CATALOGUE OF REMAINING DIFFERENCES 2012 Update of the CDP 2011

GENERAL REMARKS CONCERNING THE CURRENT VERSION

The table below indicates the versions of the official provisions on which the contributions of each office are based. The IP5 offices are doing their best to keep the Catalogue of Remaining Differences up to date. However:

<u>Users are kindly invited to check on the official website of the offices (indicated below)</u> whether a later version may have come into force in the interval.

Versions of the official pro	visions used as a basis for the contributions
EPO http://www.epo.org	 Convention on the Grant of European Patents (EPC), as applicable since 13 December 2007 EPC Implementing Regulations, including the amendments entered into force on 1 January 2011 - Subsequent amendments are listed on the web site of the EPO.
	Revised Guidelines for Examination - June 2012
JPO	 Patent Act, including the amendments entered into force on 1 April 2012
http://www.jpo.go.jp/	 Regulations under the Patent Act, including the amendments entered into force on 1 April 2012
	 Examination Guidelines for Patent and Utility Model in Japan (Provisional translation in English) - April 2012
L/IDO	• Patent Act, last amended on March 15, 2012
KIPO http://www.kipo.go.kr/kpo/eng/	 Enforcement Decree of the Patent Act, last amended on March 15, 2012
	• Patent Examination Guidelines, March 15, 2012
SIPO http://english.sipo.gov.cn/	 Patent Law of the People's Republic of China, including the amendments entered into force on 1 October, 2009.
	 Implementing Regulations of the Patent Law of the People's Republic of China, including the amendments entered into force on 1 February, 2010.
	 Revised Guidelines for Patent Examination, which entered into force on 1 February, 2010.
USPTO http://www.uspto.gov/	 United States Code, Title 35 – Patents, as applicable since December 8, 2004. Title 37 – Code of Federal Regulations Patents, Trademarks, and Copyrights – (July 2010) Manual of Patent Examining Procedure – Eighth Edition, Revision No. 8. (July 2010)

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A. Incorporation by reference / Subsequent filing of missing parts

A. Incorp	poration by reference / Subsequent filing of missing parts
	PCT reservations on Rule 20.8(a) and (b)
	EPO
PCT	Reservations on PCT Rule 20.8(a) and (b): None
Legal basis	Incorporation by reference to an earlier application: Art 80, Art 90, Rule 40 EPC
	Subsequent filing of missing claims: Art 90, Rule 57(c), Rule 58 EPC
	Subsequent filing of missing parts in the description or missing drawings: Art 80, Art 90, Rule 56 EPC
Category	Category II
In practice	Incorporation by reference (GL A-II, 4.1.3.1)
	Instead of filing application documents, the applicant may file a reference to a previously filed application according to Rule 40(1)(c). The previously filed application relied on for the reference does not need to be claimed as priority.
	In order to qualify for a date of filing, the application must indicate the following details on the filing date: (i) the filing date of the previous application, (ii) its file number, (iii) the office where it was filed, (iv) an indication that this reference replaces the description and any drawings (Rule 40(2)). The previous application referred to may also be an application for a utility model. The applicant must supply a certified copy of the previously filed application within two months of the filing date (Rule 40(3)), subject to exceptions (see OJ EPO 10/2009, 486). If the previously filed application is not in an official language of the EPO, the applicant must also file a translation into one of those languages within two months of the filing date (Rule 40(3)), unless already provided to the EPO.
	The applicant also has the option of indicating that he wishes the claims of the previously filed application to take the place of the claims in the application as filed. Such an indication must be made on the date of filing, preferably by crossing the appropriate box in the Request for Grant (Form 1001). If this indication is made, then the claims of the previously filed application will form the basis for the search, and will satisfy the requirement of Rule 57(c), so that an invitation under Rule 58 to file claims later will not be issued.
	If the applicant does not refer to the claims of the previously filed application, but refers only to the description and any drawings thereof, he may at the same time as filing the reference (i.e. on the date of filing), file a set of claims. If the applicant does not do so, he will be invited by the EPO to file claims.
	Subsequent filing of missing claims (GL A-III, 15)
	For the purposes of obtaining a date of filing it is not necessary for the European application to contain any claims. The presence of at least one claim is nonetheless a requirement for a European application according to Art. 78(1)(c), but a set of claims can be provided after the date of filing

as follows: If the application on filing contains neither at least one claim, nor any indication that the claims of the previously filed application referred to on filing shall take the place of claims in the application as filed, the applicant shall file the claim(s) within two months after the EPO has invited him to do so under Rule 58. If the applicant fails to do so within this period, the application is refused according to Art. 90(5). The applicant may also file the missing claims of his own motion after the filing date, but before the EPO invites him to do so under Rule 58. In this case, no communication under Rule 58 will be issued. If the application was filed by means of a reference to a previously filed application in accordance with Rule 40(3) and the applicant indicated on the date of filing that the claims of the previously filed application were to take the place of claims in the application as filed, then, provided the previously filed application also contained claims on its date of filing. claims were present on the European date of filing and no communication under Rule 58 will be sent. Claims received after a date of filing has been accorded are never considered as part of the application as filed. As a consequence, they must meet the requirements of Art 123. Subsequent filing of missing parts in the description or missing drawings (GL A-II, 5) Under Rule 56(1) and (2), the applicant may file missing parts of the description or missing drawings after the date of filing, either of its own motion and within two months of the date of filing or on invitation of the EPO within two months from of that invitation. In both cases, the application will be re-dated to the date of filing of the missing parts. It is to be noted that under Rule 56, only whole figures will be accepted, even where only a part of the original figure was missing. Re-dating can be avoided under Rule 56(3) if the missing parts of the description or missing drawings are based on and completely contained in a priority document, and the latter is filed at the very latest together with the missing parts, and a translation where applicable (GL A-II, 5.4). Re-dating can also be avoided if the applicant withdraws late filed missing parts of the description or missing drawings which are either not based on a claimed priority, or based on a claimed priority, but the requirements of Rule 56(3) are not met (GL A-II, 5.5)

	JPO
PCT	Reservations on PCT Rule 20.8(a) and (b)
Legal basis	Regulations under the PCT Rule 20.8 Regulations under the Patent Act Article 38-2-2
Category	Category II, III
In practice	Reservations on Rule 20.8(a) and (b) of the Regulations under the PCT apply in the JPO.
	"(1) The Commissioner of the Patent Office shall notify the applicant of international patent application, for which the international filing date has been accorded pursuant to Rules 20.3 (b)(ii) and 20.6(b) of the Regulations under the Patent Cooperation Treaty (hereinafter referred to as the "Regulations"), that the international filing date of such

international patent application shall be determined as the international filing date accorded under one of provisions from among Rules 20.3 (b)(i), 20.5(b) and 20.5(c) of the Regulations. (2) The applicant of international patent application may submit observations only within the time limit specified by the notification from the Commissioner of the Patent Office pursuant to the preceding paragraph. (4) The applicant of international patent application may request, only within the time limit under paragraph (2), among the international patent application under paragraph (1), and with regard to description, claim(s) or drawings which have been determined as being included in such international patent application pursuant to Rule 20.5(c) of the Regulations, that such description, claim(s) or drawings are not included in the said international patent application. (6) Where the request has been made pursuant to paragraph (4), the Commissioner of the Patent Office shall treat the description, claim(s) or drawings involved in such request as being not included in the international patent application and determine, notwithstanding the notification under paragraph (1), the international filing date of such international patent application to be the international filing date accorded under one of provisions from among Rules 20.3(b)(i), 20.5(b) and 20.5(c) of the Regulations." (Regulations under the Patent Act Article 38-2-2(1), (2), (4), (6))**KIPO PCT** Reservations on PCT Rule 20.8(a) and (b) Legal basis Patent Act Article 42 Patent Act Article 47 Category III Category In practice Rule 20.5 and 20.6 is reserved in KIPO under the PCT Rule 20.8(a) and 1. Incorporation by reference is not allowed Patent Act Article 42 paragraph (2) A person to obtain a patent shall file a written patent application accompanied by an abstract, drawing(s) (if necessary) and a description stating (i) the title of the invention, (ii) a brief explanation of the drawing(s), (iii) a detailed description of the invention and (iv) the scope of claims. 2. Subsequent filing of missing parts only for the scope of claims Patent Act Article 42 paragraph (5), (7) (5) Notwithstanding paragraph (2), a patent applicant may, at the time the application is filed, attach the description, from which the scope of claims under paragraph (2)(iv) are omitted, to the written patent application. In such cases, the applicant shall amend the description to include the scope of claims by either of the following deadlines: (i) the date marking the elapse of one year and six months from the date that falls under any of the subparagraphs of Article 64(1); or (ii) the date marking the elapse of three months from the date on which notification is given under Article 60(3) for a request to examine a patent application before the deadline stipulated in subparagraph (i) of this paragraph (however, where the

notification is given more than one year and three months after the date

	that falls under any subparagraph of Article 64(1), the date marking the elapse of one year and six months from that date).
	(7) Where a patent applicant has filed a patent application but fails to subsequently amend the description to include the scope of claims by the relevant deadline stipulated in subparagraph (5)(i) or (ii), the application is deemed to have been withdrawn on the date immediately following the relevant deadline.
	3. Scope of amendment
	Patent Act Article 47 paragraph (2)
	(2) An amendment to the description or drawing(s) shall be made within the scope of the matters disclosed in the description or drawing(s) originally attached to the written patent application.
	SIPO
PCT	Reservations on PCT Rule 20.8(a) and (b)
Legal basis	Art 33; Rule 101(2)
Category	Category III
In practice	An applicant may amend his patent application documents, provided that the amendment to the invention or utility model patent application documents does not exceed the scope specified in the original written descriptions and claims, or that the amendment to the design patent application documents does not exceed the scope shown in the original drawings or pictures. (Art 33)
	For any international application filed under the Patent Cooperation Treaty designating China (hereinafter referred to as the international application), the requirements and procedures for entering the phase of process conducted by the patent administration department under the State Council (hereinafter referred to as entering the Chinese national phase), the provisions prescribed in this chapter shall apply. Where no provisions are made in this chapter, the relevant provisions in the Patent Law and in any other chapters of these Implementing Regulations shall apply. (Paragraph 2, Rule 101)
	According to the provisions of the PCT Regulations, where some elements or parts, which are missing when the applicant files the international application, they may be incorporated by reference of the corresponding parts in the earlier application, and the original filing date shall be retained. Here, "elements" refer to all the description or claims, and "parts" refer to part of the description, part of claims or all or part of drawings.
	As China makes reservations to the above provisions of the Treaty and its Regulations, when the international applications enters the Chinese national phase, where the original international filing date is retained through incorporating the missing elements or parts by reference from earlier application, the Patent Office shall not recognized it.
	For the application documents which contain the elements or parts incorporated by reference, where, at the time of going through the formalities for entering the national phase, the applicant indicates it in the entering statement and requests to amend the filing date for China, the elements or parts incorporated by reference can be retained in the application documents. The examiner shall redetermine the filing date in China based on the records in the Notification on Decision of

	Confirmation of Incorporation by Reference of Element or Part (Form PCT/RO/114) delivered by the International Bureau, and issue the Notification of Redetermination of the Filing Date. With regard to the application whose filing date exceeds twelve months from priority date due to redetermination of the filing date, the examiner shall issue the Notification that Claim to Priority Deemed Not to Have Been Made in respect of the relevant priority claim. For the application documents which contain the elements or parts incorporated by reference, where, at the time of going through the formalities for entering the national phase, the applicant does not indicates it, or does not request to amend the filing date in China, the elements or parts incorporated by reference are not permitted to be retained in the application documents. The examiner shall issue the Notification to Make Rectification to notify the applicant to delete the elements or parts incorporated by reference. Where no rectification is made within the time limit, the examiner shall issue the Notification that Application Deemed to be Withdrawn. The applicant cannot request to retain the elements or parts incorporated by reference by the means of requesting to amend the filing date in China in subsequent procedures. (Guidelines Part III Chapter 1 Section 5.3) If the applicant indicates in entering statement that there are elements or parts incorporated by reference in the application documents and the filing date for China has been redetermined in the preliminary examination stage, the elements or parts incorporated by reference shall be considered as part of the application documents originally submitted. The applicant shall not be permitted to retain the elements or parts incorporated by reference by the means of requesting to amend the international application date for China in the process of substantive examination. (Guidelines Part III Chapter 2 Section 3.2)
	, , ,
	USPTO
PCT	An international application which claims priority on the international filing date to an earlier application may contain a statement incorporating by reference all or part of the description, claims, or drawings of such earlier application, subject to later confirmation within a certain time limit. See PCT Rules 4.18 and 20.6. The USPTO has not made a reservation under PCT Rule 20.8.
Legal basis	35 U.S.C. 112; 37 CFR 1.53 and 1.57
Category	Category III
In practice	An application must be complete in and of itself at the time of filing in order to comply with the disclosure requirements of 35 U.S.C. 112. However, USPTO practice does permit an applicant to incorporate material into the specification by reference to patents, patent applications and publications. The criteria for incorporation of material set forth in 37 CFR 1.57(b) and MPEP 608.01(p) depend upon whether the material is considered "essential" or "nonessential".
	"An application for a patent when filed may incorporate 'essential material' by reference to (1) a United States patent or (2) a U.S. patent application publication, which patent or patent application publication does not itself incorporate such essential material by reference."
	"Essential material" is defined in 37 CFR 1.57(c) as that which is necessary to (1) provide a written description of the claimed invention, and of the manner or process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to

which it pertains, or with which it is most nearly connected, to make and use the same, and set forth the best mode contemplated by the inventor of carrying out the invention as required by 35 U.S.C. 112, 1st paragraph, (2) describe the claimed invention in terms that particularly point out and distinctly claim the invention as required by 35 U.S.C. 112, 2nd paragraph, or (3) describe the structure, material or acts that correspond to a claimed means or step for performing a specified function as required by 35 U.S.C. 112, 6th paragraph. See 37 CFR 1.57(c) and MPEP 608.01(p).

"Nonessential material" is subject matter referred to for purposes of indicating the background of the invention or illustrating the state of the art.

Nonessential material may be incorporated by reference to U.S. patents, U.S. patent application publications, foreign patents, foreign published applications, prior and concurrently filed commonly owned U.S. applications, or non-patent publications. An incorporation by reference by hyperlink or other form of browser executable code is not permitted. See 37 CFR 1.57(d) and MPEP 608.01(p).

Although the filing date of an application is the appropriate reference point in determining whether the application was submitted with an enabling disclosure, an original incorporation by reference of essential material may be cancelled and the actual material referenced by the incorporation inserted into the pending application.

The amendment adding the previously incorporated material must be accompanied by a statement that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. See 37 CFR 1.57(f).

37 CFR 1.57(a) provides that, if all or a portion of the specification or drawing(s) is inadvertently omitted from an application, but the application contains a claim under 37 CFR 1.55 for priority of a prior-filed foreign application, or a claim under 37 CFR 1.78 for the benefit of a prior-filed provisional, nonprovisional, or international application, that was present on the filing date of the application, and the inadvertently omitted portion of the specification or drawing(s) is completely contained in the prior-filed application, the claim for priority or benefit shall be considered an incorporation by reference of the prior-filed application as to the inadvertently omitted portion of the specification or drawing(s). See MPEP 201.17.

Incorporation by reference to a specific figure or table in a claim is permitted only in exceptional circumstances where there is no practical way to define the invention in words and where it is more concise to do so.

If an application omits pages of the specification or drawings and such items cannot be added by 37 CFR 1.57(a) (incorporation by reference from a priority application), the filing date of the application will be the date on which the omitted page(s) are submitted.

An executed oath or declaration and any fees due may be filed subsequent to the filing date of the application if submitted with the payment of an applicable surcharge within the time period set forth by the USPTO.

B. Insertion into the statement of prior art of references discovered subsequently

	PCT reservation (PCT/GL/ISPE - Appendix A4.05)
	EPO
PCT	PCT/GL/ISPE Appendix A4.05, Alternative A4.05[1]
Legal basis	Art. 123(2), Rule 42 EPC
Category	Category II
In practice	The insertion into the statement of prior art (see GL F-II, 4.3) of references to documents identified subsequently, for example by the search report, should be required, where necessary, to put the invention into proper perspective. The subsequent inclusion of such a summary in the description does not contravene Art. 123(2) (T 11/82, OJ 12/1983, 479). For instance, while the originally filed description of prior art may give the impression that the inventor has developed the invention from a certain point, the cited documents may show that certain stages in, or aspects of, this alleged development were already known. In such a case the examiner should require a reference to these documents and a brief summary of the relevant contents.
	The subsequent inclusion of such a summary in the description does not contravene Art. 123(2). The latter merely lays down that, if the application is amended, for example by limiting it in the light of additional information on the background art, its subject-matter must not extend beyond the content of the application as filed. But the subject-matter of the European patent application within the meaning of Art. 123(2) is to be understood – starting off from the prior art – as comprising those features which, in the framework of the disclosure required by Art. 83, relate to the invention (see also GL H-IV, 2.1). In addition, relevant prior art documents not cited in the original application may be subsequently acknowledged in the description even if these were known to the applicant at the time of filing (T 2321/08, unpublished, and GL H-IV, 2.3.7). References to the prior art introduced after filing must be purely factual.
	Any alleged advantages of the invention must be adjusted if necessary in the light of the prior art. New statements of advantage are permissible provided that they do not
	introduce into the description matter which could not have been deduced from the application as originally filed (see GL H-V, 2.2) If the relevant prior art consists of another European patent application falling within the terms of Art. 54(3), this relevant prior document belongs to the state of the art for all Contracting States. This is the case even if the two applications do not share any commonly designated State, or the designation of commonly designated States has been dropped (see GL G-IV, 6). The fact that this document falls under Art. 54(3) must be explicitly acknowledged. Thus the public is informed that the document is not relevant to the question of inventive step (see GL G-VII, 2). According to Rule 165, the above also applies to international applications designating EP, for which the filing fee pursuant to Rule 159(1)(c) has been validly paid and, where applicable, the translation into one of the

	official languages has been filed (Art. 153(3) and (4)) (see GL G-IV, 5.2).	
	JPO	
PCT	PCT/GL/ISPE Appendix A4.05, Alternative A4.05[1]	
Legal basis	Patent Act Article 17-2(3) Patent Act Article 36(4)(ii) Patent Act Article 48-7 Guidelines Part I, Chapter 3, 4, Guidelines Part III, Section I, 5.2(1)	
Category	Category I	
In practice	"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 foreign language written application under Article 36-2(2), the translation of the foreign language documents as provided in Article 36-2(2) that is deemed to be the description, scope of claims and drawings under Article 36-2(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 17-2(3))	
	"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 36(4)(ii)) "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 48-7) "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." (Guidelines Part I, Chapter 3, 4),

"
The guideline applied to applications whose filing date (actual filing date as for divisional and converted application, etc.) is on or after January 1, 2009.

Pursuant to Article 36(4)(ii), the prior art document information (name of publications in which the relevant invention was stated and location of other information of the inventions disclosed in the publication) is required to be stated. Therefore, an amendment to add the prior art document information in the detailed description of the invention and add contents stated in the document to "Background Art" of the detailed description of the invention does not introduce new technical matter and is permitted. However, an amendment to add information on evaluation of the invention, such as comparison with the invention in the application or information on implementation of the invention, or an amendment to add contents stated in the prior art document to eliminate violation of Article 36(4)(i) introduces new technical matter and is not permitted."

(Guidelines Part III, Section 1, 5.2(1))

	KIPO	
PCT	PCT/GL/ISPE Appendix A4.05, Alternative A4.05[2]	
Legal basis	Patent Act Article 42(3) Patent Act Article 47(2) Guidelines Part IV, Chapter 2, 2.1	
Category	Category III	
In practice	Currently the statement of prior art of reference is not obligation of an applicant and KIPO does not invite an applicant to insert additional prior art documents.	

	2. In case an applicant inserts prior art reference by amendment, where just titles of prior art documents are added to a description, it shall not be deemed as the addition of new matter. However, though an amendment was based on the prior art documents, if such an amendment adds matters which were disclosed only in the documents but not described in the original description, it shall be deemed as the addition of new matter except that such added matters are obvious to a person skilled in the art in view of the original description. (Guidelines Part IV, Chapter 2, 2.1)
	SIPO
PCT	PCT/GL/ISPE Appendix A4.05, Alternative A4.05[1]
Legal basis	Art 33, Rule 17
Category	Category III
In practice	The allowable amendments to the description include the scenario that the part of "Background Art" is amended to make it consistent with the claimed subject matter of the invention. Where the independent claim is drafted according to the provisions of Rule 21, the relevant contents of the prior art described in the preamble portion of the claim shall be contained in the part of "Background Art" of the description, and the documents reflecting the background art shall be cited. If, through search, the examiner finds any reference documents which are even more related to the claimed subject matter of the invention than the prior art cited in the initial description by the applicant, the applicant shall be allowed to amend such part of the description by adding the contents of these documents and citing the documents. At the same time, the contents describing the unrelated prior art shall be deleted. It shall be noted that such amendment, in fact, has introduced the contents which are not contained in the initial claims and description. However, since the amendment relates just to the background art other than the invention per se, and the contents added are prior art already known to the public before the date of filing, it is allowable. (Guidelines Part II Chapter 8 Section 5.2.2.2)
	USPTO
PCT	The ISA/IPEA/US does not invite applicant to insert additional prior art documents, subsequently discovered prior art documents, or a detailed description of previously cited documents into the description. See PCT/GL/ISPE AppendixA4.05, Alternative A4.05[2].
Legal basis	35 U.S.C. 132; 37 CFR 1.53
Category	Category III
In practice	All amendments must find descriptive basis in the original disclosure, otherwise they raise the issue of new matter. As no new matter may be introduced into an application after its filing date, inserting a statement regarding the prior art into the specification is generally improper.

C. Allowability of multiple dependent claims

	PCT reservation (PCT/GL/ISPE - Appendix A5.16)	
	EPO	
PCT	PCT/GL/ISPE Appendix A5.16, Alternative A5.16[2]	
Legal basis	Art 82, Art 84, Rule 43 EPC	
Category	Category II	
In practice	Dependent claims referring back to other independent and/or dependent claims, alternatively or cumulatively (GL F-IV, 3.4)	
	Any claim which includes all the features of any other claim is termed a "dependent claim". Such a claim must contain, if possible at the beginning, a reference to the other claim, all features of which it includes (see, however, GL F-IV, 3.8 for claims in different categories).	
	Since a dependent claim does not by itself define all the characterising features of the subject-matter which it claims, expressions such as "characterised in that" or "characterised by" are not necessary in such a claim but are nevertheless permissible. A claim defining further particulars of an invention may include all the features of another dependent claim and should then refer back to that claim.	
	Also, in some cases, a dependent claim may define a particular feature or features which may appropriately be added to more than one previous claim (independent or dependent). It follows that there are several possibilities: a dependent claim may refer back to one or more independent claims, to one or more dependent claims, or to both independent and dependent claims.	
	Number of dependent claims (GL F-IV, 5)	
	While there is no objection to a reasonable number of such claims directed to particular preferred features of the invention, the examiner should object to a multiplicity of claims of a trivial nature. What is or what is not a reasonable number of claims will depend on the facts and circumstances of each particular case.	
	JPO	
PCT	PCT/GL/ISPE Appendix A5.16, Alternative A5.16[2]	
Legal basis	Regulations under the Patent Act Note 14 of Form 29bis Guidelines Part I, Chapter 1, 2.2.4.2(2), (3)	
Category	Category I, II	
In practice	"In light of conciseness and clearness, multiple dependent form claims preferably refer to statements of 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.)" (Guidelines Part I, Chapter 1, 2.2.4.2(2))	
	"If a multiple dependent form claim refers to statements of 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." (Guidelines Part I, Chapter 1, 2.2.4.2(3))
	KIPO
PCT	PCT/GL/ISPE Appendix A5.16, Alternative A5.16[1]
Legal basis	Patent Act Article 42(8) Enforcement Decree of the Patent Act 5(5), (6) Guidelines Part II, Chapter 4, 6.5, 6.6
Category	Category III
In practice	A claim depending on two or more claims shall include the numbers of the cited claims in order for at least one of the cited claims to be selected (Enforcement Decree of the Patent Act 5(5), Guidelines Part II, Chapter 4, 6.5).
	A claim that depends on two or more claims shall not refer to another claim which cites more than two claims. The purpose of this provision is to avoid difficulty in having to refer to other multiple claims in order to interpret a single patent claim.
	Meanwhile, since Article 5 (6) of the Enforcement Decree of the Patent Act applies to claims that refer to more than two claims, it shall be noted that this provision cannot apply to claims that cite only one claim. (Enforcement Decree of the Patent Act 5(6), Guidelines Part II, Chapter 4, 6.6).
	SIPO
PCT	PCT/GL/ISPE Appendix A5.16, Alternative A5.16[1]
Legal basis	Rule 22(2)
Category	Category II
In practice	Any dependent claim shall only refer to the preceding claim or claims. Any multiple dependent claims, which refers to two or more claims, shall refer to the preceding claims in the alternative only, and shall not serve as a basis for any other multiple dependent claims.(Paragraph 2, Rule 22)
	Any dependent claim shall only refer to the preceding claim or claims. Any multiple dependent claim, which refers to two or more claims, shall refer to the preceding claims in the alternative only, and shall not serve as a basis for any other multiple dependent claim, i.e. a subsequent multiple dependent claim shall not refer to a preceding multiple dependent claim. (Guidelines Part II Chapter 2 Section 3.3.2)
USPTO	
PCT	The ISA/IPEA/US will permit a multiple dependent claim which refers to more than one other claim only in the alternative. Multiple dependent claims cannot form a basis for other multiple dependent claims. See PCT/GL/ISPE, Appendix A5.16, Alternative A5.16[1].
Legal basis	35 U.S.C. 112; 37 CFR 1.75(c)

Category	Category III
In practice	A multiple dependent claim which refers to more than one other claim can do so only in the alternative. Multiple dependent claims cannot form a basis for other multiple dependent claims.

