



Registry of the Enlarged Board of Appeal
European Patent Office
Erhardtstrasse 27
80331 Munich
Germany

29 April 2009

Dear Sirs,

Re: **Case G3/08: Referral under Art. 112(1)b) EPC by the President of the EPO
(Patentability of programs for computers) to the Enlarged Board of Appeal**

We hereby present our written statement in accordance with Article 10 of the Rules of Procedure of the Enlarged Board of Appeal with respect to the questions asked by the President of the EPO.

We will first address the appropriateness of the present referral, thereafter the statutory background, and then the specific questions asked.

1. Appropriateness of the present referral

We are pleased with the opportunity that now arises to achieve greater clarity into the important issue of the patentability of computer-implemented inventions. To an increasing extent, software is used to implement technical innovations, and any uncertainty as to whether these innovations can be protected affects the competitiveness of innovative European industries.

BUSINESSEUROPE has 40 member federations from 34 countries, including the European Union countries, the European Economic Area countries, and some central and Eastern European countries. One priority of BUSINESSEUROPE is to implement reforms for growth and jobs, which includes a call for a strong and efficient patent system. Patent protection for computer-implemented inventions is an important element of such a system, in particular given role that patents for such inventions play in diverse fields or applications, such as industrial processes, mobile phones, music and video players and recorders, home appliances (such as washing machines), medical devices (such as MRI scanners), navigation systems (such as GPS systems), and transportation (including automobiles and aircraft).



BUSINESSEUROPE also has as a priority the integration of the European market. Given this scope and importance of patents for computer-implemented inventions in Europe, it is important that the various patent offices and courts operating in that market have aligned views on this important subject, and your coming decision will provide a unique opportunity to achieve this.

Users of the patent system also need clarity as to how patentable inventions can be claimed in order to achieve optimum claim scope. Where the usual method and apparatus claims protect the carrying out of the method and the manufacture and sale of the apparatus, respectively, a method claim sometimes does not provide adequate protection against somebody distributing software (e.g. on physical media or as downloads from a website) that, when loaded on a programmable apparatus, results in that a technical invention is carried out. This could make it less attractive to invest in computer implemented inventions compared to inventions in other technical fields, since the possibility to protect such inventions by (in practice) enforceable patents could be seen as low. To close this gap, claims on a computer program or at least a computer program product are needed and should not be excluded for formal reasons whenever the computer program concerned embodies a genuine new, non-obvious and technical invention.

2. Statutory background

Provisions relevant to the present issue can be found, inter alia, in the TRIPs Agreement and the EPC.

2.1. TRIPs Agreement

While the EPO itself is not bound by the TRIPs Agreement, most EPC Contracting States are so bound, so that it would be rather academic to say that the TRIPs Agreement is not relevant. This is illustrated by the fact that some EPC amendments that are now in the EPC2000 originate from the TRIPs Agreement, such as the inclusion of “in all fields of technology” into Article 52(1) EPC, the alignment of Article 53 EPC to Article 27(2) TRIPs Agreement, and the inclusion of WTO priorities into Article 87 EPC, which clearly show that the EPC Contracting States do not wish the EPC to deviate from the TRIPs Agreement.

Provisions relevant to the present issue can be found in Article 27(1) TRIPs Agreement.

Article 27

Patentable Subject Matter

1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this



Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.

From this provision it is clear that patents must be available for any inventions in all fields of technology, without discrimination as to the field of technology, provided that they are new, involve an inventive step and are industrially applicable. Whether the invention is capable of implementation on a computer cannot be legally relevant to the decision on whether to grant a patent. This is clear from the amendment of Article 52 of the EPC in 2000 to specify that European patents shall be granted for inventions “in all fields of technology.”

2.2. EPC

Relevant provisions are not just present in Article 52 EPC, but also in Rules 42 and 43 EPC.

Article 52

Patentable inventions

(1) European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.

(2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:

...

(c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;

...

(3) Paragraph 2 shall exclude the patentability of the subject-matter or activities referred to therein only to the extent to which a European patent application or European patent relates to such subject-matter or activities as such.

Rule 42

Content of the description

(1) The description shall:

(a) specify the technical field to which the invention relates;

(b) indicate the background art (DE: Stand der Technik; FR: état de la technique) which, as far as is known to the applicant, can be regarded as useful to understand the invention, draw up the European search report and examine the European patent application, and, preferably, cite the documents reflecting such art;

(c) disclose the invention, as claimed, in such terms that the technical problem, even if not expressly stated as such, and its solution can be understood, and state any advantageous effects of the invention with reference to the background art;

...



Rule 43

Form and content of claims

(1) The claims shall define the matter for which protection is sought in terms of the technical features of the invention.

From the above provisions it is clear that “technology” and “technical” are essential notions in European patent law: not only has the invention to be in a field of technology, but also the field to which the invention relates is a technical field, the prior art is technical, the problem solved is technical, and the invention is defined by technical features.

3. Questions

In the light of the above outline on the statutory background, we make the following observations regarding the questions referred to the Enlarged Board of Appeal by the President of the EPO.

