

## **Working Guidelines**

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### **Q217**

## **The patentability criteria for inventive step / non-obviousness**

### **Introduction**

- 1) The AIPPI Executive Committee decided, at the 2009 meeting in Buenos Aires, to undertake a study of the issue of inventive step / non-obviousness. This study commenced with examination of the definition of the person of ordinary skill in the art, which was considered at the 2010 Paris Congress as Q213.
- 2) Q217 follows the resolution reached in Paris on Q213 by examining the larger and more fundamental question of the criteria for inventive step / non-obviousness.

### **Previous Work of AIPPI**

- 3) Despite the importance of this question, the AIPPI has not had many opportunities to study inventive step / non-obviousness. Q35, "Method and preparation of a study on the unification of law on patents," which included treatment of inventive step, was considered at the 1960 London Congress and resulted in a resolution at the Berlin Congress of 1963.
- 4) Q209, "Selection Inventions the inventive step requirement, other patentability criteria and scope of protection" was considered at the 2009 Buenos Aires meeting but limited the inquiry into inventive step / non-obviousness to the specific context of selection inventions.
- 5) As previously noted, Q213, "The person skilled in the art in the context of the inventive step requirement in patent law," was considered at the 2010 Paris Congress but specifically excluded the broader question of inventive step /non-obviousness in general.

## Discussion

- 6) The resolution reached on Q35 relating to patentability requirements was brief on the subject of inventive step:

*An invention is patentable provided:*

*a) It is capable of being applied industrially. By “capable of being applied industrially” is meant an invention the embodiment of which can be manufactured or used in any of the industries defined in Article 1 (3) of the Union Convention (which includes agriculture).*

*b) It is novel. An invention is regarded as devoid of novelty when it is contained in the prior art. The prior art comprises all that has been accessible to the public prior to the date of filing of a national application or of a foreign application on which a priority is based, through a written or oral description, through use or in any other manner. It is emphasized that formal proof must be required as to the contents and the date of an oral disclosure.*

*c) It constitutes an invention. For example, there cannot be invention if the subject of the patent is obviously having regard to the state of the art.*

- 7) Since the time of the Q35 resolution, continued advancement of technology and emergence of entirely new technical fields have presented new challenges for patent authorities and courts in considering inventive step / non-obviousness. Hence it is timely and worthwhile to consider this broad question directly within the scientific framework of AIPPI.
- 8) In the interest of focusing on the broad question, consideration of field-related issues and other specific issues within the inventive step question shall be excluded from Q217. For example, the following topics will *not* be considered:
- a. Selection inventions (Q209 in Buenos Aires)
  - b. Definition of the person skilled in the art (Q213 in Paris)
  - c. New use of known compounds or compositions
  - d. Biotechnology or chemistry (alloys, composition of matter, etc.)
  - e. Inventions numerically limited by a new parameter
  - f. Pharmaceuticals
  - g. Software and computer-related inventions
  - h. Business methods
- 9) Inventive step is approached differently in different jurisdictions. For example, the 2007 U.S. Supreme Court decision in *KSR v. Teleflex* altered the analysis used in the United States to determine non-obviousness. Particularly, the U.S. Court of Appeals for the Federal Circuit had developed an extensive body of case law applying the “teaching, suggestion, motivation” (“TSM”) test to determine non-obviousness. Under the TSM test, an invention was non-obvious if the prior art failed to provide teaching, suggestion, or motivation to combine known elements to reach the claimed invention. The Supreme Court in *KSR*, while finding the TSM test to be a useful inquiry, nonetheless rejected it as overly rigid as the sole test for non-obviousness. Noting that the “person of ordinary skill is also a person of ordinary creativity, not an automaton,” the Court emphasized the need to consider common sense and the degree of predictability of the results or advantages obtained by the proposed combination.