D. Allowability of multiple independent claims of overlapping scope / conciseness issue

conciseness issue	
PCT reservation (PCT/GL/ISPE - Appendix A5.42)	
	EPO
PCT	PCT/GL/ISPE Appendix A5.42, Alternative A5.42[1]
Legal basis	Art 84, Rule 43 EPC
Category	Category II
In practice	Number of independent claims and their scope in general (GL F-IV, 5)
	The requirement that the claims must be concise refers to the claims in their entirety as well as to the individual claims. The number of claims must be considered in relation to the nature of the invention the applicant seeks to protect. Undue repetition of wording, e.g. between one claim and another, should be avoided by the use of the dependent form.
	What is or what is not a reasonable number of claims depends on the facts and circumstances of each particular case. The interests of the relevant public must also be borne in mind. The presentation of the claims should not make it unduly burdensome to determine the matter for which protection is sought (T 79/91 and T 246/91, not published in OJ). Objection may also arise where there is a multiplicity of alternatives within a single claim, if this renders it unduly burdensome to determine the matter for which protection is sought.
	Number of independent claims and their scope within a category (GL F-IV, 3.2)
	According to Rule 43(2) the number of independent claims is limited to one independent claim in each category (subject to transitional measures EPC 1973/2000).
	Exceptions from this rule can only be admitted in the specific circumstances defined in sub-paragraphs (a), (b) or (c) of Rule 43(2) (e.g., if the subject-matter of the application involves one of the following: (a) a plurality of interrelated products; (b) different uses of a product or apparatus or (c) alternative solutions to a particular problem, where it is inappropriate to cover these alternatives by a simple claim) and provided the requirement of Art. 82 with regard to unity is met (See GL F-V).
	For the purpose of Rule 43(2)(c), the term "alternative solutions" can be interpreted as "different or mutually exclusive possibilities". Moreover, if it is possible to cover alternative solutions by a single claim, the applicant should do so. For example, overlaps and similarities in the features of the independent claims of the same category are an indication that it would be appropriate to replace such claims with a single independent claim, e.g. by selecting a common wording for the essential features (see GL F-IV, 4.5).
JPO	
PCT	PCT/GL/ISPE Appendix A5.42: Neither A5.42[1] nor A5.42[2] applies.

Legal basis	Patent Act Article 36(5), Patent Act Article 36(6)(iii) Guidelines Part I, Chapter 1, 2.2.3.1
Category	Category III
In practice	Allowability of multiple independent claims of overlapping scope
	"an invention specified by a statement in one claim may be the same invention specified by a statement in another claim" (Patent Act Article 36(5))
	Conciseness issue
	"The statement of the scope of claims shall comply with each of the following items: (iii) the statement for each claim is concise" (Patent Act Article 36(6)(iii))
	"Article 36(6)(iii) does not deal with the inventive concept defined by the statement of the claim 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." (Guidelines Part I, Chapter 1, 2.2.3.1)
	KIPO
PCT	PCT/GL/ISPE Appendix A5.42, Alternative A5.42[2]
Legal basis	Patent Act Article 42(4)(ii) Guidelines Part II, Chapter 4, 4. Patent Act Article 42(8) Enforcement Decree of the Patent Act 5(2) Guidelines Part II, Chapter 4, 6.3
Category	Category II
In practice	1. About the conciseness of individual claim
	"Claim(s) shall define the invention clearly and concisely" (Patent Act Article 42(4)(ii))
	"In case the statement of the claim is too prolix, such as the repetitive statement of the identical contents, so that the subject of the invention sought to be protected are unclear." (Guidelines Part II, Chapter 4, 4.)
	2. About the conciseness of total claims
	KIPO does not limit the number of independent claims.
	But "The claim shall be entered in a proper number according to the nature of the invention." (Enforcement Decree of the Patent Act, Article 5(2))
	"Where claims are not described in a proper number are as follows: ① where two or more inventions from different categories are described in a single claim, ② where more than two matters are claimed, ③ where the same claim is redundantly described (it means the case in which the claim is identically expressed, and does not means the case in which the claim is substantially identical with different expression), ④ where multiple claims are cited in a single claim, and so on." (Guidelines Part II, Chapter 4, 6.3)
SIPO	
PCT	PCT/GL/ISPE Appendix A5.42, Alternative A5.42[1]

Legal basis	Art 26(4)	
Category	Category III	
In practice	The written claim shall, based on the written description, contain a clear and concise definition of the proposed scope of patent protection.(Paragraph 4 Art 26)	
	The requirement that the claims shall be concise means, on the one hand, individual claims shall be concise, and on the other hand, the claims as a whole shall be concise as well. For example, in one application there should not exist two or more claims that have substantially the same extent of protection.	
	The number of claims shall be reasonable. It is permitted to have a reasonable number of dependent claims in the claims to define those preferable technical solutions of the invention or utility model.	
	The expression of the claims shall be concise. Except for the technical features, a claim shall neither contain unnecessary explanations as to the cause or reason, nor shall it contain commercial advertising.	
	In order to avoid undue repetition of the same content between one claim and another, where possible, the claims shall be drafted in the manner of referring to a preceding claim to the largest extent. (Guidelines Part II Chapter 2 Section 3.2.3)	
USPTO		
PCT	The ISA/IPEA/US does not generally object to the number of claims as long as the claims differ from one another and there is no difficulty in understanding the scope of protection. See PCT/GL/ISPE, Appendix A5.42, Alternative A5.42[1].	
Legal basis	35 U.S.C. 112, 37 CFR 1.75	
Category	Category III	
In practice	There is generally no objection to the number of independent claims as long as the claims differ from one another and there is no difficulty in understanding the scope of protection.	

II. CLAIM INTERPRETATION

A. Applicant acting as own lexicographer

	PCT reservation (PCT/GL/ISPE Appendix A5.20)
	EPO
PCT	PCT/GL/ISPE, Appendix A5.20, Alternative A5.20[1]
Legal basis	None
Category	Category I, IV
In practice	Meaning and scope of a word in a claim (GL F-IV, 4.2)
	Each claim should be read giving the words the meaning and scope which they normally have in the relevant art, unless in particular cases the description gives the words a special meaning, by explicit definition or otherwise. Moreover, if such a special meaning applies, the examiner should, so far as possible, require the claim to be amended whereby the meaning is clear from the wording of the claim alone. This is important because it is only the claims of the European patent, not the description, which will be published in all the official languages of the EPO. The claim should also be read with an attempt to make technical sense
	out of it. Such a reading may involve a departure from the strict literal meaning of the wording of the claims. However, Art. 69 and its Protocol do not provide a basis for excluding what is literally covered by the terms of the claims (see T 223/05).
	Any inconsistency between the description and the claims should be avoided if it may throw doubt on the extent of protection and therefore render the claim unclear or unsupported under Art. 84, second sentence or, alternatively, render the claim objectionable under Art. 84, first sentence (see GL F-IV, 4.3).
	JPO
PCT	PCT/GL/ISPE, Appendix A5.20, Alternative A5.20[1]
Legal basis	Guidelines Part I, Chapter 1, 2.2.2.1(4), Guidelines Part II, Chapter 2, 1.5.1
Category	Category I
In practice	"Where the statement of a claim is 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 statement of the claim 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, 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 the claimed invention, which is done by taking into account the statements of the detailed explanation of the invention, etc. although the primary basis for the identification is the statement of the claim." (Guidelines Part I, Chapter 1, 2.2.2.1(4)) "Claimed inventions are identified based on the descriptions of the
	claims. The descriptions of the specifications and drawings and the common general knowledge as of the filing are taken into consideration

	for the analysis of meaning of words."
	"(1) Clear descriptions of the claims are interpreted as they are to identify the claimed inventions. Words of the claims are interpreted as the meanings in the normal sense."
	"(2) However, when the invention is clearly described in the claims and meanings of the words in the claims, or matters used to specify the inventions, are defined or explained in the specification and drawings, the specifications and drawings are taken into consideration to interpret the words. In addition, examples of more specific concepts developed under the concepts of the words in the claims, which are merely provided in the detailed description of the inventions or drawings, are not included in the words defined or explained. Also, when the description in the claims is not clear enough to be understood and the description could be specified by interpreting the words in the claims based on the specifications, drawings and technical knowledge as of the filing, they are taken into consideration to identify the invention."
	"(3) Claimed inventions are not identified when the inventions are not specific, even when taking the description in the specifications or drawings and the technical common knowledge as of the filing into consideration."
	"(4) Even when an invention identified by the claims does not correspond to the invention described in the specification or drawings, the claimed invention is not identified by the specification or drawings alone without analyzing the claims. When technical matters or terms are described in the specifications or drawings but not described in the claims, the claimed invention is identified without analyzing the technical matters or terms. On the other hand, when they are described in the claims, they are always analyzed and the invention should not be identified without analyzing them."
	(Guidelines Part II, Chapter 2, 1.5.1)
	KIPO
PCT	PCT/GL/ISPE Appendix A5.20, Alternative A5.20[1]
Legal basis	Case No. 97Hu990 (Supreme Court, 22 Dec. 1998) Guidelines Part III, Chapter 2, 4.1.1(3)
Category	Category IV
In practice	"4.1.1(3) In the case where an applicant specifically defines a term in the detailed description to the extent that it is clearly understood that the term is different from any general meaning in order to specify the term as having a specific meaning other than general meaning in the technical field to which an invention pertains, the term is interpreted as a term with the specific meaning defined in the detailed description." Guidelines Part III, Chapter 2, 4.1.1(3)
	"A term in a patent specification is interpreted with the general meaning in the technical field and its usage should be consistent over the whole specification. However, if an applicant intends to use a certain term to have a specific meaning, an applicant is allowed to define the meaning of the term. So, the term can be simply interpreted according to the specific definition when the meaning of term is defined in the description (Case No. 97Hu990 (Supreme Court, 22 Dec. 1998)).
SIPO	

PCT	PCT/GL/ISPE Appendix A5.20: No reservation under A5.20[1] nor A 5.20[2]
Legal basis	Rule 3(1), 17(3), 19(3)
Category	Category II
In practice	Any document submitted in accordance with the provisions of the Patent Law and these Implementing Regulations shall be in Chinese; the standard scientific and technical terms shall be used if there is a prescribed one set forth by the State; where no generally accepted translation in Chinese can be found for a foreign name or scientific or technical term, the one in the original language shall be also indicated.(Paragraph 1 Rule 3)
	The description of the invention or utility model shall use standard terms and be in clear wording, and shall not contain such references to the claims as:"as described in claim", nor shall it contain commercial advertising. (Paragraph 3 Rule 17)
	The scientific and technical terms used in the claims shall be consistent with that used in the description. The claims may contain chemical or mathematical formulae but no drawings. They shall not, except where absolutely necessary, contain such references to the description or drawings as:"as described in part of the description", or "as illustrated in Figure of the drawings".(Paragraph 3 Rule 19)
	The description shall use the technical terms as recognized in the technical field to which the invention or utility model pertains. As for terms of natural science, where there is national standard, the standard terms shall be used. Where there is no national standard, the terms generally accepted in the art may be used, and little known or newly emerging technical terms, or the terms in loan word (in Chinese transliteration or free translation) may also be used, provided that their meanings are clear to a person skilled in the art and are not misleading. If necessary, specially formulated technical terms may be used, in which case they shall be clearly and adequately defined or explained. Generally, terms already having an established meaning in the art shall not be used to mean something different so as to avoid misunderstanding and confusion. Technical terms and symbols used in the description shall be consistent throughout. (Guidelines Part II Chapter 2 Section 2.2.7)
	The extent of protection as defined by each claim shall be clear. The extent of protection of a claim shall be construed according to the meaning of the words used in the claim. Generally, the words used in a claim shall be understood as having the meaning that they normally have in the relevant art. In particular cases, where the description explicitly gives a certain word a special meaning and, by virtue of the definition to the word in the description, the extent of protection of the claim using the word is defined sufficiently clearly, such a case is also allowed. However, in this case the examiner should also invite the applicant to amend as far as possible the claim whereby the meaning is clear from the wording of the claim alone.
	Any term which whose meaning is indefinite, such as "thick", "thin", "strong", "weak", "high temperature", "high pressure", "very broad scope", etc., shall not be used in a claim, unless the term has a well-recognized definite meaning in the particular art, such as "high frequency" in relation to an amplifier. Where the term has no well-recognized meaning, it should, if possible, be replaced by a more precise wording selected from

the description.		
Such expressions as "for example", "such as", "had better", "particularly", "if necessary", and the like shall not be used in a claim, since they will define different extents of protection in a single claim, making the extent of protection thereof unclear. Where in a claim there exists a generic term being followed by a specific term introduced by one of the above expressions, the examiner shall invite the applicant to amend the claim, and it is allowed to maintain in the claim either of the terms or to define the different extents of protection in two claims with the terms respectively.		
Generally, such terms as "about", "approximately", "etc.", "or the like", and the like shall not be used in a claim, since they are likely to make the protection extent of the claim unclear. Where in a claim there exists such a term, the examiner shall make a judgment as to whether use of such term makes the claim unclear according to the specific situation, and if not, the use of such term is permitted.		
Except for being used with reference signs, chemical formulae, or mathematical formulae, use of parentheses in a claim, such as "(concrete) moulded brick", shall be avoided as far as possible so as to prevent the claim from being unclear. However, bracketed expressions with a generally accepted meaning are allowable, for example "(meth)acrylate", "containing A of 10%-60% (weight)". (Guidelines Part II Chapter 2 Section 3.2.2)		
The technical terms used in the claims shall be consistent with those used in the description. (Guidelines Part II Chapter 2 Section 3.3)		
USPTO		
In interpreting claims, the ISA/IPEA/US takes into account any special meaning provided in the description to a term appearing in the claim. See PCT/GL/ISPE, Appendix A5.20, Alternative A5.20[1].		
35 U.S.C. 112		
Category III, IV		
In interpreting claims, any special meaning provided in the description to a term appearing in the claim is taken into account, provided that the special meaning is sufficiently clear in the specification such that any departure from common usage would be understood by a person of ordinary skill in the art. See MPEP 2111.01.		

II. CLAIM INTERPRETATION

B. Use claims in general

PCT reservation (PCT/GL/ISPE Appendix A5.21)			
	EPO		
PCT	PCT/GL/ISPE, Appendix A5.21 applies		
Legal basis	Rule 43(2) EPC		
Category	Categories II, IV		
In practice	Claim categories under the EPC (GL F-IV, 3.1)		
	The EPC refers to different "categories" of claim ("products, process, apparatus or use"). In fact, there are only two basic kinds of claim, viz. claims to a physical entity (product, apparatus) and claims to an activity (process, use). The second basic kind of claim ("process claim") is applicable to all kinds of activities in which the use of some material product for effecting the process is implied; the activity may be exercised upon material products, upon energy, upon other processes (as in control processes) or upon living things.		
	Use claims in general (GL F-IV, 4.16)		
	Use of a product		
	For the purposes of examination, a "use" claim in a form such as "the use of substance X as an insecticide" should be regarded as equivalent to a "process" claim of the form "a process of killing insects using substance X". Thus a claim in the form indicated should not be interpreted as directed to the substance X recognisable (e.g. by further additives) as intended for use as an insecticide. Similarly, a claim for "the use of a transistor in an amplifying circuit" would be equivalent to a process claim for the process of amplifying using a circuit containing the transistor and should not be interpreted as being directed to "an amplifying circuit in which the transistor is used", nor to "the process of using the transistor in building such a circuit".		
	As to the requirement of novelty, it should be borne in mind that a claim to the use of a known compound for a particular purpose (second non-medical use) which is based on a technical effect should be interpreted as including that technical effect as a functional technical feature, and is accordingly not open to objection under Art. 54(1), provided that such technical feature has not previously been made available to the public (G 2/88, OJ 4/1990, 93, and G 6/88, OJ 4/1990, 114) (see GL G-VI, 7.2). Use of a process (GL F-IV, 4.16)		
	A claim directed to the use of a process for a particular purpose is		
	equivalent to a claim directed to that very same process (see T 684/02).		
	Care should be taken when a claim relates to a two-step process which combines a use step with a product production step as this type of claim is an attempt to gain protection for the composition under Art. 64(2). According to decision G 2/88 there are two different types of process claim, (i) the use of an entity to achieve a technical effect and (ii) a process for the production of a product. This decision makes clear that Art. 64(2) applies only to processes of type (ii).		
	JPO		

PCT	PCT/GL/ISPE, Appendix A5.21 applies
Legal basis	Guidelines Part I, Chapter 1, 2.2.2.3(3)
Category	Category I
In practice	""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 "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 "method for using substance X for the manufacture of a medicament for therapeutic application Y. "" (Guidelines Part I, Chapter 1, 2.2.2.3(3))
	KIPO
PCT	PCT/GL/ISPE Appendix A5.21 is not applied
Legal basis	Guidelines Part III, Chapter 2, 4.1.2(2)
Category	Category I
In practice	Guidelines 4.1.2(2) The claim which includes an expression specifying a product by its use "Where a claim includes an expression specifying a product by its use, the examiner should interpret the claimed invention only as a product especially suitable for the use disclosed in the claim, by taking into account the detailed descriptions in the specification and drawings, and the common general technical knowledge at the time of the filing. Even if a product includes all technical characteristics described in the claims, an examiner should not regard the product as the product described in the claim when the product is not appropriate for the relevant use or when the product needs conversion to be used. For example, "crane hook with a shape of ~" merely indicates a hook including technical features with size and strength suitable for a crane. So it is appropriate that the crane hook should be construed as a different product from "fishing hooks" with regard to the structure. If a product with a limitation of use is regarded as not being specifically suitable for such use by taking into account the specification and
	drawings, and the common general technical knowledge at the time of the filing, it is construed that a limitation of use has no impact in specifying an invention, thereby the limitation of use does not have influence in the assessment of novelty." (Guidelines Part III, Chapter 2, 4.1.2(2))
PCT	PCT/GL/ISPE, Appendix A5.21 does not apply
Legal basis	Guidelines Part II Chapter 2 Section 3.2.2
Category	Category I
In practice	According to their nature, claims are divided into two basic kinds, namely, claims to a physical entity and claims to an activity, which are simply referred to as product claims and process claims respectively. The first basic kind of claim includes any physical entity (product, apparatus) that is produced by a person's technical skill. The second basic kind of claim

includes any activity with element of time or process (process, use). Claims to a physical entity include claims to articles, substances, materials, tools, apparatus, and equipment etc. Claims to an activity include claims to manufacturing processes, methods of use, communication methods, processing methods, and methods of applying a product for a specific purpose, etc. (Guidelines Part II Chapter 2 Section 3.1.1)

A use claim belongs to the category of process claim. However, the examiner shall pay attention to distinguishing a use claim from a product claim from the wording thereof. For example, a claim in such a form as "using compound X as an insecticide" or "the use of compound X as an insecticide" is a use claim, and belongs to process claim, while a claim in such a form as "an insecticide made of compound X" or "an insecticide containing compound X" is not a use claim but a product claim. (Guidelines Part II Chapter 2 Section 3.2.2)

The examiner shall take notice of the wording to distinguish a use claim from a product claim. For example, "using compound X as an insecticide" or "the use of compound X as an insecticide" is a wording used in use claim, which is of type of process claim, while the wording "an insecticide made of compound X" or "the insecticide containing compound X" is not a use claim, but a product claim.

It shall also be clarified that "the use of compound X as an insecticide" shall not be construed as equivalent to "the compound X for an insecticide". As the latter is a product claim defining the use, it is not a use claim. (Guidelines Part II Chapter 10 Section 4.5.1)

Claim of Medical Use of Substance

An application relating to the medical use of a substance shall not be granted if its claim is drafted in the wording "use of substance X for the treatment of diseases", "use of substance X for diagnosis of diseases" or "use of substance X as a medicament", because such claim is one for "method for the diagnosis or for the treatment of diseases" as referred to in Article 25.1(3). However, since a medicament and a method for the manufacture thereof are patentable according to the Patent Law, it shall not be contrary to Article 25.1(3) if an application for the medical use of a substance adopts pharmaceutical claim or use claim in the form of method for preparing a pharmaceutical, such as "use of substance X for the manufacturing of a medicament", "use of substance X for the manufacturing of a medicament for the treatment of a disease" and so on.

The above-mentioned use claim in the form of method for manufacturing a medicament may be drafted as "use of compound X for manufacturing a medicament for the treatment of disease Y" or the like. (Guidelines Part II Chapter 10 Section 4.5.2)

Novelty of Use Invention of Chemical Product

Since a chemical product is novel, the use invention of the novel product will naturally possess novelty.

A known product is not rendered novel merely because a new application thereof has been put forward. For example, if product X is known as a detergent, then the product X used as a plasticizer does not possess novelty. However, a known product does not destroy the novelty of its new use if the new use per se is an invention. This is because such use invention is an invention of method of application, and the substance of

the invention lies in how to apply the product rather than the product per se. For example, said product X is originally used as a detergent. Then, someone discovers from research that it can be used as a plasticizer after adding to it certain additives. Then its preparation, the kind of additives selected and the proportion etc., are the technical features of the method of application. Under such circumstances, the examiner shall assess whether the method per se possesses novelty and shall not consider that the method of application does not possess novelty on the grounds that product X is known. As for a medical-use invention relating to a chemical product, the following aspects shall be taken into consideration when the examination of novelty is carried out. (1) Whether or not the new use is different in substance from the known use. The use invention does not possess novelty when the difference between the new use and the known use lies merely in the form of expression, but the substance of them is the same. (2) Whether or not the new use is revealed directly by the mechanism of action or pharmacological action of the known use. The use does not possess novelty if it is directly equivalent to the mechanism of action or pharmacological action of the known use. (3) Whether or not the new use belongs to generic (upper level) term of the known use. The known use defined by specific (lower level) term may destroy the novelty of the use defined by generic (upper level) term. (4) Whether or not the features relating to use, such as the object, mode, route, usage amount, interval of administration can define the procedure of manufacture of a pharmaceutical. The distinguishing features merely present in the course of administration do not enable the use to possess novelty. (Guidelines Part II Chapter 10 Section 5.4) **USPTO** PCT The ISA/IPEA/US does not regard a "use" claim as equivalent to a "process" claim for purposes of international search and examination. PCT/GL/ISPE, Appendix A5.21 is not followed. Legal basis 35 U.S.C. 101, 112 Category Category III In practice "Use claims" are generally regarded (1) as indefinite because such claims merely recite a use without any active, positive steps delimiting how this use is actually practiced, and/or (2) as not falling into any of the statutory categories of subject matter eligible for patent protection because the claimed recitation of a use, without setting forth any steps involved in the process. See MPEP 2173.05(q).

II. **CLAIM INTERPRETATION**

C. Funct	C. Functional claims (e.g., means-plus-function limitation)	
	Based on the Trilateral Comparative Studies	
	EPO	
PCT	N.A.	
Legal basis	Art 83 EPC (as a framework)	
Category	Categories I, IV	
In practice	Functional features in a claim allowable (GL F-IV, 2.1)	
	It is not necessary that every feature be expressed in terms of a structural limitation. Functional features may be included provided that a skilled person would have no difficulty in providing some means of performing this function without exercising inventive skill (GL F-IV, 6.5). For the specific case of a functional definition of a pathological condition, see GL F-IV, 4.22.	
	Functional features in broad claims (GL F-IV, 6.5)	
	A claim may broadly define a feature in terms of its function, i.e. as a functional feature, even where only one example of the feature has been given in the description, if the skilled reader would appreciate that other means could be used for the same function. In general, however, if the entire contents of the application is such as to convey the impression that a function is to be carried out in a particular way, with no intimation that alternative means are envisaged, and a claim is formulated in such a way as to embrace other means, or all means, of performing the function, then objection arises. Furthermore, it may not be sufficient if the description merely states in vague terms that other means may be adopted, if it is not reasonably clear what they might be or how they might be used.	
	Subject-matter defined in terms of a result to be achieved (GL F-IV, 4.10)	
	It should be noted that the requirements for allowing a definition of subject-matter in terms of a result to be achieved differ from those for allowing a definition of subject-matter in terms of functional features. As a general rule, claims which attempt to define the invention by a result to be achieved should not be allowed, in particular if they only amount to claiming the underlying technical problem. However, they may be allowed if the invention either can only be defined in such terms or cannot otherwise be defined more precisely without unduly restricting the scope of the claims and if the result is one which can be directly and positively verified by tests or procedures adequately specified in the description or known to the person skilled in the art and which do not require undue experimentation (see T 68/85, OJ 6/1987, 228)	
	It should be noted that the above mentioned requirements for allowing a definition of subject-matter in terms of a result to be achieved differ from those for allowing a definition of subject-matter in terms of functional features (see GL F-IV, 4.22 and 6.5). Moreover, claims pertaining to a result to be achieved may likewise pose problems in the sense that essential features are missing (see GL F-IV, 4.5).	
	Functional definition of a pathological condition (GL F-IV, 4.22)	

	When a claim is directed to a further therapeutic application of a medicament and the condition to be treated is defined in functional terms, e.g. "any condition susceptible of being improved or prevented by selective occupation of a specific receptor", the claim can be regarded as clear only if instructions, in the form of experimental tests or testable criteria, are available from the patent documents or from the common general knowledge allowing the skilled person to recognise which conditions fall within the functional definition and accordingly within the scope of the claim (T 241/95, OJ 2/2001, 103; see also GL G-II, 4.2).	
	JPO	
PCT	N.A.	
Legal basis	Guidelines Part II, Chapter 2, 1.5.2(1)	
Category	Category I	
In practice	"Descriptions in claims in which products are defined by functions or characteristics are interpreted, in principle, as representing all products that have the functions or characteristics unless otherwise noted according to 1.5.1(2) (see, Note below). For example, "wall materials with layers insulating heat" are interpreted to be wall materials with "products" that are "layers with heat insulation as their working or functions."	
	(Note) For example, the term "heat insulation alloys" from the expression "heat insulation alloys with compositions of" in claims is interpreted to be "alloys applied to use (of products) requiring heat insulation" after the claimed invention has been identified based on the descriptions in the specifications and drawings and the common general knowledge as of the filing. In this case, the invention is dealt according to 1.5.2(2) for the descriptions in which products are defined by use." (Guidelines Part II. Chapter 2. Section 1.5.2(1)①)	
	"However, descriptions of the functions or characteristics inherent in the products do not help to define the products, and they are interpreted to represent the products per se." (Guidelines Part II. Chapter 2. Section 1.5.2(1)②)	
	"Some expressions specifying products by the functions or characteristics should not be interpreted as specific products among all the products that have such functions or characteristics based on the common general knowledge as of the filing. For example, the expression "means for fixing" from the expression of a claimed art "means for fixing the first wooden member to the second plastic member" does not represent fixation means used for metals, such as for welding, among all fixation means." (Guidelines Part II. Chapter 2. Section 1.5.2(1)③)	
	KIPO	
PCT	N.A.	
Legal basis	Patent Act Article 42(6) Guidelines Part III, Chapter 2, 4.1.2(1) Case No. 2007Hu4977 (Supreme Court, 23 July 2009)	
Category	Category I, Category III, Category IV	
In practice	Patent Act	

Article 42 Patent Application

(6) When stating the scope of claims under paragraph (2)(iv), the applicant shall state the structure, method, functions, materials, or a combination thereof etc. which are deemed to be necessary for specifying the invention, for the purpose of clearly specifying the matters for which protection is sought.

