

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

## Chapter 3 Unity of Invention (Patent Act Article 37)

### 1. Overview

Patent Article 37 of the Patent Act provides that two or more inventions may be the subject of a single patent application, provided that these inventions are of a group of inventions which fulfill the requirements of unity of invention based on a certain technical relation among them.

If two or more inventions that are technically closely interrelated can be filed for patents in a single application, the application procedures become simplified and rationalized to the applicant and it becomes easier for third parties to use patent information and transact rights. In addition, it allows the Patent Office to examine such inventions together in an efficient way. In light of these points, Article 37 is established.

In this way, Article 37 is a provision for the convenience of applicants, third parties, and the Japanese Patent Office (JPO). Even if two or more inventions included in a single patent application do not fulfill the requirements of unity of invention, as long as there is no substantive deficiency in the inventions, such lack of unity of invention constitutes a mere formal deficiency that the single patent application should have been drafted as different applications for the two or more inventions which do not fulfill the requirements of unity of invention. Accordingly, the fact that a patent application which fails to fulfill the requirements of Article 37 is granted a patent does not directly inflict serious damages on the interests of third parties. Therefore, failure to fulfill the requirements of Article 37 constitutes a reason for refusal, but does not constitute a reason for invalidation.

Considering these circumstances, the examiner shall not make an unnecessarily strict determination on the requirements of Article 37.

### 2. Determination on Requirements of Article 37

**The examiner shall decide a group of inventions which fulfill the requirements of unity of invention (a group of inventions having the same or corresponding special technical features) and inventions which fulfill certain requirements among the inventions stated in the claims, as the subject of the examination on requirements other than the requirements of Article 37 (in this**

**chapter, hereinafter, simply referred to as "subject of the examination"). Then, only in the case where there is an invention which is not decided the subject of the examination, the examiner shall make a determination that the patent application fails to fulfill the requirements of Article 37.**

Understanding of special technical features of inventions and making a determination on the requirements of unity of invention are necessary for deciding inventions as the subject of the examination.

For making a determination on the requirements of unity of invention and understanding special technical features of inventions, the examiner shall follow 3. to be described later.

For deciding the subject of the examination, the examiner shall follow 4. to be described later.

(Explanation)

If not all the inventions stated in the claims are of a group of inventions which fulfill the requirements of unity of invention, essentially, the patent application does not fulfill the requirements of Article 37. In this case, the examiner shall decide only a group of inventions which fulfill the requirements of unity of invention as the subject of the examination, and shall not need to decide the other inventions as the subject of the examination.

However, the examiner shall decide the inventions that meet certain requirements as the subject of the examination as well as the group of inventions that meets the requirements of unity of invention, based on the fact that Article 37 is a provision with the purpose of promoting the convenience of applicants, etc. Then, only in the case where there is an invention which is not decided the subject of the examination, the examiner shall make a determination that the patent application fails to fulfill the requirements of Article 37.

### 3. Determination on Requirements of Unity of Invention

(1) The examiner shall make a determination on the requirements of unity of invention by determining whether two or more inventions stated in the claims have the same or corresponding special technical features.(Note 1)

The term "special technical feature" here means a technical feature defining a contribution made by an invention over the prior art (a technical significance of the invention in contrast to the prior art. (Note 2)

(Note 1) Usually, a determination on the requirements of unity of invention shall be made

between two or more "claimed invention." If a matter specifying the invention in one claim are expressed by pro forma or de facto alternatives (in this chapter, hereinafter, simply referred to as "alternatives." See 4.1.1(Note 1) in "Part III Chapter 2 Section 3 Procedure of Determining Novelty and Inventive Step"), a determination on the requirements of unity of invention shall also be made between two or more inventions identified based on the respective alternatives.

(Note 2) "Prior art" refers to the inventions that fall under each item of Article 29(1), and does not include the inventions that had not been published at the time of filing of the application concerned.

The examiner shall make a determination on the requirements of unity of invention by determining whether a special technical feature of one invention is the same as or corresponds to a special technical feature of another invention.

If a special technical feature of one invention is the same as or corresponds to a special technical feature of another invention, these inventions fulfill the requirements of unity of invention.

An examiner determines whether "special technical features are same or corresponding" based on substantial contents irrespective of mere differences in expression.

Since there are cases where both "the same" and "corresponding" are applicable to a special technical feature, the examiner shall not need to clearly determine whether "the same" or "corresponding" is applicable, at the time of making a determination on the requirements of unity of invention.