10) In the United Kingdom, inventive step is determined by application of the “Windsurfing / Pozzoli” test, which divides the inquiry into four steps:

(1) (a) Identify the notional “person skilled in the art”

(b) Identify the relevant common general knowledge of that person;

(2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;

(3) Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed;

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

11) The German law defines inventive step succinctly: “[a]n invention shall be considered to involve an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.” Application of this standard in Germany does not follow a formalized approach. Factors that weigh in favor of inventive step include unforeseeable or surprising results and the combination of more than two references. Factors that weigh against inventive step include simplification of a known construction and substitution of one known element for another.

12) The definition of inventive step in the EPO is the same as that of Germany. However, the EPO follows a formalized problem-solution approach:

- a. Identify the closest prior art;
- b. Establish the “objective technical problem” to be solved;
- c. Consider whether the invention, starting from the technical problem and the closest prior art, would have been obvious to the skilled person.

13) Under the Japanese approach, inventive step is determined by reasoning whether a person skilled in the art would have been able to easily make the invention based on one or more cited inventions. The reasoning is done from various and wide-ranging points for view. Aspects in support of no inventive step include:

- a. Selection of an optimal material, workshop modification of design or mere juxtaposition of features;
- b. Motivation to combine references;
  - i) Close relation of technical fields;
  - ii) Close similarity of a problem to be solved;
  - iii) Close similarity of function, work or operation; and/or
  - iv) Suggestions shown in the contents of cited inventions.

Aspects in support of inventive step include:

- a. Advantageous effects
- b. Teaching away

- 14) Inventive step / non-obviousness was also one component of WIPO's SPLT (Substantive Patent Law Treaty) as originally conceived in 2000. Article 18 of the draft SPLT initially provided two alternative definitions of inventive step. Alternative A defined inventive step as follows: "An invention shall be considered to involve an inventive step (be non-obvious) if, having regard to the prior art, it would not have been obvious to a person skilled in the art at the filing date or, where priority is claimed, the priority date of the application claiming the invention". Alternative B provided the following alternative definition: "A claimed invention shall be considered to involve an inventive step (be non-obvious) unless the differences between the claimed invention and the prior art, at the filing date or, where priority is claimed, the priority date of the application which discloses the subject matter of the claim, were obvious to a person skilled in the art" (WIPO doc. SCP/5/2). The delegates were, however, unable to move the negotiations further and so this initial attempt of harmonization of inventive step was discontinued in 2005.
- 15) In some jurisdictions, "teaching away" is a factor in the inventive step / obviousness determination. "Teaching away" refers generally to the situation where a prior art reference discloses relevant teachings, but includes language that describes as undesirable or unworkable some aspect of the claimed combination.
- 16) Some jurisdictions, including the United States, may consider "secondary indicia of non-obviousness" (referred to below as "secondary considerations") as part of the inventive step / non-obviousness determination. Secondary considerations refer to factual inquiries that, while not directly related to the inventive step / non-obviousness standard, tend to weigh in favour of a determination of inventiveness. Examples include commercial success of the claimed invention, copying or licensing by others, failure of others to solve the problem, *etc.* It may be important to show that the secondary considerations are closely tied to the claimed invention and do not result from other, unrelated factors or market forces.
- 17) In some jurisdictions, the approach to inventive step / obviousness during examination may differ from that taken during litigation or invalidity proceedings. Such divergence may create a situation where a claim is valid in one forum but invalid in another.

## Questions

### I. Analysis of current law and case law

The Groups are invited to answer the following questions under their national laws:

#### Level of inventive step / non-obviousness

1. What is the standard for inventive step / non-obviousness in your jurisdiction? How is it defined?
2. Has the standard changed in the last 20 years? Has the standard evolved with the technical / industrial evolution of your jurisdiction?
3. Does your patent-granting authority publish examination guidelines on inventive step / non-obviousness? If yes, how useful and effective are the guidelines?

4. Does the standard for inventive step / non-obviousness differ during examination versus during litigation or invalidity proceedings?