Guidelines

4.1.2(1) A product specified by its work, function, property, or characteristic (hereinafter referred to as "the function, characteristic, etc.")

"Because it is possible to state the structure, method, functions, materials or combination of these factors for the purpose of clarifying the subject matters to be protected, when function, characteristic, etc. are disclosed in the claims to limit the subject matters of the claimed invention, an examiner should not exclude the function, characteristic, etc. from the features of the invention when interpreting the claims.

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 because the expression is specifically defined in the detailed description.

However, it is noted that there are also cases where a product described 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." (Guidelines Part III, Chapter 2, 4.1.2(1))

"In a case where "means to selectively join plastic materials" is disclosed, it is appropriate that "the means to selectively join" mentioned here should not apply to materials such as a magnet which is difficult to join with plastic material." (Case No. 2007Hu4977 (Supreme Court, 23 July 2009))

SIPO	
PCT	N.A.
Legal basis	Art 26(4)
Category	Category I
In practice	Usually, for product claims, features of function or effect shall be avoided as far as possible to be used in defining the invention. It is only when a certain technical feature cannot be defined by a structural feature, or it is more appropriate to be defined by a feature of function or effect than by a structural feature, and the function or effect can be directly and affirmatively verified by experiments or operations as stated in the description or by customary means in the art, that definition by features of function or effect in a product claim can be permissible.
	Technical feature defined by function in a claim shall be construed as embracing all the means that are capable of performing the function. For claim containing a feature defined by function, whether the definition by function can be supported by the description shall be examined. If the function is carried out in a particular way in the embodiments of the description, and the person skilled in the art would not appreciate that the function could be carried out by other alternative means not described in

	the description, or the person skilled in the art can reasonably doubt that one or more means embraced in the definition by function cannot solve the technical problem aimed to be solved by the invention or utility model and achieve the same technical effect, then the definition by function as embracing the other alternative means or means incapable of solving the technical problem shall not be allowed in the claim.	
	Furthermore, if the description merely states in vague terms that other alternative means may be adopted, but the person skilled in the art cannot understand what they might be or how they might be used, then definition by function in the claims is not permitted. In addition, claim of pure functional definition cannot be supported by the description, and therefore is not permitted. (Guidelines Part II Chapter 2 Section 3.2.1)	
USPTO		
PCT	N.A.	
Legal basis	35 U.S.C. 112	
Category	Category III	
In practice	When an element is claimed using "means- or step- plus function" language without the recital of structure, material, or acts in support thereof, such language is interpreted to read on only the structures, materials, or acts disclosed in the specification and "equivalents thereof" that correspond to the recited function. Thus the specification must be consulted to determine the structure, material, or acts corresponding to the function recited in the claim.	

III. PRIOR ART

A. Point of time to be considered for a prior art disclosure to be anticipatory

First-to-file v First-to-invent; any other specific provisions or practices		
	EPO	
PCT	N.A.	
Legal basis	Art 54(2) EPC	
Category	Category III	
In practice	Date of filing as effective date (GL G-IV, 1)	
	An invention is "considered to be new if it does not form part of the state of the art". The "state of the art" is defined as "everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application", subject to some specific exceptions (GL G-V).	
	Date of priority as effective date (GL G-IV, 3)	
	It should be noted that "date of filing" in Art. 54(2) and 54(3) is to be interpreted as meaning the date of priority in appropriate cases (see GL F-VI, 1.2). It should be remembered that different claims, or different alternatives claimed in one claim, may have different effective dates, i.e. the date of filing or (one of) the claimed priority date(s). The question of novelty must be considered against each claim (or part of a claim where a claim specifies a number of alternatives) and the state of the art in relation to one claim or one part of a claim may include matter, e.g. an intermediate document (see GL B-X, 9.2.4), which cannot be cited against another claim or another alternative in the same claim because it has an earlier effective date.	
	JPO	
PCT	N.A.	
Legal basis	Patent Act Article 29(1)(i)-(iii), 29(2) Guidelines Part II, Chapter 2, 1.2.1, 1.2.4(2)	
Category	Category III	
In practice	"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." (Patent Act Article 29(1)(i)-(iii))	
	"Where, prior to the filing of the patent application, a person ordinarily skilled in the art of the invention would have been able to easily make the invention based on an invention prescribed in any of the items of the preceding paragraph, a patent shall not be granted for such an invention notwithstanding the preceding paragraph." (Patent Act Article 29(2))	
	"The expression "prior to the filing of the patent application" represents a definite time, even hours and minutes, of the filing, which is different from	

the expression "prior to the date of filing of a patent application." For example, when an invention that has been publicly known in the morning in Japan is filed for application in the afternoon of that same day, the invention is deemed to be the one publicly known in Japan prior to the filing of the patent application. Also, when an invention that has been distributed abroad through publications in the morning in Japan is filed in the afternoon of that same day, the invention is deemed to be the invention described in a distributed publication in a foreign country prior to the filing of the patent application." (Guidelines Part II, Chapter 2, 1.2.1)

"Determining a distributed point of time

- ① A distributed point of time is estimated as follows when a publication date has been indicated:
- (i) The last day of the year when only a publication year has been indicated; (ii) The last day of the month of the year when publication month and year have been indicated; and (iii) The day, month and year when publication day, month and year have been indicated.
- ② A distributed point of time is estimated as follows when a publication date has not been indicated:
- (i) For foreign publications with an exact date when they were brought from abroad to Japan, the date retrospectively estimated from the date when the publications were brought from abroad to Japan, considering the period normally taken for shipping the publications from abroad to Japan; (ii) For publications compiled with other materials, such as book reviews, excerpts or catalogs, the publication date of the publication estimated from the publication dates of these materials; (iii) For reprinted publications, the initial print date if any; and (iv) For other publications, the date estimated or acknowledged from other possible information source if any.
- ③ A distributed point of time is determined as follows when a filing date and a publication date are the same date:

When a filing date and a publication date are the same date, a distributed point of time is not deemed to be prior to the filing unless the filing is obviously after the publication."

(Guidelines Part II, Chapter 2, 1.2.4(2))

KIPO		
PCT	N.A.	
Legal basis	Patent Act Article 29(1) Guidelines Part III, Chapter 2	
Category	Category III	
In practice	Under the Patent Act Article 29 paragraph (1), prior to the filing of the patent application, (i) inventions publicly known, (ii) inventions publicly worked (iii) inventions described in a publication, or (iv) inventions published through electric telecommunication lines as prescribed by Presidential Decree are not patentable due to lack of novelty.	
	"In interpreting of "prior to the filing of the application", the time of filing refers to the exact point of time of filing, even to the hour and minute of the filing, not to the date of filing (if the invention is publicly known in a foreign country, the time is converted into Korean time)." (Guidelines Part	

	T
	III, Chapter 2, 3.1)
	"For a publication as a prior art, the time of publication is presumed as follows:
	① In the case where the time of publication is indicated in a publication (a) In the case where only the year of publication is indicated, the last day of that year;
	(b) In the case where the month and year of publication is indicated, the last day of the month of the year; and
	(c) In the case where the day, month and year of publication is indicated, that date.
	② In the case where the time of publication is not indicated in a publication
	(a) The distribution date of a foreign publication is presumed in light of the period normally required to reach Korea from the country of the publication, as far as the date of its receipt in Korea is clear.
	(b)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.
	(c)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, provided that the cited contents in the second edition or second print of the publication accords with the contents of the first edition.
	(d) In the case where other appropriate information is available, the date of distribution is presumed or confirmed therefrom." (Guidelines Part III, Chapter 2, 3.3.3)
	SIPO
PCT	N.A.
Legal basis	Art 22(5)
Category	Category III
In practice	For the purposes of this Law, existing technologies mean the technologies known to the public both domestically and abroad before the date of application.(Paragraph 5 Art 22)
	According to Article 22.5, the prior art means any technology known to the public before the date of filing in China or abroad. The prior art includes any technology which has been disclosed in publications in China or abroad, or has been publicly used or made known to the public by any other means in China or abroad, before the date of filing (or the priority date where priority is claimed). (Guidelines Part II Chapter 3 Section 2.1)
	As regards an invention or utility model application, the temporal demarcation of prior art is its filing date or the priority date where applicable. Broadly speaking, all of the technical contents disclosed before the filing date are within the scope of prior art; however, those disclosed on the filing date are not. (Guidelines Part II Chapter 3 Section 2.1.1)
	The printing date of a publication is regarded as the date of disclosure, except where the date of disclosure can be evidenced otherwise. Where only a specific month or year is indicated as the printing date, the last day

of the month or year shall be regarded as the date of disclosure. (Guidelines Part II Chapter 3 Section 2.1.2.1) The date on which the product or process is available to the public shall be regarded as the date of disclosure by use. (Guidelines Part II Chapter 3 Section 2.1.2.2) Disclosure by other means mainly refers to oral disclosure etc. Examples include talking, reporting, speaking at symposium, broadcasting, televising, and cinematographing that make the technical contents known to the public. For contents of talking, reporting, or speaking at symposium, the date of action shall be regarded as the date of disclosure. For contents of broadcasting, televising, or cinematographing that can be received by the public, the date of broadcast or showing shall be regarded as the date of disclosure. (Guidelines Part II Chapter 3 Section 2.1.2.3) USPTO PCT N.A. Legal basis 35 U.S.C. 102, 37 CFR 1.131 Category Category III In practice For U.S. patents, U.S. patent application publications, and other printed publications, the date that the patent or publication is made available to the public is the date it is available as a 35 U.S.C. 102(a) or (b) reference. A reference is a "printed publication" if it has been disseminated or otherwise made available to the extent that persons interested and of ordinary skill in the subject matter or art, exercising reasonable diligence, can locate it. For purposes of 35 U.S.C. 102(e), the effective U.S. filing date of the U.S. patent or U.S. patent application publication may be used as the prior art date provided that the subject matter relied upon is disclosed in the earlier filed U.S. application in the manner provided by the first paragraph of 35 U.S.C. 112. Furthermore, the filing date of an international application is a U.S. filing date for prior art purposes under 35 U.S.C. 102(e) if the international application (1) has a filing date on or after November 29, 2000; (2) designated the United States; and (3) published under PCT Article 21(2) in English. See MPEP 2136.03. The foreign priority date of U.S. patents and U.S. patent application publications cannot be used as the 35 U.S.C. 102(e) date for prior art purposes (the "Hilmer doctrine"). See 35 U.S.C. 102(e) and MPEP 2136.03. An applicant can overcome rejections based on references or activities which are not statutory bars by establishing invention of the subject matter of the rejected claim prior to the effective date of the reference or activity on which the rejection is based. Prior invention may not be established in any country other than the United States, a NAFTA country, or a WTO member country. See MPEP 715.

III. PRIOR ART

B. Restrictions, if any, as to given types of prior art documents (including language)

langa	PCT reservation on Article 64(4)a)
	EPO
PCT	No reservation ON PCT Art 64(4)a)
Legal basis	Art 54(2) EPC
Category	Category III
In practice	The "state of the art" is defined as "everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application". The width of this definition should be noted. There are no restrictions whatever as to the geographical location where or the language or manner in which the relevant information was made available to the public; also no age limit is stipulated for the documents or other sources of the information (GL G-IV, 1).
	JPO
PCT	No declaration on PCT Article 64(4)a
Legal basis	N.A.
Category	Category III
In practice	There is no restriction on the types of documents available as a prior art.
	KIPO
PCT	No declaration on PCT Article 64(4)a
Legal basis	Patent Act Article 29(1)(ii)
	Guidelines Part III, Chapter 2, 3.3.1
Category	Category III
In practice	There is no restriction on the types of documents as a prior art. "A distributed publication is "a document, a drawing or other similar medium for the communication of information, duplicated by printing, mechanical or chemical methods, etc. for the purpose of disclosing the contents to the public through distribution".
	A "Distribution" in the context of the wording "disclosing the contents to the public through distribution" 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.
	Patent gazettes such as microfilm or CD-ROM should be considered as a distributed publication, since the public could refer to the contents of the film by using a display screen and obtain a copy of it.
	In addition, non-patent literatures which are stored in floppy discs, slides, presentations or OHP materials as well as microfilms or CD-ROMs should be regarded as distributed publication, as far as they are produced to make available to the public." (Guidelines Part III, Chapter 2,

	3.3.1)	
SIPO		
PCT	No reservation under PCT Art 64(4)a	
Legal basis	Art 22(5)	
Category	Category III	
In practice	For the purposes of this Law, existing technologies mean the technologies known to the public both domestically and abroad before the date of application.(Paragraph 5 Art 22)	
	According to Article 22.5, the prior art means any technology known to the public before the date of filing in China or abroad. The prior art includes any technology which has been disclosed in publications in China or abroad, or has been publicly used or made known to the public by any other means in China or abroad, before the date of filing (or the priority date where priority is claimed).	
	The prior art shall be the technical contents that are available to the public before the date of filing. In other words, the prior art shall be in such a state that it is available to the public before the date of filing and shall contain such contents from which the public can obtain substantial technical knowledge. (Guidelines Part II Chapter 3 Section 2.1)	
	Publications in the context of the Patent Law mean the independently existing disseminating carriers of technical or designing contents, which shall indicate or have other evidence to prove the date of public issue or publication.	
	Publications of the above definition can be various printed or typed paper documents, such as patent documents, scientific and technological magazines and books, academic theses, specialized documents, textbooks, technical manuals, officially published proceedings or technical reports, newspapers, sample books, product catalogues, and advertisement brochures etc. They can also be audio or video materials made by electric, optic, magnetic, or photographic means, such as microfiches, films, negative films, videotapes, tapes, gramophone records, CD-ROMs, etc. Furthermore, they can be materials in other forms, such as those on the Internet or in other online databases.	
	The determination of whether a document is a publication shall not be affected by the place or language of issue, the manner of acquisition, or its age. The amount of distribution, whether it has been read, or whether the applicant is aware of it is of no relevance either. (Guidelines Part II Chapter 3 Section 2.1.2.1)	
	USPTO	
PCT	The ISA/IPEA/US does not restrict the types of prior art documents specified in PCT Rules 33 and 64.	
Legal basis	35 U.S.C. 102	
Category	Category III	
In practice	There is no restriction on the types of publicly available documents that can be used as prior art or that may be cited by an examiner. See III.A., above, for differences in the date a given prior art document is accorded for anticipatory prior art purposes.	

III. PRIOR ART	
C. Grace period provisions	
	Based on the Trilateral Comparative Studies
	EPO
PCT	N.A.
Legal basis	Art. 55(1), Rule 25 EPC
Category	Category III
In practice	Non prejudicial disclosures (GL G-V)
	There are two specific instances (and these are the only two) in which a prior disclosure of the invention is not taken into consideration as part of the state of the art, viz. where the disclosure was due to, or in consequence of:
	(i) an evident abuse in relation to the applicant or his legal predecessor – e.g. the invention was derived from the applicant and disclosed against his wish (Art. 55(1)(a)). For "evident abuse" to be established, there must be, on the part of the person disclosing the invention, either actual intent to cause harm or actual or constructive knowledge that harm would or could ensue from this disclosure (see T 585/92, OJ 3/1996, 129).
	(ii) the display of the invention by the applicant or his legal predecessor at an officially recognised international exhibition as defined in Art. 55(1)(b). The applicant must state, at the time of filing the application, that the invention has been so displayed, and must also file a supporting certificate within four months, giving the particulars required by Rule 25 (see GL A-IV, 3). The exhibitions recognised are published in the Official Journal of the EPO.
	An essential condition, in both instances, is that the disclosure in point must have taken place not earlier than six months preceding the filing of the application. For calculating the six-month period the relevant date is that of the actual filing date of the European patent application, not the priority date (G 3/98, OJ 2/2001, 62, and G 2/99, OJ 2/2001, 83).
	JPO
PCT	N.A.
Legal basis	Patent Act Article 30(1)-(3)
Category	Category III
In practice	Exception to lack of novelty of invention
	"In the case of an invention which has fallen under any of the items of Article 29 (1) against the will of the person having the right to obtain a patent, such invention shall be deemed not to have fallen under any of the items of Article 29 (1) for the purpose of Article 29 (1) and (2) for the invention claimed in a patent application which has been filed by the said person within six months from the date on which the invention first fell under any of said items." (Patent Act Article 30(1))
	"In the case of an invention which has fallen under any of the items of Article 29 (1) as a result of an act of the person having the right to obtain a patent (excluding those which have fallen under any of the items of said

	paragraph through the publication in the bulletin pertaining to inventions, utility models, designs or trademarks), the preceding paragraph shall also apply for the purpose of applications of Article 29 (1) and (2) for the invention claimed in a patent application which has been filed by said person within six months from the date on which the invention first fell under any of said items." (Patent Act Article 30(2)) "Any person seeking the application of the paragraph (2) of this Article shall submit to the Commissioner of the Patent Office, at the time of filing of the patent application, a document stating that fact and, within thirty days from the date of filing of the patent application, a document proving the fact that the invention which has otherwise fallen under any of the items of Article 29(1) is an invention to which the preceding paragraph may be applicable. "(Patent Act Article 30(3))
	KIPO
PCT	N.A.
Legal basis	Patent Act Article 30 Guidelines Part III, Chapter 2, 5.3
Category	Category III
In practice	Patent Act
	Article 30 Inventions not considered to be publicly known, etc.
	(1) In the case public disclosure of an invention made by a person who has a right to obtain a patent falls under any of the following subparagraphs and the person files a patent application within twelve months from the date of disclosure, the invention is not considered to correspond to any of the inventions under the subparagraphs of Article 29(1) upon assessing if the invention complies with Article 29(1) or (2).
	(i) When a person with the right to obtain a patent causes the invention to fall under either subparagraph of Article 29(1); nonetheless, this provision does not apply where a patent application or a patent registration is published in the Republic of Korea or a foreign country in accordance with a treaty or law
	(ii) When, against the intention of a person with the right to obtain a patent, the invention falls under either subparagraph of Article 29(1)
	(2) A person who intends to take advantage of Article 30 paragraph (1) subparagraph (i) shall state purport of such intention to the Commissioner of the Korean Intellectual Property Office when filing a patent application; the person shall also submit a document proving the relevant facts to the Commissioner of the Korean Intellectual Property Office, within thirty days from the filing date of the patent application.
	Guidelines
	5.3 Requirements for inventions under Article 30 paragraph (1)
	5.3.1 Where an invention is laid open by a person with the right to obtain a patent prior to the filing of the application
	(a) The invention is publicly known(or disclosed) by a person with the right to obtain a patent
	(b) A patent application shall be filed by a person with the right to obtain a patent within twelve months from the date of disclosure (when the date of disclosure is unclear, the first day of the month or the year of the

disclosure may be applied); (c) The purport of taking advantage of the provision of Article 30 shall be stated in the application; and (d) Documents proving the relevant facts shall be submitted within thirty days from the filing date. 5.3.2 When an invention is publicly known, against the intention of a person with the right to obtain a patent When an invention is publicly known against the intention of a person with the right to obtain a patent, it does not matter how the invention is publicly known. However, the person with the right to obtain a patent shall also file a patent application within twelve months from the date of disclosure, without the need to state the purport of taking advantage of Article 30 in the application. (Guidelines Part III, Chapter 2, 5.3) SIPO **PCT** N.A. Art 24 Legal basis Category Category III In practice Within six months before the date of application, an invention for which an application is filed for a patent does not lose its novelty under any of the following circumstances: (1) It is exhibited for the first time at an international exhibition sponsored or recognized by the Chinese Government; (2) It is published for the first time at a specified academic or technological conference; and (3) Its contents are divulged by others without the consent of the applicant. (Art 24) The international exhibition recognized by the Chinese Government referred to in Article 24, subparagraph(1) of the Patent Law means the international exhibition that is registered with or recognized by the International Exhibitions Bureau as stipulated by the International Exhibitions Convention. The academic or technological meeting referred to in Article 24, subparagraph(2) of the Patent Law means any academic or technological meeting organized by a competent department concerned of the State Council or by a national academic or technological association. Where any invention-creation for which a patent is applied falls under the provisions of Article 24, subparagraph(1) or (2) of the Patent Law, the applicant shall, when filing the application, make a declaration and, within a time limit of two months from the date of filing, submit certifying documents issued by the entity which organized the international exhibition or academic or technological meeting, stating the fact that the invention-creation was exhibited or published and with the date of its exhibition or publication. Where any invention-creation for which a patent is applied falls under the provisions of Article 24, subparagraph(3) of the Patent Law, the patent administration department under the State Council may, when it deems necessary, require the applicant to submit the relevant certifying documents within the specified time limit. Where the applicant fails to make a declaration and submit certifying

	documents as required in paragraph three of this Rule, or fails to submit certifying documents within the specified time limit as required in paragraph four of this Rule, the provisions of Article 24 of the Patent Law shall not apply to the application. (Rule 30)		
	USPTO		
PCT	N.A.		
Legal basis	35 U.S.C. 102		
Category	Category III		
In practice	There is a one year grace period, i.e., applicant's disclosure of his or her own work within the year before the U.S. application filing date cannot be used against him or her. Furthermore, evidence that the claimed invention was in public use or on sale in the U.S. within the one year period before the U.S. application filing date will not bar patentability. See MPEP 2133.		