(2) An examiner determines "special technical features" of an invention based on a content of the description, claims and drawings and common general knowledge as of the filing.

However, in cases where it becomes clear that what was deemed to be a "special technical feature" does not make contribution over the prior arts relevant to the invention, it is denied a posteriori that said technical feature is a "special technical feature" (Note 3).

In this context, cases "where it becomes clear that what was deemed to be a "special technical feature" does not make contribution over the prior arts relevant to the invention" are the cases that fall under any of the following (i) to (iii):

- (i) where what was deemed to be a "special technical feature" is found in the prior art;
- (ii) where what was deemed to be a "special technical feature" is an addition, deletion, or replacement of well-known or commonly used art to one prior art, which does not produce any new effect; or
- (iii) where what was deemed to be a "special technical feature" is a mere design variation of one prior art.

(Note 3) Even if any technical feature of an invention is denied to be a "special technical feature", an examiner should note that another technical feature may be a "special technical feature" in some cases.

- (3) In a case where two or more inventions have "the same special technical feature," these inventions have the same technical feature which makes a contribution over the prior art.

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)

Polymeric compound A is a special technical feature which makes a contribution over the prior art. The inventions claimed in claims 1 and 2 both have this technical feature, and thus have the same special technical feature.

Example 2:

[Claim 1] A method of lighting comprising shielding a part of illumination light from a 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)

Shielding a part of illumination light is a special technical feature which makes a contribution over the prior art. The inventions claimed in claims 1 and 2 both have this technical feature, and thus have the same special technical feature.

- (4) The case where two or more inventions have "corresponding special technical

features" is any of the following cases a and b.

- a Cases where two or more inventions have common or closely related technical significance in comparison with the prior art among them

In cases where two or more inventions solve the same or overlapping problems with respect to the prior art (the problems are limited to unsolved problems at the time of filing of the application concerned), technical significance of the inventions are considered as common or closely related in comparison with the prior art.

Example 3:

[Claim 1] Conductive ceramics made by adding titanium carbide to silicon nitride.

[Claim 2] Conductive ceramics made by adding titanium nitride to silicon nitride.

(Explanation)

The inventions claimed in claims 1 and 2 have different technical features, differing in whether titanium carbide or titanium nitride is added in silicon nitride. The problems solved by the inventions of Claims 1, 2 with respect to the prior art lie in making electric discharge machining possible by giving conductivity to ceramics composed of silicon nitride. Since the inventions of Claims 1, 2 solve the same or overlapping problems solved with respect to the prior art, they have common technical significance of the inventions in comparison with the prior art, thus, they have the corresponding special technical feature.

In this example, in cases where making electric discharge machining possible by giving conductivity to ceramics composed of silicon nitride is not considered as an unsolved problem at the time of filing of the application concerned, technical significance of the inventions in comparison with the prior art is not considered to be common or closely related. Therefore, the inventions of Claims 1, 2 fail to have a corresponding special technical feature.

- b Cases where special technical features of two or more inventions are related complementarily to each other

Example 4:

[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.

(Explanation)

The inventions claimed in claims 1 and 2 have different technical features, that is, a transmitter with a time axis extender and a receiver with a time axis compressor, respectively. Here, extension of the time axis to transmit a video signal by the transmitter and reception of a video signal to compress the time axis by the receiver have a complementary relationship. Therefore, the inventions of Claims 1, 2 have the corresponding special technical feature.

(5) For a determination on "the same or corresponding special technical features" in the case where two or more inventions have a specific relation, see 6.

#### 4. Specific Decision Procedures for Subject of Examination

An examiner determines the subject of the examination based on "special technical features" and "examination efficiency."

Specifically, the examiner shall perform an examination for requirements other than the requirements of Article 37, on an invention which is decided as the subject of the examination based on any of the following decision procedures 4.1 and 4.2 (for a flow of specific decision procedures for the subject of the examination, see figure below. ).

In the case where an invention pertaining to a specific claim is excluded from the subject of the examination for the requirements other than Article 36(6)(iv) and Regulations under the Patent Act Article 24ter(v) in light of the description in 2. of "Part II Chapter 2 Section 5 Ministerial Ordinance Requirement on Statement of Claims," the subject of the examination for the requirements other than Article 37 shall be determined based on the claims after excluding the said claims.

##### 4.1 Decision of subject of the examination based on special technical features

An examiner determines the invention which is decided the subject of the examination based on "special technical features" according to following procedures (1) to (4). In cases where a matter specifying an invention of claims is expressed by alternatives in a claim (including a multiple dependent form claim), an examiner follows procedures below as if each invention understood by choosing each alternative is described as a separate claim in the order of said alternatives.

