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

Part II Chapter 2 Section 3 Clarity Requirement

Section 3 Clarity Requirement (Patent Act Article 36(6)(ii))

1. Overview

Article 36(6)(ii) is a provision on Clarity Requirement for Claims, which prescribes that an invention for which a patent is sought shall be clear.

The statement in the claims has great significance, since the claims are used for the basis of determination on novelty and inventive step, etc., and also used for the basis of determination of the technical scope of a patented invention. Thus, it is necessary that an invention can be clearly identified from one claim.

Article 36(6)(ii) is a significant provision for securing these functions of the claims.

2. Determination of Clarity Requirement

2.1 Basic ideas of determination of clarity requirement

(1) For a claimed invention to be clearly understood, it is necessary that the scope of the claimed invention shall be clear, that is to say, that the claims shall be stated such that a person skilled in the art can understand whether a specific product or process falls within the scope of the claimed invention, and to that end, the matter specifying the invention shall be clear.

Also, since an invention for which a patent is sought is described on a claimby-claim basis, one invention should be identified based on matters stated in one claim (see 2.2(4)).

(2) Examination of the clarity requirement shall be made for each claim based on matters specifying the invention stated in the claim.

However, when interpreting the meanings or technical meanings (see 2.2(2)b) of the matters specifying the invention, the examiner shall consider not only the statement of the claim but also the statements of the description and drawings as well as the common general knowledge as of the filing.

In identifying an invention, a matter not stated in a claim shall not be considered by the examiner. On the contrary, a matter stated in a claim shall be necessarily taken into consideration by the examiner.

(3) Where the statement of a claim is clear by itself, an examiner shall examine whether a term in the claim is defined or explained in the description or drawings, and determine whether such definition or explanation, if any, makes (the statement of)the claim unclear instead. For example, if clear definition of a term in a claim, which is either completely inconsistent with or different from what it normally means, is mentioned in the description, such definition could make the claimed invention unclear. This is because such definition could raise confusion in interpretation of the term, under the practice that identification of the claimed invention should be done primarily based on the statement of the claim and also be done by considering the statements of thedescription.

Where the statement of a claim is unclear by itself, an examiner shall examine whether a term in the claim is defined or explained in the description or drawings, and determine whether such definition or explanation, if any, makes (the statement of)the claim clear by interpreting the term in the claim considering the common general knowledge as of the filing. If the examiner determines that the invention for which a patent is sought can be clearly identified as a result of this determination, the clarity requirement is satisfied.

2.2 Types of violation of clarity requirement

Types (1) to (5) as the examples of statements in the claims violating the clarity requirement are shown below.

- (1) The case where the statement of a claim itself is unclear, and as a result, a claimed invention is unclear.
 - a The case where an expression in a claim is inadequate as a Japanese language expression, and as a result, a claimed invention is unclear.

For example, it corresponds to a case where a claim includes statements inadequate as Japanese language expressions such as clerical errors or ambiguous statements, thereby a claimed invention is made unclear. It is not a violation of the clarity requirement, however, if defects in a claim are minor and do not render the claimed invention unclear to a person skilled in the art.

b The case where the meaning of a term in a claim is incomprehensible to a person skilled in the art even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, a claimed invention is unclear.

Example1:

[claim]

A process for manufacturing compound D, consisting of the steps of:

synthesizing compound C by reacting compound A and compound B in ethanol at a normal temperature, and

synthesizing compound D by heating compound C at a temperature between 80 and 100°C in the presence of KM-II catalyst.

(Explanation)

The meaning of the term "KM-II catalyst" is incomprehensible because this term is neither defined in the description nor included in the scope of the common general knowledge as of the filing.

(2) The case where a technical defect is included in matters specifying the invention, and as a result, a claimed invention is unclear.

a The case where a technically incorrect matter is included in matters specifying the invention, and as a result, a claimed invention is unclear.

Example2:

[claim]

An alloy composed of 40 to 60 wt% of component A, 30 to 50 wt% of component B, and 20 to 30 wt% of component C

(Explanation)

This claim includes a technically incorrect statement because the total sum of the maximum amount of component A and the minimum amounts of components B and C exceeds 100 wt%.

b The case where the technical meaning of a matter specifying the invention is incomprehensible to a person skilled in the art, and further, it is evident that the matter specifying the invention is deficient in light of the common general knowledge as of the filing, and as a result, the invention is unclear.

