a state capable of expressing.

Accordingly, the coryneform bacterium strain K-336 is not required to be deposited.

8.2 Inventions Relating to Antibodies

<u>Case 2-1 A case where the hybridoma can be prepared by a person skilled in the art</u> on the basis of the description in the specification (No need to deposit)

[Claims]

1. An antigenic protein A consisting of the amino acid sequence represented by SEQ ID NO: 1.

2. A monoclonal antibody against the antigenic protein A described in claim 1.

3. A hybridoma producing the monoclonal antibody described in claim 2.

[Outline of Description of the invention]

A novel antigenic protein A was isolated and purified from the outer membrane of virus X. Since the antigenic protein A was found to react only with a serum derived from a person infected with virus X, the antigenic protein A is useful for identifying a person infected with virus X.

Further, a partial amino acid sequence of the antigenic protein A was determined, and a gene encoding the antigenic protein A consisting of the amino acid sequence represented by SEQ ID NO: 1 was cloned by a known genetic engineering technique based on the partial amino acid sequence.

[Note]

There is no example in the specification that a monoclonal antibody specifically reacting with the antigenic protein A was prepared.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, the monoclonal antibody described in claim 2 is a monoclonal antibody specified only by an antigen.

Generally, there is common general knowledge that, when a protein having immunogenicity is obtained, a monoclonal antibody binding to the protein can be obtained by using the protein as an immunogen based on a known hybridoma method.

Further, a person skilled in the art can prepare an antigenic protein A consisting of the amino acid sequence represented by SEQ ID NO: 1 by means of obtaining a gene encoding the antigenic protein A and expressing the gene using a known genetic technology, on the basis of the description in the specification. In addition, it is obvious that the antigenic protein A has immunogenicity.

Consequently, a person skilled in the art can obtain the monoclonal antibody described in claim 2 and a hybridoma producing the monoclonal antibody by the means of preparing the antigenic protein A and using the antigenic protein A as an immunogen by a known hybridoma method, on the basis of the description in the specification.

Therefore, the hybridoma described in claim 3 is a microorganism that can be prepared by a person skilled in the art on the basis of the description in the specification.

Accordingly, the hybridoma described in claim 3 is not required to be deposited, since

the hybridoma described in claim 3 is a microorganism readily available to a person skilled in the art.

<u>Case 2-2 A case where the hybridoma can be prepared by a person skilled in the art</u> on the basis of the description in the specification (No need to deposit)

[Claims]

1. A monoclonal antibody of IgM isotype, reacting with a surface antigen P of a virus Y with an association constant of $10^{10}M^{-1}$ or more.

2. A hybridoma producing the monoclonal antibody described in claim 1.

[Outline of Description of the invention]

The surface antigen P of a virus Y was already isolated and purified, and the antibody detecting the surface antigen P was publicly known at the filing. However, the monoclonal antibody of IgM isotype had not been considered suitable for detection of the surface antigen P due to its properties of easy aggregation and the other. The inventors obtained for the first time a monoclonal antibody of IgM isotype capable of detecting the surface antigen P of a virus Y with high sensitivity.

The inventors selected a specific partial amino acid sequence from an amino acid sequence encoding the surface antigen P, and prepared a polypeptide consisting of the specific partial amino acid sequence, and confirmed that the polypeptide functions as an immunogen. Further, using the polypeptide as an immunogen, they prepared a hybridoma producing the monoclonal antibody based on a known hybridoma method. As a result, there were obtained 149 lines of the hybridoma in which the antibody production was confirmed. From these, 10 lines were selected, an association constant of the antibody produced by the selected hybridoma was measured, and only 3 lines of the hybridoma were confirmed to satisfy the conditions of being an IgM isotype and having an association constant of 10¹⁰M⁻¹ or more. However, when a set of these experiments was performed three times repeatedly for preparing the hybridoma in a similar manner, at least one line of the hybridoma producing an antibody, which satisfies the conditions of being an IgM isotype and having an association constant.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, the monoclonal antibody described in claim 1 is a monoclonal antibody satisfying limitative conditions, "reacting with a surface antigen P of a virus Y with an association constant of 10^{10} M⁻¹ or more".

Generally, there is common general knowledge that it is in many cases not reproducible to obtain a hybridoma producing a monoclonal antibody that satisfies limitative conditions.

However, in the Description of the invention, there is a description that plural lines of a hybridoma producing a monoclonal antibody of IgM isotype that satisfy the limitative conditions, "reacting with a surface antigen P of a virus Y with a association constant of 10^{10} M⁻¹ or more" can be obtained by selecting a certain specific partial amino acid sequence from the amino acid sequence encoding a surface antigen P of a virus Y. Further, there is also a description that a hybridoma producing the monoclonal antibody

of IgM isotype that satisfies the limitative conditions can be reproducible by repeatedly performing the experiments of preparing the hybridoma in a similar manner using a polypeptide consisting of the specific partial amino acid sequence as an immunogen.

Consequently, the monoclonal antibody described in claim 1 and the hybridoma producing the monoclonal antibody are reproducible in confirmatory studies conducted by a person skilled in the art.

Therefore, the hybridoma described in claim 2 is a microorganism that can be prepared by a person skilled in the art on the basis of the description in the specification.

Accordingly, the hybridoma described in claim 2 is not required to be deposited, since the hybridoma described in claim 2 is a microorganism readily available to a person skilled in the art.

<u>Case 2-3 A case where the hybridoma is not readily available to a person skilled in</u> the art (Need to deposit)

[Claims]

1. A monoclonal antibody ABC-1, suppressing cell proliferation by binding to receptor Z.

2. A hybridoma H- ABC-1 producing the monoclonal antibody described in claim 1.

[Outline of Description of the invention]

Receptor Z was already isolated and purified, and it was publicly known at the filing that cell proliferation was suppressed by agonist binding to receptor Z. Further, an attempt to prepare a monoclonal antibody that suppresses the cell proliferation by binding to receptor Z was performed prior to the filing. However, an antibody suppressing the cell proliferation by binding to receptor Z was not obtained prior to the filing.

When the inventors prepared a monoclonal antibody based on a known hybridoma method using receptor Z as an immunogen, they obtained numerous hybridomas producing a monoclonal antibody that binds to receptor Z. Among them, however, only one line was the hybridoma producing the monoclonal antibody that suppresses the cell proliferation. Further, the monoclonal antibody suppressing the cell proliferation was named "monoclonal antibody ABC-1" and the hybridoma producing the "monoclonal antibody ABC-1" was named "hybridoma H-ABC-1".

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, the monoclonal antibody ABC-1 described in claim 1 is a monoclonal antibody produced by the specific hybridoma line, hybridoma H-ABC-1.

Generally, there is common general knowledge that it is difficult to obtain a specific hybridoma line by design based on a known hybridoma method.

Further, in the Description of the invention, there is only a description that one line of the hybridoma H-ABC-1 producing the monoclonal antibody ABC-1 was obtained based on a known hybridoma method, and there is no description of a method for obtaining the hybridoma H-ABC-1 reproducibly.

Consequently, the monoclonal antibody ABC-1 or hybridoma H-ABC-1 is not reproducible in confirmatory studies conducted by a person skilled in the art. Therefore, the hybridoma H-ABC-1 is not a microorganism that can be prepared by a person skilled in the art on the basis of the description in the specification.

Accordingly, the hybridoma H-ABC-1 is required to be deposited, since the hybridoma H-ABC-1 is not a microorganism readily available to a person skilled in the art.

8.3 Inventions Relating to Cells

<u>Case 3-1 A case where the cells can be produced by a person skilled in the art on</u> the basis of the description in the specification (No need to deposit)

[Claims]

1. A method for isolating mouse lung cancer cells from a heterogeneous cell population containing the mouse lung cancer cells, comprising:

(1) a step of preparing a vector ligated to a nucleic acid molecule encoding a fluorescent protein under the control of a lung cancer cell-specific promoter consisting of the nucleic acid sequence represented by SEQ ID NO: 1;

(2) a step of introducing the vector into the cell population; and

(3) a step of identifying and isolating mouse lung cancer cells as cells generating fluorescence from the cell population.

2. The mouse lung cancer cells, isolated by the method described in claim 1.

[Outline of Description of the invention]

A novel promoter that functions specifically in lung cancer cells was cloned from a mouse. The nucleic acid sequence of the promoter is represented by SEQ ID NO: 1. In addition, based on a known technique, a heterogeneous cell population containing lung cancer cells was prepared from a mouse. Further, a vector ligated to a nucleic acid molecule encoding GFP, that is well-known as a kind of fluorescent protein, under the control of the promoter was introduced into the cell population, GFP was expressed only in lung cancer cells in the cell population, and mouse lung cancer cells were identified and isolated as fluorescing cells among the cell population.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, in the Description of the invention, the nucleic acid sequence of a promoter specifically functioning in lung cancer cells is disclosed. It is also disclosed that mouse lung cancer cells were identified and isolated from a heterogeneous cell population by using a vector ligated to a nucleic acid molecule encoding GFP under the control of the promoter.

Consequently, the mouse lung cancer cells can be identified/isolated reproducibly in confirmatory studies conducted by a person skilled in the art.

Therefore, the mouse lung cancer cells described in claim 2 are microorganisms that can be produced by a person skilled in the art on the basis of the description in the specification.

Accordingly, the mouse lung cancer cells described in claim 2 are not required to be deposited, since the mouse lung cancer cells are microorganisms readily available to a person skilled in the art.

<u>Case 3-2 A case where the cells are not readily available to a person skilled in the art (Need to deposit)</u>

[Claims]

1. A mesenchymal stem cell line H-01, derived from a mouse mesenchymal stem cell, capable of subculturing in a serum-free medium, exhibiting fibrous form when cultured in the serum-free medium, and being induced to differentiate into target cells at a rate of 80 % or more by culturing in a medium containing a conditioned medium of the target cells.

[Outline of Description of the invention]

Mesenchymal stem cells obtained from mouse bone marrow were cultured for three weeks in a serum-free medium and dead cells were removed. Subsequently, by repeatedly subculturing the remaining cells for examining the differentiation potential, a mutant cell line differentiating into astrocyte-like cells was fortuitously obtained by culturing in a medium containing an astrocyte-conditioned medium. Further, the mutant cell line was named "mesenchymal stem cell line H-01". Here, by performing a further analysis of the differentiation potential of the mesenchymal stem cell line H-01, the mesenchymal stem cells were induced to differentiate into adipocytes, smooth muscle cells, fibroblasts and the like respectively at the rate of nearly 100% by culturing in medium each containing a conditioned medium of the corresponding cells.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

Generally, there is common general knowledge that it is difficult to obtain a specific mutant cell line intentionally during the cell culture since the mutation in a genome of a cell occurs randomly during the cell culture.

In the present case, in the Description of the invention, there is only a description that the mesenchymal stem cell line H-01 was established from a mutant cell line that was obtained fortuitously in the process of subculturing the mesenchymal stem cells obtained from mouse bone marrow, and there is no description about a method for obtaining the mesenchymal stem cell line H-01 reproducibly.

Consequently, the mesenchymal stem cell line H-01 is not reproducible in confirmatory studies conducted by a person skilled in the art. Therefore, the mesenchymal stem cell line H-01 is not a microorganism that can be produced by a person skilled in the art on the basis of the description in the specification.

Accordingly, the mesenchymal stem cell line H-01 is required to be deposited, since the mesenchymal stem cell line H-01 is not a microorganism readily available to a person skilled in the art.

8.4 Inventions Relating to Animals

<u>Case 4-1 A case where the animal can be produced by a person skilled in the art on</u> the basis of the description in the specification (No need to deposit)

[Claims]

1. A transgenic mouse introduced with a proto-oncogene comprising the base sequence represented by SEQ ID NO: 1.

[Outline of Description of the invention]

A novel proto-oncogene consisting of the base sequence represented by SEQ ID NO: 1 was cloned from human. Further, a plurality of transgenic mice were prepared based on a known gene transfer method by introducing the gene into a commercially available fertilized BALB/c mouse ovum to create transgenic mice. These mice developed tumors at an average age of 5 months old.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

In the present case, in the Description of the invention, a novel proto-oncogene consisting of the nucleic acid sequence SEQ ID NO: 1 is described. The description also describes that transgenic mice were prepared based on a known gene transfer method, using said proto-oncogene and a commercially available mouse.

Consequently, a transgenic mouse introduced with a proto-oncogene consisting of the base sequence represented by SEQ ID NO: 1 is reproducible in confirmatory studies conducted by a person skilled in the art.

Therefore, the transgenic mouse described in claim 1 is an animal that can be produced by a person skilled in the art on the basis of the description in the specification.

Accordingly, the prepared transgenic mouse (a fertilized egg thereof and the like) is not required to be deposited, since the transgenic mouse described in claim 1 is an animal readily available to a person skilled in the art.

Case 4-2 A case where the animal is not readily available to a person skilled in the art (Need to deposit)

[Claims]

1. An RFG mouse spontaneously developing dermatitis, developing periocular edema as an incipient lesion at 3 weeks old.

[Outline of Description of the invention]

In the process of maintaining the strain of BALB/c mouse, a mutant individual which developed periocular edema as an incipient lesion at 3 weeks old and spontaneously developing dermatitis under a clean condition was fortuitously obtained. Subsequently, an inbred mouse strain was established from the mutant individual and named "RFG mouse". After establishing the inbred mouse strain, in the process of 25 generations, an RFG mouse spontaneously developed dermatitis while maintaining a characteristic of developing periocular edema as an incipient lesion at 3 weeks old.

[Explanation on judgment of necessity for deposit of microorganisms, etc.]

Generally, it is common general knowledge that it is difficult to obtain a specific mutant individual reproducibly in a process of maintaining a mouse strain, since the mutation occurring in a genome of a mouse randomly occurs in a process of maintaining the mouse strain.

In the present case, in the Description of the invention, there is only a description that the RFG mouse is an inbred mouse established from a mutant individual obtained fortuitously in the process of maintaining the strain of BALB/c mouse, and there is no description about a method for obtaining the RFG mouse with repeatability.

Consequently, the RFG mouse is not reproducible in confirmatory studies conducted by a person skilled in the art. Therefore, the RFG mouse is not an animal that can be produced by a person skilled in the art on the basis of the description in the specification.

Accordingly, the RFG mouse (a fertilized egg thereof and the like) is required to be deposited, since the RFG mouse is not an animal readily available to a person skilled in the art.

[Appendix 1]

The Guidelines for Describing Taxonomic Characters

It is required to describe in detail taxonomic characters of a microorganism belonging to a new species (including ones designated by their strain) and append a micrograph or electron micrograph as necessary. The description should mention differences from other similar known species, make clear the reason why the microorganism was judged as new, and cite relevant literature on which the judgement based. It is desirable that a new species is named in accordance with the applicable international rules of nomenclature.

In the following, microorganisms are divided into four categories, namely yeast, mold or mushroom, bacteria and actinomycetes. Items to be described are shown below. In describing such items, experiments and observations should be performed on normally grown microorganism. It is necessary to describe cultivation conditions, such as the kind of culture media used (or the composition of the media), incubation temperature, incubation time, etc. Further, it is desirable to describe the date, the source (its scientific name should be shown, when the source is an animal or a plant) and the place of isolation of the strain.

Besides, the items listed here are only a guidance for specifying microorganisms. Which items must be described to sufficiently specify a microorganism should be judged depending on microorganisms involved in each patent application.

1. If the new species belongs to yeasts, the following should be described.

(a)Cultural and morphological characters

a)Wort or YM liquid medium

b)Wort agar medium or YM agar medium

c)Dalmau plate culture or slide culture using potato or corn meal agar culture media It is necessary to describe the appearance, color, luster, diffusion pigment, etc. of those grown on agar media, as well as the surface growth, turbidity of the media, etc. of those grown on liquid media, in addition to the size, shape and mode of multiplication of vegetative cells (indicate whether it multiplies by budding or fission, it has mycelia or pseudohyphae) grown on these media. Further, it is desirable to describe in detail the above characters observed through the use of a medium which reveals the characteristics of the strain.

(b)Formation of spores

a)Sexual spore

1) The presence of ascosporogenesis should be examined with the use of Gorodkowa medium, gypsum sodium acetate medium, malt extract agar medium, vegetable extract agar medium, carrot piece, etc. The form of the ascus and the ascospore should be described when the formation of spores is found.

2) It is necessary to describe the shape of dicaryon mycelia, basidia (teliospore, premycelia) or basidiospore when it is found with the use of malt extract agar medium, vegetable extract agar medium, corn meal agar medium, potato yeast exudate glucose agar medium, etc.

b)Ballistospore

The presence of ballistospore should be examined with the use of wort agar medium, potato agar medium, corn meal agar medium and the like. The shape of the ballistospore should be described when it is found.

(c)Physiological and chemotaxonomical characters

a) Optimal growth conditions (pH, temperature)

b) Range of growth (pH, temperature)

c) Utilization of nitrate

d) Lipolysis

e) Decomposition of urea

f) Color reaction to diazonium blue B

g) Liquefaction of gelatin

h) Optimal or maximal concentration of sucrose or sodium chloride if it is osmophilic

or osmotolerant

i) Formation of carotinoid

j) Remarkable formation of organic acid

k) Formation of starch-like substance

I) Requirement for vitamins

m) Utilization of 15 or more of the following carbon sources (for the saccharides marked with *, both utilization and fermentativeness should be described.)

1) D-arabinose

2) L-arabinose

3) D-ribose

4) D-xylose

5) *D-glucose

6) D-mannose

7) *D-galactose

8) L-rhamnose

9) D-fructose

10)L-sorbose

11)*maltose

12)*sucrose

13)*lactose

14)*melibiose

15)cellobiose

16)trehalose

17)*raffinose 18)melezitose 19)α-methyl-D-glucoside 20)D-glucosamine 21)N-acetyl glucosamine 22) arbutin or esculin 23)dextrin 24) soluble starch 25)inulin 26)methanol 27)ethanol 28)adonitol 29)erythritol 30)*inositol 31)D-mannitol 32)D-sorbitol 33)dulcitol 34)D-gluconate 35)glycerin 36)DL-lactate 37) succinate 38)citrate 39)hexadecane

40)other carbon compounds necessary to show characteristics of new species n)It is desirable to describe the base composition (GC content) of DNA and type of ubiquinone (coenzyme Q).

o)Other physiological and chemotaxonomical characters necessary to characterize the new species, if any, should also be described.

The following are examples.

1)Sugar composition of cell wall (presence of xylose, rhamnose, fucose and galactose)

2)DNA-DNA homology with analogous species

(d)In addition to the above characters, other characteristics characterizing the microorganism, if any, should be described.

2. If the new species belongs to mold or mushroom, the following should be described.

(a)Cultural and morphological characters

- a) Wort (or malt extract) agar medium
- b) Potato glucose agar medium
- c) Czapek agar medium

d) Sabouraud agar medium

e) Oatmeal agar medium

f) Synthetic mucor agar medium

g) YpSs agar medium

h) Glucose dry yeast agar medium (for mycorrhiza forming fungi)

i) corn meal agar medium

Two or more of the above media should be selected. It is necessary to describe the state of growth of strains grown on each selected medium, namely the teleomorphic (sexual stage) and anamorphic (asexual stage) morphological characters, shape and color tone of the surface of colonies, color tone of the back side of colonies.

Further, it is desirable to describe in detail the above characters observed with the use of a medium which reveals the characteristics of the strain very well.

(b)Physiological and chemotaxonomical characters

a) Optimal growth conditions (pH, temperature)

b) Range of growth (pH, temperature)

c) Phenol oxidase reaction (only for wood-rotting fungi)

d) Other physiological and chemotaxonomical characteristics necessary to characterize the new species, if any, should also be described.

The following are examples.

1) Base composition (GC content) of DNA

- 2) Electrophoretogram of enzyme and protein
- 3) DNA-DNA identity with analogous species
- 4) Type of ubiquinone (coenzyme Q)

(c) When the above characters are insufficient to determine the microorganism to be new, it is necessary to describe teleomorphic or anamorphic morphological characters and the shape, color tone of a microorganism on the substrate on the basis of dry specimens,

[Note] It is desirable to state the storage facility (culture collection) and the specimen number of the standard type specimen.

(d) In addition to the above, other characteristics characterizing the microorganism, if any, should be described.

3. If the new species belongs to bacteria, the following should be described.

(a) Morphological characters

Following items should be described in respect of cells grown on agar media and liquid media. In principle, the standard medium formulation is broth or broth agar, but other appropriate media may be used for cells which do not grow well on such media.

a) Shape and size of cells

b) Polymorphism of cells, the details of the polymorphism if present.

c) Motility, the state of adherence of flagella if the cell has motility.

d) Spores, the shape and size of the spores and sporangia as well as site of spores if the cell has spores.

(b) Cultural characters

- a) Broth agar plate culture
- b) Broth liquid culture
- c) Broth gelatin stab culture
- d) Litmus milk

It is required to describe the appearance, color, luster, diffusible pigment, etc. of cells grown on agar media; the presence of surface growth, turbidity of media and the like of those grown on liquid media, the state of growth, gelatin liquefaction and the like of those grown on gelatin stab culture, as well as the change of color (alkaline or acid), coagulation and liquefaction of litmus milk. It is recommended to describe the state of growth on any other media suitable for growth when the microorganism does not grow on the media listed above.

(c) Physiological characters

- a) Gram stain
- b) Reduction of nitrate
- c) Denitrification
- d) MR test
- e) VP test
- f) Production of indole
- g) Production of hydrogen sulfide
- h) Hydrolysis of starch

i) Utilization of citric acid (Both Koser (or Simmons) medium and Christensen medium should be used)

- j) Utilization of inorganic nitrogen sources (nitrate and ammonium salt)
- k) Production of pigment (indicate whether the pigment is water soluble or not)
- I) Urease
- m) Oxidase
- n) Catalase
- o) Range of growth (pH, temperature)
- p) Behavior toward oxygen (aerobic or anaerobic)
- q) O-F test (according to Hugh Leifson method)
- r)The formation of acids or gases from the saccharides below should be described.
 - 1) L-arabinose
 - 2) D-xylose
 - 3) D-glucose
 - 4) D-mannose
 - 5) D-fructose

6) D-galactose

- 7) maltose
- 8) sucrose
- 9) lactose
- 10) trehalose
- 11) D-sorbitol
- 12) D-mannitol
- 13) inositol
- 14) glycerin
- 15) starch

Descriptions should also include the formation of gas or acid from any other sugars, if necessary to show the characteristics of the new species.

(d) It is desirable to describe items selected from the following necessary for showing characteristics of the new species.

- a) Decomposition products of saccharides
- b) Oxidation of gluconic acid
- c) Oxidation of alcohol
- d) Formation of dihydroxyacetone
- e) Decomposition of esculin
- f) Decomposition of cellulose
- g) Decomposition of hippuric acid
- h) Utilization of malonic acid
- i) Decomposition of arginine
- j) Decarboxylation of lysine
- k) Decarboxylation of ornithine
- I) Deamination of phenylalanine
- m) Coagulase
- n) Hemolysis
- o) Temperature sensitivity
- p) Tolerance to sodium chloride
- q) Tolerance to potassium cyanide
- r) Phosphatase
- s) Pectinase
- t) Lipase
- u) Lecithinase
- v) Auxotrophy
- w) Acid fastness
- x) Other necessary characters
- (e) Chemotaxonomic characters
 - a) It is desirable to describe the base composition (GC content) of DNA.
 - b) Other chemotaxonomical characteristics necessary to characterize the new

species, if any, should be described.

The following are examples.

1) Amino acid composition of cell wall peptide glycan

2) Kind of reducing sugars in cell wall hydrolysate

3) Kind of lipids (isoprenoid quinone, phospholipid, fatty acid including mycolic acid)

4) DNA-DNA identity with analogous species

(f) Obligate anaerobes, lithotrophic bacteria, photosynthetic bacteria should be described in accordance with the above with reference to the Bergey's Manual of Systematic Bacteriology or recent studies.

(g)In addition to the above characters, other characteristics to characterize, if any, should be described.

4. If the new species belongs to actinomycetes, the followings should be described. In principle, the medium stated below should be used. However, if there is any other medium on which the new species reveals the characteristic features, it may additionally be used. Hereinafter, the International Streptomyces Project is abbreviated as "ISP".

(a) Morphological characters

It is required to describe morphological characters of mycelia, spores, etc. which differentiate the taxonomic genus or species of the actinomycetes, based on observation of the species grown on yeast malt agar medium (ISP medium No.2), oatmeal agar medium (ISP medium No.3), starch inorganic salt agar medium (ISP medium No.4) or glycerin asparagine agar medium (ISP medium No.5).

The following are examples.

a) Hypha

The formation of aerial hypha, septation (fragmentation) of aerial or substrate hypha and the motility of septated (fragmented) hypha

b) Spores

1) The formation of spores or sporangia as well as their adhering site (on aerial or substrate hypha)

2) The number of spores per chain on sporophore and the shape of the chain (linear, curving, circular, spiral, trochoidal)

3) Shape and size of sporangia, as well as the number sporangiospore per sporangium, when sporangia exist.

4) Characteristics (surface structure, size, motility, flagella) of spores (including sporangiospore)

c) Others

The formation of chlamydospores, coremia, rhizomorph, pseudosporangia or sclerotia, type of fission of mycelia, etc.

(b) Cultivation characters

It is recommended to describe the state of growth on yeast malt agar medium (ISP medium No.2), oatmeal agar medium (ISP medium No.3), starch inorganic salt agar medium (ISP medium No.4) or glycerin asparagine agar medium (ISP medium No.5), the state of adhesion and the color tone of aerial mycelia, the color tone of substrate mycelia, the production of pigment diffusing into media, etc.

- (c) Physiological characters
 - a) Range of growing temperature
 - b) Formation of melanin like pigments

Peptone yeast iron agar medium (ISP medium No.6) and tyrosine agar medium (ISP medium No.7) should be used.

c) Utilization of carbon sources

At least, the utilization of the carbon sources below shall be described.

- 1) L-arabinose
- 2) D-fructose
- 3) D-glucose
- 4) D-inositol
- 5) D-mannitol
- 6) raffinose
- 7) L-rhamnose
- 8) sucrose
- 9) D-xylose

In principle, Pridham & Gottlieb agar medium (ISP medium No.9) should be used as a base medium. When any other medium is used, the medium used should be expressly described.

(d) Chemotaxonomic characters

a) It is preferable to identify optical isomers (LL- and meso-type) of diaminopimelic acid when it is present in a cell.

b) Other chemotaxonomical characteristics necessary to characterize new species, if any, should also be described.

The following are examples.

1) Amino acid composition of cell wall peptidoglycan

2) Kind of reducing sugars in hydrolysate of the whole cell or cell wall

3) Kind of lipids (isoprenoid quinone, phospholipid, fatty acid including as mycolic acid)

4) DNA-DNA identity with analogous species

5) Base composition (GC content) of DNA

(e) In addition to the above, other characteristics characterizing the microorganism, if any, should be described.

The following are examples of media formulation used in identifying yeasts, mold, mushroom, bacteria and actinomycetes. Commercially available media may also be used. In such cases the manufacturer and the trade name of the product should be described.

1.Yeast

(1) YM medium

Peptone	5 g
Yeast extract	3 g
Malt extract	3 g
D-glucose	10 g
Deionized water	1000ml

(2) Potato glucose agar medium

Mash 100g of potato, immerse in 300 ml of water and allow to stand for several hours in a cold dark place. Filter this mash through a piece of cloth and boil the filtrate at 120 for one hour. After cooling, add water to 1000 ml, and further add 20 g of D-glucose and 20 g of agar.

(3) Gorodkowa medium

Peptone	1 %
Bouillon	1 %
D-glucose	0.25 %
NaCl	0.5 %
Agar	2.5 %
(4) Sodium acetate medium	
CH₃COONa	0.4 %
Agar	1.5 %
Raffinose	0.04 %)
(5) Malt extract agar medium	
Powdered malt extract	20 g
Agar	12 g
Deionized water	400 ml
(6) Vegetable extract agar me	dium
Vegetable extract	500 ml
Baker's yeast	10 g
Agar	20 g
Deionized water	500 ml
рН	7.0
(7) Gypsum medium

Impaste calcined gypsum by adding an equal volume of water. Pour the paste into a suitable frame (a conical trapezoid frame made of copper, of which inner surface has been thinly coated with vaseline beforehand). Immediately after that, tap the frame on the desk in order to let gases out of the gypsum. Allow the gypsum to stand for about 30 minutes until it solidifies. Take the gypsum out of the frame, shave its surface smoothly and bore a small hole for placing a sample of yeast. After solidification, wipe off vaseline from the gypsum. Boil the gypsum for about 30 minutes, while changing water once or twice.

Immediately after that, take out the gypsum using a sterile pincette and put into a previously sterilized large petri dish. Add sterilized water to the half of the height of the gypsum block. Preculture yeast on wort, koji soup, YM or Miller media two or three times. Collect fresh yeast by removing the supernatant of the liquid culture, dispense the fresh yeast into the small hole of the gypsum using a platinum loop or a microspoon and incubate at 20 to 25 .

(8) Corn meal agar medium

(c) com mear agar mearan	
Corn meal	12.5 g
Deionized water	300 ml
(After heating in warm bath	n at 60 for 1 hour, filter and make up its filtrate to 300
ml)	
Agar	3.8 g
(9)Potato yeast exudate glucose	agar medium
Potato (peeled and diced)	200 g
Baker's yeast	30 g
Deionized water	1000 ml
(boil for 30 minutes to obtai	n exudate)
Glucose	20 g
Agar	15 g
2. Mold or mushroom	
(1) Malt extract agar medium	
Malt extract	20 g
Glucose	20 g
Peptone	1 g
Agar	25 g
Deionized water	1000 ml
(2) Potato glucose agar medium	
Potato (peeled and diced)	200 g
Deionized water	1000 ml

(prepare exudate using the	above)
Glucose	20 g
Agar	15 g
(3) Czapek agar medium	
NaNO ₃	3 g
K ₂ HPO ₄	1 g
$MgSO_4 \cdot 7 H_2O$	0.5 g
KCI	0.5 g
$FeSO_4 \cdot 7 H_2O$	0.01 g
Sucrose	30 g
Agar	15 g
Deionized water	1000 ml
(4) Sabouraud agar medium	
Maltose or glucose	40 g
Peptone	10 g
Agar	15 g
Deionized water	1000 ml
(5) Oatmeal agar medium	
Oatmeal	30 g
Deionized water	1000 ml
(prepare exudate using the	e above)
Agar	20 g
(6) Synthetic mucor agar mediur	n
Glucose	40 g
Asparagine	2 g
KH ₂ PO ₄	0.5 g
$MgSO_4 \cdot 7 H_2O$	0.025 g
Thiamin chloride	0.5 mg
Agar	15 g
Deionized water	1000 ml
(7) YpSs agar medium	
Soluble starch	15 g
Yeast extract	4 g
K ₂ HPO ₄	1 g
$MgSO_4 \cdot 7 H_2O$	0.5 g
Agar	15 g
Deionized water	1000 ml

(8) Glucose dry yeast agar medium (for mycorrhiza forming fungi)

Glucose		10 ថ្	g
Dry yeast		5 g	
KH ₂ PO ₄		1 g	
$MgSO_4 \cdot 7 H_2O$		0.5	g
Agar		15 <u>(</u>	g
Deionized water			1000 ml
pH (adjusted by	1 N	HCI)	5.0

(9) Medium for assaying phenol oxidase reaction

Add 0.5 % of tannic acid and 0.5 % of gallic acid to wort agar medium or potato glucose agar medium.

3. Bacteria

(1) Broth medium	
Broth	10 g
Peptone	10 g
NaCl	5 g
Deionized water	1000 ml
рН	7.2
(2) Broth agar medium	
Broth	10 g
Peptone	10 g
NaCl	5 g
Agar	15-20 g
Deionized water	1000 ml
рН	7.2
(3) Broth gelatin medium	
Broth	10 g
Peptone	10 g
NaCl	5 g
Gelatin	100-300 g

pH (4) Litmus milk

Deionized water

Add adequate amount of litmus to fresh skim milk or reconstituted skim milk adjusted to the density of original milk.