- (1) It is determined whether the invention first described in the claims (Note 1) has any special technical feature.

(Note 1) In principle, it corresponds to the invention claimed in Claim 1. If matters specifying the invention of Claim 1 are expressed by alternatives, in principle, the invention understood by choosing the first alternative shall be deemed to be the invention. However, for an invention relating to a chemical substance that is described by Markush-form etc., the examiner shall deem the invention that is understood by choosing an appropriate alternative in consideration of the description of working examples, etc. to be the invention of Claim 1.

- (2) In cases where the invention first described in the claims has no special technical feature, it is determined whether there are inventions claimed in the same category (Note 3) that include all matters specifying the invention of Claim 1 (Note 2). In cases there are such inventions, it is determined whether the invention of the claim to which the smallest claim number is attached has any special technical feature.

(Note 2) The cases of "including all matters specifying the invention" of an invention shall mean, for example, the following cases (i) to (iv). The examiner shall make a determination on whether a claim includes all matters specifying an invention is determined irrespective of whether the claim is formally an independent claim or a dependent claim.

- (i) The case where other matters specifying the invention are attached to said invention
- (ii) The case where part or all of the matters specifying the invention of said invention are converted into more specific concepts
- (iii) The case where, if there are elements that are written in an alternative form, part of the elements are deleted
- (iv) The case where, if one of the matters specifying the invention of said invention is a numerical range, the range is further limited

(Note 3) There is no longer a requirement to determine whether there is any special technical feature, in the case where the claimed invention for which a determination is to be made on whether there is any special technical feature falls under the following cases (i) and (ii).

- (i) The case where a technical feature with low technical relevance is added to the claimed invention for which a determination has been made immediately before on whether there is any special technical feature

(ii) The case where a specific problem to be solved by the invention understood by said technical feature also has low relevance

(3) In cases where an claimed invention for which whether there is any special technical feature has already been determined has no special technical feature, it is determined whether there is any invention claimed in the same category that include all matters specifying the claimed invention for which whether there is any special technical feature has been determined immediately before. In cases where there are such inventions, the examiner choose a claimed invention with the smallest claim number among claimed inventions and determine whether there is any special technical feature.(See Note 3 in (2)) This procedure is repeated until any special technical feature is found or there is no other claimed invention in the same category that includes all matters specifying the claimed invention for which whether there is any special technical feature has been determined immediately before.

(4) In the case where any special technical feature is found in any of the procedures (1) to (3), the following inventions (i) and (ii) shall be the subject of the examination. In the case where no special technical feature is found in any of the procedures (1) to (3), the following invention (i) shall be the subject of the examination.

(i) the invention for which whether there is any special technical feature has already been determined

(ii) the invention having any special technical feature which is same as or corresponding to the special technical feature found (Notes 4, 5)

(Note 4) For determining whether an invention for which a special technical feature has already been found and another invention have the same or corresponding special technical features, the examiner shall follow 3..

Note that the examiner may also make this determination by finding a common technical feature between an invention for which a special technical feature has already been found and another invention and determining whether the found technical feature is a special technical feature. Even if no special technical feature has been found by this method, the examiner should note that a special technical feature may be found in technical features different from the common technical feature.

(Note 5) In cases where an invention for which any special technical feature has been found has several different special technical features, an examiner shall choose one of those special technical features and an invention having a special technical feature same as or corresponding to said special technical feature shall be the subject of the examination.

In this regard, when one special technical feature is selected, if the subject of the examination becomes more advantageous to the applicant than in the case where another special technical feature is selected (for example, when one special technical feature is selected, a larger number of inventions involving an invention is decided the subject of the examination than another special technical feature is selected is decided the subject of the examination), the examiner shall select such a special technical feature with higher priority.

#### 4.2 Decision of subject of the examination based on examination efficiency

If it is efficient to examine an invention together with those that is decided the subject of the examination, an examiner shall add the invention to the subject of the examination. The examiner shall determine whether it is efficient to examine an invention collectively by comprehensively taking into consideration matters described in the description, claims, drawings and common general knowledge as of the filing, and perspectives of prior art searches.

For example, an examiner adds an inventions that falls under (1) or (2) below to the subject of the examination, as it is efficient to examine it together with inventions that is decided the subject of the examination.