When the scope of a claimed invention is clear, normally, the invention can be clearly identified from the statement in the claim.

However, even when the scope of an invention is clear, if the "technical significance" of a matter specifying the invention is incomprehensible and it is evident that a matter specifying the invention is deficient in light of the common general knowledge as of the filing, the claimed invention cannot be examined precisely on the patentability requirements, such as novelty or inventive step, etc. In such a case, the function of the claims, which requires that an invention can be clearly identified from one claim, is not secured, and therefore, the claim violates the clarity requirement.

The technical meaning of a matter specifying an invention refers to the function or role that these elements play in the claimed invention. In understanding the function or role, an examiner shall consider the statements of the description and drawings as well as the common general knowledge as of the filing.

The function or role that the claimed elements play in the claimed invention can be usually understood by considering the statement of the description (see 3.1.1(2) and (3) in "Chapter 1 Section 1 Enablement Requirement") or the common general knowledge as of the filing. Such a case does not constitute this type of violation.

A case where the technical meaning of a matter specifying an invention is just incomprehensible does not constitute this type of violation. A case where a matter specifying the invention is deficient in light of the common general knowledge as of the filing, in addition to the incomprehensibility of the technical meaning of the matter specifying the invention, constitutes this type of violation.

An examiner shall determine whether deficiency in matters specifying the invention is evident, based on the common general knowledge as of the filing in the technical field to which the invention pertains. Therefore, this type of violation shall not apply when the content of the common general knowledge as the ground for such determination cannot be specified.

Example 3:

[claim]

A machining center comprising a bed made of metal, an elastic body, a metal plate, an automatic tool change arm, and a tool magazine

(Explanation)

The claim fails to define the structural relationship of the elastic body and metal plate with other components, and the technical meanings of the elastic body and the metal plate cannot be understood even by considering the statements of the description and drawings as well as the common general knowledge as of the filing. With regard to an invention relating to a machining center, it is the common general knowledge as of the filing that the structural relationship of a particular component with other components greatly differs depending on the technical meaning of the relevant component. In light of this common general knowledge, it is evident that the matters specifying the invention in this claim are deficient for understanding the structural relationship of the elastic body and metal plate with other components. Therefore, the invention cannot be clearly identified from the statement of the claim.

(Supplementary explanation)

In light of the common general knowledge as of the filing, the technical meanings of the "bed made of metal", the "automatic tool change arm", and the "tool magazine" are obvious. However, in order to understand the technical meanings of the "elastic body" and the "metal plate", it is insufficient that the claim only states that the invention is equipped with these components. Suppose the description indicates a specific example in which the elastic body is mounted on the lower part of the bed made of metal and the metal plate is mounted on the lower part of the elastic body, both serving as damping members. While it is possible to understand the roles that the elastic body and the metal plate play in this specific example, the claim does not state such structural relationships, and therefore, this limitative interpretation cannot be applied to the roles to be played by the elastic body and the metal plate in the claimed invention. Therefore, even by considering the statements of the description and drawings, the technical meanings of the elastic body and metal plate cannot be understood.

Example 4:

[claim]

An image encoding chip which compresses input image data and outputs X-encoded image data, comprising: an A-encoding circuit which encodes externally input image data by an A-encoding system that is reversible, thereby producing A-encoded data; an A-decoding circuit decoding the produced A-encoded data into the

original image data by an A-decoding system; and an X-encoding circuit which encodes the decoded image data by an X-encoding system that is irreversible, thereby producing X-encoded image data, and externally outputs the produced X-encoded image data.

(Explanation)

It is the common general knowledge as of the filing that speeding up, downsizing, electric power saving, and cost reduction are of importance for an invention of an image encoding chip. Thus, providing a circuit which only decodes the encoded data into the original data, as stated in the claim, is against the common general knowledge. Therefore, even in light of the statements of the description and drawings, the technical meanings of the A-encoding circuit and the A-decoding circuit cannot be understood. With regard to an invention relating to an image encoding chip, it is also the common general knowledge as of the filing that what to be processed by the image encoding chip greatly differ depending on the technical meanings of the circuits mounted on the chip. In light of the common general knowledge as of the filing, it is evident that the matters specifying the technical functions of the A-encoding circuit and the A-decoding circuit in the image encoding chip are not sufficiently described in the clams. Therefore, the invention cannot be clearly identified from the statement of the claim.

