

Examination Guidelines for Patentability

- Novelty and Inventive Step

Nov. 26, 2013

Atsushi Hiruta
Examination Standards Office
JAPAN PATENT OFFICE

■ International Search

- The objective of the international search is to discover relevant prior art. (PCT Article 15(2))
- For the purposes of Article 15(2), relevant prior art shall consist of everything which has been made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) and which is capable of being of assistance in determining that the claimed invention is or is not new and that it does or does not involve an inventive step (i.e., that it is or is not obvious), provided that the making available to the public occurred prior to the international filing date. (Rule 33.1 (a))

■ Written Opinion

- the International Searching Authority shall, at the same time as it establishes the international search report or the declaration referred to in Article 17(2)(a), establish a written opinion as to: whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), and to be industrially applicable; (Rule 43bis.1)

- International Preliminary Examination
 - The objective of the international preliminary examination is to formulate a preliminary and non-binding opinion on the questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), and to be industrially applicable. (Art. 33(1))

- For the purposes of the international preliminary examination, a claimed invention shall be considered novel if it is not anticipated by the prior art as defined in the Regulations. (Art. 33(2))
- For the purposes of the international preliminary examination, a claimed invention shall be considered to involve an inventive step if, having regard to the prior art as defined in the Regulations, it is not, at the prescribed relevant date, obvious to a person skilled in the art. (Art. 33(3))

PCT International Search and Preliminary Examination (ISPE) Guidelines

Primarily for examiners in ISAs/IPEAs (ISPE Guidelines 1.02)

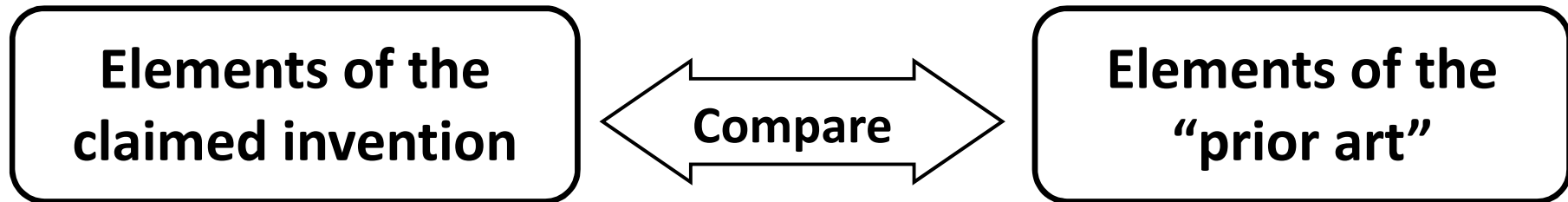
- Appendix of the Guidelines allows options of practices for ISAs/IPEAs.

- Exclusions from, and limitation of, International Search and International Preliminary Examination (ISPE Guidelines Ch. 9)
- Unity of Invention (ISPE Guidelines Ch. 10)
- Novelty (ISPE Guidelines Ch. 12)
- Inventive Step (ISPE Guidelines Ch. 13)
- Others

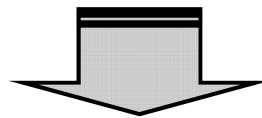
ISPE Guidelines

- Chapter 5 Claims (Interpretation of claims 5.20 – 5.28)
- Chapter 11 Prior Art

Does a document under consideration form part of any “prior art”?

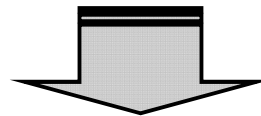


(ISPE guidelines 12.03)



Assessment of Novelty

Where there is a difference, the claimed invention is novel.



Assessment of inventive step

Example: Claim

- (1) A mobile communication terminal comprising
- (2) a main housing,
- (3) a folder cover and
- (4) a hinge,
- (5) wherein the folder cover contains a display screen and
- (6) the main housing contains a keypad.