(1) Claimed inventions in the same category that include all matters specifying the invention of the invention first claimed in the claims

However, inventions which fall under the following case (i) or (ii) may be excluded.

- (i) The case where a problem to be solved by the invention first claimed in the claims (Note 1) and a specific problem to be solved understood by technical features added to said invention have low relevance
- (ii) The case where technical features of the invention first claimed in the claims (Note 2) and technical features added to said invention have low technical relevance

The relevance in (i) and the technical relevance in (ii) shall be determined by taking into consideration matters described in the description, claims, drawings and common general knowledge (Note 3) as of the filing and perspectives of prior art searches.

(Note 1) An examiner shall identify the problem to be solved by the invention first claimed in the claims by taking into consideration matters described in the description, claims, drawings and common general knowledge (Note 3) as of the filing. In cases where several problems are identified, the examiner shall identify one problem by giving consideration to the problem to be solved by the other inventions that is decided the subject of the examination in line with 4.1. In cases where identified problems are now-resolved and well-known, the examiner shall identify the problems in the same way.

(Note 2) In cases where the invention first claimed in the claims belongs to the common general knowledge as of the filing (Note 3) , technical features of the invention first claimed in the claims shall be identified by giving consideration to the technical features of the problem to be solved by the other inventions that is decided the subject of the examination in line with 4.1.

(Note 3) The common general knowledge refers to technologies generally known to a person skilled in the art (including well-known or commonly used art) or matters clear from empirical rules (See 2. in "Chapter 1 Section 1 Enablement Requirement " ).

(Explanation)

Claimed inventions in the same category that include all matters specifying the invention of the invention first claimed in the claims generally belong to a technical field which is the same as or associated with the invention first claimed in the claims, and in many cases a prior art search can be conducted from a similar perspective. Therefore, those inventions shall, in principle, be added to the subject of the examination as inventions for which it is efficient to conduct an examination together with the invention first claimed in the claims.

However, inventions which fall under case (i) or (ii) require a prior art search from different perspectives, and hence it is not efficient to conduct an examination collectively. Therefore, the examiner may exclude these inventions from the subject of

the examination.

(2) An invention for which an examination may be made without substantially conducting additional prior art searches and making a determination as a result of examining inventions that is decided the subject of the examination based on 4.1 and 4.2(1)

For example, an invention that falls under any of (i) to (v) below is usually deemed as an invention for which an examination may be made without substantially conducting additional prior art searches and making a determination.

- (i) Other inventions that differ only in terms of expression from inventions that is decided the subject of the examination based on said 4.1 and 4.2(1)
- (ii) Other inventions which added, deleted or replaced well-known or commonly used art with respect to inventions that is decided the subject of the examination based on said 4.1 and 4.2(1), which do not produce any new effects
- (iii) Other inventions whose difference from inventions that is decided the subject of the examination based on said 4.1 and 4.2(1) is a "designs modified along specific application of techniques" or "optimally or preferably modified numerical ranges" and it is easily determined said change does not produce any advantageous effects in comparison with the prior art (Note 4)
- (iv) In cases where it has been found that an invention has no novelty or inventive step as a result of examining inventions that is decided the subject of the examination based on said 4.1 and 4.2(1), other inventions which have wider concept that covers said invention
- (v) In cases where a point having some matters specifying the invention has been found out to have novelty and inventive step as a result of examining inventions that is decided the subject of the examination based on said 4.1 and 4.2(1), other inventions that include said matters specifying the invention

(Note 4) The prior art refers to an invention that falls under each item of Article 29(1) with respect to inventions that is decided the subject of the examination based on special technical features and it does not include inventions that had not been published as of the filing.