(Supplementary explanation)

If the description describes a specific example in which the A-encoding circuit measures an encoding time, and the parameter to be used for X-encoding is determined based on the encoding time it is possible to understand the technical function that the A-encoding circuit and the A-decoding circuit performs in this specific example, however, the claim fails to specify a feature of using the information obtained by the A-encoding circuit for X-encoding, and therefore, it cannot interpret the technical function of the A-encoding circuit and the A-decoding circuit performed in the claimed invention as such limitative way as specified in the example in the description. Therefore, even by considering the statements of the description and drawings, the technical significance of the A-encoding circuit and A-decoding circuit cannot be understood.

c The case where matters specifying the invention are inconsistent with each other, and as a result, the invention is unclear.

Example 5:

A claim states "a method for producing a final product D comprising a first step of producing an intermediate product B from a starting material A, and a second step of producing the final product D from a starting material C" in which the product produced by the first step is different from the starting material in the second step, and thus, the relation between the first step and the second step is not clear even if interpreting the meaning of the terms "the first step" and "the second step" by considering the statements of the description and drawings as well as the common general knowledge as of the filing

d The case where matters specifying the invention are not technically related to each other, and as a result, the invention is unclear.

Example 6: A road on which an automobile equipped with a specific engine is traveling

Example 7: Information transmission media transmitting a specific computer program (Explanation)

The transmission of information is a function inherent to the transmission media. To define the matter specifying the invention to be "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 only defines the inherent function of the transmission media, and does not specify any relation between the information transmission media and the computer program.

e The case where a claim states a non-technical matter, as a whole, since the claim includes such statements as sales area or distributors, etc., and as a result, the invention is unclear.

(Points to note)

Where a claim includes a statement to specify a product by means of a brand name, for example, it is noted such a statement—makes the claimed invention unclear unless it is clear to a person skilled in the art that the product specified by such brand name have had the specific quality, composition and structure, etc., at least from prior to the filing date to the filing date.

(3) The case where the category of a claimed invention is unclear, or cannot be identified as any category, and as a result, the invention is unclear.

The Patent Act prescribes that "a patentee shall have the exclusive right to work the patented invention" (Article 68), and defines the term "working" by categorizing inventions into an invention of a product, an invention of a process, and an invention of a process for producing a product (Article 2(3)). In considering them, in a case where the category of the claimed invention is unclear or cannot be identified as any category, it is inadequate to grant a patent to such invention since it makes the extent of the patent right unclear.

(Examples of the case where an invention is unclear)

Example 8: A method or apparatus comprising ...

Example 9: A method and apparatus comprising ...

Example 10:

A claimed invention which cannot be determined whether it is directed to a "product" or a "process" as a result that the claim states only an operation, a function, a property, an objective or an effect (e.g., "an anti-cancer effect of a chemical compound A").

In determination of the category, an examiner shall consider the following points.

- a The term "system" (e.g., "telephone system") is treated as a term meaning the category of a "product".
- b The terms "use" and "utilize" are treated as terms meaning a method for using something which is categorized into a "process".

Example 11:

The expression "use (utilize) substance X as an insecticide" is treated as that meaning a "method for using substance X as an insecticide".

Example 12:

The expression "use (utilize) substance X of manufacturing a medicament for therapy of ..." is treated as that meaning a "method for using substance X of manufacturing a medicament for therapy of ... ".

(4) The case where the matters specifying the invention are expressed in alternatives

and the alternatives have no similar characteristics or functions to each other, and as a result, the invention is unclear.

Considering the purpose of the provision of Clarity Requirement an invention should be clearly identified from one claim. Also, considering the purpose of the system of claims, one invention should be identified based on matters stated in one claim.

Consequently, when there exist two or more alternatives related to a matter specifying the claimed invention and these alternatives do not have similar characteristics or functions, it falls under a violation of Clarity Requirement.