A document which describes a cell phone



- Interpretation of Claims
- Prior Art
- Assessment of Novelty
- Assessment of Inventive step

- Interpretation of Claims
- Prior Art
- Assessment of Novelty
- Assessment of Inventive step

- ISPE Guidelines Chapter 5: Claims
- This chapter sets out the appropriate form and content of the claims, together with how they should be interpreted for the purposes of assessing the novelty and inventive step of the inventions which they define, and searching for prior art which may be relevant to making that determination. (ISPE Guidelines 5.03)
- Claims should be interpreted the same way for both search and examination purposes. (ISPE Guidelines 5.20)

Definition in descriptions

- Each claim should be read, with the words given the ordinary (common) meaning and scope that would be attributed to them by a person skilled in the relevant art, unless in particular cases the description gives the words a special meaning, by explicit definition or otherwise. (ISPE Guidelines 5.20)

- Appendix = alternatives for ISAs (ISPE Guidelines A5.20)
- Where the description provides a special meaning by way of, for example, defining a term appearing in the claim
 - [1] the definition should be used for the interpretation of the claim.
 - [2] 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.

“Use” Claims

Example “substance or composition X for use as a medicament”

- A claim to a substance or composition for a particular use should generally be construed as meaning a substance or composition which is in fact suitable for the stated use
- A known product, which would not be unsuitable for the stated use, would not deprive the claim of novelty; but if the known product is in a form in which it is in fact suitable for the stated use, though it has never been described for that use, it would deprive the claim of novelty. (ISPE Guidelines 5.21)

Open and Closed Claims

- (a) “closed” type.
“a product consisting only of A, B and C”

- (b) “open” type.
“a product comprising A, B and C”

- (c) “consisting essentially of”
“a product consisting essentially of A, B and C”

In case a Prior Art describes

“a product which includes A, B, C and D”

(ISPE Guidelines 5.24)

Means Plus Function Claims

Example “a building material incorporating a layer which insulates heat”

- A limitation in the claim defines a means or a step in terms of its function or characteristics without specifying the structure or material or act in support thereof
- It is construed as defining any structure or material or act which is capable of performing the defined function or which has the defined characteristics

(ISPE Guidelines 5.25)

Product by Process Claims

Example, “a two-layer structured panel which is made by welding together an iron sub-panel and a nickel sub-panel.”

- A claim defines a product in terms of the process by which the product is made
- The claim as a whole is directed to a product. Such a claim lacks novelty if a prior art product, even if made by an undisclosed process, appears to be inherently the same as, or indistinguishable from, the claimed invention.
- Appendix gives options

(ISPE guidelines 5.26, 5.27, A5.26)

- Interpretation of Claims
- Prior Art
- Assessment of Novelty
- Assessment of Inventive step

- The prior art, for the purposes of assessing the novelty and inventive step of an invention, is defined as “everything made available to the public anywhere in the world by means of written disclosure” before the “relevant date.”
- No restrictions as to:
the geographical location, the language or manner (including the Internet or an on-line database)
(ISPE guidelines 11.01)
- Any disclosure deemed to be prior art must enable a person skilled in the art to carry out the claimed invention.
(ISPE guidelines 12.02)

Form of Disclosure

Availability of Written Disclosure to the Public

- A written disclosure becomes “available to the public” if it was possible for the public to gain access to the content of the document and to acquire possession of the content of the document, and there was no bar of confidentiality restricting the use or dissemination of the knowledge gained thereby.

(ISPE guidelines 11.12)

Relevant Date

- Relevant Date for International Search Report Purposes:
This refers to the international filing date of the international application. (Rule 33.1)
- Relevant Date for Written Opinion and International Preliminary Examination Purposes:
This refers to: (i) the international filing date of the international application, or (ii) where that international application validly claims the priority of an earlier application, the filing date of such earlier application. (Rule 64.1)

(ISPE guidelines 11.03, 11.04)

Documents not within prior art but which nevertheless may be relevant

- International search reports include later published patent applications or patents which would constitute relevant prior art (Rule 33(3))
- The written opinion and the preliminary examination report do not include (Cited in “Certain document cited”)

(ISPE guidelines 11.07, 11.08, 17.44)

Forms of Disclosure Disclosures on the Internet

- Problems of citing disclosures via the Internet (a web page) include:
 - (1) establishing the date of publication
 - (2) determining whether or not the disclosure has been modified over time.