III. **PRIOR ART** D. Third parties contributions Currently under development **EPO PCT** N.A. Legal basis Art. 115, Rule 114(1) EPC Category Category III Observations by third parties (GL E-V, 3) In practice Following publication of the European patent application under Art. 93, any person may present observations concerning the patentability of the invention. Although lack of novelty and/or inventive step are the most common observations, third-party observations may also be directed to clarity (Art. 84), sufficiency of disclosure (Art. 83), patentability (Art. 52(2) and (3), Art. 53 or Art. 57) and unallowable amendments (Art. 76(1), Art. 123(2)). Such observations must be filed in writing in English, French or German and must include a statement of the grounds on which they are based. That person may not be a party to the proceedings before the EPO. The web interface provided by the EPO is the preferred means for filing such observations. Documentary evidence and, in particular, publications submitted in support of the arguments may be filed in any language. However, the EPO may request that a translation into one of its official languages be filed within a period to be specified; otherwise the evidence will be disregarded. Although the third party is sent acknowledgment of the receipt of his observations, the EPO does not inform him of any further action it takes in response to them. The outcome of the evaluation by the competent Division will briefly be indicated in the respective office action from the EPO (e.g. in a communication or in the intention to grant) and will thus be visible to the public. The observations are communicated to the applicant or proprietor without delay and he may comment on them. If they call into question the patentability of the invention in whole or in part, they must be taken into account in any proceedings pending before a department of the EPO until such proceedings have been terminated, i.e. they must be admitted to the proceedings. If the observations relate to alleged prior art available other than from a document, e.g. from use, this should be taken into account only if the alleged facts either are not disputed by the applicant or proprietor or are established beyond reasonable doubt. Observations by third parties received after the conclusion of proceedings will not be taken into account and will simply be added to the file. **JPO PCT** N.A. Regulations under the Patent Act Article 13-2, 13-3 Legal basis

"Any person may offer any information to the Commissioner of the Patent

Category

In practice

Category II

Office to the effect that the patent application falls under any of the following items by submitting a publication, a copy of description, claim(s) for patent or utility model registration, or drawings or other documents attached to a request of an application for patent of utility model registration. However, this provision shall not apply when the patent application ceases to be pending before the Patent Office:

- (i) the amendment made in respect of the description, patent claim(s) or drawings attached to the request of the patent application (excluding a foreign language file application under Article 36bis(36-2)(2) of the Patent Act, a foreign language patent application under Article 184quater(184-4)(1) of the said Act and an international application made in a foreign language which is recognized as a patent application in accordance with Article 184vicies(184-20)(4) of the said Act) does not comply with the requirements prescribed in Article 17bis(17-2)(3) of the Patent Act.
- (ii) the invention claimed in the patent application is unpatentable in accordance with the provision of Article 29, 29bis(29-2) or 39(1) to (4) of the Patent Act.
- (iii) the patent application does not comply with the requirements prescribed in Article 36(4) or (6)(excluding (iv)) of the Patent Act.
- (iv) where the patent application is a foreign language file application under Article 36bis(36-2)(2) of the Patent Act, the features disclosed in the description, patent claim(s) or the drawings attached to the request of the patent application do not remain within the scope of the matters stated in its foreign language paper under Article 36bis(36-2)(1) of the said Act." (Regulations under the Patent Act Article 13-2(1))
- "Any person may offer any information to the Commissioner of the Patent Office to the effect that the patent falls under any of the following items by submitting a publication, a copy of description, claim(s) for patent or utility model registration, or drawings or other documents attached to a request of an application for patent or utility model registration:
- (i) where the patent has been effected in respect of a patent application with the amendment which does not comply with Article 17bis (17-2)(3) of the Patent Act (excluding the foreign language file application under Article 36bis(36-2)(2) of the Patent Act, the foreign language patent application under Article 184quater(184-4)(1) of the said Act and an international application made in a foreign language which is recognized as a patent application under Article 184vicies(184-20)(4) of the said Act):
- (ii) where the patent has been effected contrary to Article 29, 29bis(29-2) or 39(1) to (4) of the Patent Act;
- (iii) where the patent has been effected in respect of a patent application which does not comply with Article 36(4)(i) or (6)(excluding (iv)) of the Patent Act;
- (iv) the features disclosed in the description, patent claim(s) or drawings attached to the request of the foreign language file application under Article 36bis(36-2)(2) of the Patent Act do not remain within the scope of the features disclosed in the foreign language document under Article 36bis(36-2)(1) of the said Act;
- (v) where the correction to the description, patent claim(s) or drawings attached to the request of the patent application has been effected contrary to the proviso to Article 126(1), (5) to (7) of the Patent Act (including its application under Article 134bis(134-2)(9) of the said Act) or

	the proviso to Article 134bis(134-2) of the said Act." (Regulations under the Patent Act Article 13-3(1))	
	KIPO	
PCT	N.A.	
Legal basis	Patent Act Article 63bis Guidelines Part V, Chapter 3, 6.4(7)	
Category	Category III	
In practice	Patent Act Article 63bis Provision of Information on Patent Applications	
	After a patent application has been filed, any person may provide the Commissioner of the KIPO with information and evidence of a ground for rejecting the patent application. However, this provision may not apply if the requirements stipulated in Articles 42(8) and 45 are not satisfied.	
	Guidelines	
	6.4(7) An examiner may use evidential documents submitted for information for his/her examination according to Article 63 bis.	
	Where it is certain that evidential documents are periodicals or their copies, or copies of description or drawing(s) having been published before the application date, an examiner may use them as prior art without additional examination of evidence.	
	Where evidential documents submitted are documents other than periodicals or their copies, or copies of description or drawing(s) having been published before the application date, an examiner may use them as prior art only if an examiner is confident of the fact to be verified without examination of evidence. However, where an applicant argues the existence of the evidential fact in the written argument, an examiner shall not admit the fact unless he/she finds its admission justifiable.	
	(Explanation) The Patent Act has no provisions regarding an examination of evidence during examination. Therefore, where the evidential documents submitted for reference information are documents other than periodicals or their copies, or copies of description or drawing(s) having been published but the fact to be verified cannot be confirmed with confidence, an examiner shall not decide to reject the application based on this evidence.	
	(Note) Except for an application which has been invalidated, withdrawn, or abandoned, or whose patent grant or rejection has been decided by an examiner, anyone can provide relevant evidence to an examiner to argue that an application of the claimed invention shall not be patented. Information provision can be made by any person or corporation, except for an incompetent minor who shall appoint a legal representative for such action. In the meanwhile, an examiner may refer documents or information provided by a group or association instead of invalidating or returning them. (Guidelines Part V, Chapter 3, 6.4(7))	
SIPO		
PCT	N.A.	
Legal basis	Rule 48	
Category	Category II	

In practice	Any person may, from the date of publication of an application for a patent for invention till the date of announcing the grant of the patent right, submit to the patent administration department under the State Council his observations, with reasons therefore, on the application which is not in conformity with the provisions of the Patent Law. (Rule 48)
	The observations submitted by anyone to the Patent Office on an invention application not in conformity with the provisions of the Patent Law shall be included in the application file, and the examiner shall take them into consideration in the course of substantive examination. It is not necessary for the examiner to consider the observations submitted after the issuance of Notification to Grant Patent Right. The handling of the observation submitted by the public does not need to be notified to the public concerned. (Guidelines Part II Chapter 8 Section 4.9)
	USPTO
PCT	N.A.
Legal basis	35 U.S.C. 122; 37 CFR 1.99, 1.291, 1.292
Category	Category III
In practice	Third parties may submit patents or publications, with no further comment or explanation, for consideration in a pending published application during a limited (2 month) period after publication of an application in compliance with 37 CFR 1.99.
	The only forms of third party protest or pre-issuance opposition to a pending application (permitted by the rules of practice) are protests under 37 CFR 1.291 (see MPEP 1901) and public use proceedings under 37 CFR 1.292 (see MPEP 720), which must be filed prior to publication of the application (unless applicant otherwise consents).

III. PRIOR ART

E. "Secret prior art" and its relevance for the assessment of novelty

	Based on the Trilateral Comparative Studies
	EPO
PCT	N.A.
Legal basis	Conflicting European applications: Art 54(3) EPC Conflicting PCT applications: Art 153, Rule 165 EPC Conflicting national applications: Rule 138 EPC
Category	Category III
In practice	Under the European patent system, "secret prior art" is referred to as "conflicting applications".
	Conflict with other European applications (GL G-IV, 5.)
	The state of the art also comprises the content of other European applications filed or validly claiming a priority date earlier than – but published under Art. 93 on or after – the date of filing or valid date of priority of the application being examined. Such earlier applications are part of the state of the art only when considering novelty and not when considering inventive step.
	The "date of filing" referred to in Art. 54(2) and (3) is thus to be interpreted as meaning the date of priority in appropriate cases (see GL F-VI, 1.2). By the "content" of a European application is meant the whole disclosure, i.e. the description, drawings and claims, including: (i) any matter explicitly disclaimed (with the exception of disclaimers for unworkable embodiments); (ii) any matter for which an allowable reference (see GL F-III, 8, penultimate paragraph) to other documents is made; and (iii) prior art insofar as explicitly described.
	However, the "content" does not include any priority document (the purpose of such document being merely to determine to what extent the priority date is valid for the disclosure of the European application (see GL F-VI, 1.2) nor, in view of Art. 85, the abstract (see GL F-II, 2).
	In case of an earlier application filed in a non-official language as permitted by Art. 14(2), it is the content of the original text, and not the content of the translation as published, which is relevant for the purposes of Art. 54(3).
	Whether a published European application can be a conflicting application under Art. 54(3) is determined firstly by its filing date and the date of its publication; the former must be before the filing or valid priority date of the application under examination, the latter must be on or after that date. If the published European application claims priority, the priority date replaces the filing date (Art. 89) for that subject-matter in the application which corresponds to the priority application. If a priority claim was abandoned or otherwise lost with effect from a date prior to publication, the filing date and not the priority date is relevant, irrespective of whether or not the priority claim might have conferred a valid priority right. Further it is required that the conflicting application was still pending at its

publication date (see J 5/81, OJ 4/1982, 155). If the application was withdrawn or otherwise lost before the date of publication, but published because the preparations for publication had been completed, the publication has no effect under Art. 54(3). Changes taking effect after the date of publication (e.g. withdrawal of a designation or withdrawal of the priority claim or loss of the priority right for other reasons) do not affect the application of Art. 54(3).

Conflict with other Euro-PCT applications (GL G-IV, 5.2)

The above principles also apply to PCT applications designating EP, but with an important difference. Art. 153, in conjunction with Rule 165, makes it clear that a PCT application is not included in the state of the art for the purposes of Art. 54(3) unless the PCT applicant has paid the required filing fee under Rule 159(1)(c) and has supplied the PCT application to the EPO in English, French or German (this means that a translation is required where the PCT application was published in Japanese, Chinese, Spanish, Russian, Korean, Portuguese or Arabic).

Conflict with national rights in an EPO Contracting State (GL G-IV, 6)

Where a national right of an earlier date exists in a Contracting State designated in the application, there are several possibilities of amendment open to the applicant. First, he may simply withdraw that designation from his application for the Contracting State of the national right of earlier date. Second, for such State, he may file claims which are different from the claims for the other designated States. Third, the applicant can limit his existing set of claims in such a manner that the national right of earlier date is no longer relevant.

Amendment of the application to take account of prior national rights should be neither required nor suggested (see also H-III, 4.5). However, if the claims have been amended, then amendment of the description and drawings should be required if necessary to avoid confusion.

JPO	
PCT	N.A.
Legal basis	Patent Act Article 29-2
Category	Category III
In practice	"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." (Patent Act Article 29-2)	
	KIPO	
PCT	N.A.	
Legal basis	Patent Act Article 29 (3) (4) Guidelines Part III, Chapter 4	
Category	Category III	
In practice	Patent Act Article 29 (3)(4) (Enlarged Concept of Novelty)	
	(3) Where a patent application is filed for an invention that is identical to an invention or device described in the description or drawing(s) originally attached to another application for a patent or a utility model registration that has been filed before the filing date of the patent application and laid open or published after the filing of the patent application, the patent shall not be granted for such an invention. However, this shall not apply where the inventor of the concerned patent application and the inventor of the another application for a patent or utility model registration are the same person, or the applicant of the concerned patent application and the applicant of the another application for a patent or utility model registration are the same person at the time of filing of the concerned patent application.	
	(4) where the another application for a patent or utility model registration falls under one of the following subparagraphs, "laid open" of paragraph (3) reads "laid open or published for an international publication under Article 21 of the Patent Cooperation Treaty", and "an invention or device described in the description or drawing(s) originally attached to the written application" reads, in case the international application was filed in Korean, "an invention or device described in the description, claim(s) or drawing(s) of the international application as of the international filing date" and, in case the international application was filed in a foreign language, "an invention or device described in the description, claim(s) or drawing(s) of both the international application as of the international filing date and its translation":	
	(i) the another application for a patent is an international application that is deemed to be a patent application according to Article 199(1) (including an international application that is deemed to be a patent application according to Article 214(4)); and	
	(ii) the another application for a utility model registration is an international application that is deemed to be a utility model registration application according to Article 34(1) of the Utility Model Act (including an international application that is deemed to be a utility model registration application according to Article 40(4) of the Utility Model Act).	
SIPO		
PCT	N.A.	
Legal basis	Art 22(2)	
Category	Category III	
In practice	Novelty means that the invention or utility model concerned is not an existing technology; no patent application is filed by any unit or individual	

for any identical invention or utility model with the patent administration department under the State Council before the date of application for patent right, and no identical invention or utility model is recorded in the patent application documents or the patent documentations which are published or announced after the date of application. (Paragraph 2 Art 22)

In accordance with Article 22.2, when novelty of an invention or utility model application is examined, the applications relating to the identical invention or utility model which have been filed by any entity or individual prior to the filing date of the application being examined with the Patent Office and published or announced on or after said filing date, will take away the novelty of the application being examined. During examination of novelty, for the sake of convenience, this kind of application that are prejudicial to the novelty of the application being examined are called "conflicting applications".

When conducting a search to determine whether there exists a conflicting application, the examiner shall note that not only the claims but also the description (including drawings) of the earlier patent or patent application shall be consulted, that is, the whole contents thereof shall be taken into account.

A conflicting application can also be an international application entering the Chinese national phase that was filed previously by any entity or individual, published or announced by the Patent Office on or after the filing date of the application being examined, and is for an identical invention or utility model.

It should be noted that conflicting applications refer to the applications for the identical invention or utility model filed previously before but not on the filing date of the application being examined. (Guidelines Part II Chapter 3 Section 2.2)

USPTO	
PCT	N.A.
Legal basis	35 U.S.C. 102
Category	Category III
In practice	Under 35 U.S.C. 102(e), the effective U.S. filing date of a U.S. patent or U.S. patent application publication may be used as the prior art date, provided that the subject matter relied upon is disclosed in the earlier filed U.S. application in the manner provided by the first paragraph of 35 U.S.C. 112. Furthermore, the filing date of an international application is a U.S. filing date for prior art purposes under 35 U.S.C. 102(e) if the international application (1) has a filing date on or after November 29, 2000; (2) designated the United States; and
	(3) published under PCT Article 21(2) in English. See MPEP 2136.03. Note that an application claiming the benefit of an earlier US provisional application is to be treated as if filed on the provisional filing date, so long as the invention is disclosed in the earlier filed provisional application in the manner provided by the first paragraph of 35 U.S.C. 112.
	Thus under 35 U.S.C. 102(e), a U.S. patent or publication that published after an application's effective filing date is available as prior art if the patent or publication has an effective filing date earlier than the application. Such prior art can be considered in assessing novelty as

well as nonobviousness. See MPEP 2136.03.

If a foreign patent grants an exclusionary right (is enforceable), but it is secret or private, it is not available as prior art for purposes of determining novelty (or nonobviousness). The foreign patent must be at least minimally available to the public, e.g., laid open for public inspection or disseminated in printed form. See MPEP 2126 and 2126.01.

III. PRIOR ART

F. Issues relating to double patenting and its prevention	
Based on the Trilateral Comparative Studies	
	EPO
PCT	N.A.
Legal basis	N.A.
Category	N.A.
In practice	Double patenting in general (GL G-IV, 5.4)
	The EPC does not deal explicitly with the case of co-pending European applications of the same effective date filed by the same applicant. However, it is an accepted principle in most patent systems that two patents cannot be granted to the same applicant for one invention. The Enlarged Board of Appeal has accepted obiter dictum that the principle of the prohibition on double patenting is based on the notion that an applicant has no legitimate interest in proceedings leading to the grant of a second patent for the same subject-matter if he already possesses one granted patent for the same subject-matter (see G 1/05, OJ 2008/5, 271 and G 1/06, OJ 2008/05, 307). It is permissible to allow an applicant to proceed with two applications having the same description where the claims are quite distinct in scope and directed to different inventions.
	Should two applications of the same effective date be received from two different applicants, each must be allowed to proceed as though the other did not exist.
	Potential double patenting in case of divisional applications
	In the rare case in which there are two or more European applications from the same applicant definitively designating the same State or States (by confirming the designation through payment of the relevant designation fees) and the claims of those applications have the same filing or priority date and relate to the same invention (in the typical case: a parent application and an divisional application), the applicant should be told that he must either amend one or more of the applications in such a manner that they no longer claim the same invention, or choose which one of those applications he wishes to proceed to grant (GL G-IV, 5.4).
	Thus, the parent and divisional applications may not claim the same subject-matter. This means not only that they must not contain claims of substantially identical scope, but also that one application must not claim the subject-matter claimed in the other, even in different words. The difference between the claimed subject-matter of the two applications must be clearly distinguishable. As a general rule, however, one application may claim its own subject-matter in combination with that of the other application. In other words, if the parent and divisional applications claim separate and distinct elements A and B respectively which function in combination, one of the two applications may also include a claim for A plus B (GL C-IX, 1.6).
JPO	
PCT	N.A.
Legal basis	Patent Act Article 39

Category	Category III
In practice	"(1)Where two or more patent applications claiming identical inventions have been filed on different dates, only the applicant who filed the patent application on the earliest date shall be entitled to obtain a patent for the invention claimed.
	(2)Where two or more patent applications claiming identical inventions have been filed on the same date, only one applicant, who was selected by consultations between the applicants who filed the said applications, shall be entitled to obtain a patent for the invention claimed. Where no agreement is reached by consultations or consultations are unable to be held, none of the applicants shall be entitled to obtain a patent for the invention claimed.
	(3)Where an invention and a device claimed in applications for a patent and a utility model registration are identical and the applications for a patent and a utility model registration are filed on different dates, the applicant for a patent may obtain a patent for the invention claimed therein, only if the application for a patent is filed prior to the application for a utility model registration.
	(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 46-2(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)The Commissioner of the Patent Office shall, in the case of paragraph (2) or (4), order the applicant to hold consultations as specified under paragraph (2) or (4) and to report the result thereof, designating an adequate time limit.
	(7)Where no report under the preceding paragraph is submitted within the time limited designated under the said paragraph, the Commissioner of the Patent Office may deem that no agreement under paragraph (2) or (4) has been reached."
	(Patent Act Article 39)

KIPO	
PCT	N.A.
Legal basis	Patent Act Article 36 Guidelines Part III, Chapter 5
Category	Category III
In practice	Patent Act Article 36 First-to-File Rule (1) Where two or more patent applications claiming identical inventions are filed on different dates, only the applicant of the patent application with the earlier filing date may obtain a patent for the invention. (2) Where two or more patent applications claiming identical inventions are filed on the same date, only the applicant agreed upon by all the applicants after consultation may obtain a patent for the invention. If no agreement is reached or no consultation is possible, none of the applicants may obtain a patent for the invention. (3) Where an invention of a patent application is the same as a device of a utility model registration application and the applications are filed on different dates, paragraph (1) applies mutatis mutandis. In addition, where the applications are filed on the same date, paragraph (2) applies mutatis mutandis. (4) Where a patent application or a utility model registration application is
	invalidated, withdrawn, or abandoned, or where a decision of rejection or a trial decision to reject the application has become final and binding, the patent application or utility model registration application is deemed to have never been filed in the application of paragraphs (1) to (3). However, this provision shall not apply where a decision of rejection or a trial decision to reject the patent application or the utility model registration application has become final and binding in accordance with the latter sentence of paragraph (2) (including cases in which the provision applies mutatis mutandis under paragraph (3)). (5) When paragraphs (1) to (3) apply, a patent application or utility model
	registration application filed by a person who is not the inventor, creator or successor in title to the right to obtain a patent or utility model registration is deemed never to have been filed.
	(6) When paragraph (2) applies, the Commissioner of the KIPO shall order the applicants to report on the results of the consultation within a designated period. If the report is not submitted to the Commissioner of the KIPO within the designated period, the applicants are deemed not to have reached an agreement prescribed in paragraph (2).
	SIPO
PCT	N.A.
Legal basis	Art 9, Rule 41(1) and (2)
Category	Category III
In practice	Only one patent can be granted for the same invention. However, where the same applicant applies for a utility model patent and an invention patent with regard to the same invention on the same day, if the utility model patent acquired earlier is not terminated yet and the applicant declares his waiver of the same, the invention patent may be granted.

If two or more applicants apply for a patent for the same invention separately, the patent right shall be granted to the first applicant. (Art 9) Two or more applicants who respectively file, on the same day(means the date of filing or the priority date where priority is claimed), applications for patent for the identical invention-creation, shall, after receipt of a notification from the patent administration department under the State Council, hold consultations among themselves to decide the person or persons who shall be entitled to file the application. Where an applicant files on the same day (means the date of filing) applications for both a patent for utility model and a patent for invention for the identical invention-creation, he or it shall state respectively upon filing the application that another patent application for the identical invention-creation has been filed by him or it. If the applicant fails to do so, the issue shall be handled according to the provisions of Article 9, paragraph one of the Patent Law, only one patent right shall be granted for any identical invention-creation. (Paragraph 1 and 2 of Rule 41) Article 9 establishes the principle of non-double-patenting. The purpose of preventing duplicate patent rights being granted to an identical invention-creation is to prevent interference between patent rights. As for invention or utility model, "identical invention-creation" referred to in Article 9 and Rule 41 means claims which exist in two or more applications or patents, and have the same extent of patent protection. (Guidelines Part II Chapter 3 Section 6) **USPTO** N.A. PCT Legal basis 35 U.S.C. 101, Judicial doctrine Category Categories III and IV There are two types of double patenting rejections. One is the "same In practice invention" type double patenting rejection based on 35 U.S.C. 101 which states in the singular that an inventor "may obtain a patent." The second is the "nonstatutory-type" double patenting rejection based on a judicially created doctrine. A nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy and which is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinguishing from claims in a first patent. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 46 USPQ2d 1226 (Fed. Cir. 1998). See MPEP 804 for a discussion of nonstatutory double patenting rejection. If the copending applications differ by at least one inventor and at least one of the application is not patentable over the other, a provisional rejection under 35 U.S.C. 102(e) or 103 may be made when appropriate. See MPEP 2127, subsection IV., 706.02(f)(2), 706.02(k), 706.02(l)(1), and 706.02(l)(3). If an application that has not been published has an assignee or inventor in common with the application being examined, a rejection will be proper in some circumstances. For instance, when the claims between the two

applications are not independent or distinct, a provisional nonstatutory double patenting rejection may be made.

IV. NOVE	IV. NOVELTY	
A. Prior art document enabling only in the light of extrinsic knowledge available subsequently		
	PCT reservation (PCT/GL/IPSE Appendix A12.02)	
	EPO	
PCT	PCT/GL/IPSE Appendix A12.02, Alternative A12.02[1]	
Legal basis	Art 54 EPC	
Category	Category III	
In practice	Extrinsic knowledge must be available at the date of publication of the prior art document (GL G-VI, 3 and GL G-VI, 4)	
	Subject-matter can only be regarded as having been made available to the public, and therefore as comprised in the state of the art pursuant to Art. 54(1), if the information given to the skilled person is sufficient to enable him, at the relevant date, to practise the technical teaching which is the subject of the disclosure, taking into account also the general knowledge at that time in the field to be expected of him (see T 26/85, OJ 1-2/1990, 22, T 206/83, OJ 1/1987, 5 and T 491/99, not published in OJ).	
	Similarly, it should be noted that a chemical compound, the name or formula of which is mentioned in a prior-art document, is not thereby considered as known, unless the information in the document, together, where appropriate, with knowledge generally available on the relevant date of the document, enables it to be prepared and separated or, for instance in the case of a product of nature, only to be separated.	
	By "relevant" date is meant the publication date in the case of a previously published document and the date of filing (or priority date, where appropriate) in the case of a document according to Art. 54(3), e.g., a conflicting application (GL G-IV, 5.1).	
	JPO	
PCT	PCT/GL/IPSE Appendix A12.02, Alternative A12.02[2].1-2	
Legal basis	Guidelines Part II, Chapter 2, 1.5.3 (3)	
Category	Category I	
In practice	""Inventions described in publications" are identified based on "the descriptions in the publications." The descriptions are able to be interpreted based on the common general knowledge, and any facts that a person skilled in the art could derive from the description in the publications based on the common general knowledge as of the filing date, or equivalents to such descriptions in the publications, could also be a basis for identifying the inventions described in publications. In other words, "inventions described in publications" means inventions that a person skilled in the art is able to understand based on the descriptions in publications or equivalents to such descriptions. Accordingly, inventions that a person skilled in the art is not able to understand based on the descriptions in the publications or equivalents to such descriptions are not included in either "inventions described in publications" or "cited inventions." For example, when one "description in a publication" is part of the alternatives in the claims described in the Markush form, it is	

	necessary to check if person skilled in the art is able to understand an invention that provides either one of the alternatives as a requisite to define the invention." (Guidelines Part II, Chapter 2, 1.5.3 (3))
	KIPO
PCT	PCT/GL/IPSE Appendix A12.02, Alternative A12.02[2].1,2
Legal basis	Case No. 2004hu2307 (Supreme Court, 24 Mar. 2006) Guidelines Part III, Chapter 2, 3.3.4 Guidelines Part III, Chapter 3, 5.2(5)
Category	Category I, Category IV
In practice	Guidelines
	"An invention described in a publication" means an invention identified by the matters, which are directly and clearly described or considered to be essentially described, though not explicitly, in a publication. Here "Matters essentially described, though not explicitly, in a publication" includes those directly derivable from the matters described, taking the common general knowledge into consideration. (Guidelines Part III, Chapter 2, 3.3.4)
	Even though the prior art constitutes an incomplete expression or there is a defect in some of the prior art, it can be cited in assessing the inventive step, when the person skilled in the art can readily understand the technical features of the claimed invention based on common technical knowledge or empirical rules. (Guidelines Part III, Chapter 3, 5.2(5)) (Example 1)
	The claimed invention relates to a pharmaceutical compound to treat neuro-degenerative disorders by using an estrogen compound alone. A person skilled in the art can easily recognize from the cited invention that sexual hormones such as estrogen are effective for curing neuro-derogative disorders. And if this fact is not contrary to the technical common sense at the time of filing the application, the cited invention can be used as a prior art to assess the inventive step even if some defects exist in the description of the cited invention due to insufficiently disclosed pharmaceutical effects and real experiments. (Case No. 2004hu2307 (Supreme Court, 24 Mar. 2006))
	SIPO
PCT	PCT/GL/IPSE Appendix A12.02, Alternative A12.02[2].1-2
Legal basis	Art 22(2)
Category	Category III
In practice	When determining novelty, the examiner shall compare each claim of the application separately with the relevant technical contents disclosed in each item of the prior art or each previously filed and later published or announced invention or utility model, rather than with a combination of the contents disclosed in several items of the prior art or several previously filed and later published or announced applications or with a combination of several technical solutions disclosed in one reference document. (Guidelines Part II Chapter 3 Section 3.1)
USPTO	
PCT	The ISA/IPEA/US considers knowledge that became available after the
	1

	publication date of the prior document but before the relevant date of the claim being searched or examined to determine whether the prior document provided a sufficient disclosure of every element or step of the claimed invention. See PCT/GL/ISPE, Appendix A12.02, Alternative A12.02[2].
Legal basis	In re Donohue, 766 F.2d 531, 226 USPQ 619 (Fed. Cir. 1985)
Category	Category IV
In practice	A reference contains an "enabling disclosure" if the public was in possession of the claimed invention before the date of invention. Therefore, knowledge that became available after the publication date of the prior document but before the relevant date of the claim being searched or examined is considered when determining whether the prior document provided a sufficient disclosure of every element or step of the claimed invention.