(Examples of the case where an invention is unclear)

Example 13: A specific component or an apparatus incorporated said component

Example 14: A transmitter or a receiver which has a specific power supply

Example 15:In a case where an intermediate and a final products of a chemical compound are stated in an alternative form in one claim.

It is not a violation of the requirements, however, as long as the intermediate per se is also regarded as a final product in one sense and meets Description Requirements of a Markush-type claim along with other final products, even though the product is the intermediate product of the certain final product.

(5) The case where a claim includes an expression which may make the scope of an invention ambiguous, and as a result, the scope of the invention is unclear.

The examiner shall not immediately determine that the scope of an invention is unclear, even when a certain expression may make the scope ambiguous. The examiner shall evaluate whether a person skilled in the art can understand the scope of a matter specifying the invention including the relevant expression by considering the description and drawings as well as the common general knowledge as of the filing.

a Negative expressions (e.g., "except ..." or "not ..."), resulting in making the scope of the invention unclear.

When what is excluded by a negative expression is unclear (e.g., "except for the invention stated in Cited Document 1"), the scope of the claimed invention including the relevant expression is unclear.

However, even if a claim includes a negative expression, the scope of an

invention nothing of which has been excluded by the negative expression is clear and at the same time the scope of part to be excluded by the negative expression is also clear, usually, the scope of the claimed invention shall be clear.

- b Expressions using a numerical limitation which only indicates either an upper limits or a lower limit such as "not less than..." or "not greater than...", and as a result, the scope of the invention is unclear.
- c Expressions where a basis or a degree of comparison criterion is unclear (e.g., "with slightly greater specific gravity", "much bigger", "high temperature", "low temperature", "hard to slip", "easy to slip") or terms having ambiguous meanings, resulting in making the scope of the invention unclear.

However, when an expression in a claim is widely used in a particular technical filed and its meaning is clear (e.g., the term "high frequency" relating to amplifiers), the scope of the invention shall not be unclear, usually.

d Expressions where the scope cannot be identified (e.g., "about", "approximately", "substantially", "essentially"), resulting in making the scope of the invention unclear.

However, even if a claim includes an expression where the scope cannot be identified, an examiner shall not immediately determine that the scope of the invention is unclear, but consider whether the scope of the invention can be understood by considering the statements of the description and drawings as well as the common general knowledge as of the filing.

Example:16 [claim]

A coating method comprising depositing a raw material for coating on a surface of a semiconductor substrate wherein in the deposition of the raw material for coating, the semiconductor substrate is rotated so that the raw material for coating can be supplied on the substrate in a substantially uniform way.

(Explanation)

Although it is the common general knowledge as of the filing that a raw material for coating cannot be supplied in a completely uniform way,, it can be understood from the statements of the description and drawings as well as the common general knowledge as of filing that the claimed invention provides a

substantially uniform supply of the raw material for coating on the surface of the semiconductor substrate by rotating the semiconductor substrate. It can be clearly understood that the expression "be supplied ... in a substantially uniform way" means such a degree of uniformity that can be obtained by the rotation of the semiconductor substrate. Therefore, the scope of the invention is clear. It is determined equally even if "substantially" is replaced by "approximately" in this example.

Example:17

[claim]

A folding-type mobile phone comprising a first housing having keypads, a second housing having a display, and a hinge connecting the first housing and the second housing so as to rotate the first housing approximately 360 degrees in relation to the second housing, wherein an electric circuit in the first housing and an electric circuit in the second housing are connected each other with a flexible substrate.

(Explanation)

It can be understood that the claimed invention is an improvement invention of the known art in which one housing rotates approximately 360 degrees in relation to the other housing around the connecting part on the basis of the statements of the description and drawings. It is obvious that the fact that one housing rotates approximately 360 degrees in relation to the other indicates an arrangement where the back side of the first housing is opposed to the back side of the second housing (i.e. the keypads and the display facing outside) on the basis of the statements of the description and drawings as well as the common general knowledge as of the filing. Accordingly the scope of the invention is clear. Note that, it is determined equally even if "approximately" is replaced by "about" or "substantially" in this example.

e Expressions where optionally additional matters or selective matters are stated along with such words as "when desired", "if necessary", etc., resulting in making the scope of the invention unclear (the same is applied to statements including such words as "especially", "for example", "etc.", "preferably", and "suitably").

