

THE PRACTICAL APPLICATION OF INDUSTRIAL APPLICABILITY/UTILITY REQUIREMENTS UNDER NATIONAL AND REGIONAL LAWS

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Summary

The present paper, based on information received by SCP members, reveals that there is a wide range of differences among SCP members concerning the interpretation and practice relating to the “industrial applicability/utility” requirement. It also shows that the industrial applicability/utility requirement is closely linked, or sometimes overlaps, with other substantive patentability requirements, such as the sufficient disclosure (enablement) requirement, inventive step, exclusions from patentable subject matter and the definition of “invention.” Therefore, for the purposes of full harmonization of substantive patent law, the industrial applicability/utility requirement cannot be considered separately from other substantive requirements of patentability. Against this backdrop, the SCP may consider examining the substantive patentability requirements *as a whole*, without giving too much focus on the terminology “industrial applicability” or “utility.”

Background

1. At the fourth session of the Standing Committee on the Law of Patents (SCP) (November 6 to 10, 2000), it was suggested that the International Bureau further study the application of the “industrial applicability/utility” requirement in various countries. Following this suggestion, the International Bureau invited the SCP Electronic Forum members to provide information in this respect. This document contains information on the application of the “industrial applicability” or “utility” requirement under national/regional practices based on the answers received.

Definitions and examples of “industrial applicability”

[Definitions]

2. The patent laws of many countries and regions require that an invention be susceptible or capable of “industrial application.” Although a number of countries follow the type I definition of industrial applicability, other definitions, which are presented below as type II definitions, are found in other laws.

(1) industrial applicability–type I

3. An invention shall be considered as susceptible of industrial application “if it can be made or used in any kind of industry, including agriculture.” The interpretation of the word

“industry” is to be understood in the broadest possible sense. The phrase “including agriculture” is not considered limitative, but emphasizes the broad character of the term “industry.” The criterion of industrial application is distinct from the criterion of technical character of the invention. For the purposes of industrial applicability, the invention does not necessarily have to be useful.

(2) industrial applicability–type II

4. In some countries, the definition of “industrial application” is broader than the one above (type I) or, at least, clarifies the scope of the term “industry.” For example, in one country, the law states that an invention is considered as susceptible of industrial application if it can be “made or used in economic activities.” Further, the law of another country states that an invention shall be deemed industrially applicable if it can be “used in industry, agriculture, public health and other sectors of the economy.” In another law, it is provided that the requirement of industrial applicability shall be met where the subject matter of the invention causes an industrial result or product to be obtained, industry being understood as including agriculture, forestry, livestock breeding, fisheries, mining, processing industries in the strict sense and services.

5. According to the law of one country, in addition to the requirement that the invention may be made and used in at least one field of activity, it requires that the invention “may be reproduced with the same characteristics whenever necessary.” The requirement of “reproducibility” of the invention is further mentioned by one additional country.

6. The law of another country provides for a requirement concerning “industrial applicability” without any statutory definition. Instead, the Examination Guidelines provide an exclusive list of inventions which are not considered as “industrially applicable.”

[Examples]

7. The following categories of inventions are not patentable on the ground of lack of “*industrial applicability*” in more than one country. It should be noted that the examples listed are a compilation of the examples given by one or more of the SCP members and observers. Therefore, for example, if country X considers that the inventions referred to in paragraph (1) are not “industrially applicable,” it does not necessarily mean that examples (i) to (iii) do not meet the criterion of “industrially applicable” in country X.

(1) Inventions with no practical application, such as a product or a process alleged to operate in a manner clearly contrary to laws of nature

Examples:

- (i) a perpetual motion machine
- (ii) a ghost-catcher
- (iii) a method for preventing the increase in ultraviolet ray associated with the destruction of ozone layer by covering the whole surface of the earth with an ultraviolet ray absorbing plastic film

(2) Artisan-type of works; Fine arts

Example:

- (i) “Stradivarius”

(3) Methods for the treatment of the human (or animal) body by surgery or therapy or of diagnosis practiced on the human (or animal) body

Example:

- (i) cleaning and boring process of a root canal

(4) Inventions limited to personal use

Examples:

- (i) a method for the local application of a contraceptive composition
- (ii) a method for smoking

8. Further, home remedies, household remedies, an idea for a penal reform by the substitution of voluntary corporal punishment, a method for regulating the city traffic are other examples given by the patent Offices of inventions that are not considered as being applicable in the “industry.”