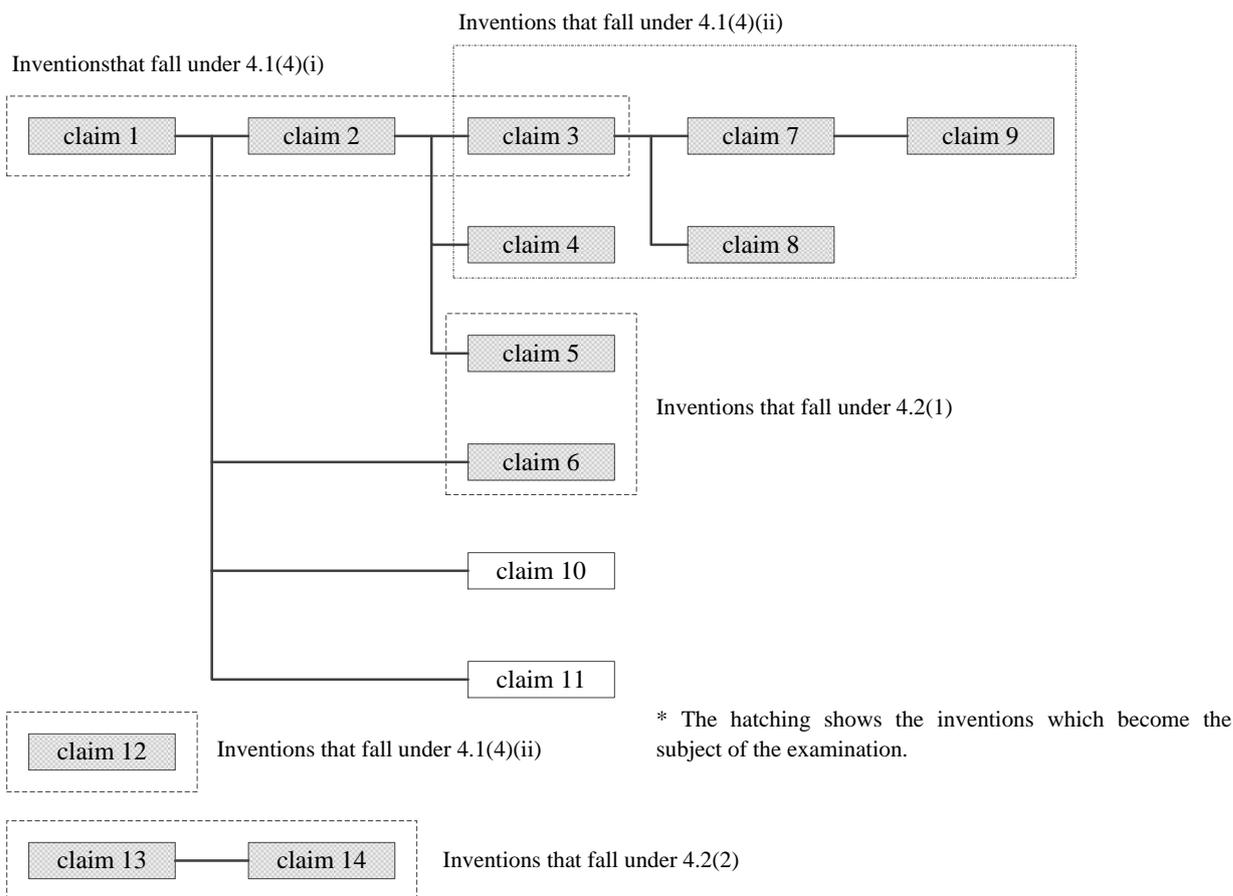
### 4.3 Example of decision of subject of the examination

There were no special technical features in the inventions of claims 1 and 2, but a special technical feature was found in the invention of claim 3. The inventions of claims 4, 7 to 9 and 12 have special technical features same as or corresponding to the found special technical feature.

Furthermore, the inventions of claims 5, 6, 10 and 11 are in the same category that includes all matters specifying the invention of claim 1. However, the specific problem to be solved by the invention of claim 10 that can be identified from the technical feature which is added to the invention of claim 1 and the problem to be solved by the invention of claim 1 have little relevance. Furthermore, the technical feature of the invention of claim 11 which is added to the invention of claim 1 and the technical feature of the invention of claim 1 have low technical relevance.

Claim 13 is an invention which differs only in terms of expression from claim 1.

Claim 14 is an invention which differs only in terms of expression from claim 6.



(Explanation)

In the case of this example, the examiner shall decide subject of examination as described below.

(1) Decision of subject of the examination based on special technical features (See 4.1)

The inventions of claims 1 to 3 shall become the subject of the examination as inventions for which whether there is any special technical feature has been determined.

The inventions of claims 4, 7 to 9 and 12 shall become the subject of the examination as inventions having a special technical feature which is same as or corresponding to the special technical feature found.

(2) Decision of subject of the examination based on examination efficiency (See 4.2(1), (2))

The inventions of claims 5 and 6 are in the same category that includes all matters specifying the invention of claim 1 so that they shall be added to the

subject of the examination.