- *A Disclosure Made on the Web Sites of Trusted Publishers* (on-line scientific journals and the web sites of newspapers, periodicals, and television and radio stations)

- This type of Internet disclosure gives the publication date of the disclosure which, in the absence of evidence to the contrary, should be taken at face value.

(ISPE guidelines 11.13-20)

- Interpretation of Claims
- Prior Art
- Assessment of Novelty
- Assessment of Inventive step

Inherent or Implicit Disclosure

- Example: “elastic material” in a claim, and “rubber” in a prior art, where the elastic properties of rubber are relied upon in the prior art.
- Lack of novelty may be apparent from an inherent or implicit teaching in the document.
- Alternatively, inevitably arrive at a result falling within the terms of the claim.
- Lack of novelty of this kind should be raised by the examiner only when there can be no reasonable doubt as to the practical effect of the prior teaching.
- Lack of novelty may not be established by probabilities or possibilities.

(ISPE guidelines 12.04)

Combining Documents

- Example

Claim A+B+C

A prior art, embodiment 1: A+B, embodiment 2: B+C

- No: combine separate items in Novelty Assessment
- However, if a document refers explicitly to a second document, the teachings of the second document may be regarded as incorporated into the primary document to the extent indicated in the primary document.
- Dictionaries or additional documents can be used as secondary documents.

(ISPE guidelines 12.06)

Alternatives

■ Example

Claim: Product A, in which a feature B is one of B1, B2, B3 or B4

A prior art: Product A with a feature B2

- Where a claim contains alternatives, for example Markush claims (P1, P2, P3 ... Pn), any alternatives disclosed in the prior art are anticipated.

(ISPE guidelines 12.07)

Generic vs. Specific Disclosures

- Example

Claim: Product A, in which a feature B is metal.

Prior art: Product A in which a feature B is iron

- How about other way around?

- Where a claim recites an invention in generic terms, the disclosure of a specific example falling within the parameters of the generic claim anticipates the generic claim.
- An item of prior art that discloses a genus does not always anticipate a claim to a species falling within the genus.

(ISPE guidelines 12.08, 12.09)

Ranges

Example

	nickel (Ni)	Molybdenum (Mo)
claim : Ti alloy	0.6 to 0.7%	0.2 to 0.4%
prior art: Ti alloy	0.65%	0.3%

- A specific example in an item of the prior art is within a claimed range and anticipates the range claimed.
- Where an item of prior art discloses a range which touches, overlaps or is within the claimed range, but does not disclose a specific example falling within the claimed range, a case-by-case determination must be made as to the novelty of the claim. In order to anticipate the claim, the claimed subject matter should be disclosed with sufficient specificity in the item of prior art.

(ISPE guidelines 12.10)

- Interpretation of Claims
- Prior Art
- Assessment of Novelty
- Assessment of Inventive step

What is “obvious”?

- A claimed invention is considered to involve an inventive step if, having regard to the prior art as defined in the Regulations, it is not, at the relevant date obvious to a person skilled in the art.
- The term “obvious” means that which merely and plainly or logically follows from the prior art, and which does not go beyond the normal progress of technology. That is, it is something which does not involve the exercise of any skill or ability beyond that to be expected by a person skilled in the art.

(ISPE guidelines 13.01, 13.03)

Assessment of Inventive Step

- The condition of inventive step/non-obviousness is fulfilled if the invention as a whole, compared to any prior art as a whole, would not have been obvious to a person skilled in the art.
- Multiple items of prior art may be combined
- It is fair to construe a published document in light of subsequent knowledge and all knowledge generally available to a person skilled in the art at the relevant date of the claim.

(ISPE guidelines 13.01, 13.04)

Example

- Claim: A+B+C
- Prior Art 1: A+B
- Prior Art 2: B+C

- The claimed invention relates to a building structure made from aluminum.
- A prior document discloses the same structure and says that it is of lightweight material but fails to mention the use of aluminum.
- Aluminum is a light-weight material that is well known in the art to be useful as a building material.

