

## **Request from WIPO's Standing Committee on the Law of Patents (SCP) to submit information to the IB on the requirements of inventive step and sufficiency of disclosure**

This paper addresses the above mentioned request of the SCP with respect to the requirements of **inventive step and sufficiency of disclosure** as applied by the European Patent Office (EPO).

### *1. Inventive Step*

According to Article 56, first sentence, of the European Patent Convention (EPC) an invention shall be 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.

#### *(i) Person skilled in the art*

The "person skilled in the art" should be presumed to be a skilled practitioner in the relevant field of technology, who is possessed of average knowledge and ability and is aware of what was common general knowledge in the art at the relevant date (see T 4/98, T 143/94 and T 426/88). He should also be presumed to have had access to everything in the "state of the art", in particular the documents cited in the search report, and to have had at his disposal the means and capacity for routine work and experimentation which are normal for the field of technology in question. If the problem prompts the person skilled in the art to seek its solution in another technical field, the specialist in that field is the person qualified to solve the problem. The skilled person is involved in constant development in his technical field (see T 774/89 and T 817/95). He may be expected to look for suggestions in neighbouring and general technical fields (see T 176/84 and T 195/84) or even in remote technical fields, if prompted to do so (see T 560/89). Assessment of whether the solution involves an inventive step must therefore be based on that specialist's knowledge and ability (see T 32/81). There may be instances where it is more appropriate to think in terms of a group of persons, e.g. a research or production team, rather than a single person (see T 164/92 and T 986/96). It should be borne in mind that the skilled person has the same level of skill for assessing inventive step and sufficient disclosure (see T 60/89, T 694/92 and T 373/94).

The Guidelines for Examination at the EPO provide detailed explanations on the concept of inventive step in chapter G-VII, 3. They are available online at [http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g\\_vii\\_3.htm](http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_3.htm)). This website also contains direct hyperlinks to the decisions of the Boards of Appeal which are cited in the definition above. Alternatively, the decisions can be accessed on this website: <http://www.epo.org/law-practice/case-law-appeals/advanced-search.html>.

(ii) *methodologies employed for evaluating the inventive step*

In order to assess inventive step in an objective and predictable manner, the EPO applies the so-called "problem-and-solution approach". Deviation from this approach should be exceptional.

In the problem-and-solution approach, there are three main stages:

- (1) determining the "closest prior art",
- (2) establishing the "objective technical problem" to be solved, and
- (3) considering whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.

As to (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 a development leading to the invention. In selecting the closest prior art, the first consideration is that it should 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. In practice, the closest prior art is generally that which corresponds to a similar use and requires the minimum of structural and functional modifications to arrive at the claimed invention (see T 606/89).

As to (2): In the second stage, one establishes in an objective way the technical problem to be solved. To do this one studies the application (or the patent), the closest prior art and the difference (also called "the distinguishing feature(s)" of the claimed invention) in terms of features (either structural or functional) between the claimed invention and the closest prior art, identifies the technical effect resulting from the distinguishing features, and then formulates the technical problem.

As to (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. In other words, the point is not whether the skilled person could have arrived at the invention by adapting or modifying the closest prior art, but whether he would have done so because the prior art incited him to do so in the hope of solving the objective technical problem or in expectation of some improvement or advantage (see T 2/83).

The Guidelines for Examination at the EPO provide detailed explanations on the problem-solution approach in chapter G-VII, 5. They are available online at [http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g\\_vii\\_5.htm](http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5.htm).

- (iii) *having regard to the prior art, the level of inventiveness (obviousness) to meet the inventive step requirement*

The term "obvious" means that which does not go beyond the normal progress of technology but merely follows plainly or logically from the prior art, i.e. something which does not involve the exercise of any skill or ability beyond that to be expected of the person skilled in the art. In considering inventive step, as distinct from novelty, it is fair to construe any published document in the light of knowledge up to and including the day before the filing or priority date valid for the claimed invention and to have regard to all the knowledge generally available to the person skilled in the art up to and including that day.