The invention of claim 10 is in the same category that includes all matters specifying the invention of claim 1. However, the problem to be solved by the invention of claim 1 and the specific problem to be solved by the invention understood by technical features added to the invention of claim 1 have little relevance. Therefore, if it is not an invention for which an examination may be made without substantially conducting additional prior art searches and making a determination as a result of examining the inventions of claims 1 to 9 and 12 and there are no other reason that it is efficient to examine the inventions collectively, the invention of claim 10 may be excluded from the subject of the examination.

The invention of claim 11 is in the same category that includes all matters specifying the invention of claim 1. However, the technical feature of the invention of claim 1 and the technical feature added to the invention of claim 1 have little technical relevance. Therefore, if it is not an invention for which an examination may be made without substantially conducting additional prior art searches and making a determination as a result of examining the inventions of claims 1 to 9 and 12 and there are no other reason that it is efficient to examine the inventions collectively, the invention of claim 11 may be excluded from the subject of the examination.

The invention of claim 13 is an invention that differs only in terms of expression from the invention of claim 1 and for which an examination may be made without substantially conducting additional prior art searches and making a determination as a result of examining the invention of claim 1, so that the invention of claim 13 shall be added to the subject of the examination.

The invention of claim 14 is an invention that differs only in terms of expression from the invention of claim 6 and for which an examination may be made without substantially conducting additional prior art searches and making a determination as a result of examining the invention of claim 6, so that the invention of claim 14 shall be added to the subject of the examination.

5. Procedure of Examination under Article 37
--

In the case where the examiner has determined that there is an invention which is not decided the subject of the examination and the patent application does not fulfill the requirements of Article 37, the examiner shall issue a notice of reasons

for refusal to the effect that the patent application does not fulfill the requirements of Article 37. The examiner shall indicate the inventions that are not decided the subject of the examination and describe reasons for the inventions being ruled out in the notice of reasons for refusal.

6. Example of "the same or corresponding special technical features" in Specific Examples
---

6.1 Examples with specific relation among inventions of claims

6.1.1 A product and method of producing the product or product and machine, instrument, device, the other means for producing the same

If a method of producing a product, and machine, instrument, device, the other means for producing a product (in this chapter, hereinafter referred to as "production method or production device, etc.") is suitable for producing "the product," they have the same or corresponding special technical feature. Even if something other than "the product" is produced by "production method or production device, etc.," they have the same or corresponding special technical feature, if the "production method or production device, etc." is suitable for producing "the product."

The phrase "the other means" in the above "machine, instrument, device, the other means for producing a product" encompasses a catalyst, microorganism etc., which acts on other materials, work pieces, etc., and turns them into a product.

(Explanation)

The case where a "production method or production device, etc." is "suitable" for producing "the product" is, for example, a case where a special technical feature of a "production method or production device, etc." necessarily causes conversion of raw material into a special technical feature of "the product" (including the "product" itself). In this case, the contribution over the prior art of the invention which is made by the special technical feature of the "production method or production device, etc." gives the special technical feature of the "product." Therefore, the contributions over the prior art of the invention which are respectively made by the special technical features of the two are closely related, and hence the two have the same or corresponding special technical features.

6.1.2 A product and method of using the product or product and another product solely utilizing specific properties of the product

- (1) If a "method of using a product" is suitable for use of the "product", both have the same or corresponding special technical feature.

(Explanation)

The case where a "method of using a product" is "suitable" for use of the "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 of the invention which is made by the special technical feature of the "method of using a product" lies in the utilization of the particular properties and/or functions of the special technical feature of the "product." Therefore, the contributions over the prior art of the invention which are respectively made by the special technical features of the two are closely related, and hence the two have the same or corresponding special technical features.

- (2) If a special technical feature of "a product solely utilizing the specific properties of another product" solely utilizes the specific properties of the special technical feature of "another product", both "a product" and "another product" have the same or corresponding special technical features.

(Explanation)

If a special technical feature of "a product solely utilizing the specific properties of another product" solely utilizes the specific properties of the special technical feature of "another product", the contribution over the prior art of the invention, 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 contributions over the prior art of the invention which are respectively made by the special technical features of the two are closely related, and hence the two have the same or corresponding special technical features.

6.1.3 A product and method of handling the product or product and another product handling the product

If a method of handling a product or another product handling the product (in this chapter, hereinafter referred to as "a handling method or another handling product") is suitable for handling "the product", both 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", both still have the same or corresponding special technical features, if they are suitable for handling said "product".

(Explanation)

The case where "a handling method or another handling product" is "suitable" for handling "the product" is, for example, a case 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 of the invention which is made by the special technical feature of the "handling method or another handling product" is to necessarily maintain and exercise the function of the special technical feature of the "product." Therefore, the contributions over the prior art of the invention which are respectively made by the special technical features of the two are closely related, and hence the two have the same or corresponding special technical features.