1000 ml

7.2

4. Actinomycetes

Sterilization should be performed under high pressure at 121⁰C for 20 minutes, unless

otherwise stated.

(ISP medium No.2)
4 g
10 g
4 g
1000 ml
15-20 g
7.3

(2) Oatmeal agar medium (ISP medium No.3)

Oatmeal	20 g
Trace salts solution	1 ml
$FeSO_4 \cdot 7 H_2O$	0.1 g
$MnCl_2 \cdot 4 H_2O$	0.1 g
$ZnSO_4 \cdot 7 H_2O$	0.1 g
Deionized water	100 ml
Agar	18 g
рН	7.2

Boil oatmeal in 1000 ml of deionized water for 20 minutes and filtrate through cheese cloth. Supplement the loss with deionized water. Adjust pH by adding trace salts solution, then add agar.

(3) Starch inorganic salt agar medium(ISP medium No.4)

Liquid I: Impaste 10 g of soluble starch by adding small amount of cold deionized water and dilute to make 500 ml.

Liquid II:

-	
K_2HPO_4	1 g
$MgSO_4 \cdot 7 H_2O$	1 g
NaCl	1 g
$(NH_4)_2SO_4$	2 g
CaCO ₃	2 g
Deionized water	500 ml
Trace salts solution	1 ml (same as(2))
Mix Liquid I and Liquid II,	and add 15-20 g of agar.

(4) Glycerin asparagine agar medium(ISP medium No.5)

Glycerin	10 g	
L-asparagine	1 g	
K ₂ HPO ₄	1 g	
Deionized water	1000 ml	
Trace salts solution (same as(2)) 1 ml		
Agar	15-20 g	

рΗ

(5) Peptone yeast iron agar	medium (ISP medium No.6)
-----------------------------	--------------------------

1) Peptone iron agar	36.58 g
Peptone	15 g
Proteose peptone	5 g
Iron ammonium citrate	0.5 g
K ₂ HPO ₄	1 g
Na_2S2O_3	0.08 g
Agar	15 g
2) Yeast extract	1 g
3) Deionized water	1000 ml
Mix 1), 2) and 3), and adjust pH to	7.0-7.2.

(6) Tyrosine agar medium (ISP medium No.7)

Glycerin	15 g	
L-tyrosine	0.5 g	l
L-asparagine	1 g	
K ₂ HPO ₄	0.	5 g
$MgSO_4 \cdot 7 H_2O$	0.5 g	l
NaCl	0.5 g	l
FeSO ₄ ·7 H ₂ O	10 m	g
Deionized water		1000 ml
Trace salts solution (same a	s(2))	1 ml
Agar	15-2	0 g
рН		7.2-7.4

(7) Pridham & Gottlieb agar medium (ISP medium No.9)

$(NH_4)_2 SO_4$	2.64 g
KH ₂ PO ₄	2.38 g
K ₂ HPO ₄	5.65 g
$MgSO_4 \cdot 7 H_2O$	1 g
Deionized water	1000 ml
Pridham Gottlieb trace	salts solution 1 ml
$CuSO_4 \cdot 5H_2O$	0.64 g
FeSO ₄ ·7 H ₂ O	0.11 g
MnCl ₂ ·4 H ₂ O	0.79 g
ZnSO ₄ ·7 H ₂ O	0.15 g
Deionized water	100 ml

Dissolve all the ingredients, adjust pH to 6.8-7.0 (use 1 N NaOH or 1 N HCl as required) and add 15-20 g of agar. Sterilize the agar medium and cool it down to 60 , and add 10 % of various carbon sources sterilized separately (filtration sterilization, ether sterilization, ethylene oxide sterilization etc.) to the agar medium

in the ratio of 1:10.

Trace salts solution should be stored at 3 to 5 and returned to room temperature before use. Do not use a trace salt solution which was stored more than one month after prepared or which produced precipitate during storage.

[Appendix 2] (Omitted) [Appendix 3] (Omitted) Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part VII: EXAMINATION GUIDELINES FOR INVENTIONS IN SPECIFIC FIELDS

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Chapter 3: Medicinal Inventions

In this chapter, matters requiring special judgment and handling in examining patent application relating to medicinal inventions are mainly explained.

A medicinal invention here means "an invention of a product" which intends to provide a new medicinal use (Note 2) of a material (Note 1), based on discovering an unknown attribute of the material.

- (Note 1) "A material means a component used as an active ingredient, including a compound, a cell, a tissue and a chemical substance (or a group of chemical substances) whose chemical structure is not specified, such as an extract from a natural product, and a combination thereof. Hereinafter, the material concerned is referred to as "compounds etc."
- (Note 2) "A medicinal use" means (i) an application to the specific disease or (ii) an application to the specific disease in which dosage and administration such as dosing time, dosing procedure, dosing amount or administration areas (hereinafter referred to as "dosage and administration") is specified.

Refer to Part I or Part II for those matters not explained in this Chapter in relation to description requirements of the Description and the Claims, and requirements for patentability.

1. Description Requirements of the Description and the Claims

1.1 Claims

1.1.1 Article 36(6)(i) of the Patent Act

As Article 36(6)(i) of the Patent Act requires that an invention for which a patent is sought shall be stated in the detailed explanation of the invention, an invention stated in the claim should not extend the scope described in the detailed explanation of the invention. A determination on whether the statement in a claim complies with Patent Act Article 36(6)(i) shall be made based on comparison and review of the claimed invention and an invention described in the detailed explanation (Refer to Examination Guidelines Part I, Chapter 1, 2.2.1).

Typical examples of violation of Article 36(6)(i) are as follows.

(1) While an antiemetic drug having an ingredient A as an active ingredient is claimed, neither description about pharmacological test method nor pharmacological data are described in the detailed explanation of the invention, and furthermore it would not be possible to presume that the ingredient A was effective as an antiemetic drug in the light of the common general technical knowledge as of the filing (Refer to Examination Guidelines Part I, Chapter 1, 2.2.1.1 Example 9),

(2) While therapeutic agents for a specified purpose whose active ingredients are compounds

defined by desired properties are comprehensibly claimed, and in the detailed explanation of the invention usefulness as therapeutic agents for a specified purpose is verified for only a small part of the compounds which is included in the claim, a person skilled in the art could not presume, beyond this, the usefulness of chemical substances in general included in the claim as therapeutic agents in the light of the common general technical knowledge as of the filing (Refer to Examination Guidelines Part I, Chapter 1, 2.2.1.1 Example 7).

(Reference: Tokyo High Court Judgment Hei 15.12.26 (Heisei 15 (Gyo Ke) 104), Intellectual Property High Court Judgment Hei 19.3.1 (Heisei 17 (Gyo Ke) 10818))

1.1.2 Article 36(6)(ii) of the Patent Act

As Article 36(6)(ii) of the Patent Act requires that an invention for which a patent is sought is clear, a claim shall be stated in such a manner that an invention for which a patent is sought can be clearly identified from a single claim.

Considering the purport of Article 36(5) of the Patent Act, various forms of expression can be used in the claim by the applicant to define an invention for which a patent is sought. For example, in the case of "an invention of a product", various forms of expression such as operation, function, property, characteristics, method, usage and others can be used as matters to define an invention in addition to the forms of expression such as combination of products or the structure of products. As for a medicinal invention, various forms of expression can be used as well (example 3).

On the other hand, since a claim should be stated in such a manner that an invention for which a patent is sought can be clearly identified from a single claim according to the provision of Article 36(6)(ii), it should therefore be noted that such definition of an invention by applicant using the various forms expression is allowed as far as the claimed invention can be clearly identified.

For example, it should be noted that the scope of the medicinal invention usually cannot be deemed clear, if the active ingredient of the medicinal invention is defined by its function or characteristics and a person skilled in the art cannot conceive of a concrete active ingredient even by taking into consideration the common general technical knowledge as of the filing (refer to Examination Guidelines, Part I; Chapter 2, 2.2.2.1(6)3(i)).

In case that the statement in the claim does not express a specific medicinal use but a general medicinal use, where the claim directed to a medicinal invention (for example, in case where the statement expresses not a "pharmaceutical agent for disease X consisting of..." but a "pharmaceutical agent consisting of..."), it should not be deemed a violation of Article 36(6)(ii) merely because the statement expresses a general use (i.e., merely because the scope of the claim is relatively broad) unless the expression makes unclear the invention for which a patent is sought. The detailed explanation of the invention, however, shall comply with the provision of Article 36(4)(i) (Refer to Examination Guidelines, Part I, Chapter 1, 2.2.2.2).

Medicinal invention can be described in a claim as "an invention of a product" as follows:

Example 1: A medicine for disease Z containing an active ingredient A

Example 2: A medicinal composition for disease Y containing an active ingredient B

Example 3: A medicine for disease W containing active ingredients C and D in combination

Example 4: A kit for disease V comprising an injection agent including an active ingredient E and an oral agent including an active ingredient F.

1.2 Detailed Explanation of the Invention

1.2.1 Enablement Requirement

As a medicinal invention resides in technical field where it is generally difficult to infer how to make and use a material on the basis of its structure and its name, normally one or more representative embodiments or working examples are necessary which enable a person skilled in the art to work the invention, except the case where a person skilled in the art can manufacture the compounds etc. and can use the compounds etc. for medicinal use, in the light of common general technical knowledge as of the filing. As for working examples supporting the medicinal use, a description of the result of the pharmacological test is usually required (Refer to Examination Guidelines, Part I, Chapter 1, 3.2.1 (5)). The following examples display concrete practices regarding the description of the result of the pharmacological test sufficient to support a pharmacological effect.

(1) Description of the Result of the Pharmacological Test

Since the result of the pharmacological test is to confirm the pharmacological effect of compounds etc. of the claimed medicinal invention, all of the followings should be made sufficiently clear, in principle; (i) which compounds etc. are (ii) applied to what sort of the pharmacological test system, (iii) what sort of result is obtained, and (iv) what sort of relationship the pharmacological test system has with the medicinal use of the claimed medicinal invention. It should be noted that the result of the pharmacological test should be described with numerical data as a general rule, but when the result cannot be described with the numerical data due to the nature of the pharmacological test system, an objective description equivalent to the numerical data for example, a description of the objective observation result by a medical doctor may be accepted. Furthermore, a clinical test, an animal experiment, and in-vitro test are employed as the pharmacological test system.

(2) Examples of Cases where Reasons for Refusal are Notified

(a) A case in which the result of the pharmacological test is not described

Generally, since it is difficult to predict whether the compounds etc. are actually usable for a specific medicinal use from only the structure and name of the compounds etc., it is still difficult for a person skilled in the art to predict whether the compound etc. are actually usable for the specific medicinal use when an effective dose, a mode of administration, and formulation method are described in the description as filed but the result of the pharmacological test is not described. Accordingly, in such a case, in principle, reasons for refusal are notified. It should be noted that even if the result of the pharmacological test is submitted afterward, the reasons for refusal are not overcome.

(Tokyo High Court Judgment Hei 10.10.30 (Heisei 8 (Gyo Ke) 201) "Judgment on Antiemetic Drug": Examination Guidelines Part I, Chapter 1 5. Examples 5.3, Example 3-5: Tokyo High Court Judgment Hei 14.10.1 (Heisei 13 (Gyo Ke) 345: Tokyo High Court Judgment Hei 15.12.22 (Heisei 13 (Gyo Ke) 99)

(b) A case in which the existence of a pharmacological effect of the compounds etc. of a claimed medicinal invention can not be confirmed, as the compounds etc. used in the pharmacological test are not specified

It should be noted that, in many cases the existence of the pharmacological effect of the compounds etc. of the claimed medicinal invention cannot be confirmed; for example, when the compounds etc. used in the pharmacological test system described in the description as filed are merely stated as being "any of a plurality of the compounds etc." and it is not concretely specified which compounds etc. are actually used, this case comes under the case where (i) in "(1) Description of the Result of the Pharmacological Test" is not clear.

2. Requirements for Patentability

2.1 Industrial Applicability

As a medicinal invention means "an invention of a product.", it does not come under the category of "methods of surgery, therapy or diagnosis of humans" despite the fact that the application possibly involves the administration of a dosage to a human body or the spreading on the human body, and it is considered to be an "industrially applicable invention." It should be noted that a medicinal invention defined by combination of two or more medicines, or defined by dosage and administration is handled in the same way because it is also "an invention of a product" (Refer to the Examination Guidelines Part II, Chapter 1, 2.1 "Industrial Applicability").

2.2 Novelty

2.2.1 Principle of Method of Determining whether a Claimed Medicinal Invention is Novel

A medicinal invention means "an invention of a product" based on discovering an unknown attribute of compounds etc. and finding that compounds etc. are suitable for a new medicinal use due to the presence of such attribute, and its novelty is judged from two points of view; (i) compounds etc. having a specific attribute and (ii) a medicinal use based on the attribute.

(Tokyo District Court Judgment Hei 4.10.23 (Heisei 2 (Wa) 12094))

2.2.2 Methods of Judging Novelty

(1) Finding of a claimed medicinal invention

The finding of a claimed invention should be made on the basis of the statements in the claim. Matters (terms) stated in the claim defining the claimed invention should be construed in the light of the statements in the description, the drawings and the common general technical knowledge as of the filing. (Refer to Examination Guidelines Part II, Chapter 2, 1.5.1.)

(2) Finding of an invention described in a publication

Since a medicinal invention consists of compounds etc. having a specific attribute and a medicinal use based on the attribute, it is necessary that both compounds etc. and the medicinal use are described in a publication (or essentially described, though not literary, in the publication) in order to find that the medicinal invention is described in the publication.

Unless it is clear that an invention is described in a publication in such a manner that a person skilled in the art can make or acquire compounds etc. of claimed medicinal invention based on the description of the publication and common general technical knowledge as of the filing, the medicinal invention shall not be deemed to be described in the publication.

Furthermore, if it is unclear that the invention is described in the publication in such a manner that a person skilled in the art can use the compounds etc. for a medicinal use based on the description of the publication or common general technical knowledge as of the filing, the medicinal invention also shall not be deemed to be described in the publication (refer to Part II, Chapter 2, 1.5.3(3)(ii)).

For example, in the case where a medicinal use is merely listed without any support in the publication, it cannot be considered that the invention is described in the publication in such a manner that it is clear that a person skilled in the art can use the compounds etc. for the medicinal use, and the medicinal invention shall not be deemed to be described in the publication.

(3) Determining whether a claimed medicinal invention is novel

Guidelines for determining whether a claimed medicinal invention is novel are stated below in sections (3-1) to (3-2), based on "Determining whether a Claimed Invention is Novel" in Examination Guidelines Part II, Chapter 2, 1.5.5 and "Method of Determining whether a Claimed Medicinal Invention is Novel" of this Chapter 2.2.1.

Hereinafter, "a cited invention" means a cited invention as provided in Patent Act Article 29(1)(i)-(iii).

(3-1) Regarding the compounds etc. having a specific attribute

When the compounds etc. having a specific attribute of the claimed medicinal invention differs from the compounds etc. of a cited invention, the novelty of the claimed medicinal invention is not denied.

(3-2) Regarding the medicinal use based on a specific attribute

(3-2-1) Application to a specific disease

Even if the compounds etc. of the claimed medicinal invention do not differ from the compounds etc. of the cited invention, the novelty of the claimed medicinal invention is not denied when the claimed medicinal invention and the cited invention differ in medicinal use of applying to a specific disease based on the attribute of such compounds etc. (Examples 1 to 3)

For example, when a claimed invention is "a medicine for disease Z comprising an active ingredient A," and a cited invention is "a medicine for disease X comprising an active ingredient A," the novelty of the claimed medicinal invention is not denied, in the case that it is clear that the disease X and the disease Z are different diseases in the light of the common general technical knowledge as of the filing.

The lines of thoughts regarding the differences in medicinal use are as follows.

(a) Even if the medicinal use of the claimed medicinal invention and the medicinal use of the cited invention are different in expression, the novelty of the claimed medicinal invention is denied when the medicinal uses are judged to come under (i) or (ii) described hereunder taking into consideration the common general technical knowledge as of the filing.

(i) In the case that the medicinal use is conceived from a working mechanism thereof,

(ii) In the case that the medicinal use inevitably results from closely related pharmacological effect.

[Example of (i) above]

(Cited invention) Bronchodilator

 \rightarrow (Claimed medicinal invention) Therapeutic agent for Asthma (Cited invention) Vasodilator \rightarrow (Claimed medicinal invention) Hypotensive agent (Cited invention) Coronary vessel dilator

 \rightarrow (Claimed medicinal invention) Therapeutic agent for Angina (Cited invention) Histamine release inhibitor

 \rightarrow (Claimed medicinal invention) Anti-allergy drug

(Cited invention) Histamine H-2 receptor inhibitor

 \rightarrow (Claimed medicinal invention) Therapeutic agent for Gastric ulcer

[Example of (ii) above]

(Cited invention) Cardiotonic agent \rightarrow (Claimed medicinal invention) Diuretic agent (Cited invention) Anti-inflammatory agent

→ (Claimed medicinal invention) Painkiller

(Note) It is known in the field of medical treatment that there are certain compounds etc. having two or more medicinal uses inevitably. However, in the examples listed under (ii) above, it is also well known that all the compounds etc. having a first medicinal use coming under (ii) above do not have necessarily a second medicinal use. Accordingly, when the novelty of the claimed medicinal invention in such a case is considered, it is necessary to consider the common general technical knowledge as of the filing regarding the structure-activity correlation or the like of the compounds etc.

(b) When the medicinal use of the cited invention is expressed in a more specific concept of the medicinal use of the claimed medicinal invention, the novelty of the claimed medicinal invention is denied.

[Example]

(Cited invention) Antipsychotic agent

→ (Claimed medicinal invention) Agent acting on central nervous system
 (Cited invention) Therapeutic agent for Lung cancer
 → (Claimed medicinal invention) Anticancer agent

- (c) When the medicinal use of the cited invention is expressed as a generic concept of the medicinal use of the claimed medicinal invention and the medicinal use of the claimed medicinal invention is expressed as a more specific concept which can be conceived from the medicinal use of the cited invention based on the common general technical knowledge as of the filing, the novelty of the claimed medicinal invention is denied.
- (Note) It should be noted that a medicinal use expressed as a more specific concept can not be conceived only because the medicinal use expressed as a more specific concept is conceptually included in the medicinal use expressed in a generic concept or the medicinal use expressed in a more specific concept can be listed from the medicinal use expressed in a generic concept.
- (d) When the medicinal use of the claimed medicinal invention is only expressed as a newly found working mechanism in place of the medicinal use of the cited invention and both uses cannot be substantially distinguished from each other, the novelty of the claimed medicinal invention is denied.

[Example]

(Cited invention) Antibacterial agent

 \rightarrow (Claimed medicinal invention) Bacterial cell membrane formation inhibitor

(e) When there is no difference in the component compositions and the medicinal uses of the claimed medicinal invention and the cited invention, and the component contained in the claimed medicinal invention is merely expressed in a manner that the working mechanism of a part of the component of the cited invention is defined as if it is a use, the novelty of the claimed medicinal invention is denied.

[Example]

(Cited invention) Skin anti-inflammatory agent containing indomethacin and capsicum extract

→ (Claimed medicinal invention) Skin anti-inflammatory agent containing indomethacin and long-term stability improving agent for indomethacin composed of capsicum extract

(Note) As the component constitutions of the composition are the same, it is obvious that the components contained in the skin anti-inflammatory agent of both inventions perform the same working effect despite the subjective object for adding. Accordingly, even if the capsicum extract is defined as a stabilizer for improving long-term stability of the indomethacin, this cannot make the invention different from the invention described in the publication. (Tokyo High Court Judgment Hei 13.12.18 (Heisei 13(Gyo Ke) 107)

(3-2-2) Application to a specific disease in which dosage and administration is specified Even if compounds etc. of a claimed medicinal invention do not differ from those of a cited invention and there is no difference in the applied disease, the novelty of the claimed invention is not denied when there is a difference between the claimed medicinal invention and the cited invention in medicinal use of applying to a specific disease with a specific dosage and administration based on the attribute of compounds etc. thereof (Example 4 to 6).

2.3 Inventive Step

2.3.1 Inventive Step regarding Medicinal Invention

- (1) Finding of a claimed medicinal invention The finding of a claimed invention is handled as described in "2.2.2(1)."
- (2) Finding of an invention described in a publication

The finding of a invention described in a publication is handled as described in "2.2.2(2)."

(3) The judgment of the inventive step

The judgment of the inventive step regarding medicinal invention is handled as described in Examination Guidelines Part II, Chapter 2, 2. Inventive Step.

2.3.2 Examples of Concrete Practices Regarding Judgment of Inventive Step

(1) Relationship between the medicinal use and the working mechanism

Even if the medicinal use of the claimed medicinal invention differs from the medicinal use of the cited invention, when the relevance of the working mechanism between both has been derived from the state of the art as of the filing, the inventive step of the claimed medicinal invention is usually denied, unless there is another ground for inferring inventive step such as advantageous effect or the like.

(2) Conversion of a medicine for animals other than human beings to a medicine for human beings

A claimed medicinal invention, derived by merely converting compounds etc. of a cited invention used for the same or a similar kind of diseases of animals other than human beings

into a medicine for human beings, usually does not involve an inventive step even if there is no suggestion in the contents of the cited invention about the pertinent conversion, unless there is another ground for inferring inventive step such as advantageous effect or the like.

The situation is the same with the conversion of a medicine for human beings to into a medicine for animals other than human beings.

(3) Medicine formulated by combining two or more medicinal components

In order to solve a problem well known to a person skilled in the art such as the increase in a medicinal effect, or the reduction of a side effect, optimization of the combination of two or more medicinal components is among exercise of ordinary creativity of a person skilled in the art. When the difference between the claimed medicinal invention and the cited invention falls only on these points, ordinarily, the inventive step of the claimed medicinal invention is denied.

For example, if the pertinent combination corresponds to the followings, in most cases, it is reasoned that a person skilled in the art would have easily arrived at the claimed medicinal invention and the inventive step is usually denied (Example 8 to 11):

(a) combination of publicly known components of which major effects are the same,

- (b) combination of a major component having a publicly known problems related to the efficacy thereof with a subordinate component having publicly known ability to eliminate the problem (for example, in case of the combination of the major component having a publicly known side effect and a subordinate component having a publicly known ability of reducing the side effect), and
- (c) combination of publicly known components having respective curative effects for a variety of symptoms arising from a major disease, and the like.

However, in the case where there is another ground for inferring the inventive step such that an advantageous effect compared with the cited invention cannot be foreseen by a person skilled in the art from the state of the art, the claimed medicinal invention is considered to involve an inventive step (Example 7).

Although the medicine formulated by combining two or more medicinal components can be assumed to be claimed in such a manner as "combination drug for the treatment of...," "composition for the treatment of...," "...medicine characterized in that ... and ...are combined," there is no fundamental difference in any of the cases as the method of judgment.

(4) Medicine characterized in the medicinal use of an application to a specific disease with a specific dosage and administration

As for a specific disease, in order to solve a problem well known to a person skilled in the art such as the increase of a medicinal effect, the reduction of an adverse effect or the improvement in drug compliance, the optimization of dosage and administration of a medicine is among exercise of ordinary creativity of a person skilled in the art. Accordingly, in the case where the advantageous effect compared with the cited invention can be foreseen by a person skilled in the art, the inventive step is usually denied, even if the claimed medicinal invention is novel compared with the cited invention in that applied disease does not differ but dosage and administration differ from each other (Example 6).

However, in the case where there is another ground for inferring the inventive step such that an advantageous effect compared with the cited invention cannot be foreseen by a person skilled in the art from the state of the art, the claimed medicinal invention is considered to involve an inventive step (Example 4 and 5).

2.4 Patent Act Article 29-2

2.4.1 Application of Patent Act Article 29-2

(1) Finding of a claimed medicinal invention The finding of a claimed invention is handled as described in "2.2.2(1)."

(2) Finding of a invention described in a initial description etc. of another application.

The finding of a invention described in a initial description etc. of another application is handled as described in "2.2.2(2)."

(3) The judgment of the requirement of "Patent Act Article 29-2"

The judgment of the requirement of "Patent Act Article 29-2" is handled as described in Examination Guidelines Part II, Chapter 3, Patent Act Article 29-2.

2.4.2 Examples of Concrete Practices Regarding Judgment of Patent Act Article 29-2

A claimed medicinal invention and an invention described in a prior application are deemed to be substantively identical if the difference between them is considered to be a very minor difference (e.g. addition, deletion, or replacing of well-known or commonly used art, generating no new effects) in an embodied means to solve a problem.

2.5 Patent Act Article 39

2.5.1 Application of Patent Act Article 39

(1) Finding of a claimed medicinal invention

The finding of a claimed invention is handled as described in "2.2.2(1)."

(2) The judgment of the requirement of "Patent Act Article 39"

The judgment of the requirement of "Patent Act Article 39" is handled as described in Examination Guidelines Part II, Chapter 4, Patent Act Article 39.

2.5.2 Examples of Concrete Practices Regarding Judgment of Patent Act Article 39

In a case in which the invention of a prior application having a generic concept has a relationship with the invention of subsequent application having a more specific concept, and in

a case in which the matters necessary for defining the subsequent application are disclosed in the prior application and the invention of the prior application having the generic concept is deemed to have de facto choices in the range of the disclosed matters, the invention of the subsequent application is the same as the invention of the prior application.

The same method is practiced in judging an identity between each claimed invention of two applications filed on the same day.

3. Examples

Explanation of Examples

These examples are prepared for the purpose of explaining examination practices regarding medicinal inventions. Therefore, it is to be noted that the descriptions of claims etc. in these examples are not necessarily exemplary cases because they are modified, e.g., simplified to make the explanation easier to understand. Additionally, it is to be noted that it does not mean that there is no reason for refusal except for reasons discussed in each example (for instance, description requirements for description and claims and the like).

3.1 Medicine characterized in a medicinal use applied to a specific disease

[Example 1] An active ingredient is publicly known, a medicinal use is novel

Claim

[Claim 1] A pharmaceutical composition for treatment of Alzheimer's disease comprising a compound A as an active ingredient.

Outline of Detailed Explanation of the Invention

It is found that a compound A, which is known as an active ingredient for an antimicrobial agent, can inhibit the function of acetylcholine-esterase, and suppress a degradation of acetylcholine.

It is shown in the example with the result of the pharmacological test that a compound A has an excellent inhibitory activity of acetylcholine-esterase, and decreases the symptom of Alzheimer's disease.

Result of Prior Art Search

Although it is already known that a compound A is an active ingredient for an antimicrobial agent, the prior art documents do not describe a pharmaceutical composition for treatment of Alzheimer's disease comprising a compound A as an active ingredient. Moreover, the documents do not describe or suggest the existence of the structural similarity between a compound A and compounds having an acetylcholine-esterase activity and the relationship between a mechanism of a compound A for affecting as an antimicrobial agent and the treatment of Alzheimer's disease.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

As a medicinal use of a compound A for a treatment of Alzheimer's disease is clearly distinguished from a known medicinal use for antimicrobial agent, the medicinal invention of claim 1 is novel.

And because there are no prior art documents showing a motivation for applying a compound A to the treatment of Alzheimer's disease, such as the existence of structural similarity between a compound A and a compound having an acetylcholine-esterase activity, or the relationship between a mechanism of a compound A for affecting as antimicrobial agent and a treatment of Alzheimer's disease, the medicinal invention of claim 1 involves an inventive step.

[Example 2] Medical materials (cells etc.) derived from the living organism which are publicly known, but a medicinal use is novel

Claim

[Claim 1] An implant material for treatment of cardiac infarction, which contains cell sheets consisting of A-cells.

Outline of Detailed Explanation of the Invention

It was found that cardiac function was recovered by transplantation of cell sheets consisting of A-cells to a site of cardiac infarction.

It is described in the example with the result of the pharmacological test that cardiac function is recovered and the symptom of cardiac infarction is reduced by transplantation of the said cell sheets to the site of cardiac infarction in a model rat of cardiac infarction.

Result of Prior Art Search

It is publicly known that cell sheets are obtained from A-cells and that they are used as implant materials. However, it is not described in any prior art documents that the said cell sheets are transplanted to the site of cardiac infarction and that the symptom of cardiac infarction is reduced by the transplantation.

Furthermore, from the state of the art as of the filing, it is not possible to predict that cardiac function is recovered and the symptom of cardiac infarction is reduced by transplantation of A-cells.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

The medicinal invention of the claim 1 is considered to be novel because the medicinal use (treating cardiac infarction) of cell sheets consisting of A-cells is different from the conventionally-known medicinal use of the sheets.

The medicinal invention of the claim 1 is considered to involve the inventive step because the prior art documents have not been publicly known which describe the relationship between the A-cell and recovery of cardiac function etc., and then motivate the use of cell sheets consisting of A-cells for treatment of cardiac infarction.

[Remark]

It should be noted that, if the claimed invention is related to the cell with the limitation of use such as "A-cell for the treatment of cardiac infarction", such limitation of use usually only indicates the utility of the cell itself and the claim should be construed to represent the cell per se with no limitation of use. Therefore, in this case, the difference between "A-cell for the treatment of cardiac infarction" and publicly known "A-cell" with no limitation of use cannot be acknowledged in view of composition of matters (refer to Examination Guidelines, Part II; Chapter 2, 1.5.2(2)).

[Example 3] Medicine characterized in a medicinal use of the cells specified by manufacturing process

Claims

[Claim 1] An anticancer agent comprising the cells as an active ingredient obtained by the following process consisting of the steps of;

(1) culturing W-cells obtained from a human body in medium A containing 0.1~0.2 weight % of protein X for 5 to 10 hours and collecting them, and

(2) disseminating the collected cells in the step (1) on an extracellular matrix Y, culturing them in medium B containing 0.1~0.2 weight % of protein Z for 24 to 48 hours, and collecting them.

[Claim 2] A method of manufacturing an anticancer agent consisting of the steps of;

(1) culturing W cells obtained from a human body in medium A containing $0.1 \sim 0.2$ weight % of protein X for 5 to 10 hours and collecting them,

(2) disseminating the collected cells in the step (1) on an extracellular matrix Y, culturing them in medium B containing $0.1 \sim 0.2$ weight % of protein Z for 24 to 48 hours, and collecting them, and

(3) a step of producing a pharmaceutical formulation by using the cells collected in the step(2),

wherein the anticancer agent contains the cells obtained by the process consisting of the steps (1) and (2) as an active ingredient.

Outline of Detailed Explanation of the Invention

It was found that the anticancer agent containing cells obtained by the process consisting of the steps of (1) and (2) as an active ingredient inhibited angiogenesis peculiar to a cancer tissue and diminished the cancer growth.

It is described in the example with the result of the pharmacological test that the cells obtained by a process consisting of the steps of (1) and (2) in the example have an excellent inhibitory effect of angiogenesis and of diminishing effect of the cancer growth.

Result of Prior Art Search

It is publicly known that W-cell obtained from a human body is processed through the steps of (1) and (2) and that cells processed through the steps have an immunosuppressive effect. However, it has not been known that W-cell itself or the cells processed through the steps consisting of (1) and (2) has an inhibitory effect of angiogenesis and an anticancer effect.

Furthermore, from the state of the art as of the filing, it is not possible to predict that the cells obtained by processing W-cells derived from the human body through the steps consisting of (1) and (2) have an inhibitory effect of angiogenesis and an anticancer effect.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

The medicinal invention of claim 1 is considered to be novel because a medicinal use (anticancer) of cells obtained from the steps consisting of (1) and (2) is different from the conventionally-known medicinal use (immunosuppression).

The medicinal invention of the claim 1 is considered to involve the inventive step because the prior art documents have not been publicly known which disclose the relationship between an immunosuppressive effect and angiogenesis and then motivate the use of the cells obtained by the steps consisting of (1) and (2) as an anticancer agent.