Such expressions make it unclear in what condition on which the optionally added or selective matters are chosen unclear, and thus, the matters stated in the claim would be interpreted in many ways.

On the other hand, when selective matters, for example, can be understood as

just an example of a generic concept for the matters specifying the invention (e.g., "Alkali metal (e.g., lithium))", the scope of the invention shall be clear.

Further, also when optionally additional matters in a claim are stated in the description such that it can be understood that the additional matter is optional, the scope of the invention shall be clear.

f A numerical limitation in a claim which includes zero (0) (e.g., "from 0 to 10%"), resulting in making the scope of an invention unclear.

When it is clearly stated in the description that a component defined by the numerical limitation is an essential component, such statement in the description is inconsistent with the expression "from 0 to 10%" in the claim which is interpreted as the component being an optional component, thereby such expression of the numerical limitation would have various meanings, and as a result, the scope of the invention is unclear. On the other hand, when the description describes in an understandable way that the component defined by the numerical limitation is an optional component, the numerical limitation including zero (0) is permissible.

g A claim is made by a reference to the description or drawings, as a result, the scope of the invention is unclear.

Example 18: A claim which includes such statement made by a reference as "an automatic drilling mechanism as shown in Figure 1"

(Explanation)

Drawings generally have ambiguous meanings and could be interpreted in many ways. Thus, when a claim is made by a reference to a drawing, the scope of the invention is usually unclear,

Example 19: A claim in which a statement is made by a reference but the portion to be referred to is unclear (e.g. "cup described in the description")

An examiner shall note that the invention may be clear even when the claim is made by a reference to the description or drawings, as in the following example.

Example 20:In an invention related to an alloy, components of the alloy have a specific relation among them and the relation can be defined by reference to the drawings as clearly as by a numerical or other literal expression.

"Heat-resisting Fe·Cr·Al alloy for electric-heating composed of Fe, Cr, Al and impurities equal to or less than x% within the area circumscribed by points A(), B(), C() and D() shown in Figure 1.".

2.3 Points to note

(1) Article 36(5) prescribes that "all matters necessary to specify the invention for which a patent is soughtshall be stated" (see "Section 1 Patent Act Article 36(5)"). Considering the purpose of this Article, various forms of expression can be used in a claim by the applicant to specify an invention for which a patent is sought.

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

On the other hand, Article 36(6)(ii) prescribes that a claim should be stated in such a manner that an invention can be clearly identified from one claim. Hence, it should be noted that it is allowed as far as the claimed invention can be clearly identified to specify the invention by the various forms of expression.

(2) In a case where the statement of a claim which is directed to an invention of use does not express a specific use but a general use, it is not appropriate the examiner shall determine a violation of the clarity requirement merely on the ground that the statement is a general expression, i.e., the concept of the claim is broad, unless the expression of the general use makes unclear the claimed invention.

For example, when a claim expresses "a pharmaceutical (or agrochemical) agent comprising ..." instead of "a pharmaceutical (or agrochemical) agent for disease X comprising ...", , it is not appropriate the examiner shall determine a violation of the clarity requirement merely based on the expression is a general expression.

In a case where a claim is directed to a composition and does not include any statement to specify the use or property of the composition, it is not appropriate the examiner shall determine a violation of the clarity requirement merely based on the

claim does not include any statement to specify the use or property of the composition.

- (3) An examiner shall consider that a multiple dependent form claim (Note) makes an invention unclear, in some cases, depending on its dependent form.
 - (Note) A multiple dependent form claim is a claim defined by making reference to statements of two or more claims (regardless of independent or dependent).
- (4) The requirement for clarity is not satisfied in the cases of (i) to (vi) in "Chapter 1 Section 1 Enablement Requirement" 6. (however "the description " should be read as "claims.") where the claimed inventions are unclear since a person skilled in the art cannot understand accurately the matter recited in the claims.