(ISPE guidelines 13.14)

Assessment of Inventive Step

- The following considerations should be applied in assessing inventive step/non-obviousness:
 - (i) determination of the scope of the claimed invention;
 - (ii) determination of the scope of the relevant item(s) of prior art;
 - (iii) determination of a person skilled in the art;
 - (iv) identification of the differences and similarities between the relevant item(s) of prior art and the claimed invention;
 - (v) assessment of whether the claimed invention as a whole would have been obvious to a person skilled in the art having regard to relevant prior art and general knowledge of a person skilled in the art.

(ISPE guidelines 13.08)

Assessment of Inventive Step

- In order to assess whether an inventive step is present, it is important for the examiner to bear in mind that there are various ways in which a person skilled in the art may arrive at an invention.
- The invention as a whole is obvious if any item(s) of prior art or general knowledge by a person skilled in the art would have motivated or prompted a person skilled in the art on the relevant date to reach the claimed invention by substituting, combining or modifying one or more items of prior art with a reasonable likelihood of success.

(ISPE guidelines 13.06, 13.09)

Combining Teachings

- In determining whether it would be obvious to combine the teachings of two or more distinct documents, the examiner should have regard to the following:
 - (i) whether the nature and content of the documents would make it likely or unlikely that a person skilled in the art would combine them;
 - (ii) whether the documents come from similar or neighboring technical fields, and if not, whether the documents are reasonably pertinent to the particular issue with which the invention is involved.

(ISPE guidelines 13.12)

A “Person skilled in the Art”

This refers to:

- A hypothetical person
- having ordinary skill in the art and who is aware of what was common general knowledge in the art on the relevant date; and
- having accessed everything in the “prior art,” in particular, documents cited in the international search report,
- and having at his/her disposal the normal means and capacity for routine experimentation.

Note that there may be instances in which “a person” is more likely to be a group of persons, for example, a research or production team, rather than a single person.

(ISPE guidelines 13.11)

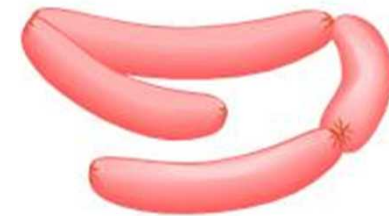
Ex Post Facto Analysis

- It should be remembered that a claimed invention which at first sight appears obvious might in fact involve an inventive step.
- The examiner should be wary of *ex post facto* analysis. The prior art must be viewed for what it is without any benefit of using impermissible hindsight based on the claimed invention.
- The teaching or suggestion to make the claimed invention must be found in the prior art and/or the general knowledge of a person skilled in the art; and not be based on the applicant's having disclosed such through filing a claim.

(ISPE guidelines 13.15)

combination

- Example: Machine for producing sausages consists of a mincing machine and a filling machine disposed end to end
- The mincing machine and the filling machine are known
- in an obvious way



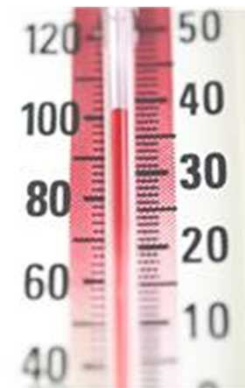
combination

- Example: A mixture of medicines consists of a painkiller (analgesic) and a tranquilizer (sedative).
- It was found that through the addition of the tranquilizer, which intrinsically appeared to have no pain-killing effect, the analgesic effect of the pain-killer was intensified in a way which could not have been predicted from the known properties of the active substances.
- in a non-obvious way



selection among a number of known possibilities

- Example: The claimed invention relates to a known chemical process for supplying heat electrically to the reaction mixture.
- There are a number of well-known alternative ways of supplying the heat; thus, the claimed invention resides merely in the choice of any one alternative way of supplying the desired heat.
- obvious selection



selection among a number of known possibilities

- Example: In a process by which substance A and substance B are transformed at high temperature into substance C, it was known in the prior art that there is in general a constantly increased yield of substance C as the temperature increases somewhere in the range between 50 and 130° C.
- It is now found that in the narrow temperature range between 63 to 65° C, which previously had not been explored, the yield of substance C was considerably higher than expected.
- non-obvious selection

Thank you