#### 6.1.4 A method and machine, instrument, device, or other means directly used to carry out the method

If "a machine, instrument, device or other means directly used to carry out a method" (in this chapter, hereinafter referred to as "device directly used to carry out a method") are suitable for direct use to carry out "the method", both have the same or corresponding special technical features. Even if the "device directly used to carry out a method" can be directly used to carry out a method other than "the method", both still have the same or corresponding special technical features, if the "device directly used to carry out a method" is suitable for direct use to carry out "the method." The phrase "the other means" in "a machine, instrument, device or other means directly used to carry out a method" encompasses catalysts, microorganisms, raw materials, work pieces and all other means directly used to carry out the method rather than a machine, instrument and device.

(Explanation)

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 utilized to carry out a special technical feature of "the method".

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

## 6.2 Markush-form

Where a claim is described in the Markush-Form, the examiner makes a determination on the requirements of unity of invention in the claim by finding out whether inventions understood based on the alternatives have the same or corresponding special technical features.

Especially, where a claim described in the Markush-Form is related to a chemical compound written in an alternative form, inventions understood based on the alternatives have the same or corresponding special technical features, if the following requirements (1) and (2) are both satisfied:

- (i) All the inventions respectively identified based on the respective alternatives have a common property or activity; and
- (ii) (ii-1) a common chemical structure is present, i.e., a significant chemical structural element is shared by all the inventions understood based on the alternatives (Note 1),  
or  
(ii-2) in cases where the common chemical structure cannot be the unifying criteria, all the inventions understood based on the alternatives belong to a group of chemical substances that is recognized as one genus in the art to which the inventions pertain (Note 2).

(Note 1)"a significant chemical structure element is shared by all the inventions identified based on the respective alternatives" refers to the cases where all

the chemical substances identified based on the respective alternatives share a common chemical structure which occupies a large portion of the whole structure. If all the chemical compounds identified based on the respective alternatives have in common only a small portion of the structure, it refers to the cases where the commonly shared structure constitutes a structurally distinctive portion in view of the prior art. The chemical structural element may be a single component or a combination of individual components linked together.

(Note 2) the phrase "a group of chemical substances recognized as one genus" means that there is an expectation from the knowledge in the art that species of the genus will behave in the same way in the context of the claimed invention. In other words, each species which belongs to this group of chemical compounds could be substituted for the other, with the expectation that the similar intended result would be achieved.

When dealing with alternatives in the Markush-Form, if at least one of the inventions understood based on the alternatives is found in the prior art, an examiner shall reconsider the question of unity of invention.

### 6.3 Intermediate and final product

If the following requirements (i) and (ii) are both satisfied, an invention related to an intermediate product and an invention related to a final product have the same or corresponding special technical features.

- (i) An intermediate and a final product have the same or technically closely related new structural element, namely:
  - (i-1) the basic skeleton which is not found in prior art is common to the chemical structures of the intermediate product and the final product; or
  - (i-2) the chemical structures of the intermediate product and the final product 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 via a small number of other new intermediate products that are not found in prior arts, which include the same substantial structural element.

Even if the structure is unclear, an intermediate product and a final product may have the same or corresponding special technical features in some cases. For example, an intermediate product with a clear constitution 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 have the same or corresponding special technical features.

In such a case, in order to prove that the intermediate product and the final product have the same or corresponding special technical features, sufficient evidence is required 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 main structural element as that of the final product or the intermediate product incorporates a main structural element in the final product).

In the case where individual intermediate products which are used in different processes to prepare one final product include the same main structural element, this main structural element is the same or corresponding special technical feature. Therefore, the inventions related to the final product and the individual intermediate products have the same or corresponding special technical features.

