Dear Sirs,

We hereby present our amicus curiae brief on the questions asked by the President of the EPO.

We will first present the statutory background, and then deal with the questions. The main principles are summarized at the end of this brief.

Statutory background

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

1.1. 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 EPC 2000 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 lawfully be relevant to the decision on whether to grant a patent.

1.2. EU law

The above-mentioned principle that patents shall be granted for inventions in all areas of technology is confirmed by Recital 12 of EU Directive 98/44/EC on the legal protection of biotechnological inventions:

(12) Whereas the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) signed by the European Community and the Member States, has entered into force and provides that patent protection must be guaranteed for products and processes in all areas of technology;

This EU directive is referred to in Rule 26 EPC as a supplementary means of interpretation.

The fact that computer programs are protected by copyright does not prevent technical inventions using software from being patentable, as is clear from Article 9(1) of EU Directive 91/250/EEC on the legal protection of computer programs:

1. The provisions of this Directive shall be without prejudice to any other legal provisions such as those concerning patent rights, trademarks, unfair competition, trade secrets, protection of semi-conductor products or the law of contract. …

There is no other EU law relevant to computer-implemented inventions (CII) as the legislative process of the draft CII directive has ended in rejection by the EU Parliament of the EU Council's common position on the draft CII directive. In view thereof, we do not know the opinion of the EU legislator (in this case, the EU Council and the EU Parliament acting together, so that whenever these two institutions do not agree, we do not have an opinion of the EU legislator).

From Article 33(1)(b) EPC it is clear that the EPC is not subject to EU law without intervention by the Administrative Council under Article 33(1) EPC (or, of course, by the EPC Contracting States under Article 172 EPC). In this respect, it is important to note that while the EPC Contracting States have indicated the relevancy of the TRIPs Agreement by amending Article 52(1) EPC in line with Article 27(1) TRIPs Agreement, and while the Administrative Council has indicated the relevancy of EU Directive 98/44/EC by adopting Rules 26 through 29 EPC, neither the EPC Contracting States nor the Administrative
Council have/has done anything that would have indicated that any of the diverging views expressed during the debate on the failed draft CII directive (other than the above-mentioned provisions from existing EU law) is relevant to patentability under the EPC.

1.3. 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.

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: Any non-technical subject-matter is not patentable under the EPC, irrespective of how it is claimed.

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 154/04, only technical features can contribute to novelty and inventive step, so that there must be technical features that distinguish the invention from the prior art in a non-obvious way. Merely mentioning the use of a prior art computer or a prior art computer-readable data storage medium will thus not help in achieving that goal. Similarly, any further technical effect is only relevant for patentability if it contributes to novelty and inventive step.

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. As mentioned in T 154/04, while non-technical features may be present, 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.
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: Writing software does not necessarily involve technical considerations. However, some software has a technical effect, so that technical inventions embodied by such software may be patentable provided that the other EPC criteria have been met.

Summary
Summarizing 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, as clarified by recent case-law of the EPO Boards of Appeal (e.g. T 154/04). Adding prior art technology to the examples of Article 52(2) EPC will thus not result in a patentable invention.

Yours faithfully,
PHILIPS INTERNATIONAL B.V.
Intellectual Property & Standards

L.J. Steenbeek