3. Examination Procedure for Determination of Clarity Requirement

3.1 Notice of reasons for refusal

When an examiner determines that a claimed invention is unclear, the examiner may notify the notice of reasons for refusal to the effect that the claimed invention does not comply with the clarity requirement. In such notice of reasons for refusal, the examiner specifically explains the reason why the claimed invention is not clear, in a manner that he/she indicates the grounds for the determination (e.g., the part of the statements of the description—which has been considered in the determination and the content of the common general knowledge as of the filing), as well as pointing out the term(s) used in the claim that has been found to be incomprehensible.

It is not appropriate that the examiner merely states "the claimed invention is unclear" without explaining a specific reason for such determination, because this would make it difficult for the applicant to make an effective argument or understand the direction of an amendment to resolve the reasons for refusal the applicant has received.

3.2 Applicant's argument or explanation etc.

In response to a notice of reasons for refusal due to violation of the clarity requirement, the applicant can make an argument or explanation by submitting a written opinion, etc.

The applicant has opportunities to argue, in a written opinion, for example, (i) that the meaning of the term(s) used in the claim that the examiner has found to be incomprehensible can be understood from the common general knowledge as of the filing, or (ii) that the claimed invention is clear, by pointing out the part of the statement of the description or the common general knowledge as of the filing other than that considered by the examiner when making the determination.

3.3 Examiner's response to applicant's argument or explanation etc.

In the case where the examiner has been convinced that the claims comply with the clarity requirement by the argument and explanation (see 3.2) made by the applicant, the reasons for refusal is resolved. If this is not the case, the examiner shall issue a decision of refusal based on the reason for refusal notified that the claims does not comply with the clarity requirement.

4. Claims including Specific Expression

4.1 Expression specifying the product by function or characteristics, etc.

4.1.1 Types of unclear inventions

(1) The case where a person skilled in the art cannot understand the meaning of a function or characteristics, etc. (Note) (definition, a method for testing or a method for measuring etc.) stated in a claim even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, the invention is unclear (see 2.2(1)b).

Example 1:

[claim]

A composition for adhesion including a component Y, viscosity of which measured in accordance with the test method of X laboratory is a to b pascal seconds (Explanation)

The definition of "the test method of X laboratory" and its concrete method are not stated in the description, nor is it included in the common general knowledge as of the filing. Thus, a person skilled in the art cannot understand the function or

characteristics, etc of "the viscosity measured in accordance with the test method of X laboratory is a to b pascal seconds"

(Note) In principle, a function or a characteristic, etc. to be stated as a matter specifying the invention shall be a standard one, namely, either one which is defined by the JIS (Japanese Industrial Standards), ISO (International Organization for Standardization)-Standards or IEC (International Electrotechnical Commission)-Standards, or one which can be quantitatively determined (e.g., "specific gravity" or "boiling point") by the method for testing or measuring provided in these Standards.

When a function or characteristics, etc. is not expressed by using the above Standards, except the following case (i) or (ii), the definition or method for testing or measuring thereof should be explicitly stated in the description and it should be made clear such function or characteristics stated in a claim is according to the definition and the testing and measuring methods described in the description.

- (i) It is commonly used by a person skilled in the art in the field that claimed invention pertains.
- (ii) A person skilled in the art can understand the definition or method for testing or measuring thereof although it is not commonly used.
- (2) The case where it is evident, , that a matter specifying the invention stated by a function or a characteristic, etc. is not sufficiently specified from a technical perspective even in light of the common general knowledge as of the filing, and a person skilled in the art cannot clearly identify the invention from the statement of the claim even by considering the statement of the description and drawings.

When the scope of a claimed invention is clear, normally, a person skilled in the art can clearly identify the invention from the statement of the claim.

However, if a claim includes the expression of a function or characteristics, etc., there may be cases where, although the scope of the invention is clear, it is evident, even in light of the common general knowledge—as of the filing, that a matter specified by the function or characteristics, etc. is not sufficiently specified from a technical perspective, and the claimed invention cannot be examined precisely on the patentability, such as novelty or inventive step, etc. based on the statement of the claim,

even by considering the statements of the description and drawings. In such case, the function of the claims, which requires that an invention shall be clearly identified from one claim (see 1.), is not secured, and therefore, the claim violates the clarity requirement.

(Points to note)

Determination as to whether it is evident that a matter specified by a function or characteristics, etc. is not sufficiently specified from a technical perspective shall be made based on the common general knowledge as of the filing in the technical field to which the invention pertains. Thus, an examiner shall not apply this type to an invention when the content of common general knowledge as a ground for such determination cannot be specified.