IV. NOVELTY

B. Established tests or practical guidance for the assessment of novelty

B. Established tests or practical guidance for the assessment of novelty	
	Based on the Trilateral Comparative Studies
	EPO
PCT	N.A.
Legal basis	Art 54 EPC
Category	Categories III, IV
In practice	Assessment of novelty (GL G-VI)
	State of the art to be considered (GL G-VI, 1)
	An invention is considered to be new if it does not form part of the state of the art. It should be noted that in considering novelty, it is not permissible to combine separate items of prior art together. It is also not permissible to combine separate items belonging to different embodiments described in one and the same document, unless such combination has specifically been suggested (T 305/87, OJ 8/1991, 429).
	However, if a document (the "primary" document) refers explicitly to another document as providing more detailed information on certain features, the teaching of the latter is to be regarded as incorporated into the document containing the reference, if the document referred to was available to the public on the publication date of the document containing the reference (see T 153/85, OJ 1-2/1988, 1). The relevant date for novelty purposes, however, is always the date of the primary document.
	Furthermore, any matter explicitly disclaimed (with the exception of disclaimers which exclude unworkable embodiments) and prior art acknowledged in a document, insofar as explicitly described therein, are to be regarded as incorporated in the document. It is further permissible to use a dictionary or similar document of reference in order to interpret a special term used in a document.
	Novelty and implicit disclosures in a prior art document (GL G-VI, 2 and GL G-VI, 6)
	A document takes away the novelty of any claimed subject-matter derivable directly and unambiguously from that document including any features implicit to a person skilled in the art in what is expressly mentioned in the document, e.g. a disclosure of the use of rubber in circumstances where clearly its elastic properties are used even if this is not explicitly stated takes away the novelty of the use of an elastic material (GL G-VI, 2).
	It may also happen that, in carrying out the teaching of the prior document, the skilled person would inevitably arrive at a result falling within the terms of the claim. An objection of lack of novelty of this kind should be raised by the examiner only where there can be no reasonable doubt as to the practical effect of the prior teaching. Situations of this kind may also occur when the claims define the invention, or a feature thereof, by parameters. It may happen that in relevant prior art a different parameter, or no parameter at all, is mentioned. If the known and the claimed products are identical in all other respects (which is to be expected if, for example, the starting products and the manufacturing

processes are identical), then in the first place an objection of lack of novelty arises. If the applicant is able to show, e.g. by appropriate comparison tests, that differences do exist with respect to the parameters, it is questionable whether the application discloses all the features essential to manufacture products having the parameters specified in the claims (GL G-VI, 6). Novelty and generic disclosure / specific examples in a prior document

(GL G-VI, 5)

In considering novelty, it should be borne in mind that a generic disclosure does not usually take away the novelty of any specific example falling within the terms of that disclosure, but that a specific disclosure does take away the novelty of a generic claim embracing that disclosure, e.g. a disclosure of copper takes away the novelty of metal as a generic concept, but not the novelty of any metal other than copper, and one of rivets takes away the novelty of fastening means as a generic concept, but not the novelty of any fastening other than rivets.

Novelty and well-known equivalents (GL G-VI, 2)

The limitation to subject-matter "derivable directly and unambiguously" from the document is important. Thus, when considering novelty, it is not correct to interpret the teaching of a document as embracing well-known equivalents which are not disclosed in the documents; this is a matter of obviousness.

For assessment of novelty of selection inventions, see GL G-VI, 8.

JPO	
PCT	N.A.
Legal basis	Guidelines Part II, Chapter 2, 1.5.4, 1.5.5
Category	Category I
In practice	Comparing the Claimed Inventions and Cited Inventions "(1) The claimed inventions and cited inventions are compared by identifying corresponding and differing points between matters used to specify the claimed invention and matters required to express the cited inventions by words (hereinafter called "matters used to specify the cited inventions").

(2) In addition to the comparison in said (1), the claimed inventions are identified by comparing the more specific concepts of the claimed inventions to the cited invention to find the corresponding and differing points between them.

Some more specific concepts of the claimed inventions include the detailed descriptions of the invention and the descriptions in drawings as modes carrying out the claimed inventions, but the claimed inventions and cited inventions are also compared based on other modes as far as these other modes are included in the more specific concepts of the claimed inventions.

This comparison is efficient for determining the novelty of the claimed inventions, such as those containing descriptions that define products by the functions or characteristics or that provide numerical ranges.

(3) Instead of the approaches in said (1) and 1.5.3(3), matters in cited publications and matters used to specify the inventions in the claimed inventions are compared to define the corresponding and differing points by interpreting these matters based on the common general knowledge as of the filing. However, the results after this comparison should not differ from those from the approaches in said (1) and 1.5.3(3).

(4) Combinations of two or more independent cited inventions should not be compared to the claimed inventions."

(Guidelines Part II, Chapter 2, Section 1.5.4)

Determining the Novelty of the Claimed Inventions

- "(1) When the difference between the matters used to specify the invention in the claimed inventions themselves and those used to specify the cited inventions is not found after the comparison, the claimed inventions are not novel. Any difference between these two matters involves the novelty of the claimed inventions.
- (2) The claimed inventions with formal or substantial alternatives (Note 1) for defining an invention for which a patent is sought are not considered to be novel when any difference between the claimed inventions, in which one of the alternatives is presumed to be an aspect to define the invention, and the cited inventions is not found (Note 2).
- (Note 1) The term "formal alternatives" means descriptions in a style that makes it apparent that the claims are alternatives, such as claims described in the Markush form or multiple dependent form claims citing other claims alternatively. The term "substantial alternatives" means descriptions provided to substantially include more specific aspects of a limited number of arts using comprehensive expressions. The "substantial alternatives" are determined by the claims as well as specifications, drawings, and the common general knowledge as of the filing, such as claims providing the description "alkyl groups with C1 -C10 (the number of carbons)," which is a comprehensive description including methyl groups, ethyl groups, and other groups. On the other hand, the term "thermoplastic resin," for example, is not a comprehensive expression that covers specific concepts of the "thermoplastic resin" unless it should be interpreted exactly based on the specifications, drawings, and common general knowledge as of the filing, such as definitions described in the detailed description of the invention, and it should be noted that this term is not included in the substantial alternatives. Accordingly, the concept "thermoplastic resin" includes an unspecific number of specific concepts, such as polyethylene or polypropylene, and it is understood to be a generic concept specified by the characteristic shared by the specific concepts, such as "thermoplasticity" for the "thermoplastic resin."
- (Note 2) This approach does not relate to the timing when prior art searches are finished. For details, see "Part IX How to Proceed the Examinations."
- (3) Claims defining products by functions or characteristics
- ① Claims providing descriptions for defining products by functions or characteristics, which are included in the following (i) or (ii), may be difficult to compare to the cited inventions. For these claims, the examiners shall send a notice of the reasons for refusal for the lack of novelty when they have a reasonable doubt that the products in the claimed inventions and cited inventions are prima facie identical, without comparison of the products between the claimed inventions and the cited inventions for finding the exact corresponding and differing points, unless differences are found in other sections. The reason for refusal is

cancelled when the applicants argue against the notice of reasons for refusal or when they clarify their refused applications by submitting written opinions or certificates of experimental results sufficiently enough to deny the conviction of the examiners to the extent that truth or falsity becomes unclear. The novelty of the claimed invention is determined to be refused when the applicants' arguments or clarifications are abstract or general or the examiners do not change their convictions.

However, this approach should not be applied to the inventions, whose matters used to specify the cited invention are included in the following (i) or (ii), as cited inventions:

- (i) Inventions not included in any inventions whose functions or characteristics are common, used among a person skilled in the art commonly, or relation to the arts commonly used is understood by a person skilled in the art, even though they are not commonly used; or
- (ii) Inventions included in either of the inventions whose functions or characteristics are common, used among a person skilled in the art commonly, or relation to the arts commonly used is understood by a person skilled in the art, even though they are not commonly used, but those inventions whose functions or characteristics are combined and included in the inventions defined by said (i) as a whole.

(Note) Common functions or characteristics are defined by JIS (Japanese Industrial Standards), IOS-standards (International Organization for Standardization-standards) or IEC-standards (International Electrotechnical Commission-standards), or determined quantitatively by testing or measuring methods provided in those standards. Functions or characteristics commonly used among person skilled in the art is those commonly used by a person skilled in the art with the definitions or testing or measuring methods understood by a person skilled in the art.

- ② The following are examples in which the examiners should have a reasonable doubt that the cited inventions are prima facie identical:
- The functions or characteristics of the claimed inventions are found to be convertible to other functions or characteristics specified by other definitions or by testing or measuring processes, and it is found that the products of the cited inventions are considered to be identical to those of the claimed inventions from the results of the conversion:
- The claimed inventions and cited inventions, which are defined by identical or similar functions or characteristics and have different measurement conditions or evaluation processes with a constant relationship, where the functions or characteristics of the cited inventions are highly likely to be included in those of the claimed inventions when the functions or characteristics of the cited inventions are measured or evaluated by the conditions of measurement or processes of evaluation of the claimed inventions;
- After the filing of the claimed inventions for products, structures of the products that are identical to those of the claimed inventions are found and the products have been publicly known before the filing;
- The cited inventions are found to be identical or similar to the arts described in the working examples in the specifications or drawings of the claimed inventions, such as cited inventions providing an identical manufacturing process and a similar starting material to those described in the working examples, or cited inventions providing a similar manufacturing process and an identical starting material to those

described in the working examples; and

- The cited inventions and claimed inventions have common matters used to specify the claimed inventions other than sections describing the functions or characteristics and the cited inventions provide problems to be solved or advantageous effects of the inventions similar or identical to those in the matters used to specify the inventions describing the functions or characteristics, where the functions or characteristics of the cited inventions are highly likely to be included in those of the claimed inventions.

In addition, the novelty of the claimed inventions shall be determined through regular approaches rather than this special approach when possible.

- (4) Claims defining the products by manufacturing processes
- ① It is sometimes extremely difficult to determine the structures of products per se provided in the claims defining the products by manufacturing processes. For these claims, as mentioned in the above (3), the examiners shall send a notice of the reasons for refusal for the lack of novelty when they have a reasonable doubt that products in the claimed inventions and cited inventions are identical, without comparing products of the claimed inventions to those of the cited inventions to find exact corresponding and differing points, unless differences are found in other sections.

However, this approach should not be applied to the inventions, whose matters used to specify the cited invention define the products by the manufacturing processes, as cited inventions:

- ② The following are examples in which the examiners should have a reasonable doubt:
- The cited inventions are found to provide products with similar starting materials to and manufactured by the same manufacturing process as those of the claimed inventions;
- The cited inventions are found to provide products that have the same starting material as and manufactured by the similar manufacturing process to those of the claimed inventions;
- After the filing of the claimed inventions for products, structures of the products that are identical to those of the claimed inventions and the products have been publicly known before the filing; and
- The cited inventions are found to be identical or similar to the arts described in the working examples in the specifications or the drawings of the claimed inventions.

In addition, the novelty of the inventions shall be determined through regular approaches rather than these special approaches when possible."

(Guidelines Part II, Chapter 2, 1.5.5)

KIPO	
PCT	N.A.
Legal basis	Guidelines Part III, Chapter 2, 4.
Category	Category I
In practice	Guidelines

4. How to assess novelty

- (1) The examiner shall assess whether or not a claimed invention is novel by judging whether the claimed invention falls within the scope of the inventions set forth in the provision of Article 29 paragraph (1) subparagraph (i) to (ii).
- (2) The claims must describe the subject matter for which protection is sought. (Article 42 paragraph (4)) Thus, the assessment of novelty on an invention is based on the subject matters described in the claims.
- (3) When there are two or more claims in an application, assessment over novelty should be made for each claim.

4.1 Specifying the invention disclosed in claims

4.1.1 General principle of specifying inventions

- (1) When the claim statements are clear, specifying the claimed invention should be made as stated in the claim. The terminology described in the claims are interpreted as having a general meaning and scope generally accepted in the technical field with the exception of the case wherein the terminology has a specific meaning which is explicitly defined in the description. The terminology should be interpreted in an objective and reasonable way by taking into consideration of its technical meaning, taken together with the common general knowledge at the time of filing, based on the general meaning of the terminology.
- (2) In the case where the description of claims is clearly understood, an examiner should avoid limited interpretation just by referencing detailed description of the invention or drawings in finding technical features of invention. In the case where subject matters are not described in the claims but in the detailed description of invention or drawings, an examiner should specify the invention as not being described in the claims. On the contrary, in the case where the subject matters are described in the claims, an examiner should consider the subject matters in claims when specifying an invention. It is possible to consider the detailed description of invention or drawings in understanding the subject matters disclosed in the claims but it is noted that an examiner should not specify the claims by applying subject matters not described in the claims. For example, where the scope of the subject matters described in the claims are broader than embodiments in the detailed description, novelty and inventive step should not be assessed by interpreting the specific embodiments described in the detailed description as the claimed invention.
- (3) In the case where an applicant specifically defines a term in the detailed description to the extent that it is clearly understood that the term is different from any general meaning in order to specify the term as having a specific meaning other than general meaning in the technical field to which an invention pertains, the term is interpreted as a term with the specific meaning defined in the detailed description. However, only the description of a specific concept included in a generic concept of the term described in the claims in the detailed description and drawings does not fall under the specific definition aforementioned.
- (4) In the case where a term disclosed in the claims is obscure and unclear, an examiner should examine whether the subject matter of invention can be comprehended in view of the detailed description, drawings, and common general knowledge as of the time of filing. The examiner can notify the applicant a ground for rejection on the ground of

lack of clarity in describing specification and novelty at the same time, when the claimed invention can be readily comprehended in view of the detailed description or drawings, and common general knowledge as of the time of filing. (5) If a claimed invention is not clear, even in view of the detailed description in the specification, the drawings and the common general knowledge as of the time of filing, examination of novelty is not conducted and the ground for rejection due to lack of clarity in describing specification is notified. (Guidelines Part III. Chapter 2. 4.) SIPO PCT N.A. Legal basis Art 22(2) Category Category III In practice **Principles of Examination** The following principles shall be complied with during the examination of novelty. (1) Identical inventions or utility models Comparing the application being examined with the relevant contents of the prior art or of the applications for invention or utility model filed previously by any entity or individual with the Patent Office and published or announced on or after the filing date of the application being examined (hereafter "previously filed and later published or announced" application), if their technical fields, technical problems to be solved, technical solutions, and their expected effects are substantially the same, they shall be regarded as identical inventions or utility models. It should be noted that, in determining the novelty of an application, the examiner shall first of all determine whether the technical solution of the application being examined is substantially the same as that of the reference document. When an application is compared with the contents disclosed in a reference document, if the technical solution defined in a claim therein and the technical solution disclosed in the reference document are substantially the same, and the person skilled in the art from the solutions can conclude that both of them can be applied to the same technical field, solve the same technical problem, and have the same expected effects, then they can be regarded as identical inventions or utility models. (2) Separate comparison When determining novelty, the examiner shall compare each claim of the application separately with the relevant technical contents disclosed in each item of the prior art or each previously filed and later published or announced invention or utility model, rather than with a combination of the contents disclosed in several items of the prior art or several previously filed and later published or announced applications or with a combination of several technical solutions disclosed in one reference document. (Guidelines Part II Chapter 3 Section 3.1) **Criterion for Examination** Article 22.2 shall serve as the criterion for judging whether an invention or utility model possesses novelty.

Several circumstances that often arise in the judgment of novelty are

provided here to facilitate the understanding of this criterion.

Invention or Utility Model with Identical Contents

Where the claimed invention or utility model is completely identical with the technical contents disclosed in a reference document, or there are only simple changes in wording between them, the invention or utility model does not possess novelty. Furthermore, the meaning of "identical contents" shall be construed as including the technical content directly and unambiguously derivable from the reference document. For example, a claim of an invention application is "a core of a motor rotor made of Nd-Fe-B permanent magnet alloy having a tetragonal crystal structure and a main phase of Nd2Fe14B intermetallic compound". If a reference document discloses "a core of a motor rotor made of Nd-Fe-B magnet", the claim will lose novelty, since it is well known to a person skilled in the art that the so-called "Nd-Fe-B magnet" means the Nd-Fe-B permanent magnet alloy having a main phase of Nd2Fe14B intermetallic compound and a tetragonal crystal structure.

Specific (Lower Level) Term and Generic (Upper Level) Term

If, when the claimed invention or utility model is compared with a reference document, the difference between them lies merely in the fact that a technical feature of the same nature is defined in a generic (upper level) term in the former and in a specific (lower level) term in the latter, then the disclosure in the specific (lower level) term takes away the novelty of the invention or utility model defined in the generic (upper level) term. For example, a product "made of copper" disclosed in a reference document takes away the novelty of an invention or utility model for the same product "made of metal". However, the disclosure of the product made of copper does not take away the novelty of an invention or utility model for the same product made of other specific metal.

On the other hand, the disclosure in generic (upper level) term does not take away the novelty of an invention or utility model defined in specific (lower level) term. For example, a product "made of metal" disclosed in a reference document does not take away the novelty of an invention or utility model for the same product "made of copper". For another example, if the difference between the claimed invention or utility model and a reference document lies merely in that "chlorine" is used in the invention or utility model to replace "halogen" or another specific halogen "fluorine" in the reference document, the disclosure of "halogen" or "fluorine" in the reference document does not take away the novelty of the invention or utility model which is defined by "chlorine".

Direct Substitution of Customary Means

If the difference between the claimed invention or utility model and a reference document is merely a direct substitution of customary means employed in the art, the invention or utility model does not possess novelty. For example, if a reference document disclosed a device using screw fastening, and the claimed invention or utility model only replaces the screw fastening with bolt fastening, the invention or utility model does not possess novelty.

Numerical Value and Numerical Range

If the claimed invention or utility model has a technical feature defined by numerical values or a continuous numerical range, such as the dimensions of a component, temperature, pressure, and the content of components in a composition, while all other technical features are identical with those in the reference document, then the determination of novelty shall be conducted according to the following rules.

- (1) Where the values or numerical range disclosed in the reference document fall entirely within the range of the above-defined technical feature, the reference document deprives the claimed invention or utility model of novelty.
- (2) Where the numerical range disclosed in the reference document and the numerical range of the above-defined technical feature partially overlap with each other or have at least a common end point, the reference document deprives the claimed invention or utility model of novelty.
- (3) The two end points of the numerical range disclosed in the reference document take away the novelty of the invention or utility model in which the above-defined technical feature has discrete numerical values including one of said two end points, but does not take away the novelty of the invention or utility model in which the above-defined technical feature is a numerical value at any point between said two end points.
- (4) Where the numerical values or numerical range of the above-defined technical feature fall within the range disclosed in the reference document and do not have any common end point with it, the reference document dose not take away the novelty of the claimed invention or utility model.

<u>Product Claims Including Feature of Performance, Parameters, Use, or</u> Manufacturing Process

For examination of novelty of the product claims including feature of performance, parameters, use, or manufacturing process, the following rules shall be followed.

(1) Product claims including feature of performance or parameters

For this kind of claims, the examiner shall consider whether the feature of performance or parameters in a claim implies that the claimed product has a certain particular structure and/or composition. If the performance or parameters implies that the claimed product has a structure and/or composition distinct from that of the product disclosed in the reference document, the claim has novelty. On the other hand, if the person skilled in the art from the performance or parameters cannot distinguish the claimed product from that disclosed in the reference document, it can be presumed that the claimed product is identical with the product in the reference document and accordingly the claim does not have novelty. unless the applicant can, based on the application or the prior art, prove that the claimed product having the feature of performance or parameters is distinct from the product in the reference document in structure and/or composition. For example, an application claims a compound A in a crystalline state defined by a variety of parameters including X-diffraction data, and the reference document also disclosed a compound A in a crystalline state. If the crystalline state of the both cannot be distinguished from each other based on the disclosure of the reference document, it can be presumed that the claimed product is identical with the product in the reference document and accordingly the claim does not have novelty as compared with the reference document, unless the applicant can, based on the application or the prior art, prove that the claimed product is actually distinct in crystalline state from the product disclosed in the reference document.

(2) Product claims including feature of use

For this kind of claims, the examiner shall consider whether the feature of use in a claim implies that the claimed product has a certain particular structure and/or composition. If the use is fully determined by the inherent property of the product and does not imply any change in the structure and/or composition of the product, the product claim defined by this use feature does not have novelty as compared with the product in the reference document. For example, comparing an invention of antiviral compound X with compound X as a catalyst disclosed in a reference document, although the use of compound X has been changed, the chemical formula which determines its inherent property has no change, therefore the invention of antiviral compound X does not have novelty. However, if the use implies that the claimed product has a certain particular structure and/or composition, that is, the use indicates that the structure and/or composition of the product has changed, then the use as a definitive feature of the structure and/or composition of the product must be considered. For example, "a hook for crane" means a hook having the structure specifically suitable for a crane in size and strength. It is distinct in structure from "a hook for angling" which has the same shape but is used for fishing. Therefore they shall be considered as different products.

(3) Product claims including feature of manufacturing process For this kind of claims, the examiner shall consider whether the feature of manufacturing process results in a certain particular structure and/or composition of the product. If the person skilled in the art can conclude that the process will necessarily result in a product having a particular structure and/or composition different from that of the product in the reference document, the claim has novelty. On the other hand, if the claimed product, as compared with the product in the reference document, has the same structure and composition despite the different manufacturing process, the claim does not have novelty, unless the applicant can, based on the application or the prior art, prove that the process results in a product having a different structure and/or composition, or having a different performance thereby indicating that its structure and/or composition has changed. For example, an application claims a glass cup made by process X, and a reference document disclosed a glass cup made by process Y. If the glass cups made by the both processes respectively have the same structure, shape, and constituent material, the claim does not have novelty. On the other hand, if the process X comprises a step of annealing at a particular temperature not disclosed in the reference document, which considerably increases the breaking resistance of the glass cup so made as compared with that in the reference document, then it indicates the claimed glass cup has a different microstructure due to the different manufacturing process, and has an internal structure different from that in the reference document, therefore the claim has novelty. (Guidelines Part II Chapter 3 Section 3.2)

Novelty of Chemical Invention

1 Novelty of Compound

(1) For a compound claimed in an application, if it has been referred to in a reference document, it is deduced that the compound does not possess novelty, unless the applicant can provide evidence to verify that the compound is not available before the date of filing. The word "refer to" mentioned above means to define clearly or explain the compound by the

chemical name, the molecular formula (or structural formula), the physical/chemical parameter(s) or the manufacturing process (including the raw materials to be used).

For example, if the name and the molecular formula (or structure formula) of a compound disclosed in a reference document are difficult to be identified or unclear, but the document discloses the same physical/chemical parameter(s) or any other parameters used to identify the compound as those of the claimed compound of an application, it is deduced that the claimed compound does not possess novelty, unless the applicant can provide evidence to verify that the compound is not available before the date of filing.

If the name, molecular formula (or structure formula) and physical/chemical parameter(s) of a compound disclosed in a reference document are unclear, but the document discloses the same method of preparation as that of the claimed compound of an application, it is deduced that the claimed compound does not possess novelty.

- (2) A general formula cannot destroy the novelty of a specific compound included in the general formula. However, the disclosure of a specific compound destroys the novelty of a claim for said general formula containing said specific compound, but it does not affect the novelty of a compound other than the specific compounds contained in said general formula. A series of specific compounds may destroy the novelty of the corresponding compounds in the series. The compounds in a range (such as C1-4) destroy the novelty of the specific compounds at the two ends of that range (C1 and C4). However, if the compound C4 has several isomers, the compounds C1-4 cannot destroy the novelty of each single isomer.
- (3) The existence of a natural substance per se does not destroy the novelty of the invented substance. A natural substance destroys the novelty of said invented substance only when it is disclosed in a reference document and is identical with or directly equivalent to the invented substance in structure and morphology.

2 Novelty of Composition

(1) Judgment of novelty on a composition merely defined by its components

Composition X consisting of components (A+B+C) is disclosed in a reference document,

- (i) if the subject matter of an invention application relates to composition Y (components: A+B), and the claim for composition Y is presented in the close-ended mode, for example, it is described as "consisting of A+B", the claim possesses novelty even if the technical problem solved by the invention is the same as that of composition X;
- (ii) if the claim for composition Y is presented in the open-ended mode as "containing A+B", and the technical problem solved by the invention is the same as that of composition X, then the claim does not possess novelty;
- (iii) if the exclusive method is used to present the claim of composition Y, i.e., when it is indicated that "C" is not contained in it, the claim possesses novelty.
- (2) Judgment of novelty on a composition defined by its components and contents

For the judgment of novelty on a composition defined by its components and contents, the provisions of Chapter 3, Section 3.2.4 of this Part shall

apply.

<u>3 Novelty of Chemical Product Characterized by Physical/ Chemical Parameter(s) or Manufacturing Process</u>

- (1) For the claim of a chemical product characterized by physical/chemical parameter(s), if it is impossible to compare the product characterized by said parameter(s) with that disclosed in a reference document based on the parameter(s) described and to determine the difference between them, it is deduced the product claim characterized by said parameter(s) does not possess novelty as required in Article 22.2.
- (2) For the claim of a chemical product characterized by manufacturing process, the novelty shall be determined on the product per se, rather than merely comparing the manufacturing process therein with the process disclosed in a reference document to find whether or not the two processes are identical. A different manufacturing process does not always result in the change of a product per se.
- If, compared with a product disclosed in a reference document, the difference of said claimed product lies only in the manufacturing process, having neither parameters disclosed in the application, which may be used to prove its difference, nor indications of any change in its function and/or nature resulting from the difference of the process, then it is deduced that the product claim characterized by the process does not possess novelty as required in Article 22.2.