### **Construction of claims and interpretation of prior art**

5. How are the claims construed in your jurisdiction? Are they read literally, or as would be understood by a person skilled in the art?
6. Is it possible to read embodiments from the body of the specification into the claims?
7. How is the prior art interpreted? Is it read literally or interpreted as would be understood by a person skilled in the art? Is reliance on inherent disclosures (aspects of the prior art that are not explicitly mentioned but would be understood to be present by a person skilled in the art) permitted?
8. Do the answers to any of the questions above differ during examination versus during litigation?

### **Combination or modification of prior art**

9. Is it proper in your jurisdiction to find lack of inventive step or obviousness over a single prior art reference? If yes, and assuming the claim is novel over the prior art reference, what is required to provide the missing teaching(s)? Is argument sufficient? Is the level of the common general knowledge an issue to be considered?
10. What is required to combine two or more prior art references? Is an explicit teaching or motivation to combine required?
11. When two or more prior art references are combined, how relevant is the closeness of the technical field to what is being claimed? How relevant is the problem the inventor of the claim in question was trying to solve?
12. Is it permitted in your jurisdiction to combine more than two references to show lack of inventive step or obviousness? Is the standard different from when only two references are combined?
13. Do the answers to any of the questions above differ during examination versus during litigation?

### **Technical Problem**

14. What role, if any, does the technical problem to be solved play in determining inventive step or non-obviousness?
15. To what degree, if any, must the technical problem be disclosed or identified in the specification?

### **Advantageous effects**

16. What role, if any, do advantageous effects play in determining inventive step or non-obviousness?
17. Must the advantageous effects be disclosed in the as-filed specification?
18. Is it possible to have later-submitted data considered by the Examiner?
19. How "real" must the advantageous effects be? Are paper or hypothetical examples sufficient?
20. Do the answers to any of the questions above differ during examination versus during litigation?

### **Teaching away**

21. Does your jurisdiction recognize teaching away as a factor in favor of inventive step / non-obviousness? Must the teaching be explicit?

22. Among the other factors supporting inventive step / non-obviousness, how important is teaching away?
23. Is there any difference in how teaching away is applied during examination versus in litigation?

### **Secondary considerations**

24. Are secondary considerations recognized in your jurisdiction?
25. If yes, what are the accepted secondary considerations? How and to what degree must they be proven? Is a close connection between the *claimed* invention and the secondary considerations required?
26. Do the answers to any of the questions above differ during examination versus during litigation?

### **Other considerations**

27. In addition to the subjects discussed in questions 4 - 26 above, are there other issues, tests, or factors that are taken into consideration in determining inventive step / non-obviousness in your jurisdiction?  
If yes, please describe these issues, tests, or factors.

### **Test**

28. What is the specific statement of the test for inventive step/non-obviousness in your jurisdiction? Is there jurisprudence or other authoritative literature interpreting the meaning of such test and , if so, provide a brief summary of such interpretation.
29. Does such test differ during examination versus during litigation?

### **Patent granting authorities versus courts**

30. If there are areas not already described above where the approach to inventive step / non-obviousness taken during examination diverges from that taken by courts, please describe these areas.
31. Is divergence in approach to inventive step / non-obviousness between the courts and the patent granting authority in your jurisdiction problematic?

### **Regional and national patent granting authorities**

32. If you have two patent granting authorities covering your jurisdiction, do they diverge in their approach to inventive step / non-obviousness?
33. If yes, is this problematic?

## **II. Proposals for harmonization**

The Groups are invited to put forward proposals for the adoption of harmonised rules in relation to the patentability criteria for inventive step / non-obviousness. More specifically, the Groups are invited to answer the following questions without regard to their national laws:

34. Is harmonization of inventive step / non-obviousness desirable?
35. Is it possible to find a standard for inventive step / non-obviousness that would be universally acceptable?

36. Please propose a definition for inventive step / non-obviousness that you would consider to be broadly acceptable.
37. Please propose an approach to the application of this definition that could be used by examiners and by courts in determining inventive step / non-obviousness.

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