Further, an invention does not fall under this type if the invention can be clearly identified from the statement of a claim by considering the statements of the description and drawings as well as the common general knowledge as of the filing.

Example 2: A compound having R receptor activating action (Explanation)

Although the description states that the applicant was the first to discover "R receptor", it is the common general knowledge as of the filing that it is difficult to understand compounds specifically which are defined only by their action of activating a newly discovered receptor. In light of such common general knowledge, it is evident that the "compounds", which are defined only by the aforementioned action without any chemical structure etc. required to have the action being specified, are not sufficiently specified from a technical perspective, and the invention cannot be clearly identified from the statement of the claim even by considering the statements of the description and drawings.

(Points to note)

Even when an invention of a product pertains to a technical field where it is difficult to predict the structure of the product from the function or characteristics, etc. of the product, what has the relevant function or characteristics, etc. may be clearly understood by considering the common general knowledge as of the filing. In such case, the matter specified by the relevant function or characteristics, etc. is deemed to be sufficiently specified from a technical perspective.

Example 3:

[claim]

A hybrid car energy efficiency of which during running on electricity is a to

b%, as measured by the X test method (Explanation)

In the technical field of hybrid cars, it is the common general knowledge as of the filing that the energy efficiency during running on electricity is normally about x%, which is far lower than a%, and it is difficult to realize a higher energy efficiency such as a to b%. In light of this, it is difficult to understand the specific hybrid car defined only by such high energy efficiency. Thus, it is evident that the "hybrid car", which is defined only by the aforementioned energy efficiency without any means to realize the aforementioned energy efficiency being specified, is not sufficiently specified from a technical perspective, and the invention cannot be clearly identified from the statement of the claim even by considering the statements of the description and drawings.

4.1.2 Points to note

(1) It is possible to state in a claim expansion or generalization of one or more specific examples described in the description by using expressions defining an invention by a function or characteristics. However, if, as a result of using these expressions, the claimed invention exceeds the scope stated in the description which is described in such a way that a person skilled in the art could recognize that a problem to be solved by the invention would be actually solved, the relevant claim falls under a violation of the support requirements (see "Section 2 Support Requirement", 2.1(3)).

Where a claim includes an expression defining an invention by a function or characteristics, etc., and it is difficult to compare the claimed invention and a cited invention and cannot make a strict comparison between them, the examiner may notify a notice of reasons for refusal for the invention due to lack of novelty and inventive stepas far as the examiner has a reasonable doubt for determining the patentability requirements of the claimed invention such as novelty or inventive step that the claimed invention and the cited invention are prima facie identical. (see "Part III Chapter 2 Section 4 Claims Including Specific Expressions" 2.2.2).

- (2) A matter specifying an invention in the claims may be expressed by a function or characteristics, etc. However, particularly ambiguous or unclear terms should not be used even though it is easy to clearly state the claims.
- 4.2 Expression specifying the invention of a sub-combination by elements of "another

sub-combination"

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.

Types of unclear inventions when a claim includes an expression identifying an invention of a sub-combination by using a matter concerning "another sub-combination" are shown below.

- (1) The case where a person skilled in the art cannot understand a matter concerning "another sub-combination" based on the matter stated in a claim even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, the invention is unclear.
- (2) The case where it cannot be clearly understood whether or how an invention of a sub-combination is specified by a matter concerning "another sub-combination", even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, the invention is unclear.

Example:

[claim]

A client apparatus for sending words to be searched to a search server, receiving the reply information from the search server through a repeater, and displaying the search results on a display means, wherein the search server encrypts the reply information by an encryption system A before sending the information.

(Explanation)

It is well known to those skilled in the art that the information encoded by an encryption system A cannot be understood without decrypting the information. Because the information is sent to a client apparatus through a repeater by a search server in the claimed invention, it is not apparent whether a decoding means is provided in the repeater or the client apparatus. Thus, the examiner cannot clearly understand whether the client apparatus which is invention of the sub-combination is identified by a matter of "another sub-combination".