4 Novelty of Use Invention of Chemical Product

Since a chemical product is novel, the use invention of the novel product will naturally possess novelty.

A known product is not rendered novel merely because a new application thereof has been put forward. For example, if product X is known as a detergent, then the product X used as a plasticizer does not possess novelty. However, a known product does not destroy the novelty of its new use if the new use per se is an invention. This is because such use invention is an invention of method of application, and the substance of the invention lies in how to apply the product rather than the product per se. For example, said product X is originally used as a detergent. Then, someone discovers from research that it can be used as a plasticizer after adding to it certain additives. Then its preparation, the kind of additives selected and the proportion etc., are the technical features of the method of application. Under such circumstances, the examiner shall assess whether the method per se possesses novelty and shall not consider that the method of application does not possess novelty on the grounds that product X is known.

As for a medical-use invention relating to a chemical product, the following aspects shall be taken into consideration when the examination of novelty is carried out.

- (1) Whether or not the new use is different in substance from the known use. The use invention does not possess novelty when the difference between the new use and the known use lies merely in the form of expression, but the substance of them is the same.
- (2) Whether or not the new use is revealed directly by the mechanism of action or pharmacological action of the known use. The use does not possess novelty if it is directly equivalent to the mechanism of action or pharmacological action of the known use.

	(3) Whether or not the new use belongs to generic (upper level) term of the known use. The known use defined by specific (lower level) term may destroy the novelty of the use defined by generic (upper level) term. (4) Whether or not the features relating to use, such as the object, mode, route, usage amount, interval of administration can define the procedure of manufacture of a pharmaceutical. The distinguishing features merely present in the course of administration do not enable the use to possess novelty. (Guidelines Part II Chapter 10 Section 5)
PCT	N.A.
Legal basis	35 U.S.C. 102
Category	Category III
In practice	After the application has been read and the claimed invention understood, the examiner conducts a prior art search for the claimed invention. For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See MPEP 706, 706.02 and 2131. The examiner determines what the claimed invention is by giving the claims the "broadest reasonable interpretation consistent with the specification."
	A reference may be relied upon for all that it contains. The court in Celeritas Technologies Ltd. v. Rockwell International Corp., 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed." See MPEP 2123.
	The determination of whether preamble recitations are structural limitations or mere statements of purpose or use "can be resolved only on review of the entirety of the [record] to gain an understanding of what the inventors actually invented and intended to encompass by the claim." Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. Pitney Bowes, Inc. v. Hewlett-Packard Co., 51 USPQ2d 1161, 1165 (Fed. Cir. 1999).
	If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. An anticipation rejection was affirmed by the court in In re Schreiber, 44 USPQ2d 1429, 1431 (Fed. Cir 1997) based on the factual finding that the reference dispenser (a spout disclosed as useful for purposes such as dispensing oil from an oil can) would be capable of dispensing popcorn in the manner set forth in appellant's claim 1 (a dispensing top for dispensing popcorn in a specified manner). See MPEP 2111.02.
	When a claimed compound is not specifically named in a reference, but instead it is necessary to select portions of teachings within the reference and combine them, e.g., select various substituents from a list of alternatives given for placement at specific sites on a generic chemical

formulas to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. Ex parte A, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990). If one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." One may look at the preferred embodiments to determine which compounds can be anticipated. In re Petering, 133 USPQ 275 (CCPA 1962). See MPEP 2131.02.

Anticipation of ranges:

When the prior art discloses a range which touches or overlaps the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. If the claims are directed to a narrower range, and the reference teaches a broad range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. See e.g., Atofina v. Great Lakes Chem. Corp, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006) wherein the court held that a reference temperature range of 100-500 degrees C did not describe the claimed range of 330-450 degrees C with sufficient specificity to be anticipatory. Further, while there was a slight overlap between the reference's preferred range (150-350 degrees C) and the claimed range, that overlap was not sufficient for anticipation. "[T]he disclosure of a range is no more a disclosure of the end points of the range than it is each of the intermediate points." Id. at 1424. Any evidence of unexpected results within the narrow range may also render the claims unobvious. The question of "sufficient specificity" is similar to that of "clearly envisaging" a species from a generic teaching. See MPEP 2131.03 and 2131.02. When the claimed product and the prior art product are identical in structure, a prima facie case of anticipation has been established. In re Best, 195 USPQ 430, 433 (CCPA 1977). See also Titanium Metals Corp. v. Banner, 227 USPQ 773 (Fed. Cir. 1985) (Claims were directed to a titanium alloy containing 0.2-0.4% Mo and 0.6-0.9% Ni having corrosion resistance. A Russian article disclosed a titanium alloy containing 0.25% Mo and 0.75% Ni but was silent as to corrosion resistance. The Federal Circuit held that the claim was anticipated because the percentages of Mo and Ni were squarely within the claimed ranges. The court went on to say that it was immaterial what properties the alloys had or who discovered the properties because the composition is the same and thus must necessarily exhibit the properties.).

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Once the examiner conducts a search and finds a printed publication or

patent which discloses the claimed invention, the examiner should determine whether the rejection should be made under 35 U.S.C. 102(a), (b), or (e). In order to determine which section of 35 U.S.C. 102 applies, the effective filing date of the application must be determined and compared with the date of the reference.

The effective filing date of a U.S. application may be determined as follows:

- (A) if the application is a continuation or divisional of one or more earlier U.S. applications or international applications and if the requirements of 35 U.S.C. 120 and 365(c), respectively, have been satisfied, the effective filing date is the same as the earliest filing date in the line of continuation or divisional applications.
- (B) if the application is a continuation-in-part of an earlier U.S. application or international application, any claims in the new application not supported by the specification and claims of the parent application have an effective filing date equal to the filing date of the new application. Any claims which are fully supported under 35 U.S.C. 112 by the earlier parent application have the effective filing date of that earlier parent application.
- (C) if the application claims foreign priority under 35 U.S.C. 119(a)-(d) or 365(a) or (b), the effective filing date is the filing date of the U.S. application, unless (A) or (B) as set forth above applies. The filing date of the foreign priority document is not the effective filing date, although the filing date of the foreign priority document may be used to overcome certain references.
- (D) if the application properly claims benefit under 35 U.S.C. 119(e) to a provisional application, the effective filing date is the filing date of the provisional application for any claims which are fully supported under the first paragraph of 35 U.S.C. 112 by the provisional application.

See MPEP 706.02, subsection VI. See III.A., above, for determining the date of the reference. See MPEP 1893.03(b) for determining the filing date of a national stage application submitted under 35 U.S.C. 371. 35 U.S.C. 102(a):

35 U.S.C. 102(a) states that "[a] person shall be entitled to a patent unless (a) the invention was known or used by others in this country...before the invention thereof by the applicant for a patent." The knowledge or use of 35 U.S.C. 102(a) must be knowledge or use which is accessible to the public. The knowledge or use is accessible to the public if there has been no deliberate attempt to keep it secret. W.L. Gore & Assoc. v. Garlock, Inc., 220 USPQ 303 (Fed. Cir. 1983). The knowledge or use in 35 U.S.C. 102(a) must be knowledge or use in the United States, its territories and possessions. 35 U.S.C. 100(c). Prior knowledge or use which is not present in the United States, even if widespread in a foreign country, cannot be the basis of a rejection under 35 U.S.C. 102(a). In re Ekenstam, 118 USPQ 349 (CCPA 1958). Prior knowledge or use under 35 U.S.C. 102(a) must be "by others," which refers to any entity which is different from the inventive entity of the application under examination. The entity needs only differ by one person to be "by others." This holds true for all types of references eligible as prior art under 35 U.S.C. 102(a) including publications as well as public knowledge and use. Any other interpretation of 35 U.S.C. 102(a) "would negate the one year [grace] period afforded under § 102(b)." In re Katz, 215 USPQ 14 (CCPA 1982). See MPEP 2132.

35 U.S.C. 102(b):

35 U.S.C. 102(b) states that "[a] person shall be entitled to a patent unless (b) the invention was...in public use or on sale in this country, more than one year prior to the date of application for patent in the United States." 35 U.S.C. 102(b) is applicable if the activity occurred more than 1 year prior to the effective filing date of the application.

Public Use (See MPEP 2133.03(a)):

The public use bar under 35 U.S.C. 102(b) arises where the invention is in public use more than one year before the effective filing date of the U.S. patent application and the invention is ready for patenting. Invitrogen Corp. v. Biocrest Manufacturing L.P., 76 USPQ2d 1741 (Fed. Cir. 2005).

An inventor's private use of the invention, for his or her own enjoyment is not a public use. Moleculon Research Corp. v. CBS, Inc., 229 USPQ 805, 809 Fed. Cir. 1986).

Where the inventor or someone connected to the inventor puts the invention on display or sells it, there is a "public use" within the meaning of 35 U.S.C. 102(b) even though by its very nature an invention is completely hidden from view as part of a larger machine or an article, if the invention is otherwise used in its natural and intended way and the larger machine or article is accessible to the public. In re Blaisdell, 113 USPQ 289, 292 (CCPA 1957).

"'Public use' of a claimed invention under 35 U.S.C. 102(b) occurs when the inventor allows another person to use the invention without limitation, restriction or obligation of secrecy to the inventor." In re Smith, 218 USPQ 976, 983 (Fed. Cir. 1983). The presence or absence of a confidentiality agreement is not itself determinative of the public use issue, but is one factor to be considered along with the time, place, and circumstances of the use which show the amount of control the inventor retained over the invention. Moleculon Research Corp. v. CBS, Inc., 229 USPQ 805, 809 (Fed. Cir. 1986).

On sale:

The on-sale bar of 35 U.S.C. 102(b) occurs if there was a definite sale, or offer to sell, more than one year before the effective filing date of the U.S. patent application and the invention was ready for patenting. Pfaff v. Wells Elecs., Inc., 48 USPQ2d 1641, 1646-47 (1998).

An invention may be deemed to be "on sale" even though the sale was conditional. The fact that the sale is conditioned on buyer satisfaction does not, without more, prove that the sale was for experimental purpose. Strong v. General Elec. Co., 168 USPQ 8, 12 (5th Cir. 1970).

A "sale" need not be for profit to bar a patent. If the sale was for the commercial exploitation of the invention, it is "on sale" within the meaning of 35 U.S.C. 102(b). In re Dybel, 187 USPQ 593, 599 (CCPA 1975).

A single sale or offer to sell the invention may bar patentability under 35 U.S.C. 102(b). Consolidated Fruit-Jar Co. v. Wright, 94 U.S. 92, 94 (1876).

"[A]n assignment or sale of the rights in the invention and potential patent rights is not a sale of 'the invention' within the meaning of section 102(b)." Moleculon Research Corp. v. CBS, Inc., 229 USPQ 805, 809 (Fed. Cir. 1986).

Offer for sale:

"Only an offer which rises to the level of a commercial offer for sale, one which the other party could make into a binding contract by simple acceptance (assuming consideration), constitutes an offer for sale under § 102(b)." Group One, Ltd. v. Hallmark Cards, Inc., 59 USPQ2d 1121, 1126 (Fed. Cir. 2001).

A rejected offer may create an on sale bar. UMC Elecs. v. United States, 2 USPQ2d 1465, 1469 (Fed. Cir. 1987). See MPEP 2133.03(c).

Experimental use:

If the use or sale was experimental, there is no bar under 35 U.S.C. 102(b). "A use or sale is experimental for purposes of section 102(b) if it represents a bona fide effort to perfect the invention or to ascertain whether it will answer its intended purpose....If any commercial exploitation does occur, it must be merely incidental to the primary purpose of the experimentation to perfect the invention." LaBounty Mfg. v. United States Int'l Trade Comm'n, 22 USPQ2d 1025, 1028 (Fed. Cir. 1992). "The experimental use exception...does not include market testing where the inventor is attempting to gauge consumer demand for his claimed invention. The purpose of such activities is commercial exploitation and not experimentation." In re Smith, 218 USPQ 976, 983 (Fed. Cir. 1983). See MPEP 2133.03(e) to 2133.03(e)(7).

IV. NOVELTY

C. Provisions, if any, for restoring novelty over accidental anticipation

	PCT reservation (PCT/GL/ISPE Appendix 20.21)
	EPO
PCT	PCT/GL/IPSE Appendix A20.21, Alternative A20.21[2]
Legal basis	G 1/03, OJ 8-9/2004, 413 G 2/03, OJ 8-9/2004, 448
Category	Category IV
In practice	Disclaimers not disclosed in the application as filed (GL H-V, 4)
	Limiting the scope of a claim by using a "disclaimer" to exclude a technical feature not disclosed in the application as filed does not infringe Art. 123(2) in the following cases (see G 1/03, OJ 8-9/2004, 413, and G 2/03, OJ 8-9/2004, 448, and GL F-IV, 4.20):
	(i) restoring novelty over a disclosure under Art. 54(3);
	(ii) restoring novelty over an accidental anticipation under Art. 54(2). "An anticipation is accidental if it is so unrelated to and remote from the claimed invention that the person skilled in the art would never have taken it into consideration when making the invention". The status of "accidental" should be ascertained without looking at the available further state of the art. A related document does not become an accidental anticipation merely because there are other disclosures even more closely related. The fact that a document is not considered to be the closest prior art is insufficient for achieving the status of "accidental". An accidental disclosure has nothing to do with the teaching of the claimed invention, since it is not relevant for examining inventive step. For example, this is the case when the same compounds serve as starting materials in entirely different reactions yielding different end products (see T 298/01, not published in OJ). A prior art, the teaching of which leads away from the invention, however, does not constitute an accidental anticipation; the fact that the novelty destroying disclosure is a comparative example is also insufficient for achieving the status of "accidental" (see T 14/01 and T 1146/01, both not published in OJ); (iii) removing subject-matter which, under Art. 52 to Art. 57, is excluded
	from patentability for non-technical reasons. For example, the insertion of "non-human" in order to satisfy the requirements of Art. 53(a) is allowable.
	However, an undisclosed disclaimer is not allowable if it is made in order to exclude non-working embodiments or remedy insufficient disclosure, or it makes a technical contribution to the invention.
	An undisclosed disclaimer is, in particular, not allowable in the following situations:
	(i) the limitation is relevant for assessing inventive step;
	(ii) the disclaimer, which would otherwise be allowable on the basis of a conflicting application alone (Art. 54(3)), renders the invention novel or inventive over a separate prior art document under Art. 54(2), which is a not accidental anticipation of the claimed invention;
	(iii) the disclaimer based on a conflicting application removes also a

	deficiency under Art. 83;
	A disclaimer should remove no more than is necessary either to restore novelty or to disclaim subject-matter excluded from patentability for non-technical reasons. A claim containing a disclaimer must meet the clarity and conciseness requirements of Art. 84. In the interest of the patent's transparency, the excluded prior art should be indicated in the description in accordance with Rule 42(1)(b) and the relation between the prior art and the disclaimer should be shown.
	JPO
PCT	PCT/GL/IPSE Appendix A20.21, Alternative A20.21[2]
Legal basis	Guidelines Part III, Section I, 4.2(4)
Category	Category I
In practice	The JPO considers that amendments to make claims including "disclaimer" mentioned below are acceptable.
	""Disclaimer" refers to claims explicitly stating exclusion of only part of matters included in the claimed inventions from matters stated in said claims, while leaving the expression of the statement of matters stated in the claims. "Disclaimer," which excludes matters stated in the originally attached description, etc. through amendment while leaving the expression of the statement of matters stated in claims before amendment, is permitted if the "disclaimer" after exclusion is included within a scope of matters stated in the originally attached description, etc. The amendment to provide a "disclaimer" in the following (i) and (ii) does not introduce new technical matters, and the amendment is permitted.
	(i) If the claimed invention overlaps with the prior art and is thus likely to lose novelty, etc. (Article 29(1)(iii), Article 29bis or Article 39), making an amendment to exclude only the overlap while leaving the expression of the statement of matters stated in claims before amendment
	(Explanation)
	The "disclaimer" in the above-described (i) refers to a claim explicitly stating exclusion of only matters stated in the distributed publication, etc. or the description, etc. of the earlier application as the prior art relating to Article 29(1)(iii), Article 29bis or Article 39 (including matters that are deemed as being stated therein). The amendment to provide the "disclaimer" in (i) does not change technical matters introduced from the description, etc. before amendment at all by excluding specific matters that are contained in the cited invention. It is thus evident that such amendment does not introduce any new technical matter. In addition, amending claims to provide the "disclaimer" makes them patentable if the invention is remarkably different from the prior art as the technical idea, and inherently involves an inventive step but accidentally overlaps with the prior art. It is considered that if the invention is not remarkably different from the prior art as the technical idea, amending claims to provide the "disclaimer" rarely eliminates a reason for refusal for lack of inventive step. Moreover, if parts of "disclaim" occupy a major portion of the claimed invention or extend to many portions, please note that an invention may not be clearly identified from one claim. (ii) If the claimed invention includes the term "human being" and thus
	does not satisfy the requirement of the main paragraph of Article 29(1), or falls under unpatentable grounds provided in Article 32, and said reason

for refusal is eliminated by exclusion of the term "human being," making an amendment to exclude only the term "human being" while leaving an expression of the statement of matters stated in claims before amendment

(Explanation)

The "disclaimer" in the above-described (ii) refers to a claim explicitly stating exclusion of only the term "human being" from matters stated in said claims while leaving an expression of the statement of matters stated in claims before amendment. The amendment to provide the "disclaimer" in (ii) to exclude "human being" from the subject of invention to eliminate said reason for refusal does not change the technical matter introduced from the description, etc. before amendment at all. It is thus evident that such amendment does not introduce any new technical matter.

(Specific examples)

Example of (i): If the scope of claims provides "An iron plate washing agent mainly consisting of an inorganic salt containing Na ion as a cation," while the prior art provides the invention of "an iron plate washing agent mainly consisting of an inorganic salt containing CO3 ion as an anion" and discloses an example of employing Na ion as a cation, amendment to change the scope of claims to "... an inorganic salt containing Na ion as cation (excluding cases where anion is CO3 ion)" for the purpose of excluding matters stated in the prior art from the scope of claims is permitted.

Example of (ii): If the scope of claims provides "a mammal characterized in that a polynucleotide having DNA Sequence No.1 is introduced into the somatic chromosomes and that the polynucleotide is expressed in its somatic cells," "a mammal" includes human beings except when the detailed description of the invention makes it clear that "a mammal" does not include human beings. However, an invention that includes human beings as its subject falls under an invention that is likely to harm public order and morality, and it breaches Article 32. In this case, an amendment to change the scope of claims to "mammals excluding human beings ..." in order to exclude human beings from the scope of claims is permitted even if the originally attached description, etc. did not state that human beings can be excluded from the subject of the invention."

(Guidelines Part III, Section I, 4.2(4))

	KIPO	
PCT	PCT/GL/IPSE Appendix A20.21, Alternative A20.21[1]	
Legal basis	Guidelines Part IV, Chapter 2, 1.2 (7)	
Category	Category I	
In practice	Guidelines	
	1.2 (7) An amendment carried out by the so-called 'disclaimer claim' shall not mostly deemed as the addition of new matter. In the case where the subject of the invention regarding medical methods is not specified between humans or animals, if the invention is clearly not targeted on particular animals, the amendment of limitation in order to delete the parts related to humans shall not be deemed as the addition of new matter.	

	(Example) Where 'treatment methods for mammals' are amended into 'treatment methods for mammals except for humans' or 'treatment methods for livestock' (Guidelines Part IV, Chapter 2, 1.2 (7))	
	SIPO	
PCT	N.A.	
Legal basis	Art 33	
Category	Category III	
In practice	If no other numerical value within the initial numerical range of a certain technical feature is described in the initial description and claims, while novelty and inventive step are prejudiced by the contents disclosed in reference documents, or the invention cannot be carried out when said feature adopts certain parts of the initial numerical range, in view of these two situations, the applicant has to use a specific "disclaimer" to exclude said parts from the initial numerical range so that the numerical range of the claimed technical solution does not include said parts obviously as a whole, such amendment shall not be allowed because the amendment has gone beyond the scope of disclosure contained in the initial description and claims, with the exception that the applicant can prove, in accordance with the contents described in the initial application, that the invention cannot be carried out when said feature adopts the "disclaimed" numerical value, or the invention possesses novelty and involves an inventive step when said feature adopts the numerical value after the "disclaimer". For example, the numerical range in the claimed technical solution is X1=600-10000, the only difference between the technical contents disclosed in the reference documents and said technical solution is that said numerical range in the former is X2=240-1500. As X1 and X2 overlap partially, the claim does not possess novelty. The applicant uses the specific "disclaimer" to amend X1, excluding from X1 the portion that X1 and X2 overlap, i.e., 600-1500, thus, said numerical range of the claimed technical solution is changed to be from X1 >1500 to X1=10000. If the applicant can neither prove that the inventions within the numerical range from X1>1500 to X1=10000 involve inventive step with reference to those within the X2=240-1500 range described in the reference documents based upon the initially disclosed contents and the prior art, nor prove that the invention cannot be carried out when X1 is within 600-1500, such amendments shal	
USPTO		
PCT	In the ISA/IPEA/US, a negative limitation that is added in a new claim or by amendment will raise a new matter issue if the subject matter being excluded does not have support in the application as filed. See PCT/GL/ISPE, Appendix A20.21, Alternative A20.21[1].	
Legal basis	35 U.S.C. §§ 102, 112, 132 and MPEP	
Category	Category III	
In practice	As a general matter, a prior art reference may be directed to an entirely different problem than the one addressed by the inventor, or may be from an entirely different field of endeavour than that of the claimed invention, yet the reference is still anticipatory if it explicitly or inherently discloses every limitation recited in the claims. See MPEP 2131.05.	

Note however that applicant may amend the claims to add negative limitations to overcome accidental anticipation provided that there is support in the application as originally filed for the negative limitations. If there is no support in the application as originally filed for the negative limitations, then such an amendment would raise new matter.

IV. NOVELTY

D. New use of a known product (e.g., use inventions)

D. New use of a known product (e.g., use inventions)		
	Based on the Trilateral Comparative Studies	
	EPO	
PCT	N.A.	
Legal basis	Non-medical use of a known product: Art 54(1) EPC First medical use of a known product: Art 54(4) EPC Second or further medical use of a known product: Art 54(4) and (5) EPC	
Category	Category III	
In practice	Claims directed to a non-medical use of a known product (GL G-VI, 7.2)	
	A claim to the use of a known compound for a particular purpose (second non-medical use) which is based on a technical effect should be interpreted as including that technical effect as a functional technical feature, and is accordingly not open to objection under Art. 54(1), provided that such technical feature has not previously been made available to the public (G 2/88, OJ 4/1990, 93, and G 6/88, OJ 4/1990, 114).	
	Claims directed to the first medical use of a known product (GL G-II, 4.2)	
	According to Art. 54(4), where the substance or composition is known, it may only be patented for use in "methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body" (within the meaning of Art 53(c)) if the known substance or composition was not previously disclosed for use in such methods.	
	Claims directed to the second or further medical use of a known pharmaceutical product (GL G-VI, 7.1)	
	Where a substance or composition is already known to have been used in a first medical use in methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body, it may still be patentable under Art. 54(5) for any second or further use in a method, provided that said use is novel and inventive.	
	Please note that, in the following of the decision of the Enlarged Board of Appeal in G 2/08, the so-called "Swiss-type claims" are will no longer be allowable for all patent applications filed three months after the date of publication of decision G2/08 in the Official Journal of the EPO.	
	JPO	
PCT	N.A.	
Legal basis	Guidelines Part II, Chapter 2, 1.5.2(2)	
Category	Category I	
In practice	"Descriptions in claims in which products are defined by the use (limitation of use) in a word like "for use as" are analyzed to understand how the limitation of use works to define the claimed	

invention, in consideration of the descriptions in the specifications and drawings and the common general knowledge as of the filing. (It should be noted that descriptions too incomprehensible to define the claimed inventions could violate Article 36(6)(ii).)

However, chemical compounds limited by the use described in a phrase like "for use as ...," such as "a chemical compound Z for use as Y," which represents limitation of use, generally indicate mere usefulness of the compounds, and they are interpreted as simple chemical compounds without limitation of use, such as the compound Z, which is apparent without applying the approaches I and II below to this case. (See Example 1.)(Reference: Decision by the Tokyo High Court, July 8, 1997 [Heisei 7 (Gyo Ke) 27]) This approach should be applied not only to chemical compounds but also to microorganisms."

(1) General approach for analyzing the invention with limitation of use

"It is understood that a product with limitation of use, which is specially adapted for the use, is the product that provides the shapes, structures, or compositions (hereinafter called "structures etc.") defined by the limitation of use when the limitation of use would represent the structures etc. specially adapted for the use even after the descriptions of the specification and drawings and the common general knowledge as of the filing are analyzed. "

"Therefore, when matters used to specify the claimed invention do not differ from the matters used to specify the cited invention in any aspects except the limitation of use, these inventions are different inventions as far as these inventions provide different structures etc. defined by the limitation of use."

"On the other hand, the product with the limitation of use is not considered to represent a definition of the product when the product is not understood to be a product specially adapted for the use, even based on the descriptions of the specification and drawings and the common general knowledge as of the filing, unless the limitation of use is included in II. below for considering the product to be a product with limitation of use."

"Consequently, matters used to specify the claimed invention and the matters used to specify the cited invention are not understood to be different from each other when these matters do not differ in any aspects except the limitation of use."