In addition, the invention of claim 2 is considered to be novel and to involve inventive step based on the same idea of the invention of the claim 1.

It should be noted the cells could be specified by manufacturing process, even when it is difficult to specify the cells with cell markers etc. In this example, the inventions of claim 1 and 2 are considered to be clear, because original cells and culture condition are identified in details in the steps consisting of (1) and (2). As for handling of claims including specification of a product by the manufacturing process, please refer to Part I Chapter 1, 2.2.2.1(7), Part II Chapter 2, 1.5.5(4) and 2.7

3.2 Medicine characterized in a medicinal use of an application to a specific disease in which dosage and administration is specified

[Example 4] Medicine performing remarkable effect by an application to a specific disease in which dosage and administration is specified

Claim

[Claim 1] A therapeutic agent for asthma containing compound A wherein $30\sim40 \ \mu$ g/kg of compound A is orally administered to humans once per 3 months.

Outline of Detailed Explanation of the Invention

Although it has been publicly known that the symptom of asthma is reduced by daily oral administration of $1\mu g/kg/day$ of compound A to asthma patients, the reduction of the symptom is only during the administration period of compound A. It was necessary thus to continue to administer compound A daily, because the symptom relapses if the administration is stopped. In addition, in case of the daily oral administration of $1\mu g/kg/day$ of compound A, it has been pointed out that the side effect B arises with high frequency.

It was found in this invention that the symptom of asthma is improved for a long term and the incidence of side effect B is reduced compared to before, by orally administering 30~40µg/kg of compound A to asthma patients once per 3 months.

It is described in the example with the result of the pharmacological test that the symptom of asthma was reduced at least for 3 months by every single oral administration of $30{\sim}40 \ \mu$ g/kg of compound A to a group of asthma patients (weighing 30kg to 90kg), that body weights didn't bring clear difference in pharmacological efficacy, and that the incidence of side effect B significantly decreased from the case of daily oral administration of $1 \ \mu$ g/kg/day of compound A.

Result of Prior Art Search

It is publicly known that the symptom of asthma is reduced by daily oral administration of $1\mu g/kg/day$ of compound A and that side effect B arises with high frequency in that case. However, administering $30\sim40\mu g/kg$ of compound A once per 3 months is not described in the prior art documents.

Furthermore, from the state of the art as of the filing, it is not possible to predict that the symptom of asthma decreases at least for 3 months by a single oral administration of $30~40\mu$ g/kg of compound A and that the incidence of side effect B decreases compared to the prior art.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

Regarding dosage and administration of compound A for asthma treatment, dosage

and administration of this invention is different from the already known dosage and administration. Therefore, the medicinal invention of claim 1 is novel.

Furthermore, by a single administration of 30~40µg/kg of compound A, the symptom of asthma is reduced at least for 3 months and the incidence of side effect B significantly decreases compared to the case of the daily oral administration of 1µg/kg/day of compound A. As they are remarkable effects which cannot be foreseen from the state of the art as of the filing, the medicinal invention of claim 1 involves an inventive step.

[Example 5] Medicine performing remarkable effect by an application to a specific disease in which dosage and administration is specified

Claim

[Claim 1] A therapeutic agent for ovary cancer containing compound A as an active ingredient wherein $100 \sim 120 \mu g/kg$ of compound A is administered to the particular site Z in human brain.

Outline of Detailed Explanation of the Invention

It has been known that compound A exhibits growth-inhibitory effect against ovary cancer by intravenous administration to humans but arises hepatotoxicity as a side effect at the same time.

In this invention, it is found that the blood level of hormone Y secreted from the pituitary gland changes by administration of compound A to the particular site Z in the human brain, and consequently ovary cancer significantly diminishes compared to the conventional treatment by intravenous administration.

It is described in the example with the result of the pharmacological test that the blood level of hormone Y secreted by the pituitary gland changes by administration of compound A to the particular site Z in the human brain, and that as a result ovary cancer diminishes more compared to the conventional treatment by intravenous administration. It is also described in the example with the result of the pharmacological test that compound A is not delivered to the liver and does not show hepatotoxicity when it is administered to the particular site Z in the brain.

Result of Prior Art Search

It is publicly known that compound A exhibits growth-inhibitory effect against ovary cancer by intravenous administration to humans and hepatotoxicity as a side effect. However, it is not described in the prior art documents that the intravenously administered compound A is delivered to the brain through the blood brain barrier, or the administration of compound A to the particular site Z in the human brain results in more shrinking of ovary cancer than the prior art.

Furthermore, from the state of the art as of the filing, it is not possible to predict that ovary cancer diminishes without causing a side effect of hepatotoxicity by administering compound A to the particular site Z in the human brain.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

Regarding dosage and administration of compound A for ovary cancer treatment, dosage and administration (administration to the particular site Z in the human brain) of this invention is different from the already known dosage and administration (intravenous administration). Therefore, the medicinal invention of claim 1 is novel.

Moreover, as it is a remarkable effect which cannot be foreseen from the state of the art as of the filing that compound A does not cause a side effect of hepatotoxicity by administration to the particular site Z in the brain, or ovary cancer diminishes more compared to the treatment by intravenous administration, the medicinal invention of claim 1 has an inventive step.

[Example 6] Medicine characterized in an application to a specific disease in which dosage and administration is specified

Claim

[Claim 1] An antitussive agent containing compound A wherein 400~450µg/kg per dose of compound A is orally administered to humans once per day.

Outline of Detailed Explanation of the Invention

Although it has been known that orally administering 160µg/kg per dose of compound A to humans three times a day has the antitussive effect, it was found in this invention that the antitussive effect improves compared to before by oral administration of 400~450µg/kg per dose of compound A to humans.

It is described in the example with the result of the pharmacological test that oral administration of 400µg/kg per dose of compound A to a patient once per day improves the antitussive effect compared to the oral administration of 160µg/kg per dose of compound A to a patient three times per day. Furthermore, it is also described that drug compliance improves because the number of doses per day decreases.

Result of Prior Art Search

It is publicly known that the antitussive effect is obtained by oral administration of 160µg/kg per dose of compound A three times per day. Furthermore, the degree of the antitussive effect and improvement of drug compliance disclosed in the detailed explanation of the invention falls under the predictable range in the light of the state of the art as of the filing.

Outline of Reasons for Refusal

It is publicly known that an antitussive agent including compound A as an active ingredient is orally administered. In general, in order to solve a problem well known to a person skilled in the art, such as an increase in a medicinal effect and improvement of drug compliance, optimization of dosage and administration of a medicine is among exercise of ordinary creativity of a person skilled in the art. Therefore, it would have been easily arrived at by a person skilled in the art to experimentally decide appropriate dosage and administration of compound A.

Furthermore, that a medicinal effect and drug compliance can be improved by optimizing dosage and administration of a medicine can normally be foreseen to a person skilled in the art, and the degree of improvement in this invention is not remarkable one unforeseeable from the state of the art as of the filing.

Measures for Reasons for Refusal

Ordinarily, the above-described reason for refusal is not overcome.

[Remark]

How much effect is "remarkable one unforeseeable from the state of the art as of the filing" is judged individually taking into consideration the content of disclosure of the description,

results of the prior art search, and common general technical knowledge as of the filing or the like.

3.3 Medicine characterized by combination of materials having a specific attribute

[Example 7] A medicinal drug performing remarkable effect by combination of active ingredients

Claim

[Claim 1] An antidiabetic composition containing a compound A and a compound B at a ratio by weight 5:1 to 4:1.

Outline of Detailed Explanation of the Invention

In this invention, reduction of the side effects such as a weight gain or the like, which have conventionally been observed when the compound A is independently used, is found to be the result of combining and using of the compound A and the compound B at a ratio by weight 5:1 to 4:1.

In the example the result of the pharmacological test is described, which shows the reduction of the side effects in case that using a combination of a compound A and a compound B at a specific ratio.

Result of Prior Art Search

Although it is publicly known that the compound A and the compound B are respectively used as antidiabetic agents, the prior art documents do not describe the antidiabetic agent composition by combining and using the compound A and the compound B. Furthermore, decrease in the side effects such as a weight gain or the like by combining and using compound A and compound B at the specific ratio cannot be foreseen from the state of the art as of the filing.

Outline of Reasons for Refusal

No reason for refusal.

[Explanation]

As the result of the pharmacological test or the like shows a remarkable effect of reducing the side effects that cannot be foreseen by a person skilled in the art from the state of the art as of the filing by combining and using of the compound A and the compound B at the specific ratio, the invention involves an inventive step.

[Example 8] Combination of a component with another component having the same major effect which is publicly known

Claim

[Claim 1] A liquid antiflatulent containing 1 to 30g of dietary fiber and 1×10^6 to 1×10^8 cells of the YY bacterium.

Outline of Detailed Explanation of the Invention

In this invention, an antiflatulent, which fortifies the intestine regulating function, is formulated by combining the dietary fiber and the YY bacterium, both affecting the functions of the intestines. Furthermore, in the description, the result of the pharmacological test of an antiflatulent having this combination is shown. However, the result of the pharmacological test in case that using the dietary fiber and the YY bacterium respectively is not described.

Result of Prior Art Search

It is publicly known that there is an intestine regulating function when 1 to 30g of the dietary fiber is taken or when 1×10^6 to 1×10^8 cells of the YY bacterium are taken. And it is also publicly known to make the bacterium and the dietary fiber co-exist in order to maintain the activity of the bacterium having the intestine regulating function and fortify intestine regulating function.

Outline of Reasons for Refusal

It is publicly known that there is an intestine regulating function when 1 to 30g of the dietary fiber is taken or when 1×10^6 to 1×10^8 cells of the YY bacterium are taken. Furthermore it is publicly known to make the bacterium and the dietary fiber co-exist, in order to maintain the activity of the bacterium having the intestine regulating function and to fortify the intestine regulating function, it would have been easily arrived at by a person skilled in the art to formulate medicine for intestinal disorder by combining 1×10^6 to 1×10^8 cells of the YY bacteria having the intestine regulating function. Furthermore, it is considered as a mere exercise of ordinary creativity of a person skilled in the art to formulate a liquid medicine in view of the ease of taking medicine or the like, and in addition, the effect thereof cannot be found to be remarkable one.

Measures for Reasons for Refusal

In the detailed explanation of the invention in this example, the result of the pharmacological test on the antiflatulent of this invention formulated by combining the dietary fiber and the YY bacterium is shown, and a fortification of the intestine regulating function is also described. Therefore, in a written opinion etc., it is possible to insist and demonstrate that there is the advantageous effect of the antiflatulent composed of the combination of the dietary fiber and the YY bacterium compared to a cited invention, with showing the experimental result in case of the administration of the dietary fiber and the YY bacterium respectively. However, reasons for refusal should be sustained if the effect does not exceed beyond the scope expected from the state of the art as of the filing.

[Example 9] Combination of a publicly known main component having a side effect with a publicly known sub-component having the ability to reduce the side effect

Claim

[Claim 1] Therapeutic agent for a paclitaxel responsive tumor formulated by combining paclitaxel with a compound X in a effective dose for suppressing a vomiting caused by administration of paclitaxel.

Outline of Detailed Explanation of the Invention

In this invention, it is found that the paclitaxel responsive tumor can be cured while suppressing the vomiting which is the side effect caused at the time of administering the paclitaxel by using the paclitaxel together with the compound X at the same time.

In the example, the result of the pharmacological test is described which shows the reduction of the side effect by using the paclitaxel together with the compound X at the same time.

Result of Prior Art Search

Although the paclitaxel is an excellent anti-tumor agent, it is publicly known that vomiting is a side effect caused by the paclitaxel at the time of administration, and using the paclitaxel together with sub-component reducing vomiting. On the other hand, it is publicly known that the compound X generally weakens the vomiting. Furthermore, the effect of reducing the vomiting disclosed in the detailed explanation of the invention falls under the predictable range from the state of the art as of the filing.

Outline of Reasons for Refusal

Since it is known that paclitaxel is used together, at the same time, with the sub-component for weakening the vomiting which is the side effect of the administration of paclitaxel, and furthermore the compound X is well known as a compound for generally weakening the vomiting, the combined use of the paclitaxel with the compound X can be easily made by a person skilled in the art, in order to weaken the vomiting which is the side effect of the administration of paclitaxel. Furthermore, there is no remarkable effect that cannot be foreseen as a result of the combined use as described.

Measures for Reasons for Refusal

Ordinarily, the above-described reason for refusal is not overcome.

[Example 10] Combination with a publicly known sub-component having the ability to eliminate a problem related to the efficacy of a publicly known main component

Claim

[Claim 1] A combination drug for anti-inflammation formulated by compounding 1 to 100 weight parts of compound X and 0.2 to 20 weight parts of compound Y for the total 100 weights parts of diclofenac or its salts and acetaminophen.

Outline of Detailed Explanation of the Invention

In this invention, it is shown that the pain threshold value can be increased and the duration time of the function can be extended in a test for painkiller functions by adding compound X and compound Y in the anti-inflammatory drug formulated by combining diclofenac or its salts with acetaminophen.

In the embodiment, the result of the pharmacological test is described, which shows the said effects by adding compound X and compound Y at a specific ratio to the combination of the diclofenac or its salts and acetaminophen.

Result of Prior Art Search

A combination drug for anti-inflammation formulated by combining diclofenac or its salts with acetaminophen is publicly known, and it is also known that there is a so-called ceiling effect in which the anti-inflammatory and painkiller effect does not increase while only the side effect increases, even if the dose thereof is increased by more than a certain dose, generally, in the non-steroidal type anti-inflammatory drug.

In general, it is publicly known that, by adding compound X and compound Y to the non-steroidal type anti-inflammation drugs, the pain threshold value can be increased to the same degree as the invention of the present application and the duration time of the effect can also be extended to the same degree as the invention of the present application in a test for painkiller functions.

Outline of Reasons for Refusal

A non-steroidal type anti-inflammation drugs formulated by combining diclofenac or its salts with acetaminophen is publicly known, and it is known that the pain threshold value can be increased and the duration time of the effect can be extended in the analgestic effect test by adding compound X and compound Y to the non-steroidal type anti-inflammation drugs. Accordingly, adding compound X and compound Y to the non-steroidal type anti-inflammation drugs formulated by combining the diclofenac or its salts with acetaminophen in order to increase the pain threshold value and extend the duration time of the function would have been easily arrived at by a person skilled in the art, and it is considered that the range of the compounding ratio of the components would have been experimentally optimized by a person skilled in the art. In addition, the effect thereof cannot be found to be remarkable one.

Measures for Reasons for Refusal

Ordinarily, the above-described reason for refusal is not deemed overcome.

[Example 11] Combination of publicly known components having respective efficacy for various symptoms caused by major disease

Claim

[Claim 1] Therapeutic agent for AIDS formulated by combining azidothymidine (AZT), an anti-HIV medicine, with compound Z.

Outline of Detailed Explanation of the Invention

In this invention, it is shown that, in order to cure a patient with AIDS which appears after the patient has been infected by HIV, the combination of the anti-HIV medicine AZT and compound Z which is effective in curing pneumonia caused as a symptom of the AIDS inhibits the proliferation of the HIV and cures pneumonia.

Result of Prior Art Search

It is publicly known that azidothymidine (AZT) can be used as therapeutic agent for AIDS. It is also publicly known that the pneumonia is caused as one mode of the AIDS. Furthermore, the inhibitory effect of the proliferation of the HIV and curing effect of pneumonia disclosed in the detailed explanation of the invention falls under the predictable range from the state of the art as of the filing.

Outline of Reasons for Refusal

It is known that the azidothymidine (AZT) is effective as therapeutic agent for AIDS, and also known that the pneumonia is easily caused as a symptom of the AIDS. Furthermore, curing the pneumonia by use of compound Z is widely practiced.

Accordingly, it is among exercises of ordinary creativity of a person skilled in the art to use a combination of the anti-HIV medicine AZT with the compound Z when medicinally treating AIDS patients for the purpose of suppressing the proliferation of the HIV which causes the AIDS while curing also the pneumonia which is caused as a symptom of the AIDS. Furthermore, remarkable effects that cannot be foreseen are not shown by the combined use.

Measures for Reasons for Refusal

Ordinarily, the above-described reason for refusal is not overcome.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

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(Remarks)

In applying the Examination Guidelines ("Part VIII: Foreign Language Application") to applications filed on or before March 31, 2007, explanations regarding the "amendment that changes a special technical feature of an invention" (Article 17bis (4)) and "notice under Article 50bis" (Article 50bis) in 5.3.2(2), 6.4.3(4), 7.3, 7.3.1(ii) and 7.3.6 shall not be applicable.

1. Application under Foreign Language Patent Application System

1.1 Relevant Provisions

[Provisions applicable to applications filed on or before March 31, 2007] Patent Act Article 36bis

- (1) A person requesting the grant of a patent may, in lieu of the description, scope of claims, drawings (where required) and abstract as provided in paragraph (2) of the preceding Article, attach to the application a document in a foreign language as provided by a relevant Ordinance of the Ministry of Economy, Trade and Industry, stating matters required to be stated in the description or the scope claims under paragraphs (3) to (6) of the said Article, and drawing(s) (where required) which contain any descriptive text in the said foreign language (hereinafter referred to as "document in foreign language"), and a document in the said foreign language stating matters required to be stated in the abstract under paragraph (7) of the said Article (hereinafter referred to as "abstract in foreign language").
- (2) The applicant for a patent application in which a document and an abstract in foreign language are attached to the application under the preceding paragraph (hereinafter referred to as " written application in foreign language ") shall submit to the Commissioner of the Patent Office Japanese translations of the document and the abstract in foreign language within two months from the date of filing of the patent application.
- (3) Where the translation of the document in foreign language excluding drawings as provided in the preceding paragraph is not submitted within the time limit as provided in the preceding paragraph, the patent application shall be deemed to have been withdrawn.
- (4) The translation of the document in foreign language as provided in paragraph (2) shall be deemed to be the description, scope of claims and drawings submitted with the application under paragraph (2) of the preceding Article and the translation of the abstract in foreign language as provided in paragraph (2) shall be deemed to be the abstract submitted with the application under paragraph (2) of the preceding Article.

[Provisions applicable to applications filed on or after April 1, 2007] Patent Act Article 36bis

(1) A person requesting the grant of a patent may, in lieu of the description, scope of claims, drawings (where required) and abstract as provided in paragraph (2) of the preceding Article, attach to the application a document in a foreign language as provided by a relevant Ordinance of the Ministry of Economy, Trade and Industry, stating matters required to be stated in the description or the scope claims under paragraphs (3) to (6) of the said Article, and drawing(s) (where required) which contain any descriptive text in the

said foreign language (hereinafter referred to as "document in foreign language"), and a document in the said foreign language stating matters required to be stated in the abstract under paragraph (7) of the said Article (hereinafter referred to as "abstract in foreign language").

- (2) The applicant for a patent application in which a document and an abstract in foreign language are attached to the application under the preceding paragraph (hereinafter referred to as " written application in foreign language ") shall submit to the Commissioner of the Patent Office Japanese translations of the document and the abstract in foreign language within one year and two months from the date of filing of the patent application; provided, however, that where the foreign language application is a new patent application divided from a patent application under Article 44(1), a patent application pertaining to conversion of application under Article 46(1) or (2), or a patent application based on a utility model registration under Article 46bis(1), the applicant may submit Japanese translations of the foreign language document and foreign language abstract only within two months from the date of division of the patent application, conversion of the patent application based on the utility model registration.
- (3) Where the translation of the document in foreign language excluding drawings as provided in the preceding paragraph is not submitted within the time limit as provided in the preceding paragraph, the patent application shall be deemed to have been withdrawn.
- (4) The translation of the document in foreign language as provided in paragraph (2) shall be deemed to be the description, scope of claims and drawings submitted with the application under paragraph (2) of the preceding Article and the translation of the abstract in foreign language as provided in paragraph (2) shall be deemed to be the abstract submitted with the application under paragraph (2) of the preceding Article.

Hereinafter in Part VIII, the provisions of Article 36bis, 17bis and 49 shall be represented by provisions applicable to applications filed on or after April 1, 2007.

1.2 Request

Even in the case of a foreign language application, a request shall be written in Japanese just as in the case of a regular Japanese language application. It shall be stated in the column of "[Special Remarks]" in the request that it is a "patent application in accordance with the provision of Patent Act Article 36bis (1)."

1.3 Foreign Language Document and Foreign Language Abstract (Article 36bis)

- (1) Instead of the description, necessary drawings and an abstract to be attached to the request, a foreign language document and a foreign language abstract written in a foreign language specified in the Ordinance of the Ministry of Economy, Trade and Industry may be attached to the request (English is the only foreign language which is specified in Regulations under the Patent Act Article 25quater).
- (2) A foreign language document is not the description, claims and drawings under Article 36(2) but consists of a document stating matters to be described in the description and claims (Article 36(3) to (6)) in the foreign language and the necessary drawings in which any text matter is stated in the foreign language.

The foreign language abstract is not the abstract under Article 36(2), but a document stating the matters to be described in the abstract (Article 36(7)) in the foreign language.

(3) When the request, the foreign language document and the foreign language abstract are filed, they will be accepted as a regular patent application and the filing date of application will be accorded.

1.4 Translation

after such a date.

- The applicant with a foreign language application shall submit Japanese translations of the foreign language document and of the foreign language abstract within one year and two months after the filing date of the application (Article 36bis(2)).
 (Note) For applications filed on or before March 31, 2007, the period is within two months
- (2) The translation shall be submitted by means of a written submission of translation. It shall be stated in the column of "[Confirmation]" in the written submission of translation that the matters described in the foreign language document, etc. are translated into proper Japanese without excess nor shortage.
- (3) The applicant shall submit, as a translation under Article 36bis(2), a literal translation in proper Japanese (a word-by-word translation into proper Japanese in accordance with the context of the foreign language document).
- (4) Examiner's Approach to Application Lacking Submission of Translation
 - (i) Translation of "Foreign Language Document (Excluding Drawings)"

A foreign language document, excluding drawings, contains a main portion of description of the contents of the invention for which a patent is sought. A translation thereof is legally regarded as the description (Article 36bis(4)) and later becomes a subject of the examination and patent granting. Because of these, lack of a translation is equal to lack of the description attached to the request under Article 36(2). Therefore such foreign language application is regarded as withdrawn (Article 36bis(3)).

(ii) Translation of "Drawings in which Any Text Matter is stated in the Foreign Language"

In the foreign language application system, it is required to submit entire drawings as the translation even if no foreign language text matter is included in the drawings as of the filing date. If any of the drawings are not submitted as the translation, the missing drawings are deemed not to have been attached to the application although such application is not regarded withdrawn.

It should be noted that no submission of a translation of drawings may result in failure to satisfy the description requirements for the description, claims or drawings, or the requirements for patentability and, therefore, the correction of mistranslation may become necessary.

(iii) Translation of Foreign Language Abstract

Since an abstract has no influence on any matter related to patent rights, an application will not be deemed to have been withdrawn even if a translation of the foreign language

abstract is not submitted within one year and two months after the filing date of the application. However, the abstract is indispensable for publication of an unexamined application. Therefore, if a translation of the foreign language abstract is not submitted, such an application may be subject to an invitation to correct or the dismissal of procedure (Article 17(3)(ii) and Article 18(1)).

(Note) For applications filed on or before March 31, 2007, the period is within two months of such a date.

1.5 Description, Claims, Drawings and Abstract

A translation of the foreign language document and of the foreign language abstract shall be respectively deemed as the description, claims and drawings attached to the request and the abstract attached to the request (Article 36bis(4)).

(Explanation)

- (1) Where a translation under Article 36bis(2) has been filed, the translation is legally regarded as the description, claims and drawings by the Patent Act. Therefore, it is not the translation but the description, claims or drawings that is the subject of subsequent amendments. Through such amendments, the contents of the document which has been regarded as the description, etc. will be changed.
- (2) As a general rule in this Part VIII, a term "translation" used in relation to the foreign language application only means a "translation filed within one year and two months after the filing date of a patent application." "Description, claims and drawings," "description, claims or drawings," and "description, etc." mean documents which have been regarded as description, etc. (or description, etc. as amended if such documents are later amended).
- (3) However, it should be noted that the word "translation" used in "new matter beyond the translation" means not only a "translation filed within one year and two months after the filing date of a patent application," but also the description, etc. after correction of a mistranslation if a written correction of mistranslation is submitted (Refer to 5.3.1 "Relevant Provisions Concerning New Matters beyond the Translation" and 5.3.3 "Specific Practices regarding New Matters beyond the Translation").

2. Subject for Examination of Foreign Language Application

In a foreign language application, a translation is deemed as the description, claims and drawings attached to the request (Article 36bis(4)). The patent right and the right to demand compensation will come into existence on the basis of the description, claims and drawings written in Japanese.

Accordingly, the subject for substantive examination as to the description requirements and other requirements for patentability shall be the description, claims and drawings. (Refer to the sections starting from the next page with regard to examination concerning reasons for refusal, etc. which are inherent to foreign language applications.)

3. Foreign Language Document

Though a foreign language document submitted for a foreign language application is not the description, claims or drawings under Article 36(2), it describes the contents of the invention at the time of filing. Therefore, the foreign language document has the following legal status.

3.1 Criterion for Determination of New Matter beyond Original Text

- (1) In the case of a foreign language application, if any matter which is not disclosed in the foreign language document has been introduced into the translation or into the subsequent amended description etc., it constitutes a reason for refusal or invalidation of patent (Articles 49(vi), 123(1)(v)).
- (2) It is foreign language document, which describes the contents of the invention at the time of filing, which always serves as a criterion for determining new matter beyond the foreign language text.

(Note) Refer to "5.1 New Matter beyond Original Text" with regard to the practice for the examination of new matter beyond the original text.

3.2 Prior Art Effect

3.2.1 Relevant Provisions Concerning Prior Art Effect

Patent Act Article 29bis

Where an invention claimed in a patent application is identical with an invention or device (excluding an invention or device made by the inventor of the invention claimed in the said patent application) disclosed in the description, scope of claims or drawings (in the case of the written application in foreign language under Article 36bis (2), the document in foreign language as provided in Article 36bis (1)) originally attached to the written application of another application for a patent or for a registration of a utility model which has been filed prior to the date of filing of the said patent application and published after the filing of the said patent application in the patent bulletin under Article 66(3) of the patent Act (hereinafter referred to as "patent bulletin" or in the utility model bulletin under Article 14 (3) of the utility model Act (Act No. 123 of 1959) (hereinafter referred to as "utility model bulletin") describing matters provided for in each of the paragraphs of the respective Article or for which the publication of the patent application has been effected, a patent shall not be granted for such an invention notwithstanding Article 29 (1) ; provided, however, that this shall not apply where, at the time of the filing of the said patent application, the applicant of the said patent application and the applicant of the other application for a patent or for registration of a utility model are the same person.

Utility Model Act Article 3bis

Where a device claimed in an application for a utility model registration is identical with a device or invention (excluding a device created or an invention made by the creator of the device claimed in the said application for a utility model registration) disclosed in the description, scope of claims or drawings in the case of the written application in foreign

language under Article 36bis (2) of the Patent Act, the document in foreign language as provided in Article 36bis (1) originally attached to the written application of another application for a utility model registration or for a patent which has been filed prior to the date of filing of the said application for a utility model registration and published after the filing of the said application for a utility model registration in the utility model bulletin under Article 14(3)(hereinafter the "Utility Model Bulletin" or in the patent bulletin under Article 66 (3) of the Patent Act describing matters provided for in each of the paragraphs of the respective Article or for which the publication of the patent application has been effected, a utility model registration shall not be granted for such a device notwithstanding paragraph (1) of the preceding Article; provided, however, that this shall not apply where, at the time of the filing of the said application for a utility model registration, the applicant of the said application of the other application for a utility model registration or for a utility model registration or for a utility model registration.

(Explanation)

- (1) When a foreign language application is filed prior to the application concerned, the foreign language document filed on its filing date of application will be laid open subsequent to the filing of the later application. Therefore, if the invention of the later application is identical with the invention described in the foreign language document, the later application does not disclose any new invention to the public.
- (2) Accordingly, if a foreign language application falls under "another application for a patent" under Article 29bis of the Patent Act or Article 3bis of the Utility Model Act, the "description, claims, or drawings originally attached to the request" in the case of a regular application written in Japanese shall be replaced with the "foreign language document," and the prior art effect shall be generated on the basis of the foreign language document which is a document submitted describing the contents of the invention as of the filing date (Note).

(Note) Concerning the prior art effect of foreign language PCT application, refer to "10.3 Relevant Provisions Concerning Special Cases of Prior Art Effect."

3.3 Basis of Special Application (Divisional Application, Converted Application or Internal Priority Application)

- (1) Since a foreign language application is accepted as a regular application, a divisional application, a converted application and an internal priority application based on the foreign language application are also permissible.
- (2) A divisional or converted application is deemed to have been filed on the filing date of the original application. Therefore, whether the divisional or converted application based on the foreign language application is appropriate or not is judged on the basis of the foreign language document, which describes the contents of the invention as of the filing. Similarly, the effect of the internal priority comes into existence on the basis of the foreign language document because it is the foreign language document that describes the content of the invention as of the filing (Articles 41(1) and (2)).

(Note) Concerning the practice for the examination of the special application, refer to "9. Examiner's Approach to Special Application, etc."

4. Period during which Amendments to Description, Claims and Drawings are Available

4.1 Relevant Provisions Concerning the Period during which Amendments are Available before Transmittal of Certified Copy of Decision to Grant a Patent

Patent Act Article 17bis (see, Note)

(1) An applicant for a patent may amend the description, scope of claims, or drawings attached to the application, before the service of the certified copy of the examiner's decision notifying that a patent is to be granted; provided, however, that following the receipt of a notice provided under Article 50, an amendment may only be made in the following cases:

(i) where the applicant has received the first notice (hereinafter referred to in this Article as the "notice of reasons for refusal" under Article 50 [including the cases where it is applied mutatis mutandis pursuant to Article 159(2) (including the cases where it is applied mutatis mutandis pursuant to Article 174(1)) and Article 163(2), hereinafter the same shall apply in this paragraph] and said amendment is made within the designated time limit under Article 50;]

(ii) where, following the receipt of the notice of reasons for refusal, the applicant has received a notice under Article 48septies and the said amendment is made within the designated time limit under the said Article;

(iii) where, following the receipt of the notice of reasons for refusal, the applicant has received a further notice of reasons for refusal and the said amendment is made within the designated time limit under Article 50 with regard to the final notice of reasons for refusal; and

(iv) where the applicant files a request for a trial against an examiner's decision of refusal and said amendment is made simultaneously with said request for said trial.

(Paragraph (2) and the rest of the provisions omitted)

(Explanation)

The periods during which an amendment to description, claims or drawings are permitted before transmittal of a certified copy of a decision to grant a patent are as described below, regardless of whether an amendment is made to a foreign language application or a regular Japanese application:

(i) Period from the filing date to the date on which a certified copy of a decision to grant a patent is transmitted (excluding the period after the receipt of the first notice of reasons for refusal) (text of Article 17bis(1))

(ii) Within the designated period for responding to the first notice of reasons for refusal (Article 17bis(1)(i))

(iii) Within the designated period for responding to a notice under Article 48septies after the receipt of a notice of reasons for refusal (Article 17bis(1)(ii))

(iv) Within the designated period for responding to the final notice of reasons for refusal (Article 17bis(1)(iii))

(v) Simultaneous with a request for an appeal against an examiner's decision of refusal is filed (see, Note) (Article 17bis(1)(iv))

(Note) For applications whose date of transmittal of a copy of decision of refusal is on or before 31 March, 2009, the above-mentioned explanation may be replaced by "Within 30 days

after the date on which a request for an appeal against an examiner's decision of refusal is filed".