9. In addition, according to the response from one country, “insufficient disclosure” of an invention is not a ground for the refusal of an application under its current national law. Therefore, the provision concerning the “industrial applicability” requirement is imposed to refuse such applications, although the respective law is in the process of being modified.

10. A similar practice is found in the answer from another country. It states that, in order to comply with the “industrial applicability” requirement,

- (i) an application as filed shall contain the principal objective of the claimed subject matter;

- (ii) the application shall disclose means and ways to achieve the objective above as specified in any claim(s); and

- (iii) it shall actually be possible to achieve the objective as specified by the applicant while carrying out any claim of the invention.

Definitions and examples of “utility”

[Definition]

11. The patent laws of another group of countries do not provide any “industrial applicability” requirement, but require “utility.” The law of one country requires that a patentable invention be a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof.

12. The Examination Guidelines for the Utility Requirement of that country provides that an invention has a well-established utility (i) if a person of ordinary skill in the art would immediately appreciate why the invention is useful, and (ii) the utility is specific, substantial and credible. If the applicant has asserted that the claimed invention is useful for any particular practical purpose (i.e., it has a “specific and substantial utility”) and the assertion would be considered credible by a person of ordinary skill in the art, the utility requirement is met.

13. Under the law of another country, the term “invention” means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter. An invention lacks utility if it is not operable or it will not do what the specification promised it will do (“false promise”). It is sufficient if the specification correctly and fully describes the invention and its operation or use as contemplated by the inventor, so that a person skilled in the art may be able to use the invention as successfully as the inventor himself. Further, if the claim is so broad that the full scope of the claim could not have been tested and found by the inventor to have the promised utility, the claim is invalid, absent a possible showing by the patentee that the entire claim could be soundly predicted to have the requisite utility (“sound prediction”).

[Examples]

14. Situations where an invention is found to be inoperative, and therefore lacking utility, seem to be very rare. Examples of such cases include: an invention asserted to change the taste of food using a magnetic field, a flying machine operating on “flapping or flutter function” and a method of controlling the aging process.

15. Case law determining whether an applicant identifies any specific utility for the claimed invention or has not been developed, in particular, in the field of chemistry and pharmacology. For example, indicating that the compound may be useful in treating unspecified disorders, or that the compound has useful biological properties, would not be sufficient to define a specific utility for the compound. Further, although many research tools, such as nucleotide sequencing techniques, have a specific utility, if an invention is useful only in a research setting, it does not address whether the specific invention is in fact “useful” under the patent law.

Definitions and examples of other types of requirements

[Definition]

16. The law of one country provides that a claimed invention shall be “a manner of manufacture within the meaning of Section 6 of the Statute of Monopolies” and be “useful.” The Office of that country observes that aspects of the “manner of manufacture” requirement and “useful” requirement under its law considerably overlap with “industrial applicability” requirements. What constitutes “a manner of manufacture” is determined by case law and traditional principles, including the exclusion of fine arts and mere ideas or discoveries. The concept of “manner of manufacture” also includes a threshold inventiveness requirement that would exclude an invention of merely a new use of an old substance, involved old integers without a working interrelationship producing a new or improved result or was otherwise obvious on the face of the specification.

17. On the other hand, the requirement that an invention be “useful” is closely associated with questions of false suggestion and misrepresentation, and it does not include any judgements as to the social benefit or the value or morality of the invention. The requirement is met if the invention can be used and offers the public a useful choice. Lack of utility is a ground for revocation of the patent, but not a ground for objection during examination or in opposition proceedings.