(2) Approach when an invention of products with limitation of use has to be interpreted as a use invention

"Generally, a use invention is interpreted to be an invention based on the discovery of an unknown attribute of a product and finding of the product's adaptability of novel use."

"When the claimed invention provides a limitation of use in the claims and is considered to be an invention based on the discovery of an unknown attribute of a product and finding of the product's adaptability for novel use derived from the attribute, it is appropriate to analyze the invention from the additional aspect of the limitation of use since the limitation of use may define the claimed invention. Accordingly, the invention could be novel as a use invention even if the product per se is already known.

However, the novelty of the claimed invention is denied when a novel use of the product is not considered to be provided, based on the common

general knowledge in the area as of the filing, even with a discovered unknown attribute. In addition, when the claimed invention and the cited invention, which are inventions of products different in the expressive aspect of the limitation of use, cannot be distinguished from each other by use based on the analysis of the common general knowledge in the area as of the filing, the novelty of the claimed invention is denied.

(Note 1) Generally, when an invention is found to be creative because of the discovery of its unknown attribute in respect to its purpose of use which is not previously known, it is considered to be novel as a use invention. Also, the concept of the use invention is generally applied to the technical fields in which it is relatively difficult to understand how to use the product from the structure or name of the product, such as the technical field in which compositions containing chemical substances are used. On the other hand, the concept of a use invention is not applied to machines, instruments, articles, and apparatuses because these products are usually used in fixed manners.

(Note 2) The inventive step of the claimed invention is denied when a person skilled in the art could easily arrive at the use of the product of the invention based on any known attribute or structures etc. of the product, regardless of the novel use provided based on the attribute. (Decision by the Tokyo High Court, August 27, 2003 [Heisei 14 (Gyo Ke) 376].)

(Note 3) In light of the expressions, some use inventions are described in the style of the limitation of use as well as the dosage form and methods of use. Handling of the above could also be applied to use inventions described in styles other than those of use limitations, but limited to inventions whose claims provide certain words for use, such as "catalysts comprising...," "ornamental materials composed of alloy...," and "methods of killing insects using ..." according to 1.5.1(4)."

(Guidelines Part II. Chapter 2. Section 1.5.2(2))

KIPO

Kii O	
PCT	N.A.
Legal basis	Guidelines Part III, Chapter 1, 4.1.2 Guidelines Part III, Chapter 4, 6.3.5, 6.3.6
Category	Category I
In practice	Guidelines
	1. Patentability of Use invention
	"A use invention, which claims a novel use of a known material based on its inherent but newly found property, shall be treated distinctively from "a mere discovery" in the Patent Act. A mere discovery of a use of a known material does not constitute a statutory invention even if the use is novel. A novel use based on the newly found property is, however, considered a statutory invention only when a non-obvious inventive effort is made to discover the new property and provide the novel use." (Guidelines Part III, Chapter 1, 4.1.2)
	2. Assessment of sameness of Use invention
	When comparing the claimed invention with prior arts, simple difference in use or simple limitation of use is not considered as a special technical feature.

"6.3.5. Simple difference in use

A simple difference in use means the case where the difference of two inventions is only in usage, and the difference of usage can be easily expected from the inventions (Example) \(\text{a plasticizer for polyvinyl chloride resin comprising } \) Compound B_J and 「a discoloration preventive agent for polyvinyl chloride resin comprising Compound B (Example) the method of repelling hares by spraying Compound A in the wild (Hare Repellent A) and the method of repelling deer by spraying Compound A in the wild (Deer Repellent A) 6.3.6. Simple Limitation of Use A simple limitation of use means the case where the difference of two invention is whether the use is limited or not, and the limitation of use can be obviously derived from the prior art and does not make any unexpected effect. (Example) 「a net made of flat threads」 and 「a net for fishing made of flat threads (Guidelines Part III, Chapter 4, 6.3.5, 6.3.6) **SIPO** PCT N.A. Legal basis Art 22(2) Category Category III In practice As the medical-use of a substance is a use for the diagnosis or treatment of diseases, it falls into the situations provided for in Article 25.1(3); hence, it shall not be granted the patent right. However, if it is used for the manufacturing of a medicament, it may be patentable under the Patent Law. **Use Claim** Types of Use Claim The invention relating to the use of a chemical product is made on the basis of discovery of a new property of the product and the use of such property. Regardless of a new or known product, its property is inherent in the product per se. The essence of the use invention does not lie in the product per se, but in the application of its property. Hence, a use invention is an invention of process, and its claim is a process claim. If product B is invented by making use of product A, the application shall be based on product B per se, and its claim is a product claim rather than a use claim. The examiner shall take notice of the wording to distinguish a use claim from a product claim. For example, "using compound X as an insecticide" or "the use of compound X as an insecticide" is a wording used in use claim, which is of type of process claim, while the wording "an insecticide made of compound X" or "the insecticide containing compound X" is not a use claim, but a product claim. It shall also be clarified that "the use of compound X as an insecticide" shall not be construed as equivalent to "the compound X for an insecticide". As the latter is a product claim defining the use, it is not a use claim. (Guidelines Part II Chapter 10 Section 4.5.1) Claim of Medical Use of Substance

An application relating to the medical use of a substance shall not be granted if its claim is drafted in the wording "use of substance X for the treatment of diseases", "use of substance X for diagnosis of diseases" or "use of substance X as a medicament", because such claim is one for "method for the diagnosis or for the treatment of diseases" as referred to in Article 25.1(3). However, since a medicament and a method for the manufacture thereof are patentable according to the Patent Law, it shall not be contrary to Article 25.1(3) if an application for the medical use of a substance adopts pharmaceutical claim or use claim in the form of method for preparing a pharmaceutical, such as "use of substance X for the manufacturing of a medicament", "use of substance X for the manufacturing of a medicament for the treatment of a disease" and so on.

The above-mentioned use claim in the form of method for manufacturing a medicament may be drafted as "use of compound X for manufacturing a medicament for the treatment of disease Y" or the like. (Guidelines Part II Chapter 10 Section 4.5.2)

Novelty of Use Invention of Chemical Product

Since a chemical product is novel, the use invention of the novel product will naturally possess novelty.

A known product is not rendered novel merely because a new application thereof has been put forward. For example, if product X is known as a detergent, then the product X used as a plasticizer does not possess novelty. However, a known product does not destroy the novelty of its new use if the new use per se is an invention. This is because such use invention is an invention of method of application, and the substance of the invention lies in how to apply the product rather than the product per se. For example, said product X is originally used as a detergent. Then, someone discovers from research that it can be used as a plasticizer after adding to it certain additives. Then its preparation, the kind of additives selected and the proportion etc., are the technical features of the method of application. Under such circumstances, the examiner shall assess whether the method per se possesses novelty and shall not consider that the method of application does not possess novelty on the grounds that product X is known.

As for a medical-use invention relating to a chemical product, the following aspects shall be taken into consideration when the examination of novelty is carried out.

- (1) Whether or not the new use is different in substance from the known use. The use invention does not possess novelty when the difference between the new use and the known use lies merely in the form of expression, but the substance of them is the same.
- (2) Whether or not the new use is revealed directly by the mechanism of action or pharmacological action of the known use. The use does not possess novelty if it is directly equivalent to the mechanism of action or pharmacological action of the known use.
- (3) Whether or not the new use belongs to generic (upper level) term of the known use. The known use defined by specific (lower level) term may destroy the novelty of the use defined by generic (upper level) term.
- (4) Whether or not the features relating to use, such as the object, mode, route, usage amount, interval of administration can define the procedure of manufacture of a pharmaceutical. The distinguishing features merely

	present in the course of administration do not enable the use to possess novelty. (Guidelines Part II Chapter 10 Section 5.4)		
	USPTO		
PCT	N.A.		
Legal basis	35 U.S.C. 102		
Category	Category III, IV		
In practice	The discovery of a new use for an old structure based on unknown properties of the structure might be patentable to the discoverer as a process of using. In re Hack, 114 USPQ 161, 163 (CCPA 1957). However, when the claim recites using an old composition or structure and the "use" is directed to a result or property of that composition or structure, then the claim is anticipated. In re May, 197 USPQ 601, 607 (CCPA 1978). See MPEP 2112.02.		

V. INVENTIVE STEP

A. Cases where a single document calls into question the inventive step

A. Cases	POT recomplified (POT/OL/ISPE Appendix A12.12)
	PCT reservation (PCT/GL/ISPE Appendix A13.13)
	EPO
PCT	PCT/GL/ISPE Appendix A13.13 applies
Legal basis	Art 56 EPC
Category	Category I, IV
In practice	An invention is considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art. To this respect, a single prior art document can call into question the inventive step. Details on how inventive step is assessed in practice are given in GL G-
	VII.
	JPO
PCT	PCT/GL/ISPE Appendix A13.13 applies.
Legal basis	Guidelines Part II, Chapter 2, 2.4, 2.5
Category	Category I
In practice	In the JPO, an examiner can deny the inventive step of the claimed invention based on a single prior art.
	KIPO
PCT	PCT/GL/ISPE Appendix A13.13 is applied
Legal basis	Guidelines Part III, Chapter 3, 6.
Category	Category I, Category IV
In practice	The KIPO allows the cases where a single document calls into question the inventive step.
	Guidelines
	6. Grounds of assessing the inventive step
	6.1 Probable cause or motivation
	The following cases can be significant grounds for assessing that a person skilled in the art would have been led to the claimed invention based on the cited invention; suggestions shown in the disclosures of the cited inventions, a common problem to be solved described in claims, a common function or operation, close relevance of technical fields.
	6.1.1 Suggestions shown in the disclosures of the cited inventions
	Suggestions shown in the disclosures of the cited inventions relevant to a claimed invention can be significant grounds for assessing that a person skilled in the art would have been led to the claimed invention.
	6.1.2 Common problem to be solved
	(1) A common problem to be solved can be a significant ground for assessing that a person skilled in the art would have been led to the claimed invention by applying or combining cited inventions. If the

technical problems to be solved described in the claimed invention and cited invention are not in the same technical field, the examiner decides whether the technical problem of the claimed invention is obvious in the relevant field of the art or easily conceivable in light of technical common sense, and whether that reasoning can be used as a ground for denying the inventive step by scrutinizing the technical problem.

(2) Even in the case of a cited invention with a different problem compared to a claimed invention, if it is obvious that a person skilled in the art can easily arrive at the claimed invention through a mere exercise of ordinary creativity, the inventive step of the claimed invention can be denied.

6.1.3 Common function or operation

A common function or operation of a claimed invention and a cited invention is a well-founded ground that a person skilled in the art would have arrived at the claimed invention.

6.1.4 Close relation of technical fields

The notion that there exists a publicly known technical means for solving the technical problem set out in the claimed invention in the relevant technical field can be a strong ground that a person skilled in the art would have made the claimed invention.

6.2 Mere exercise of ordinary creativity of a person skilled in the art

A common improvement comprising general applications of a known art, inferences from the known physical properties, or references to other technical fields to solve a known problem falls into the scope of ordinary creativity of a person skilled in the art. Practices in such scope include selection of an optimal material among the publicly known materials to achieve a specific goal, optimization of a numerical value range, replacing with equivalents, and mere modification of design in applying a specific technology, partial removal of technical features and mere change of the use. When the differences between the claimed invention and the cited invention fall within the aforementioned scope, it is usually considered that a person skilled in the art would have readily made the claimed invention, unless there is another ground for assessing the inventive step.

6.2.1 Replacement with Equivalents

Replacing a part of an invention with a publicly known part, which is capable of carrying out the same function and interchangeable, is not considered being inventive for it falls within the scope of ordinary creativity of a person skilled in the art, unless otherwise the replacement has an unforeseeable advantage.

In order to acknowledge the replacement with equivalents as a mere exercise of ordinary creativity of a person skilled in the art, it should be justified that the replacement is obvious to a person skilled in the art at the time of filing the application in addition to the fact that the substituted known feature functions as an equivalent. The examiner is allowed to submit the proof that the substituted feature had been known as an equivalent before the filing of the present application in the same technical field.

6.2.2 Simple modification of design in applying specific technology

When an invention is merely drawn by applying normal design procedures maintaining the technical concept of the prior art and is not considered to have an effect unforeseen in the prior art, the inventive step of the invention cannot be acknowledged. For example, if the difference between the claimed invention and the cited prior art is only caused by the application of particular parameters such as size, proportion, relative dimensions, and amount from a limited range of possibilities, the inventive step cannot be acknowledged. On the contrary if the difference can lead to any particular change in the function or operation with an unforeseeable advantage, the invention is regarded as involving an inventive step.

6.2.3 Partial removal of constituents

The claimed invention is not considered inventive when the removal of a function or an effect as a result of the omission of some constituents disclosed in the prior art is obvious to a person skilled in the art. However, considering the state of the art, the inventive step can be acknowledged when the omission of some constituents does not affect the function of the invention or rather enhances the function.

6.2.4 Mere change and limitation of use

Mere change in the use of a known invention or a further limitation of such use is not considered inventive. In other words, the claimed invention, which is distinguished from the prior art only in a modification of its use or further extension of its use without exhibiting any advantage, is not considered inventive.

6.2.5 General application of known art

The claimed invention, which merely consists of a known technique in a closely analogous situation in order to solve a problem posed by the prior art with readily anticipated effect, is not inventive. However, the claimed invention is considered inventive when the application of the known technique leads to unexpected advantageous effects in combination with other components in comparison with the prior art. (Guidelines Part III, Chapter 3, 6.)

SIPO	
PCT	PCT/GL/ISPE, Appendix A13.13 applies
Legal basis	Art 22(3), Guidelines Part II Chapter 7 Section 12
Category	Category I
In practice	In a search report, the following symbols are used to express the relevance of a reference document with a claim:
	"X": the document that when taken alone, prejudices the novelty or inventive step of the claim;
	(Guidelines Part II Chapter 7 Section 12)
	Prominent Substantive Features
	That an invention has prominent substantive features means that, having regard to the prior art, it is non-obvious to a person skilled in the art. If the person skilled in the art can obtain the invention just by logical analysis, inference, or limited experimentation on the basis of the prior art, the invention is obvious and therefore has no prominent substantive feature. (Guidelines Part II Chapter 4 Section 2.2)
	Notable Progress
	That an invention represents notable progress means that the invention can produce advantageous technical effect as compared with the prior

art. For instance, the invention has overcome the defects and deficiencies in the existing technology, or has provided a different technical solution to solve a certain technical problem, or represents a certain new trend of technical development. (Guidelines Part II Chapter 4 Section 2.23)

Person Skilled in the Art

Whether or not an invention involves an inventive step shall be evaluated on the basis of the knowledge and capability of the person skilled in the art. The person skilled in the art refers to a fictional "person" who is presumed to be aware of all the common technical knowledge and have access to all the technologies existing before the filing date or the priority date in the technical field to which the invention pertains, and have capacity to apply all the routine experimental means before that date. However, he is not presumed to have creativity. If the technical problem to be solved impels that person to seek technical means in other technical field, he should also be presumed to have access to the relevant prior art, common technical knowledge, and routine experimental means in the other technical field before the filing date or the priority date.

The purpose of establishing such a concept is to unify the standard of examination and to avoid subjectivity as far as possible. (Guidelines Part II Chapter 4 Section 2.4)

Examination of Inventive Step of Invention

The determination as to whether or not an invention involves an inventive step shall be considered only when the invention has novelty.

1 Principles of Examination

In accordance with Article 22.3, when the inventive step of an invention is examined, the examiner shall examine whether or not the invention has prominent substantive features and whether or not it represents notable progress.

When evaluating whether or not an invention involves an inventive step, the examiner shall consider not only the technical solution itself, but also the technical field to which the invention pertains, the technical problem solved, and the technical effects produced by the invention. The invention shall be considered as a whole.

In the examination of inventive step, it is permissible to combine together different technical contents disclosed in one or more prior art documents to assess the claimed invention, which is different from the principle of "separate comparison" in the examination of novelty (see Chapter 3, Section 3.1 of this Part).

If an independent claim involves an inventive step, there is no need to examine the inventive step of its dependent claims.

2 Criterion for Examination

When the inventive step of an invention is assessed, Article 22.3 shall be the governing criterion for examination. In order to facilitate the understanding of this criterion, the typical approach to the assessment of prominent substantive features and the criterion for determining notable progress are respectively provided in the following.

2.1 Assessment of Prominent Substantive Features

To determine whether an invention has prominent substantive features is

to determine, to the person skilled in the art, whether the claimed invention is non-obvious as compared with the prior art.

If the claimed invention is obvious as compared with the prior art, it does not have prominent substantive features. On the contrary, if the result of comparison shows that the claimed invention is non-obvious as compared with the prior art, it has prominent substantive features.

2.1.1 Approach to Assessment

Usually the following three steps are followed to determine whether a claimed invention is obvious as compared with the prior art.

(1) Determining the closest prior art

The closest prior art refers to a technical solution in the prior art that is the most closely related to the claimed invention, which shall be the basis for determining whether or not the claimed invention has prominent substantive features. The closest prior art may, for example, be an existing technology in the same technical field as the claimed invention, and its technical problem to be solved, technical effects, or intended use are the closest to the claimed invention, and/or has disclosed the greatest number of technical features of the claimed invention; or be an existing technology which, despite being in a different technical field from the claimed invention, is capable of performing the function of the invention and has disclosed the greatest number of technical features of the invention. It should be noted that, when determining the closest prior art, account shall be first taken of the prior art in the same or similar technical fields.

(2) Determining the distinguishing features of the invention and the technical problem actually solved by the invention

During examination, the examiner shall objectively analyze and determine the technical problem actually solved by the invention. For this purpose, the examiner shall first determine the distinguishing features of the claimed invention as compared with the closest prior art and then determine the technical problem that is actually solved by the invention on the basis of the technical effect of the distinguishing features. The technical problem actually solved by the invention, in this sense, means the technical task in improving the closest prior art to achieve a better technical effect.

In the course of examination, because the closest prior art identified by the examiner may be different from that asserted by the applicant in the description, the technical problem actually solved by the invention, which is redetermined on the basis of the closest prior art, may not be the same as that described in the description. Under such circumstance, the technical problem actually solved by the invention shall be redetermined on the basis of the closest prior art identified by the examiner.

The redetermined technical problem may depend on the particular situations of each invention. As a principle, any technical effect of an invention may be used as the basis to redetermine the technical problem, as long as the technical effect could be recognized by a person skilled in the art from the contents set forth in the description.

(3) Determining whether or not the claimed invention is obvious to a person skilled in the art

At this step, the examiner shall make a judgment, starting from the closest prior art and the technical problem actually solved by the invention, as to whether or not the claimed invention is obvious to a

person skilled in the art. In the course of judgment, what is to be determined is whether or not there exists such a technical motivation in the prior art as to apply said distinguishing features to the closest prior art in solving the existing technical problem (that is, the technical problem actually solved by the invention), where such motivation would prompt a person skilled in the art, when confronted with the technical problem, to improve the closest prior art and thus reach the claimed invention. If there exists such a technical motivation in the prior art, the invention is obvious and thus fails to have prominent substantive features.

Under the following circumstances, it is usually thought there exists such a technical motivation in the prior art.

- (i) The said distinguishing feature is a common knowledge, such as a customary means in the art to solve the redetermined technical problem, or a technical means disclosed in a textbook or reference book to solve the redetermined technical problem.
- (ii) The said distinguishing feature is a technical means related to the closest prior art, such as a technical means disclosed in other part of the same reference document, the function of which in the other part is the same as the function of the distinguishing feature in the claimed invention in solving the redetermined technical problem.
- (iii) The said distinguishing feature is a relevant technical means disclosed in another reference document, the function of which in that reference document is the same as the function of the distinguishing feature in the claimed invention in solving the redetermined technical problem.

(Guidelines Part II Chapter 4 Section 3)

Assessment of Notable Progress

When evaluating whether or not an invention represents notable progress, the examiner shall primarily consider whether or not the invention produces advantageous technical effects. Usually, an invention shall be regarded as producing advantageous technical effects and therefore representing notable progress in any of the following circumstances:

- (1) where, as compared with the prior art, the invention produces a better technical effect, such as quality improved, output increased, energy saving, and environmental pollution prevented or controlled;
- (2) where the technical solution provided by the invention is of a different inventive concept and can produce a technical effect of substantially the same level as in the prior art;
- (3) where the invention represents a new trend of technical development; or
- (4) where, despite negative effect in some respect, the invention produces outstanding positive technical effects in other respects.

(Guidelines Part II Chapter 4 Section 3.2.2)

	USPTO
PCT	In the ISA/IPEA/US, the content of a single reference can call into question the inventive step of a claimed invention. See PCT/GL/ISPE, Appendix A13.13.
Legal basis	35 U.S.C. 103

Category	Category III
In practice	The content of a single reference may render a claimed invention prima facie obvious. See, e.g., MPEP 2144.08 for guidance. Furthermore, there are no restrictions as to the number of prior art references that might be combined for rejecting a claim for obviousness.

V. INVENTIVE STEP

B. Established test or practical guidance for the assessment of inventive step

B. Establ	ished test or practical guidance for the assessment of inventive step
	PCT reservation (PCT/GL/ISPE Appendix A13.08)
	EPO
PCT	PCT/GL/ISPE Appendix A13.08 applies
Legal basis	Art 56 EPC
Category	Category III
In practice	Problem-and-solution approach (GL G-VII, 5)
	In order to assess inventive step in an objective and predictable manner, the so-called "problem-and-solution approach" should be applied. Thus deviation from this approach should be exceptional. In the problem-and-solution approach, there are three main stages:
	Determination of the closest prior art (GL G-VII, 5.1)
	The closest prior art is that which in one single reference discloses the combination of features which constitutes the most promising starting point for an obvious development leading to the invention. In selecting the closest prior art, the first consideration is that it should be:
	(i) be directed to a similar purpose or effect as the invention or at least belong to the same or a closely related technical field as the claimed invention
	(ii) be assessed from the skilled person's point of view on the day before the filing or priority date valid for the claimed invention
	(iii) take into account what the applicant himself acknowledges in his description and claims to be known.
	In some cases there are several equally valid starting points for the assessment of inventive step. If a patent is to be granted, it may be necessary to apply the problem-and-solution approach to each of these starting points in turn. In the event of refusal, however, it is sufficient to show, on the basis of one relevant piece of prior art, that the claimed subject-matter lacks an inventive step.
	Determination of the objective technical problem (GL G-VII, 5.2)
	The determination of the technical problem consists in:
	(i) identifying the differences, in terms of technical features (either structural or functional) between the claimed invention and the closest prior art, and the technical effect resulting from the distinguishing features. Features which cannot be seen to make any contribution, either independently or in combination with other features, to the technical character of an invention are not relevant for assessing inventive step.
	(ii) formulating the "objective technical problem", e.g., the aim and task of modifying or adapting the closest prior art to provide the technical effects that the invention provides over the closest prior art, based on objectively established facts. It is noted that the objective technical problem must be so formulated as not to contain pointers to the technical solution (no expost facto analysis).
	The objective technical problem derived in this way may not be what the applicant presented as "the problem" in his application. The latter may

require reformulation, since the objective technical problem is based on objectively established facts, in particular appearing in the prior art revealed in the course of the proceedings, which may be different from the prior art of which the applicant was actually aware at the time the application was filed. In particular, the prior art cited in the search report may put the invention in an entirely different perspective from that apparent from reading the application only. Reformulation might lead to the objective technical problem being less ambitious than originally envisaged by the application. An example of such a case would be where the originally stated problem is the provision of a product, process or method demonstrating some improvement, but where there is no evidence that the claimed subject-matter is thereby improved over the closest prior art uncovered in the search; rather, there is only evidence with respect to more distantly related prior art (or possibly none at all). In this case, the problem has to be reformulated as the provision of an alternative product, process or method. The obviousness of the claimed solution to that reformulated problem must then be assessed in the light of the cited prior art (see T 87/08, not published in the OJ).

The extent to which such reformulation of the technical problem is possible has to be assessed on the merits of each particular case. As a matter of principle any effect provided by the invention may be used as a basis for the reformulation of the technical problem, as long as said effect is derivable from the application as filed (see T 386/89). It is also possible to rely on new effects submitted subsequently during the proceedings by the applicant, provided that the skilled person would recognise these effects as implied by or related to the technical problem initially suggested (see G-VII, 11 and T 184/82, not published in the OJ).

Obviousness to the skilled man - The could-would approach (GL G-VII, 5.3)

In the third stage the question to be answered is whether there is any teaching in the prior art as a whole that would (not simply could, but would) have prompted the skilled person, faced with the objective technical problem, to modify or adapt the closest prior art while taking account of that teaching, thereby arriving at something falling within the terms of the claims, and thus achieving what the invention achieves. This must have been the case for the skilled person before the filing or priority date valid for the claim under examination.

Attention is drawn to the Annex to GL G-VII, which contains several examples relating to inventive step.

	and the second s
JPO	
PCT	PCT/GL/ISPE Appendix A13.08 does not apply
Legal basis	Guidelines Part II, Chapter 2, 2.4,2.5
Category	Category I
In practice	Basic Idea of Analysis of Inventive Step
	"(1) The presence of an inventive step is determined based on whether or not it could be reasoned that person skilled in the art is able to easily arrive at the claimed inventions based on the cited inventions, by constantly considering the process the person skilled in the art may take based on the exact understanding of the technical field of the claimed invention as of the filing.
	(2) For details, after the claimed invention and one or more cited

inventions have been identified, one of the cited inventions most suitable for the reasoning is selected, and the claimed invention and cited invention are compared to find the correspondences and differences between the matters used to specify the claimed invention and matters used to specify the cited invention. Then, reasons for denying the presence of an inventive step of the claimed invention are sought based on the details of this or other cited invention(s)(including well known and commonly used arts) and the common general knowledge. This reasoning may be conducted from various and broad viewpoints. For example, it is examined to see if the claimed invention is selection of optimum materials, workshop modification, or mere aggregation or if the contents of the cited invention could be a cause or motivation of the claimed invention. In addition, an advantageous effect as a result of the comparison of the claimed invention to the cited invention is taken into consideration as grounds for positively presuming the presence of the inventive step when the effect is clearly described in the specification etc. As a result of this approach, the inventive step of the claimed invention is denied when the reasoning is valid and it is not denied when the reasoning is invalid.