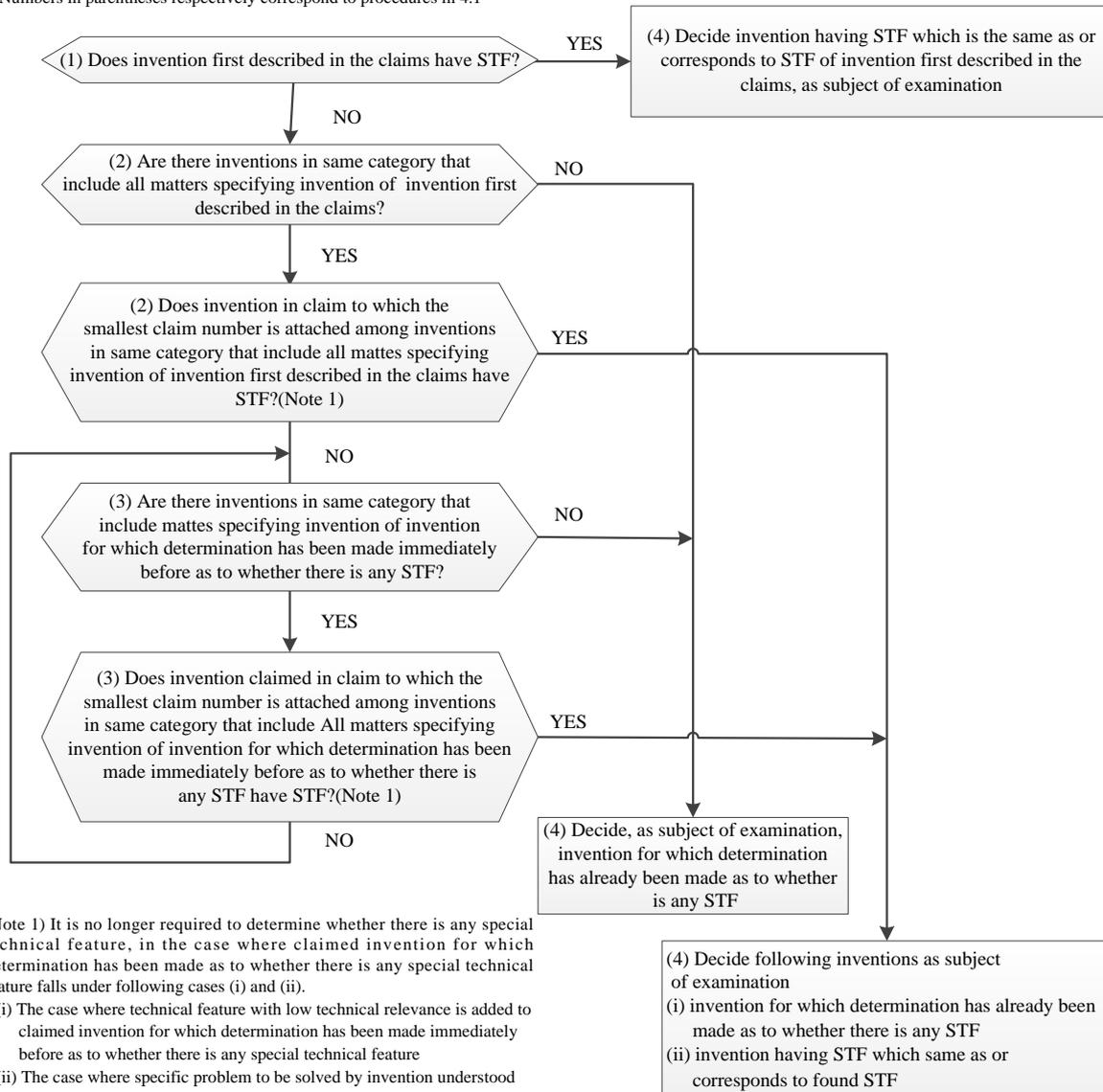
In cases where an intermediate product and a final product are defined in claims so as to constitute a group of chemical compounds, the respective intermediate compounds must correspond to one of the chemical compounds in the final product in the claims. However, some of the final products may not have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

Showing that the intermediate product has other effects or exhibits other activities than the final product does not affect the examination of unity of invention.

Figure : Specific Decision procedures for subject of examination

[1] Decision of subject of examination based on special technical features[STF](4.1)

(\*) Numbers in parentheses respectively correspond to procedures in 4.1



[2] Decision of subject of examination based on examination efficiency(4.2)

(1) Decide as subject of examination claimed inventions in same category that include all matters specifying invention of claim 1(Note 2)

(Note 2) Inventions which fall under the following case(i) or (ii) may be excluded.

- (i) The case where problem to be solved by invention claimed in claim 1 and specific problem to be solved understood by technical features added to said invention have low relevance
- (ii) The case where technical features of invention of invention claimed in claim 1 and technical features added to said invention have low technical relevance

(2) Decide, as subject of examination, invention for which examination can be made without substantial need for additional prior art searches and determinations as result of examining inventions decided as subject of examination based of [1] and [2](1) above