5. New Matters beyond Original Text or beyond Translation

5.1 New Matters beyond Original Text

5.1.1 Relevant Provisions Concerning New Matters beyond Original Text

Patent Act Article 49

The examiner shall render an examiner's decision to the effect that a patent application is to be refused where the patent application falls under any of the following:

(Paragraphs (i) to (v) and (vii) omitted)

(vi) where the patent application is a written application in foreign language, matters stated in the description, scope of claims or drawings attached to the application of the said patent application do not remain within the scope of matters stated in the document in foreign language; and

Patent Act Article 123(1)

Where a patent falls under any of the following, a request for a trial for patent invalidation may be filed. In the event of two or more claims, a request for a trial for patent invalidation may be filed for each claim.

(Items (i)-(iv) omitted)

(v) where matters stated in the description, scope of claims or drawings attached to the application in a written application in foreign language are not within the scope of matters stated in the document in foreign language;

Patent Act Article 184duodevicies

For the purpose of an examiner's decision of refusal and a trial for patent invalidation, with respect to a patent application in foreign language, the term "written application in foreign language" in Articles 49(vi), and 123(1)(i) and (v) shall be deemed to be replaced with "patent application in foreign language referred to in Article 184quater (1)," and the term "document in foreign language" in Article 49(vi) and 123(1)(v) shall be deemed to be replaced with "the description, scope of claims or drawing s of the international application as of the international application date referred to in Article 184quater(1)."

Utility Model Act Article 48quaterdecies

For the purpose of a trial for invalidation of utility model registration with regard to a Utility Model Registration Application in Foreign Language, "where the utility model registration has been granted on an application for a utility model registration with an amendment that does not comply with the requirements as provided in Article 2bis (2)" in Article 37(1)(i) shall be deemed to be replaced with "where with regard to a utility model registration granted based on a Utility Model Registration Application in Foreign Language under Article 48quater(1), matters stated in the description, scope of claims or drawing attached to the application do not remain within the scope of matters stated in the description, scope of claims or drawing of the international application as of the International Application Date referred to in Article 48quater (1)."

(Explanation)

- (1) In the case of a regular application written in Japanese, amendments to the description, claims and drawings shall be made within the matters described in the original description, etc. (Patent Act Article 17bis(3) and Utility Model Act Article 2bis(2)). This is because if any matter beyond the original description, etc. can be freely added after the filing by an amendment which has retroactive effect, it is against the principle of the patent system in which the patentability should be determined on the basis of the application as of filing date.
- (2) Similarly, for a foreign language application, a foreign language PCT patent application and a foreign language PCT utility model application, it is prohibited to submit a translation which includes a matter beyond the foreign language document or beyond the description, etc. as of the international filing date, or to add new matter beyond the original text to the description, claims or drawings through subsequent amendments. In the cases of (3) to (5) described below, as in the case where new matter is added to a regular Japanese application, the existence of "new matter beyond the original text" shall be deemed as a reason for refusal or invalidation with regard to the foreign language application and the foreign language PCT patent application, and as a ground for a patent invalidation with regard to the foreign language PCT utility model application.
- (3) If the matters disclosed in the description, claims or drawings of the foreign language application are not within the matters described in the foreign language document, such fact will be considered as the reason for refusal (Article 49(v)) and invalidation (Article 123(1)(v)).
- (4) If the matters disclosed in the description, claims or drawings of the foreign language PCT patent application do not fall within the matters disclosed in the description, claims or drawings of the international application as of the filing date of the international application, such a fact will be considered as a reason for refusal (Article 49(vi)), or a ground for invalidation (Article 123(1)(v)) (Article 184duodevicies).
- (5) If the matters disclosed in the description, claims or drawings of the foreign language PCT utility model application do not fall within the matters disclosed in the description, claims or drawings of the international application as of the filing date of the international application, such a fact will be considered as a ground for invalidation (Utility Model Act Article 37(1)(i)) (Utility Model Act Article 48quaterdecies).
- (6) Accordingly, "the original text" referred to in "new matter beyond the original text" in this Part VIII means "foreign language document" in the case of a foreign language application, or "description, claims and drawings of an international application as of the filing date of the international application" in the case of a foreign language PCT application.

(Note) Concerning the examination of new matter beyond the original text, the discussion hereinafter will mainly focus on the foreign language application. However, the same approach may be applied to foreign language PCT patent applications, and "foreign language document" referred to in the following explanation may be replaced by "description, claims or drawings of an international application as of the filing date of the international application referred to in Article 184quater(1)."

5.1.2 Concrete Standards for Judgment of New Matter beyond Original Text

(1) The examiner first assumes a translation which is translated word-by-word from the foreign language document into proper Japanese in accordance with the context (hereinafter referred to as "assumed translation"). (i) the matters which can be recognized to be described in the assumed translation and (ii) the matters which can be derived inherently from the assumed translation are treated as being within the matters disclosed in the foreign language document.

(Note) Refer to the "Part III: Article I. New Matter" with regard to the interpretation of the "matters which can be derived inherently."

- (2) The description, etc. may be described in a manner other than that stated in 1.4(3) (literal translation) only in cases where the relations between the foreign language document and the description, etc. do not become unclear and the technological content can be more accurately understood by such a manner of translation. However, even in this case, the description, etc. needs to fall within the matters disclosed in the foreign language document, or in other words, needs to satisfy the requirements (i) or (ii) mentioned in (1).
- (3) Also, when the foreign language document is translated in such a way that the order of sentences, etc. is changed, the change of the order shall not be deemed to introduce new matters beyond the original text unless it makes a matter not disclosed in the foreign language document disclosed in the description, etc. Accordingly, if a matter is described somewhere in the foreign language document, it shall
- (4) When a part of the foreign language document is not translated into Japanese, it would often not be deemed as a new matter beyond the original text, just as an amendment to a regular Japanese application which deletes a part of the description would often not
 - regular Japanese application which deletes a part of the description would often not constitute the addition of a new matter. However, one shall note that a portion which has not been translated may be deemed as a new matter beyond the original text, depending on the content thereof.

Example 1: Case where a portion which has not been translated is not deemed as a new matter

Although a foreign language document discloses a generic concept A in a claim and more specific concepts a1, a2, a3 and a4 as working examples, the a4 is not translated.

(Explanation)

In this case, since any matter beyond the foreign language document is not described in the description, etc., the portion which has not been translated will not be deemed as a new matter beyond the original text.

Example 2: Case where a portion which has not been translated is deemed as a new matter There is a specific description, "rubber treated to be heat resistant," in a foreign language document, but no description which can be understood as meaning general "rubber" can be found anywhere in the foreign language document, even considering the description, etc. In such a case, the original description is mistranslated into "rubber" in the usual meaning.

(Explanation)

In this case, the foreign language document discloses only the rubber treated to be heat-resistant, and general rubber cannot be recognized as a matter within the disclosure of the foreign language document. On the other hand, the description etc. describes general rubber. Therefore, such mistranslation constitutes new matter beyond the original text.

5.2 Method of Examination of New Matter beyond Original Text

In the foreign language application, it is the description, claims and drawings that are, in principle, subject for the substantive examination on the premise that the contents of the foreign language document coincides with the content of the description, claims and drawings. The foreign language document and the description, etc. are checked with each other only in cases where doubt arises concerning the consistency between the foreign language document and the description, etc., specifically in the cases shown in 5.2.1. If such a check reveals any new matter beyond the original text, it constitutes a reason for refusal.

(Explanation)

If the description, etc. of the foreign language application contains new matters beyond the original text, such an application is subject to refusal or invalidation. However, in light of the following, it is unnecessary for the examiner to compare the description, etc. with the foreign language document in every case:

i) it is highly probable that the contents of the foreign language document coincide with the contents of the description, etc.; and

ii) the inconsistency between the foreign language document and the description, etc. can be found by solely examining the description, etc. in light of the conformity among descriptions and common general knowledge.

Therefore, the above-mentioned handling shall be conducted.

5.2.1 Typical Examples in which Comparison with a Foreign Language Document Is Necessary

(1) Where unnatural or unreasonable descriptions in the description, claims or drawings raise a suspicion that the description, claims or drawings may contain new matters beyond the original text

(i) Among typical examples of mistranslation are oversight of words or phrases to be translated (see, Examples 3 and 4), and errors in interpretation of words, context or grammar (see, Example 5).

Such mistranslation brings in the description, etc. text which does not make sense as a whole, or which is contrary to the common general knowledge. The examiner will notice such deficient descriptions in the course of reading and understanding the description, etc. In such a case, the examiner is to suspect that matters beyond the foreign language document may be described in the description, etc. as there have been mistranslations.

Example 3:

A foreign language document contains the sentence, "A is disconnected with B." The letters "dis" were overlooked during the translation, which resulted in a mistranslation into "A is connected with B," despite the fact that it should have been translated as "A is disconnected with B."

(Explanation)

If elements which should be disconnected are translated as being connected, the relevant description in the translation usually does not make sense in terms of technology. In this case, there is a reason to suspect the new matter beyond the original text resulting from the mistranslation.

Example 4:

A term "beam" in the foreign language document is translated into "*hari* (girder)" despite that it should have been translated into "*kosen* (ray)."

(Explanation)

It is very unnatural to find the term "*hari* (girder)" being used in a completely different technical field where the correct translation "*kosen* (ray)" is usually used. Therefore, there is a reason to suspect the existence of new matter beyond the original text resulting from the mistranslation.

Example 5:

The foreign language document includes a statement, "first circle is drilled through the substrate at 20% of the desired diameter for the hole, and another circle is then drilled at 30% of the full diameter. "A person skilled in the art would be able to recognize that the "first circle" and "another circle" are drilled with the same center in succession in order to form a single hole of accurate size, in view of the context of the descriptions in the foreign language document and the disclosed technological details. Accordingly, the above sentence should be translated as "first circle is drilled through the substrate at 20% of the desired diameter for the hole, and in succession, the circle is additionally drilled up to 30% of the full diameter" (in Japanese). However, a translator misunderstood that the 20%-diameter hole and the 30%-diameter hole were to be separately formed at different positions, and mistranslated the sentence as "first circle at 20% of the desired diameter is drilled through the substrate, and a different circle at 30% of the desired diameter is drilled" (in Japanese).

(Explanation)

It is unnatural and unreasonable that the translation states that two different holes are formed in the context where only one hole is to be formed. Therefore, there is a reason to suspect the existence of new matter beyond the original text resulting from the mistranslation.

(2) Where there is a suspicion that new matter beyond the original text may exist in the corrected description, claims or drawings because it is not objectively clear that the aim of the correction is to correct the mistranslation even by referring to the reason for correction of the written correction of mistranslation. (i) When an applicant submits a written correction of mistranslation, (s)he must state a reason for correction etc., in addition to the details of the correction so as to make clear that the correction aims at correcting a mistranslation.

(ii) On the contrary, in the cases of Examples 6 and 7 below, it is unclear that the aim of correction is to correct a mistranslation. In such cases, the examiner has a reason to suspect that new matter beyond the original text may exist in the description, etc. corrected by the written correction of mistranslation.

(Note) Refer to "6. Written Correction of Mistranslation" with regard to the examination of written correction of mistranslation.

Example 6:

There is no objective explanation about the reasons why the translation before the correction is improper and why the translation after the correction is proper, although it is insisted that there are some mistranslations in words. (An example is the case where an objective documentary evidence such as a copy of a dictionary is not attached to the written correction despite that it is necessary as a material for explanation of the reasons.)

Example 7:

Although it is insisted that the incorrect translation is due to misinterpretation of the common general knowledge or the context, there is no sufficient explanation or there is a doubt about explanation with respect to the common general knowledge or the comprehension of the context.

(3) A case where there is an offer of information to the effect that new matter beyond the original text exists in the description, claims or drawings, and the result of the examination provides a suspicion that new matter beyond the original text may exist in the description, etc.

As shown in Examples 8, 9 and 10, information concerning new matter beyond the original text may be gathered through the offer of information under Article 13bis of Regulations under the Patent Act or through the submission of a written argument, etc. by an applicant to whom the foreign language application is cited as a prior application of Article 29bis, Article 39, etc. In such cases, the examiner checks the information or the argument and may have a suspicion that matters beyond the foreign language document are described in the description, etc.

Example 8:

If the examiner is informed by a third party that matters beyond the foreign language document have been added to the description, etc., and if such information is deemed reasonable, the examiner is to be suspicious that matters beyond the foreign language document are described in the description, etc.

Example 9:

When a foreign language application is cited as a ground for refusal of another application(Article 29bis or Article 39), and when the applicant of the latter makes an assertion that the foreign language document of the cited application contains new matter

beyond the original text. (An example is the case where the examiner has issued a notice of reasons for refusal under Article 29bis after referring only to the translation of the cited application, and the applicant makes an objection to the notice by asserting that the foreign language document does not disclose the cited invention.)

Example 10:

When an opinion about new matter is shown in an international preliminary examination report concerning a PCT application.

5.3 New Matter beyond Translation

5.3.1 Relevant Provisions Concerning New Matter beyond Translation

Patent Act Article 17bis(3)

Except in the case where the said amendment is made through the submission of a statement of correction of an incorrect translation, any amendment of the description, scope of claims or drawings under paragraph (1) shall be made within the scope of the matters described in the description, scope of claims or drawings originally attached to the application [in the case of a written application in foreign language under Article 36bis (2), the translation of the document in foreign language as provided in Article 36bis (2) that is deemed to be the description, scope of claims and drawings under Article 36bis (4) (in the case where the amendment to the description, scope of claims or drawings has been made through the submission of the statement of correction of an incorrect translation, the said translation or the amended description, scope of claims or drawings)].

Patent Act Article 49

The examiner shall render an examiner's decision to the effect that a patent application is to be refused where the patent application falls under any of the following:

an amendment made to the description, scope of claims or drawings attached to the application of a patent application does not comply with the requirements as provided in Article 17bis 3;

(Paragraphs (ii) through (vii) omitted)

Patent Act Article 123(1)

Where a patent falls under any of the following, a request for a trial for patent invalidation may be filed. In the event of two or more claims, a request for a trial for patent invalidation may be filed for each claim.

(i) where the patent has been granted on a patent application (excluding awritten application in foreign language) with an amendment that does not comply with the requirements as provided in Article 17bis (3);

(Items (ii) through (viii) omitted)

Patent Act Article 184duodecies (Paragraph (1) omitted)

(2) For the purpose of the allowable scope of amendment to the description, scope of claims or drawings with regard to a Patent Application in Foreign Language, the term "a written application in foreign language as provided in Article 36bis (2)" in Article 17bis (2) shall be deemed to be replaced with "a Patent Application in foreign Language as provided in Article 184quater(1)"; the term "the description, scope of claims or drawings originally attached to

the application [in the case of a written application in foreign language under Article 36bis (2), the translation of the documents in foreign language as provided in Article 36bis (2) that is deemed to be the description, scope of claims and drawings under Article 36bis (4) (in the case where the amendment to the description, scope of claims or drawing has been made through the submission of the statement of correction of incorrect translation, the said translations or the amended description, scope of claim or drawings]" in Article 17bis (3) shall be deemed to be replaced with "a translation as provided in Article 184 quater (1) of the description or drawings (limited to the descriptive text in the drawings) of an International Patent Application as provided in Article 184ter (2) (hereinafter referred to as an "International Patent Application" in this paragraph) as of the international application date as provided in Article 184quater (1) (hereinafter referred to as the "International Application Date" in this paragraph, a translation as provided in Article 184quater (1) of scope of the claims of an International Patent Application as of the International Application Date (in the case where a translation of the scope of claim(s) amended under Article 19(1) of the Patent Cooperation Treaty signed in Washington on June 19, 1970 has been submitted under Article 184quater (2) or (4), the said translation) or drawings(excluding the descriptive text in the drawings) of an International Patent Application as of the International Application Date (hereinafter referred to as the "Translations, etc." in this paragraph) (in the case where an amendment to the description, scope of claim(s) or drawing(s) has been made through the submission of the statement of correction of incorrect translation, the Translations, etc. or the said amended description, scope of claims or drawings)".

(Explanation)

 In cases where a regular amendment does not satisfy the requirements under Article 17bis(3), as in the following cases (i) or (ii), such an amendment is deemed to add new matter beyond translation:

(i) Cases where any written correction of mistranslation has not been submitted, and where a regular amendment to the description, claims or drawings introduces a matter which is not disclosed in the translation considered to be the description, claims and drawings by virtue of Article 36bis(2); or

(ii) Cases where a written correction of mistranslation has been submitted, and where a later regular amendment to the description, claims or drawings introduces a matter which is neither disclosed in the translation considered to be the description, claims and drawings by virtue of Article 36bis(2) nor is disclosed in the description, claims or drawings as corrected by the said written correction of mistranslation.

- (2) When a regular amendment is made to add a new matter beyond the translation, such an amendment constitutes a reason for refusal (Article 17bis(3) and Article 49(i)). Moreover, when such a regular amendment is submitted during the time for response to the final notice of reasons for refusal or a notice of reasons for refusal given together with a notice under Article 50bis (hereinafter referred to as the "final notice of reasons for refusal, etc." in Part VIII), or at the time of making a request for an appeal against the examiner's decision of refusal, such an amendment will be dismissed (Article 53, Article 159(1) and Article 163(1))
- (3) When a regular amendment includes new matter beyond translation, such an amendment

constitutes a reason for refusal or becomes to be dismissed. One can say, however, that it is a mere formality error in selecting a form to be used in the procedure. It is harsh to the applicant to invalidate a patent on the ground of such a minor error, through the invalidation procedure, when the amendment does not introduce any new matter beyond the foreign language document. Therefore, introduction of new matter beyond translation is not treated as the ground for invalidation.

(4) The provisions concerning new matter beyond translation do not apply to the amendment made by a written correction of mistranslation.

5.3.2 New Matter beyond Translation

(1) Significance of Regular Amendment and Prohibition of New Matter beyond Translation

With respect to a foreign language application, an amendment to the description, claims and drawings (a "regular amendment") may be made.

However, it is set forth that such a regular amendment should be made within the matters disclosed in the translation (including the description, etc. as corrected by written correction of mistranslation, if any) (prohibition of new matter beyond translation, Article 17bis(3)). Any regular amendment which infringes the above provisions constitutes a reason for refusal.

Namely, the examination of new matter is carried out on the basis of the translation because it is highly likely that the contents of a foreign language document coincide with the contents of a translation. If any amendment is made beyond the matters disclosed in translation (including the description, etc. as corrected by, if any, a written correction of mistranslation), such an amendment is treated as the reason for refusal just as in the case of the amendment adding new matter beyond the original text.

(2) Significance of Written Correction of Mistranslation

If the translation does not coincide with the foreign language document due to a mistranslation, and an amendment is made to correct the mistranslation into a proper translation, such an amendment is necessarily within the matters disclosed in the foreign language document. Namely, such an amendment does not infringe the restriction for the new matter beyond the original text. Even in this case, however, if the amendment is made beyond translation, the applicant must submit a "written correction of mistranslation" of which formality is different from the formality of a regular amendment in order to specify the details of mistranslation, the reasons for correction, etc., and thereby, must explain that it is a proper amendment which is made within the matters disclosed in the foreign language document.

This procedure aims at lightening the burden of monitoring by the third party and the workload of examination with regard to the foreign language document.

5.3.3 Practices for Determination of New Matter beyond Translation

- (1) In the examination under Article 17bis(3), the criteria for determining whether or not an amendment is "within the matters disclosed" are the same as those for determination mentioned in "Part III: Section I. New Matter."
- (2) Accordingly, in addition to the matters explicitly described in the translation, "a matter

which is inherently derivable from the matters described in the translation" is also treated as the "matters disclosed in the translation."

(3) If a written correction of mistranslation is submitted, a matter described at least either in the translation or in the description, claims or drawings immediately after being corrected by the written correction of mistranslation will not constitute new matter beyond the translation. The approach shown in (2) also applies to the matters described in the translation or in the description, claims or drawings as corrected by the written correction of mistranslation.

5.3.4 Applicant's Response to Examiner's Indication for New Matter beyond Translation

If the examiner indicates, in a notice of reasons for refusal, that the description, claims or drawings describes a new matter beyond the translation, the applicant may take, for example, the following actions:

- (1) Make an assertion by submitting a written argument, etc. that the indicated matter does not fall under new matters beyond the translation. In this case, the reason for refusal will be overcome if the applicant succeeds in convincing the examiner that the indicated matter does not fall under new matters beyond the translation through submission of a written argument, etc.;
- (2) Delete the description concerning the indicated new matter beyond the translation, just as in the case of new matter in a regular Japanese application; or
- (3) Submit a written correction of mistranslation to clarify that the description concerning the indicated new matter beyond the translation has been introduced for the purpose of correcting a mistranslation. (Through this procedure, the indicated new matter beyond the translation is deemed to have been added to the description, etc. through a lawful procedure.) In this case, in preparing the written correction of mistranslation, the applicant shall state, in the column of "[Unit to be Corrected]," the portion including the description of the new matter beyond the translation, and shall state "Change" in the column of "[Method of Correction]." In the column of "[Reasons for Correction, etc.]," reasons for correction, etc. shall be stated on the premise of the description, etc. prior to the addition of the indicated new matter beyond the translation. (Refer to "6.2.1 Reasons for Correction" and "6.4.5' Cases where a Written Correction of Mistranslation Overcoming the Reason for Refusal against New Matters beyond the Translation Added by a Regular Amendment is Submitted.")

6. Written Correction of Mistranslation

6.1 Relevant Provisions Concerning Written Correction of Mistranslation

Patent Act Article 17(4)

For any amendment of procedures (except in the case of the payment of fees), written amendment shall be submitted in writing, except for cases provided by Article 17bis (2).

Patent Act Article 17bis(2)

Where an applicant of a written application in foreign language as provided in Article 36bis (2) amends the description, scope of claims or drawings under the preceding paragraph for the purpose of correcting an incorrect translation, the applicant shall submit the statement of correction of the incorrect translation, stating the grounds thereof.

Patent Act Article 193(2)

In addition to the matters provided for in this Act, the Patent Bulletin shall contain:

(Items (i) and (ii) omitted)

(iii) amendments of the description, scope of claims or drawings attached to an application under Article 17bis (1) after the laying open of a patent application (in the case of an amendment under any of the items in the proviso to the said paragraph, limited to an amendment made through the submission of a statement of correction of an incorrect translation);

(Items (iv) through (ix) omitted)

(Explanation)

- (1) When an amendment is made to a foreign language application for the purpose of correction of mistranslation, a written correction of mistranslation which states reasons for the correction must be submitted instead of a written amendment under Article 17(4).
- (2) When an amendment is made in order to correct a mistranslation, the applicant is liable for submitting a written correction of mistranslation in which the reasons for correction of mistranslation must be stated. The purposes of this procedure are (i) to clarify that the correction of mistranslation is conducted on the basis of the description of the foreign language document, and (ii) to lighten third parties' or the examiners' burden of checking whether the correction of mistranslation is appropriate or not in the light of the foreign language document.

6.2 Requirements for Written Correction of Mistranslation

The procedure for amendment to the description, claims or drawings by a written correction of mistranslation is different from the procedure for regular amendment by a written amendment. The former procedure has been established in order to make clear to third parties or the examiner, by specifying the details of mistranslation and reasons for correction, etc., that the correction is within the matters disclosed in the foreign language document.

Accordingly, the written correction of mistranslation must satisfy the requirements described below as well as the formality requirements under the Regulation under the Patent Act.

6.2.1 Reasons for Correction

(1) Reasons for correction shall be described in a written correction of mistranslation in order to clarify that the correction is conducted within the matters disclosed in the foreign language document. Accordingly, the following items (hereinafter referred to as "reasons for correction, etc.") shall be stated enough in the column of "[Reasons for Correction, etc.]" of the written correction of mistranslation so that reasons why the mistranslation occurred become clear and the person skilled in the art would be able to confirm that the content of the correction of mistranslation is within the matters described in the foreign language document:

- (i) descriptions of the foreign language document corresponding to the descriptions to be amended, and positions thereof;
- (ii) reasons why the translation, which constitutes the basis of the description, claims or drawings before amendment, is inappropriate; and
- (iii) reasons why the translation, which constitutes the basis of the description, claims or drawings after amendment, is appropriate.
- (2) When amending two or more portions which belong to different amendment units, reasons for correction shall be stated with respect to each portion with such titles as "(Reason for Correction 1)," "(Reason for Correction 2)" and so on. When amending two or more portions which belong to a single unit, the reasons for correction shall be stated with respect to each portion (words, phrases, or sentences) with such titles as "(Reason for Correction 1-1)," "(Reason for Correction 1-2)" and so on. (Refer to the Regulation under the Patent Act, Form 15bis, Notes 4 and 5, etc.)

6.2.2 Materials Necessary for Explanation of Reasons for Correction

- (1) If documentary materials are necessary to help a person skilled in the art to easily confirm that the content of correction of mistranslation or the reasons for correction are reasonable, the "materials necessary for explanation of reasons for correction" shall be attached. In this case, the "materials necessary for explanation of reasons for correction" shall be stated as "[Title of Documents]" in the column of "[List of Documents Submitted]" of the written correction of mistranslation, and the necessary materials shall be attached.
- (2) The cases "where it is necessary to show using documents that the content of the correction and the reasons for correction are reasonable" include the cases where a dictionary or other materials are necessary to show that the content of the correction is reasonable, for example, in the case of correction of mistranslation of a technical term. In such a case, copies of relevant pages of the dictionary or other materials shall be attached to the written correction of mistranslation as the materials necessary for explanation of reasons for correction.
- (3) In the materials submitted, such titles as "(Material Necessary for Explanation of Reasons for Correction 1)," "(Material Necessary for Explanation of Reasons for Correction 2)," "(Material Necessary for Explanation of Reasons for Correction 1-1)," and "(Material Necessary for Explanation of Reasons for Correction 1-2)" shall be written in order to clearly show the correspondence relationship between the materials and the reasons for correction stated in the column of "[Reasons for Correction, etc.]."
- (4) When material necessary for explanation of reasons for correction for a portion to be amended is the same as the material necessary for explanation of reasons for correction for another portion to be amended, the attachment of the material may be omitted for the other portion with a statement to that effect in the column of "[Reasons for Correction, etc.]."

6.3 Examples of Written Correction of Mistranslation

(See Appendix 1 and 2, "Written Correction of Mistranslation (Sample)".)

6.4 Examination of Written Correction of Mistranslation

6.4.1 "Aiming at Correction of Mistranslation"

When an amendment is made by submitting a written correction of mistranslation, the fact whether or not said amendment aims at correction of mistranslation does not constitute a reason for refusal. Therefore, the purpose itself should not be examined for a written correction of mistranslation.

(Explanation)

A written correction of mistranslation is to be submitted instead of a written amendment in order to lighten third parties' or the examiners' burden when an amendment is made for the purpose of correction of mistranslation. The provision of Article 17bis only sets forth a mere formality requirement as to what document should be submitted. Therefore, violation of such provision is not deemed to be a reason for refusal.

6.4.2 Insufficient Description of "Reasons for Correction, etc."

- (1) If the examiner is not convinced that the content of correction of mistranslation is proper (i.e., no new matter beyond the original text exists in the description, etc. as amended by the correction of mistranslation), due to insufficient description of the reasons for correction and insufficiency of the materials necessary for explanation of reasons for correction, the examiner may ask the applicant for an explanation by sending a notice according to Article 194(1) or by making a telephone call, etc.
- (2) If the examiner is not convinced in spite of the action (1) above, this is the case where the examiner should suspect that new matter beyond the original text exists. Therefore, the comparison with the foreign language document should be conducted.
- (3) The examination procedure with respect to the notice of reasons for refusal on the grounds of new matters beyond the original text shall be as described in "7.1 Examination Procedure for New Matters beyond the Original Text."

6.4.3 Including Matters which can be Amended by Regular Amendment in Written Correction of Mistranslation

(1) A written correction of mistranslation is, in its nature, a document to be filed when making an amendment with the aim of correction of mistranslation. In actual practice, however, an amendment not aiming at the correction of mistranslation may also be necessary at the same time of making a correction of mistranslation. In such a case, if matters which can be amended in the regular amendment procedure are amended in addition to the correction of mistranslation, it is rather desirable to include such matters to be amended in the written correction of mistranslation so as to consolidate the amendments into a single procedure without separately filing a written amendment.

On the other hand, it is impermissible to include an amendment for correction of

mistranslation in a written amendment without submitting a written correction of mistranslation.

(Explanation)

(i) Even if a written correction of mistranslation includes a regular amendment, it is possible for third parties or the examiner to clarify the content of mistranslation or the reasons for correction as far as the mistranslation is concerned.

(ii) Even though both amendments corresponding to the regular amendments and other amendments corresponding to the correction of mistranslation are mixed with each other in a single written correction of mistranslation, appropriateness of amendments is judged for each matter to be amended and, therefore, such mixing of conditions is not regarded as troublesome in the practical work of the examination.

(iii) On the other hand, by handling the matter as described in (1) above, one can avoid such duplicated procedures filing of both a written amendment and a written correction of mistranslation, thereby simplifying a response by the applicant, etc.

(iv) To the contrary, it is impermissible to make a correction of mistranslation by means of the regular written amendment. The purpose of the written correction of mistranslation is to clarify the content of mistranslation and the reasons for correction to third parties or the examiner when there are mistranslations. Therefore, it is not proper to make an amendment through the regular amendment procedure, if it should be amended by the written correction of mistranslation. Moreover, where the amendment which should be amended by the written correction of mistranslation is made by the regular amendment procedure, one should be careful that such amendment would in many cases constitute violation of the restriction of new matter beyond translation and, therefore, constitute the reason for refusal or the reason for dismissing the amendment.

(2) Matters to Be Described in a Written Correction of Mistranslation Including Matters which can Be Amended by Regular Amendment

(i) Where matters which can be amended by regular amendment (i.e., matters to be amended within the scope of the matters described in the description, etc. before amendment) are included in a written correction of mistranslation, it is unnecessary to indicate the reasons for correction, etc. (Refer to 6.2.1(1)) in the column of "[Reasons for Correction, etc.]."

(ii) However, in this case, the applicant shall explain in the column of "[Reasons for Correction, etc.]," by indicating the corresponding portions of the description, etc. before amendment where the matters to be amended are described, that the amendment is within the scope of the matters described in the description, etc.

(3) Examiner's Approach in Cases Where the Allegedly Regular Amendment Included in Written Correction of Mistranslation Turns out to Be New Matter beyond Translation

(i) Where an amendment is included in the written correction of mistranslation as matters which is to be made as a regular amendment, and it is found that the amendment violates

the restriction of new matter beyond translation (i.e., amendment which cannot be done by the regular amendment), the examiner cannot refuse the application nor dismiss the amendment for that reason. However, this makes the reason for correction insufficient with regard to the particular amendment. Thus, the examiner can request the applicant to explain such insufficiency by sending a notice under Article 194(1) or by making a telephone call, etc.

(ii) In response to the above-mentioned demand from the examiner, the applicant may assert or produce counterevidence by filing a written statement, etc. to the effect that the contents of amendment do not correspond to new matter beyond the original text. (For example, matters to be described as the reasons for correction may be submitted in the written statement in order to show that the amendment does not introduce new matter beyond the original text.)

(iii) If the examiner is not convinced yet that any new matter beyond the original text does not exist in the description, etc. after the correction of mistranslation in spite of the above-mentioned actions, he/she shall compare the description, etc. with the foreign language document.

(iv) If the above-mentioned comparison reveals that a new matter beyond the original text exists in the description, etc., the examiner shall notify reasons for refusal (Article 49(vi)).

(4) Examiner's Approach in Cases Where a Written Correction of Mistranslation Including a Matter which can Be Amended by Regular Amendment Is Filed after Final Notice of Reasons for Refusal

If a written correction of mistranslation submitted in response to the final notice of reasons for refusal does not satisfy the requirements under Articles 17bis(4) to (6), such an amendment is to be dismissed. It must be noted that if a written correction of mistranslation contains any matter to be amended which does not satisfy the requirements under Articles 17bis(4) to (6), the entire written correction of mistranslation will be subject to a dismissing of amendment, including matters to be amended which can be amended by regular amendment, in the same manner as in a regular Japanese application, where if a certain matter to be amended does not satisfy the requirements for amendment, the entire written amendment including the said matter will be dismissed.