(3) In addition, the approach for identifying the claimed inventions and the cited inventions and that for comparing the claimed inventions and the cited inventions are also applied to the "Approach for determining the novelty.""

Examples of Reasoning

"Reasoning may be conducted from various and broad viewpoints. The following are examples of reasoning.

- (1) selection from optimum material, workshop modification, or mere aggregation
- ① selection from optimum material, workshop modification etc.

The claimed inventions that are selection from optimum materials from publicly known materials optimally or preferably modified numerical ranges, materials replaced by equivalents, or designs modified along specific application of techniques to solve certain problems are regarded to be arts derived from the ordinary creativity of a person skilled in the art. When the difference from the cited inventions only lies in any one of these modifications, the claimed inventions are usually regarded as obvious to a person skilled in the art, unless other grounds for presuming the presence of the inventive step in the claimed inventions are provided.

② Mere aggregation

Claimed inventions are included in those that would be obvious to a person skilled in the art of ordinary creativity when the components of the claimed inventions whose functions and working are not correlated and the claimed invention has merely aggregated components or merely a combination of the components, unless other grounds for presuming the presence of the inventive step in the claimed inventions are provided.

- (2) Probable cause or motivation
- (1) Relation of technical fields

The inventions to which any technical means of the related technical field is attempted to be applied to solve the problems in the inventions are the inventions created by exercising the ordinary creativity of a person skilled

in the art. For example, a technical means that could be replaced by or added to the art described in the related technical fields could be a strong ground for showing that a person skilled in the art could arrive at the claimed invention based on the means.

② Close similarity of problems to be solved

A close similarity found between problems to be solved in the inventions provides strong grounds for the reasoning that the claimed invention is an idea at which a person skilled in the art could arrive by applying or combining the cited inventions.

When the cited documents are not considered to be involved in the problem to be solved that is intended to be similar to the claimed invention, further analysis of the inventions based on the state of the art is necessary to see the obviousness of the problem or see if the problem is an idea that a person skilled in the art could easily conceive.

The inventive step of the claimed inventions, which are based on the cited inventions providing other problems to be solved, may be denied when it is reasoned that a person skilled in the art could easily conceive the matter used to specify the claimed inventions through other approaches, regardless of the difference between the problems to be solved by these inventions. This approach is also applied to inventions whose problems are not found, such as inventions resulting from discoveries found through trial and error.

③ Commonality of working or functions

Commonality of working or functions between a matter used to specify the claimed invention and a matter used to specify the cited invention or between matters used to specify the cited inventions is a strong base for showing that a person skilled in the art could derive the claimed invention from application or a combination of the cited inventions.

4 Implications in the cited inventions

Implications shown in the cited inventions relevant to the claimed invention are strong grounds for the reasoning that a person skilled in the art could derive the claimed invention from the cited inventions.

(3) Effects more advantageous to the claimed inventions than the cited inventions

Advantageous effects of the claimed inventions explicitly described in the specifications etc. are taken into consideration as a fact used for positively confirming the presence of the inventive step in the inventions. "Advantageous effects" means effects more advantageous to the claimed inventions than the cited inventions, selected from effects or particular effects derived from the matters used to specify the claimed inventions.

① Analyzing effects more advantageous to the claimed inventions than the cited inventions

The effects more advantageous to the claimed inventions than the cited inventions are attempted to be analyzed for reasoning that a person skilled in the art could have easily arrived at the claimed inventions, and the inventive step of the claimed inventions is denied when the fact that the a person skilled in the art could have easily arrived at the claimed inventions is sufficiently reasoned, regardless of the presence of the advantageous effects.

However, some inventive step may not be denied when the effect more advantageous to the claimed invention than the cited invention is

distinctively beyond the expectation on the basis of the state of the art.

For example, it is presumed that the inventive step is present in the claimed inventions even if: the matters used to specify the cited inventions and those used to specify the claimed inventions are similar; a combination of several cited inventions appears to be the idea a person skilled in the art easily conceive, the effect is more advantageous to the claimed inventions than the cited inventions, and the combination has a different nature from those of the cited inventions; or the effect has the same quality as but superior to that of the cited inventions and person skilled in the art is not able to expect the effect from the state of the art.

Especially, for claimed inventions that belong to a technical field where it is difficult to expect the effect based on the structures of the products, the effect more advantageous to the claimed inventions than the cited invention is an important factor for confirming the presence of the inventive step.

② Analyzing the effects claimed in written opinions or etc.

The effects claimed or proved in written opinions or etc., such as experimental results, are analyzed when the specifications provide effects more advantageous to the claimed inventions than the cited inventions and when person skilled in the art is able to presume effects more advantageous to the claimed inventions than the cited inventions from the descriptions of the specifications or drawings, although the advantageous effects are not explicitly described. However, the effects claimed or proven in the written opinions which a person skilled in the art is not able to presume from specifications, etc should not be analyzed.

(Reference: Decision by the Tokyo High Court, October 27, 1998 [Heisei 9 (Gyo Ke) 198])

- ③ Approach to selection inventions
- (i) Selection inventions are inventions belonging to the technical fields in which it is difficult to expect the effects of the inventions based on the structures of the products, and out of the cited inventions providing generic concepts disclosed in publications or providing substantial or formal options, the inventions providing more specific concepts subdivided under the generic concepts or inventions in which some of the options are presumed to specify the claimed inventions, whose novelty is not denied by the cited inventions, are selected. Therefore, inventions that are not regarded to be disclosed in publications mentioned in 1.5.3(3) are potential selection inventions.
- (ii) The claimed inventions involve inventive step when they provide advantageous effects that are not disclosed in publications and that are different from those included in the inventions providing the generic concepts in publications or prominent even with the same type of effect, which a person skilled in the art could not expect on the basis of the state of the art.

(References: Decisions by the Tokyo High Court, October 31, 1963 [Showa 34 (Gyo Na) 13]; March 30, 1978 [Showa 51 (Gyo Ke) 19]; July 30,1981 [Showa 53 (Gyo Ke) 20];

September 8, 1987 [Showa 60 (Gyo Ke) 51])

Approach to claimed inventions providing numerical limitations
 So-called numerical limitation inventions are inventions that provide

descriptions limiting the inventions numerically by numerical ranges, and

these inventions are considered to be as follows:

- (i) The claimed inventions providing the optimized or idealized numerical ranges in a trial way usually do not involve the inventive step since they provide the arts achieved by the ordinary creativity of a person skilled in the art. However:
- (ii) the claimed inventions involve the inventive step when they provide advantageous effects within a range of the limited numerical values, which are not disclosed in publications and provide different characteristics from those of the cited inventions disclosed in the publications or which are distinctive effects having the same characteristics as but are distinctively superior to those in the publications, from which a person skilled in the art could not expect the claimed inventions even considering the state of the art.

Prominence of advantageous effects shall be provided within a complete range of the numerical values.

In addition, the following should be noted for considering the significance of critical range of so-called numerical limitations.

The claimed inventions created on the extension of the cited inventions, or the claimed inventions that differ from the cited inventions only in the presence of numerical limitations and that share common problems to be solved, are required to provide a distinctive quantitative difference in numerical values between those outside the limitations and those inside the limitations.

However, claimed inventions are not required to provide critical range of numerical limitations when the claimed inventions and the cited inventions are different in the problem to be solved as well as characteristics of the advantageous effect, regardless of the presence of matters used to specify the identical invention in both claimed inventions and cited inventions excluding numerical limitations.

(References: Decisions by the Tokyo High Court, July 21, 1987 [Showa 59 (Gyo Ke) 180]) "(Guidelines Part II, Chapter 2, 2.4,2.5)

KIPO	
PCT	PCT/GL/ISPE Appendix A13.08 is not applied
Legal basis	Guidelines Part III, Chapter 3, 5.1
Category	Category I
In practice	Guidelines
	5.1 Procedures of assessing the inventive step
	The procedures of assessing the inventive step are as follows:
	(1) First, specify the claimed invention. The method of specifying the claimed invention is the same with that of "assessing novelty" in Chapter 2.
	(2) Secondly, specify the cited invention(s). The method of specifying the cited inventions is the same with that of "assessing novelty" in Chapter 2. The examiner shall specify the cited inventions from the point of view of a person skilled in the art, on the assumption of the common technical field and technical problems of the claims of present invention.
	(3) Select the cited invention which is the closest to the claimed invention
	(herein after "the closest cited invention") and makes a clear difference

	by comparing the closest cited invention with the claimed invention. In doing so, the examiner shall take into consideration the structural combination of the elements of an invention. More specifically, organically combined structural elements of an invention shall be compared as one integrated unit (without being separated) with their corresponding elements in the cited invention. (4) The examiner assesses whether an invention described in the claims
	can be easily made by a person skilled in the art, in view of cited inventions and the common general knowledge before the filing, although there is a difference between the claimed invention and the cited invention(s).(Guidelines Part III, Chapter 3, 5.1)
	SIPO
PCT	Partially adopts PCT/GL/ISPE Appendix A13.08
Legal basis	Art 22(3)
Category	Category III
In practice	Usually the following three steps are followed to determine whether a claimed invention is obvious as compared with the prior art.
	(1) Determining the closest prior art
	The closest prior art refers to a technical solution in the prior art that is the most closely related to the claimed invention, which shall be the basis for determining whether or not the claimed invention has prominent substantive features. The closest prior art may, for example, be an existing technology in the same technical field as the claimed invention, and its technical problem to be solved, technical effects, or intended use are the closest to the claimed invention, and/or has disclosed the greatest number of technical features of the claimed invention; or be an existing technology which, despite being in a different technical field from the claimed invention, is capable of performing the function of the invention and has disclosed the greatest number of technical features of the invention. It should be noted that, when determining the closest prior art, account shall be first taken of the prior art in the same or similar technical fields.
	(2) Determining the distinguishing features of the invention and the technical problem actually solved by the invention
	During examination, the examiner shall objectively analyze and determine the technical problem actually solved by the invention. For this purpose, the examiner shall first determine the distinguishing features of the claimed invention as compared with the closest prior art and then determine the technical problem that is actually solved by the invention on the basis of the technical effect of the distinguishing features. The technical problem actually solved by the invention, in this sense, means the technical task in improving the closest prior art to achieve a better technical effect.
	In the course of examination, because the closest prior art identified by the examiner may be different from that asserted by the applicant in the description, the technical problem actually solved by the invention, which is redetermined on the basis of the closest prior art, may not be the same as that described in the description. Under such circumstance, the technical problem actually solved by the invention shall be redetermined on the basis of the closest prior art identified by the examiner.

	The redetermined technical problem may depend on the particular situations of each invention. As a principle, any technical effect of an invention may be used as the basis to redetermine the technical problem, as long as the technical effect could be recognized by a person skilled in the art from the contents set forth in the description. (3) Determining whether or not the claimed invention is obvious to a person skilled in the art At this step, the examiner shall make a judgment, starting from the closest prior art and the technical problem actually solved by the invention, as to whether or not the claimed invention is obvious to a person skilled in the art. In the course of judgment, what is to be determined is whether or not there exists such a technical motivation in the prior art as to apply said distinguishing features to the closest prior art in solving the existing technical problem (that is, the technical problem actually solved by the invention), where such motivation would prompt a person skilled in the art, when confronted with the technical problem, to improve the closest prior art and thus reach the claimed invention. If there exists such a technical motivation in the prior art, the invention is obvious and thus fails to have prominent substantive features. (Guidelines Part II Chapter 4 Section 3.2.1.1)
	USPTO
PCT	The ISA/IPEA/US does not apply the "problem-solution approach" of assessing inventive step set forth in PCT/GL/ISPE, Appendix A13.08.
Legal basis	35 U.S.C. 103: 37 CFR 1.104: Graham v. John Deere Co., 383 U.S. 1 (1966);) KSR International Co. v. Teleflex Inc., 550 U.S. 398 (2007)
Category	Categories III and IV
In practice	The question of nonobviousness must be determined as of the "time the invention was made."
	The use of hindsight or evaluation in the context of skills developed by the evaluator or skilled artisan after the date of the invention have no place and must be ignored in the determination of nonobviousness.
	The U.S. Supreme Court in KSR International Co. v. Teleflex Inc. reaffirmed the framework for determining obviousness as set forth in Graham v. John Deere. The basic factual inquiries of Graham v. John Deere are: (1) determining the scope and contents of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; and (3) resolving the level of ordinary skill in the art while taking into account secondary considerations.
	The examiner conducts the search of the pertinent art where one can reasonably be expected to look for a solution to the problem which the invention attempts to solve.
	The Supreme Court in <i>KSR</i> noted that the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. Exemplary rationales that may support a conclusion of obviousness include:
	(1) Combining prior art elements according to known methods to yield predictable results;
	(2) Simple substitution of one known element for another to obtain predictable results;
	(3) Use of known technique to improve similar devices (methods, or

products) in the same way;

- (4) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (5) "Obvious to try" choosing from a finite number of identified, predictable solutions to a recognized problem or need in the art, with a reasonable expectation of success;
- (6) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art:
- (7) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

See MPEP 2143 for discussions of each rationale along with examples illustrating how the cited rationales may be used to support a finding of obviousness. The list of rationales provided is not intended to be an all inclusive list. Other rationales to support a conclusion of obviousness may be relied upon by Office personnel.

V. INVENTIVE STEP

C. Secondary indicia, if any, that may be taken into account for the assessment of inventive step

of inventive step	
Based on the Trilateral Comparative Studies	
	EPO
PCT	N.A.
Legal basis	Art 56 EPC
Category	Category IV
In practice	Predictable disadvantage; non-functional modification; arbitrary choice (GL G-VII, 10.1)
	If the invention is the result of a foreseeable disadvantageous modification of the closest prior art, which the skilled person could clearly predict and correctly assess, and if this predictable disadvantage is not accompanied by an unexpected technical advantage, then the claimed invention does not involve an inventive step (see T 119/82, OJ 5/1984, 217, and T 155/85, OJ 3/1988, 87). However, if this worsening is accompanied by an unexpected technical advantage, an inventive step might be present.
	Similar considerations apply to the case where an invention is merely the result of an arbitrary non-functional modification of a prior-art device or of a mere arbitrary choice from a host of possible solutions (see T 72/95, not published in OJ, and T 939/92, OJ 6/1996, 309).
	Unexpected technical effect: "Bonus effect" v. "One-way street" situation (GL G-VII, 10.2)
	An unexpected technical effect may be regarded as an indication of inventive step. However, if, having regard to the state of the art, it would already have been obvious for a skilled person to arrive at something falling within the terms of a claim, for example due to a lack of alternatives thereby creating a "one-way street" situation, the unexpected effect is merely a bonus effect which does not confer inventiveness on the claimed subject-matter (see T 231/97, not published in OJ and T 192/82, OJ 9/1984, 415).
	"Long-felt need" v "Commercial success" (GL G-VII, 10.3)
	Where the invention solves a technical problem which workers in the art have been attempting to solve for a long time, or otherwise fulfils a long-felt need, this may be regarded as an indication of inventive step. Commercial success alone is not to be regarded as indicative of inventive step, but evidence of immediate commercial success when coupled with evidence of a long-felt want is of relevance provided the examiner is satisfied that the success derives from the technical features of the invention and not from other influences (e.g. selling techniques or advertising).
JPO	
PCT	N.A.
Legal basis	Guidelines Part II, Chapter 2, 2.8(6)
Category	Category I

In practice	"Commercial successes or facts following the successes are analyzed to
	positively support the presence of the inventive step insofar as the examiners are convinced by applicant-submitted assertions or proof that these facts are derived from the features of the claimed inventions, not
	from other factors such as sales promotion techniques or advertisements." (Guidelines Part II, Chapter 2, 2.8(6))
	KIPO
PCT	N.A.
Legal basis	Guidelines Part III, Chapter 3, 8. Case No. 2002Hu314 (Supreme Court, 27 Dec. 2002)
Category	Category I, Category IV
In practice	Guidelines
	8. Other factors in assessing inventive step
	In principle, the assessment of the inventive step is to consider comprehensively the objective, technical constitution, and functional effect of an invention described in a claim, i.e., to assess the uniqueness of the objective and the remarkableness of the effect as a whole, mainly based on the difficulty of technical structure. However, there might be other factors in assessing the inventive step. Thus, the examiner should not readily reach the conclusion that the claimed invention lacks an inventive step when a written opinion submitted by an applicant claims that the claimed invention is not obvious for the following reasons: (1) If a prior art document teaches not to refer to the prior art thereof, i.e., if there is a description in the prior art document that precludes the reasoning that a person skilled in the art would easily arrive at the claimed invention, the inventive step is not denied by the prior art despite the similarity between the prior art and the claimed invention. In addition, the fact that the prior art in a prior art document is described as inferior cannot be necessarily considered as a factor that precludes the inventive
	(2) Commercial success or favourable responses from the industry or the fact that the claimed invention had not been implemented by anybody for a long time before the claimed invention was filed may be regarded as indicative of the inventive step as a secondary evidence. However, those facts alone are not to be regarded as indicative of the inventive step. First of all, as the inventive step should be assessed based on the contents disclosed in the specification (i.e., the objective, structure, and effect of the invention), commercial success is not to be regarded as a reference for the assessment of the inventive step, provided that such success is not derived from the technical features of the invention but from other factors (e.g., improvement in sales techniques or advertising). (Reference) Although a mobile video pop song accompaniment of the claimed invention made a hit 53 in Japan with a signed two-year export contract
	worth \$84,000,000, this cannot prove that the success is based only on the superiority of a technical structure of the claimed invention. In addition, if the success is assessed as deriving from the sales techniques of a salesperson, evidence of the commercial success alone is not to be regarded as a factor in guaranteeing the inventive step. (Case No. 2002Hu314 (Supreme Court, 27 Dec. 2002)

(3) The fact that a claimed invention solves a technical problem that a person skilled in the art has attempted to solve for a long time or fulfils a long-felt need may be regarded as an indication of the inventive step. In addition, such a solution of a technical problem or a need should have been recognized by a person skilled in the art for a long time and be fulfilled by the claimed invention for the first time. To accept this as an indication of inventive step, an objective evidence is required. (4) If an invention is made by technical means which a person skilled in the art has abandoned due to technical prejudice interfering with the research and development of a technical problem in the relevant field of the art, thereby solving the technical problem, this is regarded as an indicator of the inventive step. (5) If a claimed invention proposes means for overcoming technical difficulties not resolvable by other means or for solving a technical problem, this is regarded as an advantageous evidence for an inventive step. (6) If a claimed invention falls within the area of a brand-new technology and has no prior art relevant to the invention, or if the closest prior art to the invention is far away from the invention, the inventive step is likely to be acknowledged. (Guidelines Part III, Chapter 3, 8.) **SIPO PCT** N.A. Art 22(3), Guidelines Part II Chapter 4 Section 5 Legal basis Category Category III In practice Other Factors to be Considered in the Examination of Inventive Step Usually, whether or not an invention involves an inventive step shall be examined according to the criterion set forth in Section 3.2 of this Chapter. It should be stressed that where an application falls into one of the following circumstances, the examiner shall take the corresponding factors into account and avoid making a rash determination that the invention does not involve an inventive step. (Guidelines Part II Chapter 4 Section 5) Solving a Long-Felt but Unsolved Technical Problem Where the invention has solved a technical problem which was desired to be solved for a long time but not successfully solved, the invention has prominent substantive features and represents notable progress, and thus involves an inventive step. (Guidelines Part II Chapter 4 Section 5.1) Overcoming a Technical Prejudice Technical prejudice refers to the understanding of technicians in the art of a certain technical problem in a technical field during a certain period of time that departs from the objective facts, leads the technicians to believe that there is no other possibility and hinders the research and development in that technical field. If an invention is made by overcoming such technical prejudice and adopting the technical means which was abandoned by the technicians due to the prejudice, and hereby has solved a technical problem, then the invention has prominent substantive features and represents notable progress, and thus involves an inventive

step. (Guidelines Part II Chapter 4 Section 5.2)

Producing Unexpected Technical Effect

invention produces an unexpected technical effect means that, as npared with the prior art, the technical effect of the invention resents a "qualitative" change, that is, new performance; or represents quantitative" change which is unexpected. Such a qualitative or intitative change cannot be expected or inferred by the person skilled
ne art in advance. If an invention produces an unexpected effect, it ans the invention represents notable progress on the one hand, and it is means that the technical solution of the invention is non-obvious and is has prominent substantive features on the other hand. Therefore the ention involves an inventive step. (Guidelines Part II Chapter 4 Section
nieving Commercial Success
tures of the invention directly bring about such success, it means that invention has advantageous effect on the one hand and it is non-rious on the other hand. Such kind of invention has prominent estantive features and represents notable progress, and thus involves inventive step. However, if the success is brought about by other cors, such as an advance in selling techniques or advertising, it shall be used as a basis for assessing inventive step. (Guidelines Part II apter 4 Section 5.4)
USPTO
ham v. John Deere Co., 383 U.S. 1 (1966); KSR International Co. v. eflex Inc., 550 U.S. 398 (2007)
egory IV
condary indicia that may be taken into account when assessing the riousness of a claimed invention include the presence of unexpected ults, evidence of commercial success, long-felt but unsolved needs, are of others, copying by others, and scepticism of experts. The dence may be included in the specification as filed, accompany the elication on filing, or be provided in a timely manner at some other and turing the prosecution. The weight to be given any objective dence is made on a case-by-case basis.

V. INVENTIVE STEP

D. Comparative tests, and specific requirements for taking them into account	
	Based on the Trilateral Comparative Studies
	EPO
PCT	N.A.
Legal basis	N.A.
Category	Categories I, IV
In practice	Comparative tests filed after the filing date of an application cannot be included by way of amendment. Such information is, however, kept in that part of the dossier which is open to public inspection (Art. 128(4)).
	JPO
PCT	N.A.
Legal basis	Guidelines Part II, Chapter 2, 2.5(3)
Category	Category I
In practice	"The effects claimed or proved in written opinions or etc., such as experimental results, are analyzed when the specifications provide effects more advantageous to the claimed inventions than the cited inventions and when person skilled in the art is able to presume effects more advantageous to the claimed inventions than the cited inventions from the descriptions of the specifications or drawings, although the advantageous effects are not explicitly described. However, the effects claimed or proven in the written opinions which a person skilled in the art is not able to presume from specifications, etc should not be analyzed. (Reference: Decision by the Tokyo High Court, October 27, 1998 [Heisei 9 (Gyo Ke) 198])"
	(Guidelines Part II, Chapter 2, 2.5(3))
	KIPO
PCT	N.A.
Legal basis	Guidelines Part III, Chapter 3, 6.3(3) Guidelines Part III, Chapter 3, 6.4.1
Category	Category I
In practice	Guidelines
	"In case where the advantageous effect of the claimed invention which is superior to that of the prior art is either disclosed in the detailed description or easily recognized by a person skilled in the art from the detailed description or the drawings even though it is not explicitly disclosed, the examiner can assess the inventive step based on the inventor's assertion of the advantageous effect. However, the effect merely based on the inventor's assertion should not be taken into consideration in assessing the inventive step if the advantageous effect is neither disclosed nor inferred from the descriptions or drawings." (Guidelines Part III, Chapter 3, 6.3(3)) "The detailed description of the selection invention should precisely

	explain that the invention generates an advantageous effect in comparison with the cited invention, and does not need to provide experimental materials to confirm the prominence of the effect. If the grounds for rejection are notified due to the effect, the applicant can assert the effect concretely by submitting materials relating to experimental comparisons." (Guidelines Part III, Chapter 3. 6.4.1)
	SIPO
PCT	N.A.
Legal basis	Art 22(3), Guidelines Part II Chapter 2 Section 2.2.4
Category	Category III
In practice	Advantageous effects may be described by way of analysis of the structural features of the invention or utility model in combination with theoretical explanation, or illustrated with reference to experimental data, rather than by just assertion that the invention or utility model possesses the advantageous effects.
	However, no matter which approach is applied to explain the advantageous effects, the invention or utility model shall be compared with the prior art and the difference between the invention or utility model and the prior art shall be pointed out.
	The advantageous effects of an invention or utility model in the field of mechanics or electricity may, under certain circumstances, be explained by analysis of the structural features of the invention or utility model in conjunction with their operation mode. However, for an invention in the field of chemistry, under most circumstances, it is appropriate to explain the advantageous effects with reference to experimental data rather than in the above way.
	For those matters measurement of which is not available at present and the judgment of which has to rely on human sensory organs, such as taste and smell, the advantageous effects may be described by means of statistical experimental results.
	Where the advantageous effects are explained by citing experimental data, the necessary experimental conditions and methods shall be provided. (Guidelines Part II Chapter 2 Section 2.2.4)
	USPTO
PCT	N.A.
Legal basis	Current jurisprudence; MPEP
Category	Category IV
In practice	There is no requirement to submit comparative test results. Comparative tests are usually submitted as rebuttal evidence to show unexpected results once the USPTO has established a prima facie case of obviousness. Evidence pertaining to secondary considerations must be taken into account whenever present, however any comparative tests must be between the claimed invention and the closest prior art. MPEP 716.02(a) and 2145 provide guidance regarding the consideration of comparative tests submitted to support patentability of claimed subject matter.