[Examples]

18. The following examples relate to inventions which are not considered “*a manner of manufacture*”:

- (i) claims to microorganisms *per se* without any practical application;
- (ii) an improved plan for a subterranean utility distribution scheme (“the issuance of instructions to a gang of workmen to dig excavations and lay conduits as indicated on a plan of a site cannot of itself constitute any development in a useful art”);
- (iii) a method for operating a jet aircraft to reduce noise over built up area (considered not patentable because it represented operating instructions for a known aircraft and because it was mischievous to the state or generally inconvenient by adding demands on pilots);
- (iv) a container with its contents with a set of written directions (does not constitute a manner of manufacture unless the package itself is novel);
- (v) rocket projectors of known design manufactured from reinforced synthetic resinous plastic material (merely “the use of a known material in the manufacture of known articles for the purpose of which its known properties make that material suitable”).

19. In addition, the following inventions are considered not meeting the requirement that an invention be “*useful*”:

- (i) An invention related to control circuits for gas discharge lamps. The specification indicated that the invention would reduce heat generation in the ballast.

However the evidence was that some circuits falling within the scope of the claims failed to work and caused lamp failure because of excessive heat generation. Consequently the promise of the invention was not fulfilled.

(ii) The promise of a cheese for "permanent keeping" was not fulfilled by the sterilization process claimed.

Relationship between industrial applicability/utility and other requirements

20. Many Offices indicated that, in practice, the requirement concerning industrial applicability/utility was not often imposed. As several Offices mentioned, the main reason for that is that the requirement concerning industrial applicability/utility is closely related to other requirements, such as sufficient disclosure (enablement) requirement, the definition of "invention," exclusions from patentable subject matter and the requirement concerning inventive step.

21. A number of Offices mentioned the close relationship between the industrial applicability/utility requirement and the enablement requirement. If a claimed invention fails to demonstrate its practical application, it is probable that the application fails to enable a person having ordinary skill in the art to carry out the invention. For example, under the practice of the European Patent Office, as regards an invention which seems impossible to carry out, the principle is that Article 83 (disclosure requirement) takes precedence over Article 57 (industrial applicability requirement). The Japanese Patent Office seems to have a similar practice. The "Utility Examination Guidelines" issued by the United States Patents and Trademarks Office cover the "utility" requirement of 35 U.S.C. Sections 101 and 112, first paragraph. Where the requirement is not met, both Sections are imposed. With regard to the relationship with the description requirement, attention is drawn to PCT Rule 5.1(a)(vi) and Rule 3(1)(vii) of the draft Regulations under the Substantive Patent Law Treaty (document SCP/5/3).

22. In addition, certain countries impose the "industrial applicability" requirement in order to refuse an application without sufficient disclosure.

23. Further, applications concerning certain types of inventions may be refused on the basis of the definition of the term "invention" in some countries, or may be considered as containing non-patentable subject matter in other countries, while in certain other countries, applications concerning the same inventions may be refused on the ground of "industrial applicability." For example, inventions concerning "methods for treatment of the human or animal body by surgery or therapy or of diagnosis practiced on the human or animal body" may be considered non-industrially applicable in some countries, while they may be excluded from patentability in the interest of public health in other countries. Further, under the law of some countries, aesthetic creations may be considered as not being applicable in "industry," while in other countries, they may not be regarded as "inventions."

24. It is apparent that the notions of "industrial applicability" and "utility" are broad and, at least in part, overlap. Further, they relate to other substantive requirements of patentability. Therefore, for the purposes of full harmonization of substantive patent law, the industrial applicability/utility requirement cannot be considered separately from other requirements. In this regard, the SCP may wish to consider the possibility of examining substantive

patentability requirements *as a whole*, without giving too much focus on the terminology “industrial applicability” or “utility.”

25. Further, it may be noted that the requirement concerning “industrial applicability” might be examined in the light of the exceptions to the rights conferred by a patent. At the international level, Article 30 of the TRIPS Agreement allows Members to provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties. For example, under many national laws, the effects of the patent right do not extend to acts of making or using patented inventions for private purposes. Therefore, even if a patent is granted to an invention which only serves for private use, it may not be enforceable in practice.

[End of document]