6.4.4 Notes when Written Amendment and Written Correction of Mistranslation both Dated the Same Date are Filed Separately

Where a written amendment and a written correction of mistranslation are separately filed in response to a certain notice of reasons for refusal, attention shall be paid so as to prevent substantial duplications in amendment units (amendment units indicated in "[Unit to be Amended]" in the written amendment and those indicated in "[Unit to be Corrected]" in the written correction of mistranslation).

6.4.5 Cases where a Written Correction of Mistranslation Overcoming the Reason for Refusal against New Matters beyond the Translation Added by a Regular Amendment is Substantially Submitted

(1) Where the later-submitted written correction of mistranslation makes clear to the examiner and third parties that the earlier-submitted written amendment has not introduced the new matter beyond translation, the reason for refusal against the new matter beyond translation should be deemed overcome by the written correction of mistranslation.

For example, if the description including new matter beyond translation which were added through the regular amendment is included in the amendment unit indicated in "[Unit to be Corrected]" of the written correction of mistranslation, and if the written correction of mistranslation shows sufficient reasons for correction regarding the new matter, the reason for refusal against the new matter beyond translation which were added through the regular amendment should be considered to be overcome. Moreover, the examiner may not refuse the application nor dismiss the amendment by the reason that the new matter beyond translation exists in the description, etc. amended by such correction of mistranslation.

(Explanation)

Such a written correction of mistranslation should be deemed submitted in order to overcome the reason for refusal based on the new matter beyond translation (See 5.3.4(3)).

As Article 17bis(3) stipulates "Except in the case where the said amendment is made through the submission of a statement of correction of an incorrect translation," the restriction concerning the new matter beyond translation shall not be violated when the new matter beyond translation is added by the written correction of mistranslation. The notion behind this provision is that correction of mistranslation is regularly conducted by necessarily adding new matter beyond translation. Also, the procedure of submitting the written correction of mistranslation makes clear the content of correction of mistranslation and the fact that such correction does not include new matter beyond the original text, thereby, lightens third parties' burden to check foreign language documents and the examiner's burden of examination.

Accordingly, if the later-submitted written correction of mistranslation clearly states that the new matter beyond translation caused by the earlier submitted regular amendment were for the purpose of correcting mistranslation, the reason for refusal due to the new matter beyond translation should be deemed overcome.

Thus, it is appropriate that the examiner cannot refuse the application nor dismiss the amendment merely because the new matter beyond translation is included in the description after the correction of mistranslation.

(2) If the later-submitted written correction of mistranslation does not make apparent to third party or the examiner the reason why new matter beyond translation has been added, it should not be deemed that the reason for refusal due to the new matter beyond translation is resolved.

For example, if the portion of the description including new matter beyond translation which was added by the prior regular amendment is not indicated in the amendment unit of "[Unit to be Corrected]" of the written correction of mistranslation, and if the written correction does not show sufficient reason for correction regarding the new matter, the reason for refusal based on the new matter beyond translation which was added by the prior amendment should not be canceled.

Accordingly, in the above-mentioned situation, the examiner may send a notice of reasons for refusal on the ground of the new matter beyond translation. If such notice of reasons for refusal has already been sent to the applicant, the examiner may make a decision of refusal on the basis of such reason. However, the examiner may not dismiss the amendment made by the written correction of mistranslation.

(Explanation)

It is not appropriate to regard, in such a case, the reason for refusal due to the new matter beyond the translation as being overcome by considering that the new matter beyond the translation has been amended by the written correction of mistranslation, because it is against the purpose of establishing the system of written correction of mistranslation. In addition, since, as a result, the new matter beyond the translation still exists even after the correction of mistranslation.

Therefore, if such a written correction of mistranslation is filed, the examiner may send a notice of reasons for refusal on the grounds of the new matter beyond the translation. If such a notice of reasons for refusal has been already sent, the examiner may make a decision of refusal based thereon.

However, it must be noted that the amendment made by the written correction of mistranslation may not be dismissed.

(3) Even if the description in the written correction of mistranslation is not completely sufficient, the reason for refusal based on the new matter beyond translation should be deemed overcome by the written correction of mistranslation, if it makes apparent that the new matter beyond the translation has been added for correcting mistranslation.

7. Examination Procedure for Foreign Language Application

7.1 Examination Procedure for New Matter beyond Original Text

- (1) If the examiner has a suspicion that new matter beyond the original text exists in the description, claims or drawings, the examiner compares them with the foreign language document. If the examiner becomes provisionally convinced through the comparison that new matter beyond the original text does exist, the examiner indicates such effect as a reason for refusal and invites the applicant's assertion or counterevidence that new matter beyond the original text does not exist.
- (2) If the applicant, in response to the notice of reasons for refusal, succeeds in denying such reason for refusal by submitting a written argument, etc. to the extent to bewilder the examiner's conviction, the above-mentioned reason for refusal should be deemed overcome. If the examiner's conviction does not change, a decision of refusal can be rendered on the basis of the reason for refusal due to the new matter beyond the original text.
- (3) In a notice of reasons for refusal based on new matter beyond the original text, all of the new matters beyond the original text which have been found in a manner described in above-mentioned (1) should be pointed out in the notice of reasons for refusal.

(4) Where a notice of reasons for refusal is sent with regard to unnatural or unreasonable descriptions on the grounds of violation of Article 36 as the descriptions of the description etc. are unnatural or unreasonable to the extent that they do not satisfy the requirements for description under Article 36, it may be issued without comparison with the relevant foreign language document, regardless of whether or not the examiner has had a suspicion that there is a reason for refusal based on the new matter beyond the original text.

However, it must be noted that the existence of any unnatural or unreasonable description in a part of the description, claims and drawings does not necessarily mean failure in satisfying the requirements under Article 36.

7.2 Notice of Reasons for Refusal Concerning New Matter beyond Original Text

If new matter beyond the original text is found at the first step of substantive examination, the existence of such new matter should be indicated in a first notice of reasons for refusal. If the new matter beyond the original text still exists after the response made to the first notice of reasons for refusal, or if new matter beyond the original text comes to exist due to amendments made in the response to the first notice of reasons for refusal, the following procedure should be taken:

- (1) In the event that the new matter beyond the original text which has been indicated in the first notice of reasons for refusal still remains, a decision of refusal may be rendered.
- (2) In the case where the new matter beyond the original text which have not been indicated in the first notice of reasons for refusal:

(i) the new matter beyond the original text should be notified as a first notice of reasons for refusal, if the new matter had existed before the first notice of reasons for refusal was served, and

(ii) the new matter beyond the original text should be notified as a final notice of reasons for refusal, if the new matter came to exist through the amendments made in the response to the first notice of reasons for refusal. However, if there is another reason for refusal which should be notified as a first notice of reasons for refusal, the new matter should be notified as a first notice of reasons for refusal.

(iii) In the above-mentioned cases of (i) and (ii) when a reason for refusal having been already notified still remains other than that of new matter beyond the original text, a decision of refusal may be rendered. In this case, the existence of the new matter beyond the original text should be additionally mentioned in the decision of refusal.

7.3 Amendment after Final Notice of Reasons for Refusal, etc.

When an amendment is made in response to the final notice of reasons for refusal, etc., the examiner shall determine whether or not the amendment should be dismissed after confirming that it has been appropriate to make the notice the final notice of reasons for refusal or to give a notice under Article 50bis, following "Part IX: Procedure of Examination, 6.1" or "Part V: Chapter 1. Section 2. Notice under Article 50bis, 4.2."

7.3.1 Amendment to be Dismissed

(i) A regular amendment to the description, claims or drawings to add a new matter beyond the translation (Article 17bis(3)).

(a) Where a new matter beyond the translation which was indicated in the final notice of reasons for refusal, etc. still remains

(b) Where a new matter beyond the original text is added through a regular amendment made in response to the final notice of reasons for refusal, etc. and the new matter beyond the original text involves a new matter beyond the translation at the same time

(ii) A regular amendment or a correction of mistranslation for the claims, which changes a special technical feature of an invention (Article 17bis(4))

A regular amendment or a correction of mistranslation made in response to the final notice of reasons for refusal, etc.

(a) which newly adds an "invention whose special technical feature was changed"; or

(b) which includes the "invention whose special technical feature was changed" which was indicated in the final notice of reasons for refusal, etc.

(iii) A regular amendment or a correction of mistranslation made for the claims, which is not for any of the following purposes (Article 17bis(5)):

(a) the deletion of the claim or claims (Article 17bis(5)(i));

(b) the restriction of the claim or claims with limitation (Article 17bis (5)(ii));

(c) the correction of errors (Article 17bis (5)(iii)); or

(d) the clarification of ambiguous description (only with respect to the matters mentioned in the reasons for refusal concerned) (Article 17bis(5)(iv)).

(Explanation)

If an amendment to the claims is not regarded as an amendment made for any of the purposes mentioned in the paragraphs of Article 17bis(5), it will be subject to being dismissed regardless of whether or not it includes new matters beyond the original text.

(iv) A regular amendment or a correction of mistranslation which is made for the purpose of the restriction of claims with limitation, which does not make the invention after the amendment patentable (Article 17bis(6)).

7.3.2 Procedure for Considering Dismissal of Amendment

The procedure for considering a dismissing of amendment shall follow "6.2.2 Examination on whether Amendment was made legally" in "Part IX: Procedure of Examination," with "new matter" being replaced by "new matter beyond the translation."

7.3.3 Cases where Amendments (Correction of Mistranslation and Regular Amendment) Are Made More than Once in Response to Final Notice of Reasons for Refusal, etc.

(1) If a correction of mistranslation and a regular amendment are made on different dates,

judgment on whether or not the regular amendment violates Article 17bis(3) shall be made based on the translation where the correction of mistranslation was not made prior to the regular amendment or based on the description, claims or drawings immediately after the amendment by the written correction of mistranslation where the correction of mistranslation was made prior to the regular amendment.

(2) If more than one amendment (including a correction of mistranslation and a regular amendment) is made on the same date and it is apparent according to the content which of the amendments was made prior to others, then whether or not the amendments are accepted shall be judged on a first-come-first-served basis. If the order of amendments made on the same date is unknown and the decision to dismiss or the subject of the dismissal depends on the order of the amendments, the examiner shall confirm a chronological order of the amendments by sending a notice under Article 194(1) to the applicant and then determine the order of judgments on the acceptability of the amendments.

7.3.4 Application of Article 17bis (6) and Article 53

- Provisions to be considered when applying the requirement for independent patentability shall be as follows: Articles 29, 29bis and 32, Article 36(4)(i) or (6) (excluding paragraph (iv)), and Article 39(1) to (4).
- (2) Article 49(vi) (new matter beyond the original text) shall not be included in the provisions applicable to the judgment on whether or not a claimed invention to which an amendment was made for the purpose of restriction of the claim with limitation is independently patentable at the time of filing of the patent application.

7.3.5 Application Whose Amendment is Dismissed

The approach to an application when an amendment thereto is dismissed shall follow "Part IX: Procedure of Examination, 6.3" or "Part V: Chapter 1. Section 2. Notice under Article 50bis, 4.2."

7.3.6 Application Whose Amendment is Accepted without being Dismissed

- (1) The approach to an application when an amendment thereto is accepted without being dismissed shall follow "Part IX: Procedure of Examination, 6.4" or "Part V: Chapter 1. Article 2. Notice under Article 50bis, 4.2."
- (2) If a new matter beyond the original text is added by an amendment made in response to the final notice of reasons for refusal, etc., another notice of reasons for refusal shall be sent since an amendment shall not be dismissed on the grounds of introducing a new matter beyond the original text. However, if reasons for refusal mentioned in the final notice of reasons for refusal or in a notice of reasons for refusal given with a notice under Article 50bis have not been overcome, the examiner may render a decision of refusal without giving a notice of reasons for refusal to such effect. In this case, the existence of the new matter beyond the original text shall be additionally mentioned in the written decision of refusal.

8. Foreign Language Application as Prior Art

8.1 Practice when Foreign Language Documents are Searched

- (1) When foreign language applications or official gazettes thereof are searched as prior art for the examination under Articles 29, 29bis or 39, etc., it is highly probable that the contents of the foreign language document coincide with the contents of the translation. Therefore, it is usually considered to be sufficient to search only the portion translated into Japanese.
- (2) However, if any doubt arises that some differences exist between the translated portion and the description of the foreign language document, it is necessary to expand the search range to the foreign language document of the foreign language application.

8.2 Notes to Prior Application Search under Article 29bis, etc.

8.2.1 Notes to Scope of Search

- (1) When a foreign language application or a foreign language PCT application becomes "another application (prior application)" referred to in Article 29bis or 184terdecies of the Patent Act, or Article 3bis or 48novies of the Utility Model Act, the prior art effect of such prior application is produced on the basis of the foreign language document. Therefore, the relevant description in the foreign language document of the cited prior application must be eventually indicated.
- (2) As mentioned in 8.1 above, however, it is highly probable that the content of the foreign language document coincides with the content of the translation. Therefore, it is usually considered to be sufficient to search only the portion translated into Japanese.

8.2.2 Notes when Foreign Language Application or Foreign Language PCT Application is Cited as Another Application referred to in Article 29bis or 184terdecies of Patent Act, or Article 3bis or 48novies of Utility Model Act

It is usually sufficient to indicate only the relevant description in the translation and to mention that the corresponding description of the foreign language document, etc. is the ground of the notice of reasons for refusal. However, if the corresponding description in the foreign language document, etc. has been identified, the descriptions of both the translation and the foreign language document should respectively be indicated.

8.2.3 How to Deal with Applicant's Argument

(1) Where a reason for refusal according to Article 29bis etc. is notified by citing the foreign language application as "another application," and where the applicant asserts through an argument, etc. that the relevant description indicated by the examiner is not described in the foreign language document of the relevant application and thereby succeeds in denying the examiner's conviction that the indicated description is in the foreign language document to the extent that truth or falsity becomes unclear, the reason for refusal should be deemed overcome. If the applicant's argument does not change the examiner's conviction, a decision of refusal may be rendered.

(2) When new matter beyond the original text is discovered in "another application" for which the examination has not been completed, a notice of reasons for refusal on the basis of the new matter beyond the original text will be sent to such "another application."

8.3 Prior Application Right under Article 39 of Foreign Language Application

When an invention defined in a claim of a prior application or of another application filed on the same date includes new matter beyond the original text, the provisions of Article 39(1)-(4) shall not apply to such an invention.

(Explanation)

If the invention defined in a claim containing new matter beyond the original text has the effect to defeat later applications, it is against the principle of first-to-file as in the case of a regular application with a claim containing new matter. Therefore, if a claimed invention of a prior application or of another application filed on the same date contains new matter beyond the original text, the provisions of Article 39(1)-(4) should not apply to such an invention.

9. Examiner's Approach to Special Application, etc.

9.1 Basic Concept

- (1) As foreign language applications are accepted as regular domestic applications, divisional applications, converted applications and internal priority applications filed on the basis of a foreign language application shall be accepted.
- (2) Since divisional applications, converted applications, patent applications based on a utility model registration and internal priority applications are not different from regular applications in that they are patent applications, filing these applications as a foreign language application shall be allowed as in the case of regular patent applications.
- (3) Since a divisional application and a converted application have the effect that these applications are deemed to be filed on the filing date of their original applications, if the original application is a foreign language application, appropriateness of the division or conversion is judged on the basis of the foreign language document, but not of the translation.

If a divisional or converted application contains new matter beyond the foreign language document of the original (foreign language) application, it does not satisfy the requirements for a divisional or converted application and an earlier filing date therefore cannot be entitled for such an application.

In the case of an internal priority based on a foreign language application, the internal priority takes effect based on the foreign language document, since the foreign language document is the one describing the details of the invention as of the filing date of the prior application (Article 41).

- (4) Notwithstanding (3) above, since it is highly probable that the content of a foreign language document coincides with the content of the translation thereof, it is usually only necessary to examine the translation of the original application (or the prior application) in order to judge the propriety of retroactive effects in respect of the filing date.
- (5) When a foreign language application is a divisional application, a converted application, an application based on a utility model registration, or an application claiming a priority, the fulfillment of the requirements for division, conversion, etc. and the occurrence of effect of priority shall be examined not on the basis of the foreign language document but on the basis of the description, etc..

9.2 Divisional Application

9.2.1 Cases of Divisional Application

Possible cases of a divisional application related to a foreign language application are as follows:



9.2.2 Examination Practice

(1) Where the original application is a foreign language application (Cases 1 and 2)

Regarding the requirement that the divisional application "shall not exceed the scope of matters described in the description, claims or drawings of the original application as of the filing" (Part V: Chapter 1. Section 1. Division of Application, 2.2 Substantive Requirements, (1)(ii) or (2)(ii)), which is a part of the substantive requirements for division, such matters should be replaced with the matters described in the foreign language document of the original application. However, since it is highly probable that the content of the foreign language document of the original application coincides with the content of the translation thereof, it is usually sufficient to compare the translation of the original application with the matters described in the description, etc. of a divisional application to determine whether the said requirement is satisfied.

(2) Where a divisional application is a foreign language application (Cases 1 and 3)

Not the foreign language document but the translation thereof and the description, etc. amended thereafter shall be examined in terms of the fulfillment of the substantive requirements for division.

9.2.3 Period during which Divisional Application can be Filed

The period during which a divisional application can be filed for a foreign language application is basically the same as such a period for regular Japanese applications. However, where a divisional application is filed by referring to a foreign language application as the original application, the description, etc. of the original application which is subject to the division does not exist before a translation of the original application is filed. Therefore, a divisional application cannot be filed during such a period.

9.3 Converted Application

9.3.1 Cases of Converted Application

Since a foreign language application is not admitted for utility model application, possible cases of a converted application related to the foreign language application are the following:



9.3.2 Examination Practice

(1) Case 1

(i) The basis of a converted application is the matters described in a foreign language document of the original application. If a translation is filed, it is highly probable that the content of the foreign language document of the original application coincides with the content of the translation. Therefore, it is usually sufficient to compare the translation of the original application with the matters described in the description, etc. of the converted application to determine whether the substantive requirements for conversion are satisfied or not.

(ii) When a converted application is filed before a translation is submitted for the original application, the foreign language document of the original application is compared with the matters described in the description, etc. of the converted application to determine whether the substantive requirements for converted application are satisfied.

(2) Case 2

(i) The original description, etc. of the original application (regular application) and the description, etc. of the converted application are compared to determine whether the requirements for conversion are satisfied. Regarding the other requirements, the same examination procedure will be conducted as in the case of other foreign language applications.

(ii) Even if the foreign language document of the converted application does not satisfy the requirements for conversion, such converted application will be lawful if defects are remedied in the translation or later amended description, etc.

9.4 Internal Priority

9.4.1 Cases of Application

Possible cases of an application claiming internal priority in relation to a foreign language application are as follows:



9.4.2 Examination Practice

(1)Cases 1 and 2

(i) The basis of internal priority is the matters described in a foreign language document of the earlier application. If a translation is filed, it is highly probable that the content of the foreign language document of the earlier application coincides with the content of the translation. Therefore, it is usually sufficient to compare the translation of the earlier application with the matters described in the description, etc. of the application claiming internal priority to determine whether the internal priority comes into effect or not.

(ii) However, if an internal priority application is filed before filing of a translation, and if the translation of the earlier application is not filed afterward, the foreign language document of the earlier application must be compared with the matters described in the description, etc. of the application claiming internal priority to determine whether the internal priority comes into effect or not.

(iii) As in the case of a regular application claiming internal priority, the existence of the effect of priority is judged only when the examiner has discovered a prior art which can be the ground for the reason for refusal and which was published after the filing date of the earlier application and before the filing date of the application claiming internal priority.

(2) Case 3

The prior application (regular application) is compared with the matters described in the description, etc. of the foreign language application claiming priority to judge whether the effect of priority exist or not. Regarding the other requirements, the same examination procedure will be conducted as in the case of other foreign language applications.

10. Foreign Language PCT Application

A foreign language PCT patent application is treated as in the same manner with the foreign language applications. It is possible to correct mistranslation in a foreign language PCT utility model application on the basis of the description, etc. as of the filing date of international application.

However, a translation of the foreign language PCT application must be filed during the period for submission of the national form paper.

10.1 New Matter beyond Original Text and Description as Criterion for Judgement thereof

As stated in "5.1.1 Relevant Provisions Concerning New Matter beyond Original Text", new matter beyond the original text constitutes a reason for refusal or invalidation in the foreign language PCT patent application, and further, it constitutes a reason for invalidation in the foreign language PCT application for utility model registration, and the criteria for new matter in these applications is the description, claims and drawings of international application as of the international filing date.

10.2 Correction of Mistranslation and Regular Amendment

10.2.1 Correction of Mistranslation in Foreign Language PCT Application

- (1) As in the case of the foreign language application, a mistranslation in the foreign language PCT patent application may be corrected by submitting a written correction of mistranslation (Article 184duodecies(2)).
- (2) When mistranslations are corrected, the translation as well as the description or drawings as amended by the correction of mistranslations serve as the criteria for judging new matter beyond translation in a later regular amendment.
- (3) In the case of the foreign language PCT utility model application, it is possible to correct mistranslation on the basis of the description, etc. as of the international filing date which is prepared in a foreign language, within a period of time during which amendments are allowed to make to the description, claims or drawings (Articles 2bis(1), 6bis and 48octies(2) of the Utility Model Act). In this case, amendments should be made by means of a written amendment under Article 2bis(4) of the Utility Model Act (Article 48octies(3) of the Utility Model Act).

10.2.2 Regular Amendment in Foreign Language PCT Patent Application

The criterion for regular amendment to the foreign language PCT patent application is a "translation or drawings of an international patent application (if a written correction of mistranslation is filed, a translation, or the description, claims or drawings as amended by the correction of mistranslation is considered the criterion for regular amendment)" (Article 184duodecies(2)). Violation of such provisions constitutes a reason for refusal as in the case of the foreign language application. (Concerning the foreign language PCT utility model application, no provision is set forth with regard to the addition of new matter on the basis of the translation.)

10.2.3 Amendment under PCT Article 34

(1) Concerning foreign language PCT patent applications, where an amendment is made at the international phase in accordance with the provisions of Article 34(2)(b) of the PCT and the translation of the written amendment is submitted to the Commissioner of the Japan Patent Office by the date on which the relevant time for the national processing occurs, the amendment shall be deemed to have been made by means of submitting a written correction of mistranslation (Article 184octies(1) to (4)). Therefore, in that case, as a result of the amendment under Article 34(2)(b) of the PCT, the

criteria for judging the new matter beyond the translation shall be the translation or drawings of the international patent application, or the translation of the description or drawings as amended under Article 34(2)(b) of the PCT.

(2) When an amendment under Article 34(2)(b) of the PCT as mentioned above is made to a foreign language PCT utility model application, it shall be deemed to have been made in accordance with the provision of Article 2bis (Utility Model Act Article 48quindecies(1)).

10.3 Relevant Provisions Concerning Special Cases of Prior Art Effect

Patent Act Article 184terdecies

For the purpose of the application of Article 29bis, in the case where another patent application or a utility model registration application as provided in Article 29bis is an International Patent Application or an International utility model registration

application under Article 48ter (2) of the Utility Model Act, the term "another patent application or a utility model registration application" under Article 29bis of this Act shall be deemed to be replaced with "another patent application or utility model registration application (excluding a patent application in Foreign Language under Article 184quater (1) or a utility model registration application in foreign language under Article 48quater (1) of the Utility Model Act which has been deemed to have been withdrawn in accordance with Article 184quater (3) of this Act or Article 48quater (3) of the Utility Model Act)," the term "the laying open of the patent application or" shall be deemed to be replaced with "laying open of the patent application," the term "published" shall be deemed to be replaced with "published or where international publication under Article 21 of the Patent Cooperation Treaty signed in Washington on June 19, 1970 has been effected," and the term "the description, scope of claims or drawings originally attached to the application" shall be deemed to be replaced with "the description, scope of claims, or drawings of an international application as of the International Application Date under Article 184quater (1) of this Act or Article 48quater (1) of the Utility Model Act."

Utility Model Act Article 48novies

For the purpose of the application of Article 3bis, in the case where another application for a utility model registration or patent application as provided in Article 3bis is an International Utility Model Registration Application or an International Patent Application under Article 184ter (2) of the Patent Act, the term "another application for a utility model registration or for a patent" under Article 3bis shall be deemed to be replaced with "another application for a utility model registration or for a patent (excluding a Utility Model Registration Application in Foreign Language under Article 48quater (1) of this Act or a Patent Application in Foreign Language under Article 184quater (1) of the Patent Act which has been deemed to have been withdrawn in accordance with Article 48quater (3) of this Act or Article 184quater (3) of the Patent Act," the term "the respective Article or for which" shall be deemed to be replaced with "the respective Article, for which," the term "the publication of the patent application has been effected" shall be deemed to be replaced with "the publication of the patent application has been effected, or international publication under Article 21 of the Patent Cooperation Treaty signed in Washington on June 19, 1970 has been effected," and the term "the description, scope of claims or drawings originally attached to the written application" shall be deemed to be replaced with "the description, scope of claims, or drawings of an international application as of the International Application Date under Article 48 quater (1) of this Act or Article 184quater (1) of the Patent Act."

(Explanation)

- (1) Concerning a foreign language PCT application, the prior art effect is produced on the basis of the description, claims or drawings of the international application as of the international filing date, except the foreign language patent application referred to in Article 184quater(1) and the foreign language utility model application referred to in Article 48quater(1) of the Utility Model Act which are considered to have been withdrawn in accordance with the provisions of Article 184quater(3) of the Utility Model Act (Patent Act Article 184terdecies and Utility Model Act Article 48novies).
- (2) However, where the foreign language PCT application is an earlier application on which internal priority is based, even if a translation of the earlier application has not been filed, the earlier application shall be considered to have been published with regard to the inventions described in the description, claims or drawings as of the international filing date of the earlier application, among the inventions described in the original description of the later application for which priority is claimed, provided that the later application claiming priority has been laid open or published in the gazette containing the patent. As a result, the earlier application has the prior art effect. (Articles 41(3) and 184quindecies(4))
- (3) If a patent application claiming internal priority is the foreign language PCT patent application, the prior art effect is produced with regard to the inventions described in the description, claims or drawings originally attached to the request for application of the earlier application among the inventions described in the description, claims or drawings of the foreign language PCT patent application as of the international filing date (Articles 41(3) and 184quindecies(3)).

(Appendix 1)

Written Correction of Mistranslation (Sample)

[Document Name] Written Correction of Mistranslation

[Submission Date] September 1, 1995

[Address] To: The Commissioner of the Japan Patent Office

[Indication of the Case]

[Application Number] HEISEI 7 (1995) Patent Application No. 100321

[Applicant]

[Identification Number] 090004324

[Name] Tokkyo Kabusiki Kaisha

[Administrator]

[Identification Number] 190001231

[Patent Attorney]

[Name] Tokkyo Taro

[Correction of Mistranslation 1]

[Title of Document to be Corrected] Description

[Unit to be Corrected] 0003

[Method of Correction] Change

[Content of Correction]

[0003]

An apparatus for charging a cannon, which speedily charges a barrel with powder (hohshin ni kayaku wo sohtensuru) by lightening the weight (keiryoka) of the charging apparatus and by making the rotational response of the charging apparatus capable of following the elevation of the barrel.

[Reasons for Correction, etc.]

(Reason for Correction 1-1)

Concerning the phrase "hohshin ni kayaku wo sohtensuru (charges a barrel with powder)" in Paragraph [0003]:

The phrase of the foreign language document which corresponds to the above-mentioned phrase in the translation is "charge a barrel with powder" in line 3 on page 2 of the foreign language document, and such phrase was translated as "taru ni kona wo sohtensuru (charge a cask with flour)" before the correction of mistranslation. The translation before the correction of mistranslation is a general translation of the above-mentioned English phrase. However, this application relates to the apparatus for charging a cannon, and the word "barrel" means "hohshin (gun barrel)" rather than "taru(barrel/cask)" and the word "powder" means "kayaku (powder/gunpowder)" rather than "kona (powder/flour). Accordingly, taking into consideration the technical meaning of this application, the mistranslation are hereby corrected to translate the above-mentioned phrase as "hohshin ni kayaku wo sohtensuru."

(Material necessary for the explanation of the reason for correction 1-1: "SHOGAKU-KAN RANDOM HOUSE ENGLISH-JAPANESE DICTIONARY," pages 213 and 2020, published on January 20, 1988)

(Reason for Correction 1-2)

Concerning the word "keiryo (lightening the weight)" in Paragraph 0003:

It was translated as "keiryo (measuring)" before the correction of mistranslation. As it is apparent from other descriptions in the description (such as "to lighten the weight" in Paragraph [0002]) that such word "keiryo (measuring)" is an error of "keiryo (lightening the weight)." Therefore, it is a matter to be amended which can also be handled by regular
amendment. [Indication of Fee] [Advance Payment Book Number] 012345 [Amount Paid] ¥19000 [List of Documents Filed] [Title] Material necessary for the explanation of the reason for correction: 1 [Material Necessary for Explanation of the Reason for Correction 1-1]

bar·rel[baerel]n.,v.(-reled.-rel·ing or(特に英) -relled,-rel・ling)—n. 1(胴のふくれた)たる,ビヤ だる.2 バレル:1 たるの量;米国で液体は 31 1/2 ガロン,果 実や野菜は 105 乾量りォート,英国では 36 英ガロン.3(話) 多量,たくさん,どっさり(large quantity): ーa barrel of monkeys たくさんのサル.—have a barrel of fun とても おもしろく過ごす.4 たるに似た形の容器(ケース),円筒[形 のものの胴部].5【兵器類】砲身,銃身:-the dismantled barrel of the machine pistol 自動ピストルの分解し た銃身.6【機械】ポンプの筒.7 シャフトの上で動く円筒.8 [時計]香箱():時計のゼンマイを入れる歯車つきの箱.9 [鳥類](廃)羽柄(calamus,quill).10(牛・馬などの) 胴体(trunk).11〔海事〕車地(capstan)の胴部.→ capstan(図).12 バレル:回転しながら製品をめっきまた は研摩する水平のシリンダー.13(一般に)筒形構造の丸 天井,かまぼこ屋根,半円筒ボールト. over a barrel(俗)窮地に陥って、お手上げで(in an embarrassing or uncomfortable position);身動きで きない,にっちもさっちもいかない(unable to act): - They really had us over a barrel when they foreclosed the mortgage.抵当を流されたときは,全く困り果ててしまった. ーv.t.1 たるに入れる,たるに詰める.2(金属部品を)バ レルで仕上げる,バレル研摩(めっき)する. -v.i.(俗)高速度で進む(運転する),疾走する(travel or drive very fast): - barrel along the speedway 高速道路をぶっ飛ばす. [ME barell <OF baril,?=barre stave(→BAR1)+

-il<L-ile,neut.of –ilis -ILE]

pow·der[paud r|-d]n.1 粉,粉末:-be reduced to powder 粉末になる,粉々になる.—grind...into(or to)powder...をひいて粉にする.2 粉末剤;火薬,爆薬 (gunpowder),粉おしろい(face powder),歯みがき粉 (tooth powder)など:-black powder 黒色火薬.-smokeless powder 無煙火薬.—food for powder 弾丸 のえじき.—powder and shot 弾薬、軍需品.—the smell of powder 硝煙のにおい,実戦の経験.—smell powder 実戦の経験をする.—digestive powder 粉末消化剤. curry powder カレー粉.—a lady in powder and patch おしろいをしてつけぼくろをした婦人.—with powder and paint 厚化粧をして.3(また powder snow)【スキー】 粉雪:通例ざらめ雪でない,さらさらした新雪. Keep one's powder dry (俗)万一に備える,用意を怠 らない:-Put your trust in God, and keep your powder dry.神を信頼し、万一に備えなさい. not worth powder and shot 骨折りがいがない.