4.3 Expression specifying a product by a manufacturing process

4.3.1 Types of unclear Inventions

Types of unclear inventions when a claim includes an expression for specifying a product by a manufacturing method thereof are shown below.

(1) The case where a manufacturing process (e.g., starting materials or manufacturing processes) cannot be understood based on the matter stated in a claim even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, the invention is unclear.

Where a claim does not state a starting material or conditions set forth each manufacturing step, but these matters can be understood by considering the statements of the description and drawings as well as the common general knowledge as of the filing, such claim does notfall under this type.

(2) The case where the characteristics of a product (e.g., the structure or property) cannot be understood even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, and as a result, the invention is unclear.

Where a claim includes an expression specifying a product by the manufacturing method thereof, normally, the invention specified by the relevant expression shall be examined on the patentability requirements such as novelty or inventive step, etc., while considering that such invention refers to the final product itself. A precise examination on the patentability requirements may not be made if the structure or property, etc. of the product cannot be understood. In such case, the function of the claims, which requires that an invention shall be clearly identified from one claim (see 1.), is not secured, and therefore, such claim constitutes violation of the clarity requirement.

For example, if, in a case where the claimed invention of a product is specified only by the manufacturing method thereof, the description and drawings only state the features of the product which do not reflect the characteristics of the product i (e.g., high yield or high manufacturing efficiency) and thereby the characteristics of the

product (e.g., the structure or property) cannot be understood even by considering the statements of the description and drawings as well as the common general knowledge as of the filing, such claim constitutes violation of the clarity requirement.

Example:

[claim]

Wash-free rice manufactured by a wash-free rice manufacturing method comprising steps of: receiving a feed of rice within a tank and removing bran by washing the rice in water; opening a drop valve situated at the bottom of the tank and dropping the bran-removed rice into the container provided down below; and drying the rice dropped into the container, wherein the manufacturing method further includes a step of spraying oily ingredient X onto the inner wall of the tank before feeding rice, and a step of blowing air into the tank immediately before opening the drop valve. (Explanation)

The description states that the step of spraying oily ingredient X onto the inner wall of the tank before feeding rice makes the inner wall of the tank lubricious so as to prevent the rice from adhering to the wall, and that the step of blowing air into the tank immediately before opening the drop valve enables the rice on the inner wall of the tank to be dropped efficiently into the container provided down below. Even when considering the statements of the description and drawings as well as the common general knowledge as of the filing, however, it is uncertain how the step of spraying oily ingredient X onto the inner wall of the rice washing tank could affect the wash-free rice to be obtained, and the characteristics of the claimed wash-free rice cannot be understood.

4.3.2 The case where a claim concerning an invention of a product includes a manufacturing method for a product

When a claim concerning an invention of a product recites a manufacturing method for the product, the statement of claim comply with the requirement of "the invention is clear" only when the invention involves the situation where it is impossible or utterly impractical to define the product by its structure or characteristics at the time of filing. Otherwise the invention of the product is judged to be not clear. (Reference) Judgment of the Second Petty Bench of the Supreme Court (June 5, 2015, 2012(Ju) No. 1204,2658, Case of suit against appeal decision) Case of "Pravastatin sodium"

Examples of above circumstances are below.

- (i) It is technically impossible to analyze its structure or characteristics at the time of filing.
- (ii) It requires an outrageously large economic expenditure or time to carry out the work necessary to identify the structure or property of the product in view of the nature of a patent application which requires speed, etc.

The applicant can show above circumstances in the description or a written opinion.

4.3.3 Points to note

Where a claim includes an expression specifying a product by the manufacturing method thereof, normally, such expression shall be construed to refer to the final product itself (see "Part III Chapter 2 Section 4 Claims Including Specific Expressions", 5.1). When it is extremely difficult to determine the structure of the product itself specified by such expression and comparison with cited invention is difficult due to the expression of a function or characteristics, etc. and thus a strict comparison cannot be made, if an examiner has a reasonable doubt—for determining the patentability requirements of the claimed invention such as novelty or inventive step that the claimed invention would be prima facie identical to t the cited invention—the examiner may notify the notice of reasons for refusal notifying lack of novelty or inventive step for the claimed invention. (see "Part III Chapter 2 Section 4 Claims Including Specific Expressions",5.2.2)