The issue of obviousness is dealt with in the Guidelines for Examination at the EPO in chapter G-VII, 4 ([http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g\\_vii\\_4.htm](http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_4.htm)).

## 2. *Sufficiency of Disclosure*

- (i) *Enabling disclosure requirement*

In accordance with Article 83 EPC the European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. The disclosure does not have to be contained completely in the description. Other parts of the application, i.e. the claims and the drawings may also contribute to the disclosure (T14/83, T169/83, T126/91, T169/83).

The decisions of the Boards of Appeal can be accessed online at <http://www.epo.org/law-practice/case-law-appeals/advanced-search.html>

Besides, Rule 42(1)(e) EPC states that the description shall describe in detail at least one way of carrying out the invention claimed, using examples where appropriate and referring to the drawings, if any. It is noted that the EPC contains no best mode provision.

The disclosure is aimed at the person skilled in the art. Therefore, it is neither necessary nor desirable that details of well-known ancillary features should be given, but the description must disclose any feature essential for carrying out the invention in sufficient detail to allow the person skilled in the art to perform the invention over the whole area claimed without undue burden and without needing inventive skill.

It should be borne in mind that the skilled person has the same level of skill for assessing inventive step and sufficiency of disclosure (see T60/89, T694/92 and T373/94), in the latter case the skilled person being aware of the content of the patent application.

The Guidelines for Examination at the European Patent Office deal with the requirement of sufficiency of disclosure in chapter F-III. It is available at [http://www.epo.org/law-practice/legal-texts/html/guidelines/e/f\\_iii.htm](http://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iii.htm). Some examples of insufficient disclosure can be seen in the Guidelines, F-III, 3 and 5.

The special regulations applying to inventions relating to biological material are explained in the Guidelines, F-III, 6.

(ii) *Support requirement*

Article 84 EPC stipulates that the claims shall define the matter for which protection is sought. They shall be clear and concise and be supported by the description.

The requirement of support in the description means that there must be a basis in the description for the subject-matter of every claim and that the scope of the claims must not be broader than is justified by the extent of the description and drawings and also the contribution to the art (see T409/91; Guidelines for Examination, F-IV, 6.1).

The skilled person, when considering a claim, should try, building up rather than tearing down, to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent (T190/99; confirmed in T1084/00, T920/00, T552/00, T500/01, T1023/02, T749/03, T859/03, T1241/03, T1418/04, T906/05, T405/06, T1537/05, T1204/06, T1771/06).

In addition, 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 (see e.g. T311/93, T1321/04).

Most claims are generalisations from one or more particular examples. The extent of generalisation permissible is a matter which has to be established in each particular case in the light of the relevant prior art. Thus an invention which opens up a whole new field is entitled to more generality in the claims than one which is concerned with advances in a known technology (Guidelines, F-IV, 6.2).

Functional features may be included in the claims provided that a skilled person would have no difficulty in providing some means of performing this function without exercising inventive skill. This could be the case 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. For example, "terminal position detecting means" in a claim might be supported by a single example comprising a limit switch, it being evident to the skilled person that e.g. a photoelectric cell or a strain gauge could be used instead. In general, however, if the entire contents of the application are 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 (Guidelines, F-IV, 6.5).

Some examples of lack of support of the claims in the description can be seen in the Guidelines, F-IV, 6.3.

An objection of lack of support can often also be considered as an objection of insufficient disclosure of the invention, the objection being that the disclosure is insufficient to enable the skilled person to carry out the "invention" over the whole of the broad field claimed. Whether the objection is raised as lack of support or as insufficiency is unimportant in examination proceedings; but it is important in opposition proceedings since lack of support is no ground for opposition.

(iii) *Written description requirement*

In contrast to the US patent system, the European Patent Convention does not contain separate written description and enablement requirements.

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