-v.t.1 粉にする,製粉する,粉末にする,粉状にする (reduce to powder, pulverize): -be powdered to dust 粉末にされる,粉々になる.
2 粉をふりかける,粉でおおう(Sprinkle or cover with powder): -She powdered the cookies with confectioners' sugar. クッキーに精製糖をまぶした.—Her face was powdered with flour.彼女の顔は小麦粉にまみれて いた.

Origin: "SHOGAKUKAN RANDOM HOUSE ENGLISH-JAPANESE DICTIONARY," SHOGAKUKAN INC., pages 213 and 2020, published on January 20, 1988.

Written Correction of Mistranslation (Sample)

[Document Name] Written Correction of Mistranslation [Submission Date] September 1, 1995 [Address] To: The Commissioner of the Japan Patent Office [Indication of the Case] [Application Number] HEISEI 7 (1995) Patent Application No. 100322 [Applicant] [Identification Number] 090004324 [Name] Tokkyo Kabushiki Kaisha [Administrator] [Identification Number] 190001231 [Patent Attorney] [Name] Tokkyo Taro [Correction of Mistranslation 1] [Title of Document to be Corrected] Description [Unit to be Corrected] 0003 [Method of Correction] Change [Content of Correction]

[0003]

As has often been the case, oars break due to a collision, etc. during boating practices. Oars are usually purchased in a set for a boat (for examples, eight oars for an "eight" boat). Accordingly, if only one oar breaks, it is necessary to purchase extra oars. As a means for preventing the breakage of oars, it is possible to manufacture oars by using flexible materials. However, it costs too much if all oars are manufactured by using flexible materials. This invention is characterized in that an oar nearest the front (saizenbu no o-ru) which tends to easily break is made resistant to breakage upon collision by adopting flexible materials for the oar nearest the front (saizenbu no o-ru) used for a boat (such as an "eight" boat) rowed by several people.

[Correction of Mistranslation 2]

[Title of Document to be Corrected] Description [Unit to be Corrected] 0004 [Method of Correction] Change [Content of Correction] [0004]

Only a steersman watches ahead of a boat while rowing the boat (sohtei). Therefore, in many cases, one person's carelessness has lead to a collision.

[Reasons for Correction, etc.]

(Reason for Correction 1)

Concerning the phrase "saizenbu no o-ru (the oar nearest the front)" in Paragraph [0003]:

The word of the foreign language document which corresponds to the above-mentioned phrase in the translation is "bow" in line 3 on page 2 of the foreign language document, and such word was translated as "senshu (bow/stem/prow)" before correction of mistranslation. Although it is true that the word "bow" has the meaning of "senshu

(bow/stem/prow)," it also has the meaning of "saizenbu no o-ru (an oar nearest the front)." Taking into consideration that this invention relates to oars of a boat, the above-mentioned word should be translated as "saizenbu no o-ru (front side of an oar). "Therefore, the word "bow" which was mistranslated as "senshu (bow/stem/prow)" is hereby corrected to "saizenbu no o-ru (front side of an oar)."

(Material necessary for the explanation of the reason for correction 1: "SHOGAKUKAN RANDOM HOUSE ENGLISH-JAPANESEDICTIONARY" page 31, published on January 20, 1988)

(Reason for Correction 2)

Concerning the word "sohtei (rowing the boat)" in Paragraph [0004]:

The above-mentioned portion was written as "sohtei (hypothesis)" before the correction of mistranslation. However, as it is apparent from other descriptions in the description (such as the description of "sohtei renshu chu (during boating practices)" in Paragraph [0003]) that the word "sohtei (hypothesis)" is an error and should be written as "sohtei (rowing the boat)." Therefore, it is a matter to be amended which can also be handled by regular amendment.

[Indication of Fee]

[Advance Payment Book Number] 012345

[Amount Paid] ¥19000

[List of Documents Filed]

[Title] Material necessary for the explanation of the reason for correction: 1

[Material Necessary for Explanation of the Reason for Correction 1]

bow3【bau】n.1[海事][航空](1)(船の)船首,へさ き;(飛行船の)船首.cf.stern. (2)船首方向:特に遠 い目標物を示すとき船首を基準にその左右 45°以内の方向. -a mooring two points off the port (starboard)bow 左(右)側船首から2ポイントの方向(角度 22°30′)にある係 船柱.2(pl.)[海事]船の最前端の外側;特に船首材か ら船体の両側に向かってなだらかに広がっていく部分.3 漕 艇最前部のオール.4(また bowman, bow oar)バ ウ,バウマン:艇首でこぐ人. bows on (船かある物に)船首を向けて(with the bow foremost)---The vessel approached us bows on. 船は船首をまっ すぐに我々に向けて近づいてきた. bows under(船が)船首に水をかぶって(shipping water at the bow): - The ship was bows under during most of the storm.船はほとんど暴風雨の間じ ゅう船首に水をかぶっていた. on the bow[海事]船首の方に(左右前方 45°内に). -adj.船首の,船首にある. [<LG boog(n.) or D boeg or Dan bov; \rightarrow BOUGH

Origin: "SHOGAKUKAN RANDOM HOUSE ENGLISH-JAPANESE DICTIONARY," SHOGAKUKAN 1NC., page 310, published on January 20, 1988.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part IX: PROCEDURE OF EXAMINATION

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(Points to consider)

With regard to applications filed on or before March 31, 2007, among the provisions of this Examination Guidelines (Part IX Procedure of Examination), the provisions in 2(6) of "Section 1 Introduction" and the provisions in 4.2(3), 4.3.3.1(1)e, 6.2.1(2), 6.2.2(2) and (3) of "Section 2 Details," which relate to "Amendment that changes a Special Technical Feature of an Invention" (Article 17bis (4)) shall not apply.

The procedure of examination involving a "notice under Article 50bis" given with regard to applications filed on or after April 1, 2007, shall be as provided in the provisions of "Part V Chapter 1 Section 2 Notice under Article 50bis."

In Part IX, the provisions of Article 17bis (5) and Article 17bis (6) are indicated as those applicable to applications filed on or after April 1, 2007.

Section 1 Introduction

Main Articles related to the examination procedures

Patent Act Article 47 : Examination by examiner

Patent Act Article 49 : Examiner's decision of refusal

Patent Act Article 50 : Notice of reasons for refusal

Patent Act Article 51 : Examiner's decision to the effect that a patent is to be granted

Patent Act Article 52 : Formal requirements for decision

Patent Act Article 53 : Dismissal of amendments

Patent Act Article 162 and 164: Reconsideration by examiner before appeal

1. Principle of Examination

An examiner should conduct a substantive examination on whether an application for a patent should be granted or not. The examiner, therefore, is required to make a fair judgment based on high-level expertise.

Especially, the followings are to be taken note:

(1) To conduct examination as uniformly as possible in line with guidelines related to the examination, such as "Examination Guidelines", etc., paying due consideration to the promptness, accuracy, fairness and transparency.

(2) To make an effort to ensure and improve the quality of examination with respect to prior art search and judgment on the requirements for patentability. The prior art search and the judgment on patentability should be made taking into consideration of complexity and advancement of the technology by fully utilizing expertise accumulated in each examiner.

(3) To perform efficient examination in sufficiently communicating with an applicant or the attorney (hereinafter, simply referred to as "an applicant").

2. Outline of Examination Procedures

The examination procedures are summarized as follows. For the detailed procedures, "see Section 2 Details." Figure 1 shows the flow chart of the substantive examination of a patent.

(1) Understanding and finding of the invention (\rightarrow Section 2, 1)

The examination starts by finding a claimed invention of an application concerned. After reading the description carefully and understanding the content of an invention sufficiently, the examiner should find the claimed invention based on the writing of the claims.

(2) Selection of the Subject of Search (\rightarrow Section 2, 2.1)

Following the recognition of the invention claimed in the application concerned, the examiner shall consider the requirements of unity of invention (Article 37). At the same time, the examiner shall consider the requirements for the description and claims (Article 36), thereby selecting inventions as the subject of a prior art search.

(3) Prior art search (search concerning novelty, inventive step and senior or junior of applications) (→Section 2, 2.2 to 2.3)

The examiner shall conduct a prior art search targeting the claimed inventions selected as the subject of the search, in terms of novelty, inventive step and seniority of applications (Articles 29, 29bis and 39). Where the applicant discloses the information on relevant prior art documents in the description attached to the application concerned or the search report prepared by a search agency (including a foreign patent office) indicates relevant prior art documents, the examiner shall first examine these documents.

(4) Examination of requirements for patentability in terms of novelty, inventive step, etc. $(\rightarrow$ Section 2, 3.)

Novelty, inventive step, etc. of the claimed invention that was decided as the subject of the search in (2) should be examined, based on the search results.

(5) Notice of reasons for refusal (\rightarrow Section 2, 4.)

The examiner should notify an applicant of a notice of reasons for refusal when finding reasons for refusal as the results of examination (Patent Act 50). Reasons for refusal should be stated as clearly and simply as possible so as to make it easy for an applicant to understand it. Judgment should be clearly stated by every claim.

(6) Where a written opinion and a written amendment are submitted (\rightarrow Section 2, 4.)

Upon receiving a written amendment, the examiner shall check the legality of the amendment made by means of the written amendment. (Whether, in comparison with the description, claims or drawings attached to the application initially filed, the amendment adds any new matters or contains an invention that change a special technical feature.) (See "Part III Amendment of Specification, Claims and Drawings"). Then, by fully examining the contents of the written opinion and the written amendment, the examiner shall determine whether the reason for refusal stated in the notice has been overcome.

Where the reasons for refusal were resolved but other new reasons for refusal were found, the examiner should notify the applicant of reasons for refusal after judging whether it should be set to "the final notice of reasons for refusal" or not.

(7) Final decision (\rightarrow Section 2, 7.)

Where no reasons for refusal are found, decision to grant a patent should be made (Patent Act Article 51).

Where the notified reasons for refusal were deemed not to be resolved in consideration of the written opinion and amendment, an examiner should decide on refusal, as well as dismissal of the amendment if required (Patent Act Article 49). In decision of refusal, all unresolved reasons for refusal should be indicated, and the examiner should describe them clearly and simply so that the applicant can easily understand the claims for which the notified reasons for refusal were still unresolved.

(8) Reconsideration by examiner before appeal (\rightarrow Section 2, 8.)

Where an amendment is made in the demand for appeal and reconsideration by an examiner before the appeal is referred, the examiner should reconsider the application before the appeal (Patent Act Article 162).

In reconsideration by an examiner before the appeal, after judging whether the amendment made in the demand for appeal contravenes the provisions of Patent Act Article 17bis (3) to (6) or not, the examiner should examine whether the reasons for refusal of the original decision were resolved or not.

Where the reasons of refusal of the original decision were resolved and other reasons for refusal are not found as results of the examination, the examiner should annul the original decision and make a decision to grant a patent. When the examiner cannot decide to grant a patent, the results of examination should be reported to the Commissioner of the Patent Office.

Section 2: Details

1. Understanding of Invention

As the premises for examining presence/absence of the patentability in terms of novelty, inventive step etc., the technical content of a claimed invention should be understood and established. This work is called finding of a claimed invention. Finding of a claimed invention should be performed, based on the description of claims. In interpreting the meaning of the terms described in claims, descriptions and drawings should be considered.

Reference:

In the process of finding the gist of an invention, it is necessary to look through the detailed description of the invention and drawings in order to clarify the technical content related to the invention. However, at the stage where finding the technical matters, which are the gist of invention, after understanding of the technical content, any constituent elements described only in the detailed description of the invention or drawings should not be added beyond the description of claims." ("Finding of the gist of an invention related to an application of a patent", High Court Reporter, Civil Affairs, 1991, p.35)

2. Prior Art Search

An examiner should search prior art, paying attention to the provisions of the Examination Guidelines on novelty, inventive step and senior and junior applications (Patent Act Article 29, 29bis, 39) (see "Part II Chapter 2-4"), and thoroughly find relevant prior art.

2.1 Subject of Search

(1) Selection of the subject of search

Among all inventions set forth in the claims, the invention first mentioned in the claims and any other inventions that meet the requirements of unity with that invention shall be selected as the subject of search. Where the invention first mentioned in the claims lacks a special technical feature, the subject of the examination will be selected as the subject of the search in accordance with the provisions of "4.2 Subject of Examination Where the Invention First Mentioned in the Claims Does Not Have Any Special Technical Feature" ("Part I Chapter 2 Requirements of Unity of Invention"), without considering whether the requirements of unity of invention are met.

- (2) Items to be considered when deciding subject of search
 - ① Embodiments of the claimed invention should be taken into consideration in deciding a subject of prior art search.
 - 2 When considered to contribute to a prompt and precise examination, matters reasonably expected to be added to claims after an amendment, unless the burden is extremely increased, may be set to a subject of prior art search.

(3) Invention that may be excluded from a subject of search

The following inventions may be excluded from a subject of prior art search:

- ① Invention to which new matters have been clearly added (violation of the requirements of Patent Act Article 17bis (3))
- (2) Invention directed to a category of unpatentable invention (violation of the requirements of Patent Act Article 32)
- ③ Invention clearly not falling under the invention defined in Patent Act Article 2 or invention clearly not industrially applicable (violation of the requirements of Patent Act Article 29(1) main paragraph)
- ④ In case where the description of claims are so ambiguous that the invention cannot be conceived even by taking into consideration of the detailed description of the invention and drawings (violation of the requirements of Patent Act Article 36 (6)(ii))
- (5) In case where the claimed invention of which detailed description is too unclear or insufficient for a person skilled in the art to carry out, the parts where description is too unclear or insufficient for a person skilled in the art to carry out (violation of the requirements of Patent Act Article 36 (4)(i))
- (6) In case where the claimed invention is beyond the scope of description in the detailed description of the invention within which a person skilled in the art can recognize that the problem of the invention can be solved, the parts that is "beyond the scope of description" (violation of Patent Act Article 36(6)(i))

2.2 Search Strategy

- (1) Remarks before search
 - (1) Where information on prior art documents related to the detailed description of the invention was disclosed, the content of prior art documents should be examined prior to search.

With regard to the requirements for disclosure of information on prior art documents (Patent Act Article 36 (4) (ii)), please see "Part I Chapter 3 Requirements for disclosure of information on prior art document".

- (2) Where prior art search relating to the application was conducted in advance by search agencies (including foreign patent offices), the content of search results should be considered and utilized for an examination.
- (2) Methods of search
 - ① Among all documents falling in the technical fields to which the claimed inventions pertain, the examiner shall, because of reasons of economy, search a certain range of documents in which the examiner, based on his knowledge and experience, considers it highly probable to find relevant prior art documents.
 - (2) Where the examiner uses the search results provided by a search agency (including a foreign patent office), and, based on his knowledge and experience, considers it possible to conduct an examination precisely and efficiently by using such search

results, the examiner is not required to conduct a prior art search himself. Where the examiner conducts an additional prior art search, the scope already searched by the search agency shall be excluded from the scope of the additional search unless it is considered highly probable to find more significant prior art documents in the scope already searched by the search agency. (For the use of prior art search results and examination results provided by foreign patent offices in the procedure for examination of overseas-related applications, see "(Attachment) Guidelines for the Use of Prior Art Search Results and Examination Results Provided by Foreign Patent Offices.")

- ③ The examiner shall first search the technical fields in which it is most probable to find relevant prior art documents. In general, it is appropriate for a examiner to start the prior art search from the most closely relevant technical fields to the embodiments disclosed in the detailed description of the invention, and gradually extends to less relevant fields.
- ④ Whether to extend the search from highly relevant technical fields to less relevant fields should be determined by considering the obtained search results. That is to say, where adequate prior art for reasonably denying novelty or inventive step could not be found as the results of the search of the highly relevant fields, the scope of search should be extended if probability of finding prior art documents denying novelty or inventive step is high by search of less relevant fields.
- (5) Search results should be evaluated as needed, and the subjects of search are reviewed if required. In particular, it may be clarified during the prior art search that what was considered to be a "special technical feature" at the beginning of search does not indicate contribution to the prior art, which may not meet the requirements for unity of invention a posteriori. In this case, in accordance with the provisions of "Part I Chapter 2 Requirements of Unity of Invention; 4. Procedure of Examination," any inventions excluded from the subject of the examination shall be excluded from the subject of the search.
- (3) Completion of search
 - (1) When a document denying by itself novelty of the claimed invention and the embodiment of the invention disclosed in the detailed description of the invention is found, the prior art search for the claim may be completed.

However, in cases where other embodiments can be searched without any excessive burden, it is desirable to continue a further search.

(2) When highly relevant prior art documents have been sufficiently obtained, or when the possibility of discovering further relevant prior art becomes very low, the prior art search may also be stopped (see Note).

(Note) Where the claim of a chemical substance expressed by Markush form is unduly wide and has various embodiments, and the searching all of the subjects of search is extremely difficult without accompanying excessive search burden, the search can be ended without further searching, only if it falls under the following (i) or (ii) on assumption that all search of the scope which do not require the excessive search burden have been completed.

In this case, the report of finishing the search without searching all of the subjects of the search and the searched scope should be indicated in a "record of the result of prior art search".

(i) As to at least one of the chemical substance groups expressed by alternatives disclosed in claims including the chemical substances disclosed as embodiments (a group of chemical substances expressed by specified alternatives corresponding to embodiments), at least one prior art document denying its novelty etc. has been found.

(ii) All chemical substance groups expressed by specified alternatives corresponding to the aforementioned embodiments have already been searched, and at least one prior art denying novelty etc. of the claimed invention has been found by the search of the chemical substance groups expressed by those other than the aforementioned alternatives.

2.3 Record of Search Results

When notifying a notice of reasons for refusal after the first prior art search, the searched field (expressed by the IPC etc.) should be entered in the "record of the result of prior art search".

In addition, where there is prior art that does not constitute the reasons for refusal but is considered to be useful for an applicant in amending, information on the documents can be recorded together.

3. Examination of Prior Art Documents etc.

Whether the content of prior art documents constitutes the reasons for refusal on novelty, inventive step etc. of the claimed invention should be examined as follows:

(1) Confirmation of bibliographic items of prior art documents etc.

The dates of publication of prior art documents etc. are very important to constitute the reasons for refusal. The relationship between the date of publication and the filing date (or the priority date) should be certainly confirmed for each prior art document. (see Novelty and Inventive Step in Chap. 2, Part II).

In addition, when considering application of Patent Act Article 29bis or 39, a filing date, an inventor and an applicant should be confirmed.

(2) Understanding of content of prior art documents etc.

The examiner should read carefully prior art documents and understand the prior art sufficiently. In this case, the examiner;

- ① should not understand the content of prior art documents with unreasonable interpretation obsessed by the claimed invention to bring them to the claimed invention;
- 2 should not judge the whole content of the prior art document from its partial description and should not assume and determine the content of the prior art document without rational evidence;

- ③ should judge the content of the invention described in the prior art document not only by their structure but also from the viewpoints of problems to be solved, technical fields etc.
- (3) Selection of cited invention, comparison with claimed invention and judgment

In considering the reasons for refusal regarding novelty, inventive step etc, comparison between the cited invention and the claimed invention should be conducted as follows:

① In choosing the relevant prior art to be cited in a notice of reasons for refusal among the prior art described in the prior art documents already found, the optimum relevant prior art (a principle cited invention) should be selected with due consideration of embodiments.

As the principle cited invention, an invention of which technical field or problem to be solved is the same as or close to that of the claimed invention, should be selected. Where their technical field or problems to be solved are different, the reason why the relevant invention is used as a principle cited invention should be taken into consideration.

- ② Identical features and differences should be clarified by comparison of the claimed invention with the principle cited invention. Where there are no differences, the novelty of the claimed invention should be denied, but where there are differences, the inventive step of the claimed invention should be examined (see Novelty and Inventive Step, Chap. 2, Part II).
- ③ The examiner should examine inventive step of the claimed invention by determining whether a person skilled in the art would have been able to easily make the invention, based on the content of the principle cited invention and other cited inventions (including well-known art and commonly used art), and common general technical knowledge (see Novelty and Inventive Step, Chap.2, Part II).

4. Notice of Reasons for Refusal

The Patent Act stipulates that the examiner, before the decision of refusal, should notify an applicant of the reasons for refusal and give him/her an opportunity for submission of a written opinion, with specifying a reasonable period (Patent Act Article 50).

It is unfair for an applicant that an examiner decides to refuse without giving him/her any opportunities for defense even when the examiner is convinced of reasons for refusal. Moreover, it's not beyond the realm of possibility that an examiner makes a mistake. Under these circumstances, this provision aims at the fair and appropriate operation of the procedures of an application for a patent, giving the applicant an opportunity for offering an opinion, as well as resolving the reasons for refusal by amendment of a description etc., and also giving the examiner an opportunity for reconsidering with a written opinion. (Please refer to Precedent of Tokyo High Court, Mar. 30, 1993, Hei3 (Gyo Ke) No.199).

4.1 Types of Notice of Reasons for Refusal

Notices of reasons for refusal fall into two types in view of procedure. One is a notice of reasons for refusal to be notified to an applicant for the first time (hereinafter, referred to as "the first notice of the reasons for refusal," Patent Act Article 17bis (1)(i)), and the other is the last notice of reasons for refusal received in a case where another notice of reasons for refusal was received after receiving the previous notice of reasons for refusal (hereinafter, referred to as "the final notice of reasons for refusal," Patent Act Article 17bis (1)(ii)).

After "the final notice of reasons for refusal" was served, amendable scope of the claims shall be subjected to the restriction (Patent Act Article 17bis (5)(6)). Where a notice under Article 50bis is given along with a notice of reason for refusal, the same restriction shall be applied to the amendments to be made to the claims (see Part V Chapter 1 "Section2 Notice under Article 50bis").

(Explanation: The purport of the system of "the final notice of reasons for refusal" and the restriction of amendments against it)

If claims can be freely changed whenever a notice of reasons for refusal is received, the examination can be restarted on each occasion, not only causing a delay of the examination but also giving difficulty to secure duly fairness between applications with appropriate amendment and those without it.

Therefore, where another notice of reasons for refusal was received after having already received a notice of reasons for refusal, the content of amendments in response to "the final notice of reasons for refusal" should be limited to the scope in which the results of the examination that has been already completed can be effectively used in order to carry out a prompt examination, securing the fairness among applications.

(1) "The first notice of the reasons for refusal"

The first-time notice of the reasons for refusal is "the first notice of the reasons for refusal." Even when an examiner notifies the reasons for refusal on the second time or more, if the reasons for refusal are not necessitated by amendments made in response to the previous notice of reasons for refusal, "the first notice of the reasons for refusal" shall be notified.

(2) "The final notice of reasons for refusal"

"The final notice of reasons for refusal" notifies only the reasons for refusal necessitated by an amendment made in response to "the first notice of reasons for refusal" in principle.

Whether the second or later notice of reasons for refusal should be "the final notice of reasons for refusal" or not should be substantively judged, not by the ritual number of notifications.

In addition, whether a notice should be set to "the first notice of reasons for refusal" or "the final notice of reasons for refusal" is decided by the following 4.3.3.

4.2 Remarks When Notifying Notice of Reasons for Refusal

Reasons for refusal should concretely be described in a notice of reasons for refusal so that an applicant can understand clearly its purport. In addition, the reasons for refusal should be clear for a third party because the reasons for refusal and the response of the applicant will be important data not only in procedures at the Patent Office but also in determination of the technical scope of a patented invention.

Practically, the reasons for refusal should be notified, considering the following points;

(1) Reasons for refusal should be stated clearly and simply with points so as to make it easy for an applicant to understand.

(2) Reasons for refusal of lack of novelty, inventive step, etc. should be indicated on a claim by claim basis excluding reasons for refusal that cannot be judged by each claim (deficiency of the whole description, addition of new matters etc.), and distinction between claims which have reasons for refusal and the claims which do not have reasons for refusal should be clearly made. In this case, with regard to claims on which explanations of comparison, judgment, etc. in the reasons for refusal are common, they can be stated together.

(3) With regard to the inventions excluded from the subject of the examination in accordance with the provisions in "Part I Chapter 2 Requirements of Unity of Invention" (violation of Article 37) and the amended inventions excluded from the subject of the examination in accordance with the provisions in "Part III Section II Amendment that Changes a Special Technical Feature of an Invention" (violation of Article 17bis(4)), the examiner shall give a notice to indicate only the relevant reason for refusal, while clearly stating that no examination has been conducted with regard to the requirements other than those concerning Article 37 or Article 17bis(4).

(4) In the following cases, the examiner may also give a notice to indicate only the relevant reason for refusal, while clearly stating that no examination has been conducted with regard to other patentability requirements such as novelty or inventive step.

- ① Invention to which new matters have been clearly added (violation of the requirements of Patent Act Article 17bis (3))
- (2) Invention directed to a category of unpatentable invention (violation of the requirements of Patent Act Article 32)
- ③ Invention clearly not falling under the invention defined in Patent Act Article 2 or invention clearly not industrially applicable (violation of the requirements of Patent Act Article 29(1) main paragraph)
- ④ In case where the description of claims are so ambiguous that the invention cannot be conceived even by taking into consideration of the detailed description of the invention and drawings (violation of the requirements of Patent Act Article 36 (6)(ii))
- (5) In case where the claimed invention of which detailed description is too unclear or insufficient for a person skilled in the art to carry out, the parts where description is too unclear or insufficient for a person skilled in the art to carry out (violation of the requirements of Patent Act Article 36 (4)(i))
- (6) In case where the claimed invention is beyond the scope of description in the detailed description of the invention within which a person skilled in the art can recognize that the problem of the invention can be solved, the parts that "beyond the scope of description" (violation of Patent Act Article 36(6)(i))
- (5) Where a description, claims and drawings are violating the provisions of Patent Act

Article 36(4)(i) or (6), the deficient parts and the reasons for deficiency should be concretely indicated.

- (6) For citation of prior art documents, the following matters should be noted;
 ① Cited documents should be specified and the cited parts required for comparison with the claimed invention and judgment should be specified.
 - 2) The technical contents found in the cited documents etc. should be clarified.
 - ③ Necessary and sufficient documents for constituting the reasons for refusal should be cited and too many documents should not be cited unnecessarily.

4.3 Detailed Practices

In principle, examination should be made as to all of the reasons for refusal on the occasion of notifying the first notice of reasons for refusal. Reasons for refusal should not be notified more than two times, and the examination should be carried out, with effectiveness of the whole procedure considered.

4.3.1 First Notice of Reasons for Refusal

(1) The first-time notice of the reasons for refusal is set to "the first notice of reasons for refusal."

(2) In principle, all of the reasons for refusal which have been found should be notified on the occasion of notifying the notice of reasons for refusal for the first time.

However, where it is clear that other reasons for refusal will be resolved if one reason for refusal is resolved, multiple reasons for refusal should not be always notified redundantly.

(3) In drafting the first notice of reasons for refusal, the examiner should make an effort to notify the reasons for refusal required for the applicant to amend for obtaining the patent, without sticking to trivial matters.

(4) The reasons for refusal should be notified, considering the items shown in 4.2.

4.3.2 Examination of Written Opinion or Amendment in Response to the First Notice of Reasons for Refusal

When written opinion or amendment is submitted in response to the first notice of reasons for refusal, the examiner should examine as follows:

(1) Examination of the content of a written opinion, amendment etc.

The examiner should examine the content of a written opinion, amendment, etc. and judge whether the previous reasons for refusal was resolved or not.

In particular, where only a written opinion was submitted without amendment in response to the notice of refusal, the examiner should consider sufficiently the content of the written opinion and examine whether the reasons for refusal indicated in the notice of reasons for refusal can be resolved or not.

(2) Handling of amendment

Where an amendment was submitted in response to the first notice of reasons for refusal, the examiner should accept and examine it based on the description, claims, drawings etc. as amended.

(3) Handling of written opinions, reports of experiment results, etc.

Written opinions and reports of experiment results submitted in response to the notice of reasons for refusal can not substitute for the detailed description of the invention in the description, but if the applicant argue and prove thereby that the matters disclosed in the description or drawings as originally filed are correct and proper, the examiner should take into consideration of these particulars.

4.3.3 Second or Later Notice of Reasons for Refusal

For the second or later notice of reasons for refusal, the examiner should notify the applicant of the reasons for refusal after judging whether it should be set to "the final notice of reasons for refusal" or "the first notice of reasons for refusal."

4.3.3.1 Cases Where "The Final Notice of Reasons for Refusal" should be Notified

Notice of reasons for refusal notifying only the reasons for refusal necessitated by amendments made in response to the first notice of reasons for refusal is set to "the final notice of reasons for refusal".

- (1) A type of the notice of reasons for refusal necessitated by amendments
 - ① Reasons for refusal necessitated by amendments as to the description, claims or drawings made by an applicant in response to "the first notice of reasons for refusal."

(Practical examples)

- a. Where the detailed description of the invention becomes obscure or new matters were added to the detailed description of the invention by amendments.
- b. Where new reasons for refusal in terms of lack of novelty, inventive step, etc. were notified as to the examined claims to which other technical matters were added by amendments or of which technical matters were deleted or limited by amendments.
- c. Where new reasons for refusal in terms of lack of novelty, inventive step, etc. were notified by amendment adding new claims
- d. Where the amendment adds a new matter to the claims or causes deficiency in descriptions
- e. Where the amendment changes a special technical feature of the invention
- f. Where the amendment results in the failure to meet the requirements of unity (applicable only to the applications field on or before March 31, 2007)
- ② Reasons for refusal related to the claims requiring examination of the requirements for patentability in terms of novelty, inventive step, etc. as a result of amendment in response to "the first notice of reasons for refusal"

(Explanation)

Where the claims that had not been examined on the requirements for patentability in terms of novelty, inventive step, etc. (limited to the case where it is clearly expressed in the notice that the requirements for patentability in terms of novelty, inventive step, etc. have not been examined) were amended and the reasons for refusal related to the requirements for patentability in terms of novelty, inventive step, etc. is notified to the amended claims, the notice should be notified as "the final notice of reasons for refusal" because this case is substantially the same as newly starting examination on added claims by amendments.

(Practical examples)

- a. Where reasons for refusal in terms of lack of novelty, inventive step, etc. are found as to the amended claim which was not examined on the requirements for patentability such as novelty, inventive step, etc. because the writing of the claim was too obscure to understand even if the description and the drawings were taken into account.
- b. Where reasons for refusal in terms of lack of novelty, inventive step, etc. are found as to the amended claim for which only the reason for refusal of adding new matters was notified without examining on the requirements for patentability in terms of novelty and inventive step because the claim before amendment was clearly added new matter.
- (2) Special cases where "the final notice of reasons for refusal" should be notified
 - (1) Where there was a very minor deficiency in the description (e.g., the deficiency in the description deemed to fall under the correction of error or clarification of an ambiguous description under 17bis (5)(iii) and (iv)) along with the reasons for refusal not meeting the requirements of patentability in terms of novelty, inventive step, etc. but only the reasons for refusal related to novelty or inventive step of the claims were notified and reasons for refusal related to the requirements for the description were not notified, if there still exists a very minor deficiency in the description, the reasons for refusal on the deficiency in the description should be notified as "the final notice of reasons for refusal".

(Explanation)

Minor deficiency in the description is, in general, expected to be amended together with the amendment in response to the reasons for refusal related to novelty, inventive step, etc.. In addition, since the amendments of the description deemed to fall under "correction of error" or "clarification of an ambiguous description" in Patent Act Article 17bis (5)(iii) and (iv) can be accepted as amendments after "the final notice of reasons for refusal," even though the deficiency in the description was not amended, that would be indicated in "the final notice of reasons for refusal".

② Where new reasons for refusal is found based on a new prior art document as to the claims for which the prior art search was finished according to the 2.2(3)② (see, Note) after the reason for refusal was negated by amendments, "the final notice of reasons for refusal" should be notified in principle.