Question 1

Can a computer program only be excluded as a computer program as such if it is explicitly claimed as a computer program?

Observation: It is the substance of a claimed invention not the form that matters. The claims must be interpreted as a whole and given the meaning that a skilled reader would give them. And although they may be relevant, the particular claim forms and terms of art are not determinative of the applicability or inapplicability of the exclusion. The ultimate question in determining whether the exclusion is applicable is whether the claim as a whole claims an invention having technical character.

Question 2

(a) can a claim in the area of computer programs avoid exclusion under Art. 52(2)(c) and (3) merely by explicitly mentioning the use of a computer or a computer-readable data storage medium?

(b) if question 2 (a) is answered in the negative, is a further technical effect necessary to avoid exclusion, said effect going beyond those effects inherent in the use of a computer or data storage medium to respectively execute or store a computer program?

Observations: In view of the above discussion on the statutory background, the examples in Article 52(2) EPC should be understood in the light of the principle that all technical inventions are patent-eligible, while all non-technical subjects are not. So, it is not relevant whether some computer-related wording is used in a claim, as the question that needs to be answered is whether the claim relates to a technical invention.



Moreover, it is not that relevant whether a claim in the area of computer programs avoids exclusion under Article 52(2)(c) and (3) EPC by using some smartly chosen wording, as it still needs to be new and involve an inventive step in order to be patentable. As has been aptly mentioned in T 258/03 (HITACHI) not “all methods involving the use of technical means are patentable. They still have to be new, represent a non-obvious technical solution to a technical problem, and be susceptible of industrial application” (HITACHI at 4.6). Merely mentioning the use of a prior art computer or a prior art computer-readable data storage medium will thus not help in achieving novelty and inventive step. Similarly, any further technical effect is only relevant for patentability if it contributes to novelty and inventive step.

We believe it to be important to stress that by requiring that the necessary novelty and inventive step must be based on the technical features in the claim, considered as a whole, the threshold applied for patentability is anything but an easy threshold, so that the test applied in T 258/03 is fully in line with the EPC Contracting States’ clear intent to exclude computer programs as such from patentability.

Question 3

- (a) must a claimed feature cause a technical effect on a physical entity in the real world in order to contribute to the technical character of the claim?
- (b) if question 3 (a) is answered in the positive, is it sufficient that the physical entity be an unspecified computer?
- (c) if question 3 (a) is answered in the negative, can features contribute to the technical character of the claim if the only effects to which they contribute are independent of any particular hardware that may be used?

Observations: As mentioned in Rule 43 EPC, the claims define the invention in terms of the technical features. The EPC clearly does not prohibit the patenting of inventions consisting of a combination of technical and non-technical elements, the case law has consistently required that an invention must be considered as a whole when assessing its technical character. Nonetheless, there must still be technical features that provide the required novelty and inventive step. A feature is a technical feature if it has a technical effect. Whether this technical effect is on the computer or on the outside world, is irrelevant. We do not believe it to be necessary for patentability either to require a link between technical effects and any particular hardware.

Question 4

- (a) does the activity of programming a computer necessarily involve technical considerations?
- (b) if question 4 (a) is answered in the positive, do all features resulting from programming thus contribute to the technical character of a claim?
- (c) if question 4 (a) is answered in the negative, can features resulting from programming contribute to the technical character of a claim only when they contribute to a further technical effect when the program is executed?



Observations: Programming a computer, at least implicitly, involves technical considerations in the broad sense of that term (see T 1177/97¹). For example, the computer programmer may have to consider purely technical factors or constraints in performing the work, including logic flow, the instruction set supported by the hardware, memory usage and speed, processor speeds, and the like. Where, taking these technical considerations into account, a programmer makes an invention having a technical effect, there is a patent-eligible technical invention involving a computer program, as opposed to a non-patentable computer program *as such*. However, claims to technical inventions embodied by such software must still meet the other EPC criteria to be considered patentable.

4. Summary

Summarising this brief, we believe that the following principles are relevant to the present issue:

- All technical inventions are patentable subject-matter in view of Article 27(1) TRIPs Agreement and Article 52(1) EPC. Limited exceptions to this principle are those of Article 53 EPC, corresponding to Article 27(2,3) TRIPs Agreement.
- Only technical inventions are patentable subject-matter, so as to exclude the examples of Article 52(2) EPC when claimed as such rather than in the context of a technical invention.
- In order to be patentable, inventions also need to comply with other requirements, including the requirements that an invention needs to be novel and involve an inventive step. In the light of the various occurrences of “technical”/“technology” in the EPC, this novelty and inventive step can only result from technical features distinguishing the invention from the prior art. Simply adding prior art technology to the examples of Article 52(2) EPC will thus not result in a patentable invention.

Thank you for the consideration you may give to our views.

Yours sincerely,

Jérôme P. Chauvin
Director
Legal Affairs Department
Internal Market Department

¹ “Implementing a function on a computer system always involves, at least implicitly, technical considerations and means in substance that the functionality of a technical system is increased.”