4.3.3.2 Cases Where "the First Notice of Reasons for Refusal" should be Notified even

though it is the Second or Later one

Where the second or later notice of reasons for refusal notifies the reasons that should have been indicated by the examiner when the first notice of reasons for refusal was made, it should be notified as "the first notice of reasons for refusal" because reexamination was not necessitated by amendment.

Therefore, in the event of either of the following (1) or (2), "the first notice of reasons for refusal" should be notified.

(1) The reasons for refusal which could not be found when the first notice of reasons for refusal was made though they should have been indicated by the examiner at that time

(Practical examples)

- a. Where the examiner overlooked reasons for refusal, such as deficiency in the description of the description or lack of the unity of invention when notifying the reasons for refusal in terms of novelty and inventive step in the first notice of reasons for refusal, and the reasons for refusal are found after that.
- b. Where reasons for refusal are found as to the claims for which it was clearly indicated that reasons for refusal were not found in the first notice of reasons for refusal, in spite of being not amended or being restricted by amendment.
- c. Where an examination on the requirements for patentability in terms of novelty, inventive step, etc. was not made in the first notice of reasons for refusal even though there is no reasonable reason not to perform the examination on the requirements(see, 4.2(4) ①to⑦), and reasons for refusal related to the requirements are notified in the second notice of reasons for refusal.

(2) Where an appropriate reasons for refusal are notified again because the reasons for refusal indicated in the first notice of reasons for refusal were inappropriate.

(Practical examples)

- a. Where reasons for refusal are notified again after no amendment was made in response to the first notice of reasons and only a written opinion was submitted.
- b. The reasons for refusal in terms of novelty and inventive step, etc. were notified by referring to a prior art document in the first notice of reasons for refusal and an amendment against it was made. In this case, the reasons for refusal should be notified using other new prior art document on a claim which was not amended, where it is discovered that the previous reason for refusal on the claim was not appropriate after taking the written opinion into account.
- c. When reasons for refusal related to lack of novelty and inventive step were notified to the invention consisting of A and B, an amendment was made for A but not for B. In this case, where examiner notify the reasons for refusal again changing the prior art documents cited for B (however, except for the cases in which the content of B was substantially changed by the amendment of A).

4.3.3.3. Remarks Related to "The Final Notice of Reasons for Refusal"

(1) Where the reasons for refusal necessitated by the amendment in response to the notice of reasons for refusal and other reasons for refusal are simultaneously notified, this should be "the first notice of reasons for refusal."

(2) Where the case is not fallen into practical examples shown in 4.3.3.1, 4.3.3.2 and whether the notice should be "the final notice of reasons for refusal" or "the first notice of reasons for refusal" is not clear, returning the purport of the system and judge so that the applicant's opportunity of amendment may not be unreasonably limited.

(3) Indication of "the final" and the reasons for setting it to be "the final notice of reasons for refusal" should be described in the notice of reasons for refusal. Where the examiner did not describe the indication of "the final," it should not be regarded as "the final notice of reasons for refusal" even if it could have been "the final."

4.4 Securing of Communication with Applicant

(1) In a notice of reasons for refusal, the examiner can suggest amendment or division, etc. if it enables applicants to easily respond to the reasons for refusal and thus contributes prompt and precise examination. However, this suggestion makes no legal effects. Amendment, division, etc. should be made by the intention and responsibility of the applicant.

(2) Technical explanation or interview is the supplementary means for securing communication with the applicant. Where it is considered to contribute to the prompt and precise examination, communication with the applicant through an interview, telephone or facsimile should be used. An interview etc. should be performed based on the "Interview Guideline," and in order to secure transparency in an interview procedure, the examiner should keep a interview record or a response record and contribute to benefit for the access of the public.

(3) The continuity of examination should be ensured after the examiner in charge was changed. If the new examiner intends to determine differently from the previous examiner, the new examiner should communicate with the applicant so that the applicant may not be blindsided.

5. Requirement of Submission of Documents and Other Articles Required for Examination

Based on the provision in Patent Act Article 194 (1), the examiner can request the applicant for submission of documents and other articles (hereinafter referred to documents etc.) required for the examination.

5.1 Documents of Which Submission can be Requested

Under Article 194(1), the examiner may request that the applicant submit the following documents for instance.

(1) Where, in the process of recognizing the claimed invention, it is difficult to understand

the invention because the technical contents of the invention are difficult, the quantity of the specification is enormous or the number of claims is too high: documents that explain which matters defining the invention stated in a claim (respective parts of constituents of the invention) correspond to which parts of the working example or documents that explain concisely the purport of the invention, or drawings that show the relevance between the claims

(2) Where it is difficult to understand the applicant's assertion stated in the written opinion submitted after the notice of reason for refusal, and that assertion seems to have material impact on the examination results: documents that clearly explain the applicant's assertion stated in the written opinion

(3) Where it is impossible to verify the operation or effect of the invention in the description without using models, samples or experiment reports (hereinafter referred to as "samples, etc."), and it is possible to use such samples, etc. to confirm that the descriptions or drawings as originally filed are clear and sufficient: such samples, etc.

(4) Where it is not easy to determine whether the divisional application meets the substantial requirements for division of application, or where it takes a considerable amount of time to determine whether or not the invention claimed in the divisional application is identical to the invention claimed in the original application or to the invention claimed in another divisional application: documents that indicate which part of the descriptions, etc. attached to the original application has been altered or which matters described in the description, claims or drawings as originally filed provide the basis for the invention claimed in the divisional application is not identical to the invention claimed in the original application application

5.2 Remarks

(1) When demanding submission of documents etc. based on Patent Act Article 194(1), the examiner should notify the applicant, showing concretely the type of documents to be submitted, after setting the submission period.

However, the examiner can also demand submission of documents etc., in the form of a supplementary note to the notice of reasons for refusal (For example, reasons for refusal to the effect that "since the actions, effects, etc. described in the description cannot be confirmed, the detailed description of the invention is not clear and sufficient enough for a person skilled in the art to carry out the claimed invention" can be notified with a note to the effect that "if the actions and effects can be confirmed by submission of models etc., it negates the reason for refusal").

(2) It should be noted that the submitted documents are only references for examination and cannot replace descriptions or drawings.

6. Examination When Amendment was made in Response to "The Final Notice of

Reasons for Refusal"

Where amendment was made in response to "the final notice of reasons for refusal", after confirming appropriateness of setting the notice to "the final notice of reasons for refusal", the examiner judges whether the amendment is made legally based on the provisions of Patent Act Article 17bis (3) to (6). Amendments that are not made legally should be subjects to dismissal (Patent Act Article 53).

Figure 2 shows the procedures of examination when amendment was made in response to "the final notice of reasons for refusal".

6.1 Examination of Appropriateness of Decision of "The Final Notice of Reasons for Refusal"

At first, the examiner should review whether it was appropriate to set it to "the final notice of reasons for refusal", considering the assertion of the applicant in the written opinion etc.

(1) Where it was appropriate to set it to "the final notice of reasons for refusal"

Where it was appropriate to set it to "the final notice of reasons for refusal", the examiner should judge whether the amendment is made legally or not (see, 6.2).

(2) Where it was inappropriate to set it to "the final notice of reasons for refusal"

Where it was inappropriate to notify "the final notice of reasons for refusal", the examiner cannot apply Patent Act Article 53. Therefore the examiner can not dismiss the amendment and accept it. And even if the reasons for refusal were not resolved by the amendment, "the first notice of reasons for refusal," not prompt decision of refusal, should be notified again. In addition, even where only reasons for refusal necessitated by the amendment are notified, the examiner should set it to "the first notice of reasons for refusal".

(Points of consider)

However, where the applicant asserts that it should have been "the first notice of reasons for refusal" and has made amendment on the basis of that assertion, the relevant reasons for refusal should be regarded as "the first notice of reasons for refusal." Therefore, where the reasons for refusal were not resolved, decision of refusal should be made, and where only the reasons for refusal necessitated by amendment are to be notified, the notice should be set to "the final notice of reasons for refusal".

6.2 Examination of Amendment

Where it was appropriate to set it to "the final notice of reasons for refusal", the examiner should examine whether the amendment in response to the notice contravenes Patent Act Article 17bis (3) to (6) or not. And where it contravenes these provisions, the relevant amendment should be dismissed by decision (Patent Act Article 53).

6.2.1 Amendment to be dismissed

(1) Amendment that adds new matters (violation of the requirements of Patent Act Article 17bis (3))

Amendment in response to "the final notice of reasons for refusal", and

- 1) amendment adding new matters
- 2 amendment including new matters indicated in "the final notice of reasons for refusal".

(Points of consider)

Where new matters which existed when notifying "the final notice of reasons for refusal", but no reasons for refusal were indicated thereto, are maintained without being deleted as amended, the examiner should accept the amendment without dismissal and notify the reasons for refusal on the ground of adding the new matters.

(2) Amendment that changes a special technical feature of an invention (violation of Article 17bis (4))

An amendment made in response to "the final notice of reason for refusal," which:

- adds an "invention that changes a special technical feature" (excluding the inventions subject to the examination as to the patentability requirements (novelty, inventive step) in accordance with the provisions in 4.3 of "Part II Section II Amendment that Changes a Special Technical Feature of an Invention" (the same shall apply hereinafter); or
- (2) contains an "invention that changes a special technical feature," which is pointed out in "the final notice of reason for refusal."

(Points to consider)

Consider an example where an amendment made in response to the first notice of reason for refusal contained an "invention that changes a special technical feature" but the examiner failed to give a notice of reason for refusal with regard to such invention. Even if the claims amended in response to "the final notice of reason for refusal" includes the "invention that changes a special technical feature," the examiner will not dismiss the amendment but accept it, and shall give a notice of reason for refusal to indicate that the amendment is made to change a special technical feature of the invention.

(3) Amendment other than the purpose (violation of the requirements of Patent Act Article17bis (5))

Amendment of claims that does not intend the followings (Patent Act Article 17bis (5) each item)

- a. Deletion of the claim (Patent Act Article 17bis (5)(i))
- b. Restriction of the claims (only the restriction of all or some of the matters necessary to define the claimed invention and the industrial applicability and the problem to be solved of the claimed invention after amendment are the same as those of the claimed invention prior to the amendment. Hereinafter simply referred to as "restriction of claims" (Article 17bis (5)(ii))
- c. Correction of errors in the description (Article 17bis (5)(iii))

d. Clarification of an ambiguous description (only the amendment with respect to the matters mentioned in the reasons for refusal (Article 17bis (5)(iv))

(Points of consider)

Since the provisions of Patent Act Article 17bis (5) are provided, from the viewpoints of realization of the prompt grant of a right and fairness among applications, so that the examination results already obtained can be effectively used for the purpose of establishing the examination procedures, the amendment contravening the provision do not bring substantial deficiency that may invalidate the patent. Therefore, this provision is not provided as the ground invalidation.

Therefore, in applying the provision of 17bis (5), the examiner should not implement it more strictly than necessary to such an invention as is deemed worth a protection in a case where an examination can be promptly performed by effectively using the examination results already obtained.

(4) Amendment that does not satisfy requirements for independent patentability (violation of the requirements of Patent Act Article 17bis (6))

The amendment falls under this category is the amendment for the restriction of claims after which the invention cannot be patented independently.

Provisions applied to judging whether the claimed invention which was amended to restrict the claim can be independently patented at the time of filing should be limited to the followings.

Article 29, Article 29bis, Article 32, Article 36(4)(i) or (6) (excluding (iv)), Article 39(1) to (4)

(Points of concern)

Where the requirements of independent patentability is not satisfied;

- (i) Where the reasons for refusal based on the above provisions indicated in "the final notice of reasons for refusal" are still unresolved even by the amendment of the restriction of claims;
- (ii) Where the reasons for refusal indicated with respect to the claims prior to the amendment were resolved by the amendment of the restriction of claims, however, new reasons for refusal under the above provisions with respect to the invention as amended were found.

6.2.2 Examination on whether Amendment was made legally

(1) The examiner should determine whether new matters are added to the description, claims or drawings by the amendment in response to "the final notice of reasons for refusal". The examiner should determine whether the claims include new matters on a claim-by-claim basis. With regard to the claims to which new matters have been added, the examiner shall not judge whether these claims fall under the cases prescribed in Article 17bis (5) or (6).

(2) Then, the examiner shall determine whether the inventions in other claims to which no new matter has been added are "inventions that change a special technical feature." With regard to "inventions that change a special technical feature," the examiner shall not judge whether these claims fall under the cases prescribed in Article 17bis (5) or (6).

(3) With regard to the claims to which no new matter has been added and which are not "inventions that change a special technical feature," the examiner shall further determine whether the amendment to each of these claims has been made for any of the purposes prescribed in Article 17bis (5)(i) to (iv).

(4) After the determination with respect to Patent Act Article 17bis (5)(i) to (iv) in the aforementioned (3), where there are amended claims falling under Patent Act Article 17bis (5)(ii) (restriction of claims), the examiner should determine whether it should meet requirements of Article 17bis (6).

(5) Where there are amendments which are determined to be illegal by following aforementioned (1) to (4), the examiner should indicate reasons to all such amendments and decide the dismissal of the amendment.

(Explanation)

All the reasons should be indicated in dismissal so that the applicant can make an appropriate amendment when demanding an appeal.

6.2.3 Remarks when Dismissing Amendment Due to Violation of Requirements of Independent Patentability

(1) Where the claimed invention amended for the purpose of restriction of claims cannot be patented according to the provisions of Patent Act Article 29, 29bis or 39.

- ① In dismissal of the amendment, the prior art cited in "the final notice of reasons for refusal" should be referred in principle. However, where the claims are restricted by the amendment, new prior art may be cited.
- ② Where the amendment was dismissed by indicating reasons for not granting a patent by referring only the prior art that was not cited in "the final notice of reasons for refusal," since there may be cases where the prior art cited in "the final notice of reasons for refusal" was improper, it should be reconsidered whether "the final notice of reasons for refusal" was proper and maintainable.
- ③ In deciding whether to dismiss the amendment, reasons for the dismissal should be indicated for each claim which was amended for restriction and determined not to meet the requirements of independent patentability.

(2) Where the invention amended for the purpose of restriction of claims does not meet the requirements prescribed in Patent Act Article 36

Regarding the invention amended for the purpose of restriction of claims, where there is still a deficiency in the description, claims or drawings, or where a new deficiency was generated by the amendment, the examiner should dismissed the amendment for the reason of the contravention of the provision of Article 36, with applying Patent Act Article 17bis (6) and 53 applied. (However, if the reason for refusal of violation of Article 36 which had been existed before the amendment was not notified, the amendment shall not be dismissed based

on the violation of Article 36.)

However, if the deficiency is very minor so that the deficiency in the description can be corrected by the simple amendment, and is deemed worth granting a patent, the examiner should accept the amendment and give the applicant an opportunity of re-amendment, by notifying a notice of reasons for refusal related to the deficiency in the description as "the final notice of reasons for refusal".

(3) On application of Patent Act Article 17bis (6)

Patent Act Article 17bis (6) is the provision applying Patent Act Article 126(5) (prescribing that the invention described in the corrected claims must be one which could have been patented independently at the time of filing of the patent application) mutatis mutandis thereto and applied only where the amendment (amendment corresponding to restriction of claims) falling under Patent Act Article 17bis (5)(ii) was made.

Therefore, Article 17bis (6) should not be applied to claimed inventions as not amended and those as amended just for correction of errors (Article 17bis (5)(iii)) or for clarification of an ambiguous description (Article 17bis (5)(iv)).

6.3 Approach to the Application in dismissing the amendments

Where an amendment is dismissed, since the application is returned to the state before the amendment, a review should be made on whether the reasons for refusal indicated in "the final notice of reasons for refusal" before the amendment are proper.

In review of the fairness of the reasons for refusal indicated in "the final notice of reasons for refusal," the examiner should consider the particulars of the written opinion submitted by the applicant.

(1) Where the reasons for refusal indicated in "the final notice of reasons for refusal" is judged to be proper so that the reasons for refusal were not resolved, the examiner should make the decision of refusal simultaneously with the dismissal of the amendment.

(2) Where the reasons for refusal indicated in "the final notice of reasons for refusal" were inappropriate and any other reasons for refusal were not found, the examiner should decide to grant a patent simultaneously with the dismissal of the amendment.

(3) Where the reasons for refusal indicated in "the final notice of reasons for refusal" were inappropriate, but other reasons for refusal are found, the examiner should notify the applicant of the reasons for refusal with respect to the application prior to the amendment again simultaneously with the dismissal of the amendment.

In this case, the examiner should decide whether it should be set to "the final notice of reasons for refusal" or "the first notice of reasons for refusal", according to the paragraphs of 4.3.3, including whether a notice of the new reasons for refusal were necessitated by the amendment made in response to "the first notice of reasons for refusal" or not.

In addition, because the reasons for refusal should be notified along with the decision of the dismissal of the amendment, the examiner should make it clear that it is the reasons for refusal for the application before the amendment in the notice of reasons for refusal,.

6.4 Approach to the Application when Amendments are not Dismissed but Accepted

(1) Where the reasons for refusal related to the application prior to the amendment were not resolved, the examiner should make decision of refusal.

(2) Where the reasons for refusal related to the application prior to the amendment were resolved and any other reasons for refusal are not found, the examiner should decide to grant a patent.

(3) Where the reasons for refusal were resolved by the amendment but other new reasons for refusal were found, the examiner should notify the applicant of new reasons for refusal.

- ① Whether a notice should be set to "the final notice of reasons for refusal" or "the first notice of reasons for refusal" should be judged, according to the guidelines in 4.3.3.
- ② Where an amendment made in response to "the final notice of reasons for refusal" was once accepted and new reasons for refusal were notified, even if the amendment made in response to the earlier "final notice of reasons for refusal" is found to be illegal afterward, the amendment should not be dismissed retroactively. In addition, where new matters are found to be added afterward, the reasons for refusal should be notified again.

(Explanation)

Under the provisions of Patent Act Article 159 (1), and Article 163 (1), where the amendment made in response to "the final notice of reasons for refusal" was found to be illegal after the decision of refusal, the examiner should not dismiss the amendment retroactively from the viewpoint of facilitation of procedure. In compliance with this purport, where new reasons for refusal were notified after accepting the amendment made in response to "the final notice of reasons for refusal" and the amendment made for the earlier "final notice of reasons for refusal" was found to be illegal, it should be handled in the same manner.

7. Final Decision

7.1 Decision to Grant a Patent

Where no reasons for refusal related to the application for patent are found or the reasons for refusal were resolved in response to the notice of reasons for refusal, the examiner should promptly make decision to grant a patent.

7.2 Decision of Refusal

Where the notified reasons for refusal are still unsolved even in response to the notice of reasons for refusal, decision of refusal should be made regardless of whether the notice is "the first" or "the final" one (Patent Act Article 49).

Where the amendment should be dismissed, decision of refusal should be made simultaneously with the decision of dismissal.

Practically, the following points should be remarked.

(1) The examiner should indicate all the claims in which the notified reasons for refusal were still unsolved. In this case, the examiner should clearly and simply state them so that the applicant can understand the claims to which the reasons for refusal are unresolved. However, the claims in which explanation of comparison, determination etc. is the same can be described together.

(2) For the issuable items in the written opinion, determination of the examiner on them should be clarified.

(3) Obsessed by the notified reasons for refusal, the examiner should not make an unreasonable decision such as additionally referring to new prior art documents. In deciding on refusal, the examiner should not refer to the new prior art except for the well-known art or the commonly used art.

8. Reconsideration by Examiner before Appeal

As to the the appeals against examiner's decision of refusal, those in which descriptions, claims or drawings were amended simultaneously with the day of request of appeal (see, Note) should be reconsidered (Patent Act Article 162). This is called "reconsideration by examiner before appeal". Reconsideration by examiner before appeal, in principle, is performed by the examiner who made decision of refusal.

(Note) For applications whose date of transmittal of a copy of decision of refusal is on or before 31 March, 2009, the above-mentioned explanation may be replaced by "Within 30 days after the date on which a request for an appeal against an examiner's decision of refusal is filed".

Considering the fact that many cases of which original decision was cancelled at the appeal against the decision of refusal are those of which claims etc. were amended after decision of refusal, the system of "reconsideration by examiner before appeal" was introduced for the purport of reducing the number of the cases to be dealt by an appeal examiner and facilitating the appeal by letting the examiner who made decision of refusal examine the relevant case again (Reference: "Article by Article Description of the Industrial Property Act").

The cases can be more easily and promptly examined by reconsideration by the examiner who has made decision of refusal, with full knowledge on the application, than by a newly designated appeal examiner from the start.

Figure 3 shows the flow chart of reconsideration by examiner before appeal.

8.1 Procedure of Reconsideration by Examiner before Appeal

(1) Examination of amendment made in the demand for the appeal

At first, the examiner should judge whether the amendment made in the demand for the appeal contravenes the provisions of Patent Act Article 17bis (3) or (6) or not.

As to the amendment made in the demand for the appeal, the examination should apply mutates mutandis the paragraph of the aforementioned 6.2.2 in "6. Examination when amendment was made in response to the final notice of reasons for refusal". In this case, "the final notice of reasons for refusal" in this paragraph should be replaced with "the decision of refusal," and "amendment made in response to the final notice of reasons for refusal" into "the amendment made in the demand for the appeal"

- (2) Where the amendment made in the appeal is legal
 - (1) Where the reasons for refusal were resolved by the legal amendment made in the demand for the appeal and no new reason for refusal is found, the examiner should negate the original decision and decide to grant a patent.
 - ② Where the reasons for refusal were resolved by legal amendment made in the demand for the appeal, but new reasons for refusal that can be the reasons for refusal related to the application after amendment were found, the examiner should notify the reasons for refusal.

(e.g. where a part of claims were deleted by the amendment and other new reasons for refusal were founded as to the remaining claims)

- ③ Where the reasons for refusal were not negated even by the legal amendment made in the demand for the appeal, the examiner should report the results of the examination to the Commissioner of the Patent Office. All the reasons to maintain the original decision should be stated in the reconsideration report. In addition, where other new reasons for refusal are found, the examiner should also state them.
- (3) Where the amendment made in demand for the appeal is illegal

In reconsideration by the examiner before an appeal, even for cases that were not legally amended, the examiner should not decide the dismissal of the amendment except in cases of a decision to grant a patent (Patent Act Article 164).

Where the amendment made in the demand for the appeal was illegal, the examiner should reconsider whether the reasons for decision of refusal to the application prior to the amendment made in the demand for the appeal were appropriate or not.

- (1) When the reasons for decision of refusal to the application prior to the amendment made in the demand for the appeal were appropriate, the examiner should report the results of the examination to the Commissioner of the Patent Office. In the reconsideration report, the examiner should state all the reasons to maintain the original decision along with the reasons to dismiss the amendment made in the demand for the appeal. When other new reasons for refusal are found, he/she should also state them.
- ② Where the reasons for decision of refusal to the application prior to the amendment made in the demand for the appeal were not appropriate, and no other reasons for refusal were found in the application prior to the amendment made in the demand for the appeal, the examiner should cancel the decision of refusal and make decision to grant a patent simultaneously with the decision of dismissal of the amendment.
- ③ Where the reasons for decision of refusal to the application prior to the amendment made in the demand for the appeal were not appropriate, but other new reasons for refusal were found in the application prior to the amendment made in the demand for the appeal, the examiner should report the results of the examination to the

Commissioner of the Patent Office. In the reconsideration report, the examiner should state, as well as the reasons for dismissal of the amendment made in the demand for the appeal, the new reasons for refusal to the application prior to the amendment.

(4) Where decision to grant a patent can be made by giving an opportunity of amendment

Where decision to grant a patent can be made by giving an opportunity of amendment (for example, where there is only minor deficiency in the description), reasons for refusal can be notified regardless of (2) or (3).. In this case, the examiner should make an effort to make the requester understand how to amend, by communicating with the requester using an interview etc..

These reasons for refusal, in principle, should be "the final notice of reasons for refusal" (refer to 4.3.3.1 (2)(1))

8.2 Remarks

(1) In judging whether the reasons for decision of refusal were resolved or not, the examiner should consider the reasons for an appeal sufficiently.

(2) Where the examiner judges that the reasons for refusal were resolved, he/she should reconfirm before decision to grant a patent whether other reasons for refusal do not exist.

(3) In the reconsideration report, the examiner should state the issuable items and his/her judgment on them.

(Attachment) Guidelines for the Use of Prior Art Search Results and Examination Results Provided by Foreign Patent Offices

1. Basic policy

In the examination of overseas-related applications*1, in order to reduce the examination workload and to improve the quality of the examination, it is important to effectively use prior art search results and examination results provided by foreign patent offices.

In particular, with regard to the applications for which an accelerated examination has been requested under the Patent Prosecution Highway (PPH)*2, one must make best use of the prior art search results and examination results provided by foreign patent offices while in the process of conducting an examination, because the PPH program aims to make it easier for applicants to obtain patent rights overseas quickly, and also aims to enable the patent offices to reduce the examination workload by using prior art search results and examination results provided by the patent office of first filing, while improving the quality of the examination.

Therefore, in the examination of overseas-related applications, the JPO shall use prior art search results and examination results provided by foreign patent offices in the following procedure.

- *1: An "overseas-related application" means a patent application of which the applicant has also filed applications with patent offices or intergovernmental organization other than the JPO or filed international applications with regard to the same invention (e.g., domestic applications based on which priority is claimed for international applications; international applications that have entered into the national phase).
- *2: Under the Patent Prosecution Highway (PPH), an application for which the office of first filing (OFF) has decided to grant a patent is eligible for an accelerated examination through the simple procedure at the office of second filing (OSF). Where the applicant desires a normal accelerated examination through the ordinary procedure at the JPO or the USPTO, he is required to carry out a prior art search and describe the comparison between the prior art and the claimed invention, thereby explaining the patentability of the claimed invention to the OSF. Under the PPH, the applicant can omit to these requirements by submitting to the OSF the claims to which the OFF has granted a patent and the office actions that have been given by the OFF (see "Patent Prosecution Highway Pilot Program between the JPO and the USPTO").

2. Procedure of Examination

(1) Prior art search

Where search results provided by a registered search agency are unavailable in the examination of an overseas-related application, the examiner shall carry out a prior art search through the following procedure.

i) The examiner shall refer to the prior art search results and examination results concerning the corresponding foreign application that have been provided by the foreign patent office. The examiner is not required to carry out an additional prior art search

himself/herself if he/she considers it possible, based on his/her knowledge and experience, to conduct an examination precisely and efficiently by using such search results.

ii) The examiner shall carry out an additional prior art search himself/herself where he/she considers it impossible, based on his/her knowledge and experience, to conduct an examination precisely and efficiently by using only prior art search results or examination results concerning the corresponding foreign application, which have been provided by the foreign patent office*3. In this case, unless the examiner considers it highly probable, based on his/her knowledge and experience, to find more significant prior art documents in the scope already searched by the foreign patent office shall be excluded from the scope of the additional search.

(For instance, where the JPO examiner uses prior art document search results provided by the USPTO, the US patent bulletins or publications of US patent applications shall be excluded from the scope of the additional search unless it is considered highly probable to find more significant prior art documents from among these US documents.)

- *3: With regard to the applications for which an accelerated examination has been requested under the PPH, the JPO can use the examination results indicating that patents have been granted to the corresponding foreign applications.
 - iii) Where the examiner considers it possible, based on his/her knowledge and experience, to find relevant prior art documents more efficiently by carrying out a prior art search himself/herself rather than referring to the prior art search results provided by the foreign patent office, he may carry out an additional prior art search before referring to the prior art search results concerning the corresponding foreign application, which have been provided by the foreign patent office.

Where search results provided by a registered search agency are available in the examination of an overseas-related application, the examiner shall carry out an additional prior art search through the procedure described in above i) to iii) if, having referred to the search results provided by the registered search agency, he/she considers it impossible, based on his knowledge and experience, to conduct an examination by using only such search results.

(2) Examination of prior art documents, etc.

Where the highly relevant prior art documents obtained through the above-mentioned procedure are included in the scope of the prior art search results provided by the foreign patent office, the examiner shall take into account the prosecution history and examination results (finding of cited invention, rationale of the reason for refusal, final result of examination, description of the claim granted a patent) at the foreign patent office to judge whether any of the contents of the prior art documents gives a reason for refusal of the claimed invention in terms of novelty or inventive step. In this case, the examiner should take notice of the difference between the Japanese examination system and practice and those of the foreign country.

(3) Examination on other reason for refusal

When considering the existence of a reason for refusal in terms of the deficiency in descriptions or claims, the examiner shall also take into account the prosecution history and examination results (content of the notice of reasons for refusal, final result of examination, description of the claim granted a patent) at the foreign patent office, while taking notice of the differences between the Japanese examination system and practice and those of the foreign country.
Figure 1 Flow of Examination Procedure



Figure 2 Examination after the amendment was made in response to the "final notice of reason for refusal"



* Requirements for being independently patentable: the requirements under Article 29, Article 29bis, Article 32, Article 36(4)(i) and (6) (excluding (iv)), Article 39(1) to (4)

Figure 3 Reconsideration by examiner before appeal



^{*} Requirements for being independently patentable: the requirements under Article 29, Article 29bis, Article 32, Article 36(4)(i) and (6) (excluding (iv)), Article 39(1) to (4)

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part X: UTILITY MODEL

Chapter 1 Establishment of the Report of Utility Model Technical Opinion

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Chapter 1 Establishment of the Report of Utility Model Technical Opinion

1. Basic Concept

(1) Basic concept on report of technical opinion

Under a utility model system having no substantive examination to grant a right as promptly as possible, it is principally left to the judgment of persons/parties concerned whether or not a registered right of utility model would satisfy substantive requirements. However, because judging validity of the right needs technical and professional abilities, difficulties would bring unexpected confusion to judgment of persons/parties concerned. Therefore, Utility Model Act officially established the system of the report of utility model technical opinion, under which the Japan Patent Office provides objective materials upon a request useful for persons/parties concerned to determine novelty etc. of claimed devices in relation to prior art documents. (Refer to Article 12, 29bis and 29ter of Utility Model Act)

(2) Basic concept on establishment of a report of a technical opinion

A report of utility model technical opinion should be prepared promptly and appropriately by taking into consideration of fairness and objectivity.

2. Subject of Evaluation

A report of utility model technical opinion must be prepared on a claimed device for which the request was made. If amendment or correction (including those violating limitations pertaining to amendment or correction) is made prior to preparation of a report of utility model technical opinion,, the report must be prepared for claimed devices including the amendment or correction. Any report is not prepared for the claims which have been determined invalid in a trial for invalidation, for those deleted by correction of claims, and for devices pertain to a withdrawn or abandoned application for utility model before registration (See, "Note" below).

(Note) Article 12(2) of Utility Model Act stipulates that a request for preparing a report of utility model technical opinion cannot be made after the claim has been invalidated in a trial. Although there is no definitive rule for a case where invalidation is determined in a trial after the request has been made, the report of utility model technical opinion is not prepared even if invalidation was determined in a trial after the request for preparation of a report of utility model technical opinion was made, because no subjects for the report exist when the registration is invalidated. It is similar to claims deleted by correction and to devices pertaining to a withdrawn or abandoned application for utility model.

With regards to claimed devices, technical evaluation (i.e., evaluation on the provisions of Article 3(1)(iii), Article 3(2) (limited to those prescribed in Article3(1)(iii)), Article 3bis and Article 7(1)- (3) (hereinafter referred to as "evaluation on novelty etc.")) must be conducted (Article 12).

There are some cases where novelty etc. cannot be sufficiently evaluated if they failed to meet requirements stipulated in Article 5(4), (6), etc.. In these cases, the requirements stipulated in Article 5(4), (6), etc. are not evaluated, and then the report of utility model

technical opinion must contain an indication that novelty etc. cannot be sufficiently evaluated due to ambiguity etc. of claimed devices.

3. Prior Art Search

In principle, prior art search for preparing a report of utility model technical opinion must be conducted in a similar manner of examination for patent applications.

However, unpublished applications are outside the scope of prior art search. (see, Note)

(Note) In relation with a request date of a report of utility model technical opinion, there is possibility to find other applications from unpublished applications for a patent and a utility model registration etc. under Article 3bis. Even if such applications are found, it is not appropriate that an examiner waits to prepare the report until the applications will be published, because of demand of promptness in providing the report. Therefore, the scope of prior art search should be limited to published literature.

3.1 Subject of Prior Art Search

(1) Each device described in claims that are requested for a report of utility model technical opinion is a subject of prior art search. All claimed devices that are regarded as a subject of evaluation based on above 2., from those having the broadest concept to those having the narrowest concept, must be considered as a subject of prior art search.

(2) It is unnecessary to determine whether or not the requirements of unity are met.

(3) Findings of claimed devices must be made based on matter described in claims. The following points should be taken into consideration when an examiner finds claimed devices:

(i) If description in a claim is clear, finding of a claimed device must in principle be made based on description in the claim. Terms described in the claim must be interpreted as what they ordinarily mean.

(ii) Even if description in a claim is clear, where terms used in a claim are defined or explained in a description and drawings, the definition or explanation should be taken into consideration when the terms are interpreted. Meanwhile, even if mere illustration of more specific concept exists in a detailed description of a device or drawings, which is included in the concept of terms described in claims, the illustration is not considered as the definition or explanation explanation explained above.

(iii) Even if inconsistency exists between a device found based on description in a claim and a device described in a description or drawings, finding of the claimed device should not be made solely on the description or drawing, without referring to description of the claim.

Namely, matter not described in a claim must be treated as it does not exist in the claim, even though it is described in a description or drawings, when an examiner finds a claimed device. On the other hand, matter described in a claim must always be treated as it exists in the claim.

(iv) Where a description in a claim allows various ways of interpretation, an examiner should consider all possible ways of interpretation for the purpose of conducting the widest scope of prior art search.

(v) Where a device is unclear or a device is not described enough to be carried out etc., matter in a description and drawings, and common general technical knowledge as filed, should be taken into consideration when an examiner interprets terms in a claim.

(4) Embodiments of claimed devices must be taken into consideration as a subject of prior art search.

(5) Prior art search must be done as far as possible, even if prior art search cannot be effectively conducted, because a description is so unclear that a claimed device cannot be found even by referring to the description or drawings, or because a claimed device is deemed not to fall under a statutory device. In this case, the indication that prior art search could not be effectively conducted must be written together with the reason why the search failed.

3.2 Method of Prior Art Search

(1) An examiner is expected to make an effort for finding all relevant prior art documents which could show lack of novelty, etc. of claimed devices based on the provisions of (i) lack of novelty based on a device publicly known by a reference (Article 3(1)(iii)); (ii) lack of inventive step based on a device publicly known by a reference (Article 3(2) (limited to those referred to Article 3(1)(iii))); (iii) prior art effect (Article 3bis); (iv) first-to-file rule (Article 7(1), (3); (v) co-pending applications filed on the same date (Article 7(2), (7)). Prior art search must be conducted by paying due attentions to related examination guidelines concerned.

(2) Other respects are similar to those in the method of prior art search described in "Part 7: Examination Procedure, 2. Prior art search" for an examination of patent applications. However, it is not determined whether the requirements of unity are satisfied or not.

4. Evaluation of novelty etc.

(1) Examination Guidelines for patents are applicable to utility models when an examiner determines novelty etc. based on the provisions of (i) lack of novelty based on a device publicly known by a reference (Article 3(1)(iii)); (ii) prior art effect (Article 3bis); (iii) first-to-file rule (Article 7(1), (3); and (iv) co-pending applications filed on the same date (Article 7(2), (7)).

(2) In reference to the manner of the Examination Guidelines for inventive steps of patent applications, whether or not a claimed device involves inventive steps must be determined by examining whether or not the claimed device would have been exceedingly easily arrived by a person having an ordinary skill in the art to which the device pertains, on the basis of devices publicly known by references.

(3) Under Utility Model Act, no opportunity for making an argument against evaluation of a report of utility model technical opinion is given to applicants and holders of a utility model right. The report provides the persons/parties concerned with objective materials useful for determining novelty etc. in view of prior art.

Consequently, when preparing a report of utility model technical opinion, examiners must make an effort to evaluate as objectively as possible, and when making a negative evaluation on novelty, they should evaluate them with convincing evidence for lack of novelty etc. Concretely, the evaluation should be done in the similar manner of making final decisions (i.e., "decision of rejection" or "decision of patent grant") in a patent examination procedure.

(4) Where examiners cannot sufficiently evaluate novelty etc., because a claimed device is unclear or is not described enough to be carried out, etc., they should evaluate novelty etc. based on the most rational presumption for the evaluation derived from the description, claims and drawings and common general technical knowledge at the time of filing. In this case, deficiency in a description, etc. is also indicated on a report of utility model technical opinion (refer to Article 5.4.(2)), but no opportunity for making an argument against the deficiency is given to applicants and holders of utility model right. Therefore, only where an examiner is convinced that there must exist deficiency in a description, the most rational presumption for the evaluation should be established.

(The following examples explain how to put presumption for evaluation, which basic requirements and other requirements are not considered in.)

Example 1:

(Claim for utility models)

A comfortable chair shown in Fig. 1.

(Summary of description)

A chair whose seatback has a hollowed portion with the shape of human's back is shown in Figure 1.

(Presumption for evaluation)

The evaluation will be conducted under the presumption that the phrase "comfortable as shown in Figure 1" means "the seatback has a hollowed portion with the shape of human's back".

Example 2:

(Claim for utility models)

A dog-shaped toy comprising: a numerical evaluation means for numerically evaluating human's emotion, an emotional judgment means for judging human's pleasure based on signals from the numerical evaluation means, and a waggling control means for controlling a waggle of the dog's tail based on signals from the emotional judgment means.

(Summary of description)

A detailed description for the device only describes a dog-shaped toy having a means for waggling the tail on the basis of detecting the sound louder than the definite level.

(Presumption for evaluation)

When these phrases "a numerical evaluation means for evaluating human's emotion" and "an emotional judgment means for judging human's pleasure based on signals from the numerical evaluation means" are interpreted literally, no concrete example cannot be pictured, therefore novelty etc. cannot be sufficiently evaluated. At the same time, the detailed description of the device seems not to indicate a means other than that of detecting sound louder than the definite level. As the result, the "numerical evaluation means for numerically evaluating human's emotion" and the "emotional judgment means for judging human's pleasure based on signals from the numerical evaluation means" are evaluated on the assumption that they are detecting sound larger than the definite level.

(5) When arguments for claiming novelty etc. are provided in a written statement, they should be fully taken into consideration for evaluation.

(6) Where claims have been invalidated by an irrevocable appeal decision in a trial for invalidation, the content of a decision must be taken into consideration for evaluation. A report of utility model technical opinion must not be made for claims that were invalidated in the trail.

(7) In the case of a divisional or converted application, prior art search should be conducted based on the actual filing date. In principle, only when distributed publications etc. or applications for a patent or utility model registration having earlier filing dates, which can deny novelty etc. of claimed devices, are found between the original filing date and the actual filing date, whether or not these applications satisfy the requirements for a divisional and converted application should be determined according to the guidelines in "Part V, Chapter 1, Division of Application" and "Chapter 2, Conversion of Application" (see, Note). If these applications are not considered to meet the requirements of divisional or converted applications etc. or applications. On the other hand, if these applications are considered to meet the requirements of divisional or converted application, they are not evaluated to lose novelty etc..

(Note) Regarding the substantial requirement of the application for a utility model registration converted from a patent application, the requirement of "Part V, Chapter 2, Conversion of Application, 2.2(1)" doesn't have to be satisfied as far as the requirement of "Part V, Chapter 2, Conversion of Application, 2.2(2)" is satisfied. That is because a converted application can be made to meet the requirement of "Part V, Chapter 2, Conversion of Application, 2.2(1)" and the requirement of "Part V, Chapter 2 by amendment of the original application, even if the matters which are not described in the description, claims or drawings of the original application just before the conversion but described in the description, claims or drawings of a converted application.

(8) In the case of an application which claims internal priority and/or priority under the Paris Convention, prior art search must be conducted on the actual filing date. In principle, only when distributed publications or prior applications for a patent or a utility model registration, which can deny novelty etc. of claimed devices, are found between the priority date and the filing date, whether or not the claimed priority for the devices takes effect should be determined in the same way as described in "Chapter IV Priority." If the claimed priority does not take effect, novelty etc. will be denied on the basis of the above publications and the precedent applications. On the other hand, if the claimed priority takes effect, novelty etc. will not be denied.

5. Description of the Report of Utility Model Technical Opinion

The content of the report of utility model technical opinion consists of: (i) the scope of prior art search; (ii) evaluation; (iii) indications of cited documents; and (iv) explanations of evaluation.

5.1 Indication of Scope of Prior Art Search

(1) The scope of prior art search actually conducted by examiners must be indicated, so that the scope of searched documents can be recognizable clearly and objectively.

(2) In principle, the scope of prior art search is identified by: (i) type of document; (ii) technical field; and (iii) period of time. Individual document, which cannot be identified in this way, is identified by the name of the publication, the name of the author or publisher and the publication date etc.

(3) Technical field is identified by the International Patent Classification (IPC).

5.2 Indication of Evaluation

Evaluation on novelty etc. for each claim must be indicated independently (If claims whose evaluation and explanation of the evaluation are common, an examiner can describe them together.). The content of evaluation falls under one of the following six categories:

Evaluation 1: The claimed device may be lack of novelty on the basis of cited documents (Article 3(1)(iii)).

Evaluation 2: The claimed device may be lack of inventive step on the basis of cited documents (Article 3(2)(limited to devices referred to Article 3(1)(iii))).

Evaluation 3: The claimed device is deemed identical with a device or an invention disclosed in a description, claims or drawings originally attached to a request of another application which was filed prior to the filing date of the utility model application, and which was published by Utility Model Gazette, Patent Gazette or publication of unexamined applications after the filing date (Article 3bis).

Evaluation 4: A claimed device is deemed identical with a device or an invention claimed in other applications that were filed prior to the filing date of this utility model application (Article 7(1) and (3)).

Evaluation 5: A claimed device is deemed identical with a device or an invention claimed in other applications that were filed on the same date of this utility model application (Article 7(2) and (7)).

Evaluation 6: No specific prior art documents or etc. that deny the novelty etc. are found (including cases where an effective search is difficult because of an ambiguous description).

5.3 Indication of Cited Documents etc.

(1) In a case where novelty etc. is denied,

(i) All discovered prior art documents etc. should be written in a report as long as it is necessary to deny novelty etc.

(ii) Where overlap exists among contents of prior art documents, unnecessary prior art should not be written in a report.

(iii) The best prior art documents etc., which is the closest to a claimed device should be

written in report, upon taking into consideration of embodiments etc.

(2) In a case where novelty etc. is not denied

When prior art documents which could deny novelty etc. of claimed devices are not discovered, other documents showing general state of the art of relevant technical fields pertain to the claimed device should be presented with the evaluation that specifically relevant prior art was not discovered (Evaluation 6).

5.4 Explanation of Evaluation

(1) In a case where novelty etc. is denied, an examiner must explain the reason in the column for explanation of evaluation so that a person who requested the report can understand it. Basically, the specific part of cited documents showing the ground must be described in the column. If the evaluation is Evaluation 1, 3, 4 or 5, it should be explained why novelty etc. of claimed devices was denied on the basis of a description at the specific part. If the evaluation is Evaluation 2, it is also required to describe the rationale for denial of inventive step on the basis of devices found in cited documents.

(2) When an examiner cannot sufficiently evaluate novelty etc. because a claimed device is ambiguously defined etc., it is required for him or her to describe what deficiency exists in a description etc. and what assumption is used for the evaluation of novelty etc.

(3) As described in Section 3.1 (5), when an examiner recognizes that prior art search could not be effectively conducted, the conclusion and the reason why he or she failed to do so must be described.

(4) Where requirements for a divisional or converted application are not satisfied, or where claim of priority is not allowed, the reason why an examiner determined so, and the explanation that the evaluation was made based on the date of the actual application must be indicated in a report.

(Note) Matters unrelated to evaluations of novelty etc. (e.g., whether new matter exists or not, requirement for correction stipulated in Article 14bis) should not be written in a report of utility model technical opinion even if they are clearly found.

6. Offer of Information

(1) Any person can offer information, such as distributed publications against an application for utility model registration, or utility model registration (Article 22 of Regulations under Utility Model Act)

(2) Examiners must fully consider contents of offered information, which is available at the time of preparation of a report of utility model technical opinion.

(3) It must be determined whether or not publications related to offered information, which is considered when an examiner prepared the report, can be prior art documents that deny the novelty etc. of the claimed device. The conclusion must be written at the indication column regarding the scope of prior art search in a report of utility model technical opinion.

7. Interviews

An interview pertain to a claim to meet requirements for novelty etc. (communication via telephone or facsimile is included) should not be taken place. However, an interview to receive technical explanations from an applicant, a right holder or his/her representative is permissible. If the interview is taken place to receive technical explanations, an examiner must keep a record of the explanations

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

Part X: UTILITY MODEL

Chapter 2 Basic Requirements for Utility Model Registration

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Chapter 2 Basic Requirements for Utility Model Registration

1. Purport of Examination of Basic Requirements

Utility Model Act provides that the establishment of a utility model right shall be registered without the substantive examination in terms of early protection for a utility model right. An application for a utility model registration, however, shall meet requirements enough to register the establishment because Utility Model Act adopts formality examination principle that the requirement to grant a right is the registration of the establishment.

Thus, in addition to formality requirements prescribed in Utility Model Act 2bis(4), Utility Model Act 6bis prescribes requirements (referred to as "basic requirements" hereinafter) met by an application for a utility model registration in order that the establishment of a utility model right is registered without the substantive examination. The Commissioner of the Patent Office may invite amendment where an application does not meet these requirements. The Commissioner of the Patent Office may dismiss a procedure when a person whom he has invited to make amendment fails to do so within the time limit designated in accordance with the invitation to amendment (Article 2ter). The procedure of the Comissioner of the Patent Office is subject to the administrative appeal in the Administrative Complaint Review Act. Furthermore, the result of the appeal is subject to the revocation suit in the Administrative Suit Act (Patent Act Article 184bis applied correspondingly in Utility Model Act Article 48bis).

Imposing these basic requirements can prevent inexpediences such that a utility model right of a device which is not a subject of protection is established and that an application which substantively does not have the semblance of an application is registered as it is.

The same is true for the basic requirements after the correction stipulated in Article 14ter (The examination of the basic requirements after the correction is conducted to the applications filed on or after April 1, 2005).

2. What violates Basic Requirements

(1) Violation of Subject of Protection (Article 6bis(i), Article 14ter(i))

The device claimed in the application is not a device that relates to the shape or construction of an article or a combination of articles.

(2) Violation of Public Order and Morality (Article 6bis(ii), Article 14ter(ii), Article 4)

The device claimed in the application is a device that is liable to contravene public order, morality or public health.

(3) Violation of Descriptive Form of Claim (Article 6bis(iii), Article 14ter(iii), Article 5(6)(iv))

The descriptive form of the claims under Regulations under Utility Model Act Article 4 is violated.

(4) Violation of Requirements of Unity (Article 6bis(iii), Article 14ter(iii), Article 6)

There are two or more devices that shall not be the subject of an application for utility model registration in the same request.

(5) Excessive Deficiency in Description, Claims or Drawings (Article 6bis(iv), Article 14ter(iv)) The description, claims or drawings does not contain the necessary matters or the description is excessively unclear.

3. Concrete Practice

"A device claimed in the application for a utility model registration" stipulated in Article 6bis and "the device identified by the matters stated in the corrected scope of claims" stipulated in Article 14ter are hereinafter referred to as "a claimed device."

3.1 Violation of Subject of Protection (Article 6bis(i), Article 14ter(i))

(1) It falls under Article 6bis(i) or 14ter(i) where a claimed device is not related to the shape or construction of an article or a combination of articles. And it also falls under these Articles where a thing described in the claim is not "a device."

(Reference)

(i) Article

Where a thing possesses a certain shape that is fixed spatially, where the thing is merchandise in general which is a freely transportable object for commercial transaction, and where purpose of using the thing is clear, such thing is interpreted as "an article."

The construction of roads or buildings, etc. is also interpreted as the construction of articles.

If a thing is dealt in separating from the machine or the system, etc. and satisfies the above condition, such thing may be deemed to be "an article."

(ii) Shape

"Shape" is external figuration expressed in the line, the surface, and so on. For example, they are the shape of the cam, the tooth shape of the gear, or the edge type of the tool, etc. (iii) Construction

"Construction" is structure constructed spatially and 3-dimensionally. It is expressed not only in the contour of articles but also in the ground plan and the elevation view, in some cases the lateral view or the cross section diagram in addition.

(iv) Combination

Two or more articles are spatially separated respectively when an article is used or not. And, those have independently fixed structure or shape. And, value of use is produced where those relate to each other functionally by using those. In the above circumstances, that is called "combination." For example, the fastening tools which consists of a bolt and a nut.

(v) Device

"Device" means the creation of technical ideas utilizing the law of nature. (Article 2)

(2) For example, types which fall under Article 6bis (i) or Article 14ter(i) are as follows.

(I) What does not fall under "the shape or construction of an article or a combination of articles"

- (i) A device of which the category is a process
- (ii) A device of a composition
- (iii) A device of chemical material
- (iv) A thing which is not fixed in a certain shape (Example: liquid ballast, nonskid dispersion powder for the road)
- (v) Animal variety, plant variety
- (vi) Computer program per se

- (II) What dose not fall under "a device"
 - (i) The perpetual motion (a thing which is contrary to the second law of thermodynamics)
 - (ii) An audio compact disc (where the feature resides solely in music recorded thereon)
 - (iii) Simple Aesthetic creations like paintings, carvings, etc.
 - (iv) Computer program language itself

3.2 Violation of Public Order and Morality (Article 6bis(ii), Article 14ter(ii), Article 4)

- (1) It falls under Article 6bis (ii), Article 14ter(ii) or Article 4 where a device is liable to contravene public order, morality or public health.
- (2) Though the description in the detailed description of the device is liable to contravene public order, morality or public health, if a claimed device is not liable to contravene them, appropriate measures are allowed to be done at the time of the publication.

3.3 Violation of Descriptive Form of Claim (Article 6bis(iii), Article14ter(iii), Article 5(6)(iv))

It falls under Article 6bis(iii), Article14ter(iii) or Article 5(6)(iv) where the descriptive form of claims under Regulations under Utility Model Act Article 4 is violated.

Regulations under Utility Model Act Article 4

Description of the claims under Utility Model Act Article 5(6)(iv) which are to be in accordance with an ordinance of the Ministry of Economy, Trade and Industry shall be as provided in each of the following items:

- (i) for each claim, the statements shall start on a new line with one number being assigned thereto;
- (ii) claims shall be numbered consecutively;
- (iii) in the description in a claim, reference to other claims shall be made by the numbers assigned thereto; and
- (iv) when a claim refers to another claim, the claim shall not precede the other claim to which it refers.

3.4 Violation of Requirements of Unity (Article 6bis(iii), Article 14ter(iii), Article 6)

- (1) Basically, an examiner judges in accordance with the criteria in "Part I, Chapter 2, Requirements of Unity of Invention."
- (2) The determination of the special technical feature in the criteria is eventually conducted by comparing the claimed device with the prior art which falls under the invention of each item of Patent Act Article 29(1). The examination of the basic requirements of the utility model registration, however, is made without the prior art search and the comparison with the prior art found by the search. Thus, the special technical feature defining a contribution made by a device over the prior art is determined in light of the description, claims, drawings and the common general technical knowledge as of the filing. The same is true for the basic requirements after the correction.

3.5 Excessive Deficiency in Description, Claims or Drawings (Article 6bis(iv), Article 14ter(iv))

- (1) It falls under Article 6bis(iv) or Article 14ter(iv) where the description, claims or drawings does not contain the necessary matters or the description, claims or drawings is excessively unclear.
- (2) "The description, claims or drawings is excessively unclear" means that the case where an examiner can judge that the description is prima facie unclear. For example, an examiner can judge that the description is unclear without closely examining the relationship to another description.
- (3) The judgment on the claims
 - (I) Types which fall under "not contain the necessary matters" are as follows. <u>Example:</u>
 - (i) There is nothing but matters such as selling areas or customers which are not technical matters in a claim.
 - (ii) There are nothing more than the objective, operation or effect of a device in a claim.
 - (II) Types which fall under "the description in the description, claims or drawings is excessively unclear" are as follows.

Example:

- (i) The description in a claim cannot be able to technically understood.
- (ii) The description in the description or drawings is substituted for the description in a claim.
- (iii) Two or more "devices claimed for a utility model registration" are described in one claim.
- (4) The judgment on parts except the claims and the detailed description of the device (the title of the device, the brief description of the drawings and the drawings)

It falls under Article 6bis(iv) or Article 14ter(iv) where an examiner can judge that the description of the title of the device, the brief description of the drawings or the drawings is prima facie unclear.

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

<appendix>

Measurement Act (extract)

Regulations under the Patent Act Article 3

Where any quantity of the state of physical phenomena prescribed in Act 2 Paragraph 1 of the Measurements Standards Law (Law No. 51, 1992) is to be stated in a document submitted, it shall be stated in accordance with the provisions of Article 8 of the Act as well as Act 3, 4, 5, 6 and 8 (1) and (3) of the Supplementary Provisions of the Law.

Extract from the Measurement Act (Law No. 51, 1992)

Article 2

The term "measurement" as used in this Act shall mean to measure the following items hereinafter referred to as the "quantity of the state of physical (phenomena" and the term "measurement units" shall mean the standards for) measurement: (i) Length, mass, time, electric current, temperature, amount of substance, luminous intensity, angle, solid angle, area, volume, angular velocity, angular acceleration, velocity, acceleration, frequency, rotational frequency, wave number, density, force, moment of force, pressure, stress, viscosity, kinematic viscosity, work, power, mass flow rate, flow rate, quantity of heat, thermal conductivity, specific heat capacity, entropy, quantity of electricity, electric field strength, voltage, electromotive force, capacitance, magnetic field strength, magnetomotive force, magnetic flux density, magnetic flux, inductance, electric resistance, electric conductance, impedance, active power, reactive power, apparent power, active energy, reactive energy, apparent energy, attenuation of electromagnetic wave, electric power density of electromagnetic wave, radiant intensity, luminous flux, luminance, illuminance, sound power, sound pressure level, oscillating acceleration level, concentration, neutron emission rate, radioactivity, absorbed dose, absorbed dose rate, kerma, kerma rate, exposure, exposure rate, dose equivalent or dose equivalent rate. (ii) Fineness, specific gravity and others prescribed by Cabinet Order.

Article 3

The measurement units of the quantities of the state of physical phenomena listed in the left column of appended table 1 among the quantities of the state of the physical phenomena listed in paragraph 1, item 1 of the preceding Article shall be those listed in the right column of the same table and the definition of each of those units shall be prescribed by Cabinet Order in accordance with resolutions of the General Conference on Weights and Measures and other international decisions and practices with regard to measurement units.

Article 4

(1) In addition to the measurement units prescribed in the preceding Article, the measurement units of the quantities of the state of the physical phenomena listed in the left column of appended table 2 shall be those listed in the right column of

the same table and the definition of each of those measurement units shall be prescribed by Cabinet Order.

(2) In addition to the measurement units prescribed in the preceding Article, the measurement units of the quantities of the state of the physical phenomena listed in the left column of appended table 3 shall be those listed in the right column of the same table and the definition of each of those measurement units shall be prescribed by Cabinet Order.

Article 5

(1) In addition to the measurement units prescribed in Article 3 and Article 4, measurement units of their decimal-multiples and sub-multiples and their definitions shall be prescribed by Cabinet Order.

(2) In addition to the measurement units prescribed in Article 3, Article 4 and the preceding paragraph, the measurement units for length measurements at the sea level as well as the measurement units of length, mass, angle, area, volume, velocity, acceleration, pressure, and quantity of heat used for special measurements specified by Cabinet Order shall be prescribed by Cabinet Order.

Article 8

Measurement units other than the measurement units prescribed in Article 3 through Article 5 the measurement units prescribed in Article 3 through Article 5 (shall be hereinafter referred to as "statutory measurement units" and all other measurement units shall be hereinafter referred to as "non-statutory measurement units" shall not be used for transactions or certifications pertaining to quantities) of the state of the physical phenomena listed in Article 2, paragraph 1, item 1.

Quantity of State of	Measuring Unit
length	meter
mass	kilogram, gram, ton
time	second, minute, hour
electric current	ampere
temperature	Kelvin, Celsius degree or degree
amount of substance	mole
luminous intensity	candela
angle	radian, degree, second, minute
solid angle	steradian
area	square meter
volume	cubic meter, liter
angular velocity	radian per second
angular acceleration	radian per second squared
velocity	meter per second, meter per hour
acceleration	meter per second squared
frequency	hertz
speed of revolution	per second, per minute, per hour
wave number	per meter
density	kilogram per cubic meter, gram per cubic meter, gram per liter

Annexed Table I (Article 3 Related)

force	newton
moment of force	newton meter
pressure	pascal or newton per square, bar
stress	pascal or newton per square meter
viscosity	pascal second or newton second per square meter
kinematic viscosity	square meter per second
work	joule or watt second, watt hour
power	watt
mass flow rate	kilogram per second, kilogram per minute, kilogram per hour, gram per second, gram per minute, gram per hour, ton per second, ton per minute, ton per hour
flow rate	cubic meter per second, cubic meter per minute, cubic meter per hour, liter per second, liter per minute liter per hour
amount of heat	ioule or watt second watt hour
thermal conductivity	watt per meter Kelvin or watt per meter degree
specific heat capacity	ioule per kilogram Kelvin or joule per kilogram
opeonie neut supusity	dearee
entropy	ioule per Kelvin
amount of electricity	coulomb
electric field strength	volt per meter
voltage	volt
electromotive force	volt
capacitance	farad
magnetic field strength	ampere per meter
magnetomotive force	ampere
magnetic flux density	tesla or weber per square meter
magnetic flux	weber
inductance	henry
electric resistance	ohm
electric conductance	siemens
impedance	ohm
electric power	watt
amount of electric power	joule or watt second, watt hour
electric power density of	watt per square meter
electromagnetic wave	
radiant intensity	watt per steradian
luminous flux	lumen
luminance	candela per square meter
illuminance	lux
acoustic power	watt
concentration	mole per cubic meter, mole per liter, kilogram per cubic meter, gram per cubic meter, gram per liter
neutron emission rate	per second, per minute
radioactivity	becquerel, curie
absorbed dose	gray, rad
absorbed dose rate	gray per second, gray per minute, gray per hour,
	rad per second, rad per minute, rad per hour
kerma	gray

kerma rate	gray per second, gray per minute, gray per hour
exposure	coulomb per kilogram, roentgen
exposure rate	coulomb per kilogram second, coulomb per
	kilogram minute, coulomb per kilogram hour,
	roentgen per second, roentgen per minute,
	roentgen per hour
dose equivalent	sievert, rem
dose equivalent rate	sievert per second, sievert per minute, sievert per
	hour, rem per second, rem per minute, rem per
	hour

Annexed Table II (Article 4 Related)

Quantity of State of Physical Phenomena	Measuring Unit
reactive electric power apparent electric power reactive electric energy apparent electric energy attenuation of electromagnetic wave acoustic pressure level oscillating acceleration	var voltampere var second, var hour voltampere second, voltampere hour desibel desibel desibel

Annexed Table III (Article 4 Related)

Quantity of State of	Measuring Unit
Physical Phenomena	
speed of revolution	turn per minute, turn per hour
pressure	atmospheric pressure
viscosity	poise
kinematic viscosity	stokes
concentration	mass per cent, mass per mill, mass part per million,
	mass part per billion, volume per cent, volume per
	mill, volume part per million, volume part per billion,
	рН

Supplementary Provisions Article 3

(1) The measurement units listed in the right column of the appended table 1 of the supplementary provisions and their decimal multiples specified by Cabinet Order shall be deemed the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table set forth in Article 8, paragraph 1 of the revised Measurement Act until September 30, 1995 (such statutory measurement units shall be hereinafter simply referred to as "measurement units"; such revised Measurement Act shall be hereinafter referred to as the "New Act").

(2) The measurement units listed in the right column of the appended table 2 of the supplementary provisions and their decimal multiples specified by Cabinet Order shall be deemed the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table until September 30,

1997.

(3) The measurement units listed in the right column of the appended table 3 of the supplementary provisions and their decimal multiples specified by Cabinet Order, shall be deemed to be the statutory measurement units of the quantity of the state of the physical phenomena listed in the left column of the same table until September 30, 1999.

(4) The definitions of the measurement units prescribed in the preceding three paragraphs shall be prescribed by Cabinet Order.

Supplementary Provisions Article 4

(1) The measurement units prescribed in paragraphs 1 through 3 of the preceding Article may be deemed to be the statutory measurement units by Cabinet Order even after the date specified in each of these provisions.

(2) In the case of the preceding paragraph, such Cabinet Order shall specify the effective period during which the measurement units are deemed to be the statutory measurement units, the scope of transactions and certifications in which the measurement units may be used as the statutory measurement units, and how to use the measurement units as the statutory measurement units.

Supplementary Provisions Article 5

The measurement units in the yard-pound system and their definitions shall be prescribed by Cabinet Order.

Supplementary Provisions Article 6

(1) The French horse power shall be deemed for the time being to be a measurement unit of power in the case where it is used for transactions or certifications pertaining to an internal combustion engine or other transactions or certifications specified by Cabinet Order.

(2) The definition of the French horse power shall be prescribed by Cabinet Order.

Supplementary Provisions Article 8

(1) An indication using a measurement unit prescribed in the provisions of Article 3, paragraphs 1 through 3 of the supplementary provisions that has been stated on a document or affixed to a commodity or other objects on or before the effective date of the measurement unit prescribed in these provisions may be used for the purposes of transactions or certifications even after such effective date notwithstanding the provision of Article 8, paragraph 1 of the New Act.

(2) (omitted)

(3) An indication of a measurement unit prescribed in Article 4, Article 5, Article 7, Article 8, Article 9, paragraph 1 or Article 10, paragraph 1 of the Old Act for Enforcement that has been stated on a document or affixed to a commodity or other objects on or before the effective date of the measurement unit prescribed in Article 3, Article 6, paragraph 1, or Article 10, paragraph 1 of the Old Act for Enforcement may be used for the purposes of transactions or certifications even after such effective date notwithstanding the provisions of Article 8, paragraph 1 of the New Act.

[Annexed Table 1]

Quantity of State of	Measuring Unit
Physical Phenomena	
force	dyne
work	erg
amount of heat	kilogram-force meter, erg
neutron emission rate	neutron per second, neutron per minute
radioactivity	disintegration per second, disintegration per minute

[Annexed Table 2]

Quantity of State of	Measuring Unit
Physical Phenomena	
length	micron
frequency	cycle or cycle per second
magnetic field strength	ampere turn per meter, oersted
magnetomotive force	ampere turn
magnetic flux density	gamma, gauss
magnetic flux	Maxwell
acoustic pressure level	phone
concentration	normal

[Annexed Table 3]

Quantity of State of	Measuring Unit
Dhysical Dhanamana	J
Physical Phenomena	
force	kilogram-force, gram-force, ton-force
moment of force	kilogram-force meter
pressure	kilogram-force per square meter, gram-force per
	square meter, meter of mercury, meter of water
stress	kilogram-force per square meter, gram-force per
	square meter
work	kilogram-force meter
power	kilogram-force meter per second
amount of heat	calorie
thermal conductivity	calorie per second per meter per degree,
	calorie per hour per meter per degree
specific heat capacity	calorie per kilogram per degree