



## Licensing Executives Society International Inc.

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30 April 2009

Re: LESI Written Statements in accordance with Article 10 of the Rules of Procedure of the Enlarged Board of Appeal on the case

G3/08

Dear Sirs:

The Licensing Executive Society International (LESI) appreciates the opportunity to present its views on the case G3/08, the EPO President's referral to the Enlarged Board of Appeal on the limit of patentability of programs for computers within the meaning of Article 52(2)(c) and (3) EPC.

LESI is a global, not-for-profit, professional association made up of 32 national and regional societies, representing 93 countries and 12,000 individual members (including 3,500 in Europe) involved in providing education and networking opportunities in relation to business dealings with intellectual property, including the licensing, transfer and management of intellectual property rights. It is the world's largest professional association with this type of focus on intellectual property. Its aims include:



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- \* Setting and promoting consistent, high professional standards for licensing executives on a global basis; and
- \* Informing and interacting with global organisations and policy forums concerning the economic significance and importance of licensing, technology transfer and intellectual property rights.

Its members comprise mainly licensing professionals, consultants, lawyers and patent attorneys drawn mainly from business, ranging from large multi-national organisations to SMEs but also from universities, the public sector as well as law firms. LESI therefore occupies a unique position in representing such a wide variety of interests rather than the special interest nature of many other industry and professional organizations.

It is important in particular to note that LESI does not exist to advance the interests of a particular sector, but rather seeks to promote a properly functioning system of intellectual property protection suitable for all sectors.

### I. LESI Views on Patent Protection for Programs for Computers

Article 52 EPC sets forth the standard under which patents may be granted under the European Patent Convention. Art 52 Abs. 1 states that patents shall be granted for invention in all fields of technology provided that they are new, involve an inventive step and are susceptible of industrial application (emphasis added). Article 52(2)(c) and (3) restrict the definitions of inventions. Art 52 (2) (c) states that “programs for computers” are not considered to be inventions, but Art 52 (3) provides a “threshold requirement” which emphasizes that only programs for computer “as such” are excluded from patentability, no matter whether the “inventions” are novel, inventive and industrially applicable.

LESI notes that innovations in the field of computer program art necessitate a considerable amount of manpower, cost and investment.

LESI believes that innovations in the field of computer program art need to be protected. Copyright protection provides for one means of protection.



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It is LESI's view that patent protection for computer programs should be possible, provided the usual requirements for patentability are met. Otherwise, we foresee the unreasonable situation in which a particular technical innovation created in a company or by an individual is protectable by patent only if it is implemented in a hard-wired logic circuit, whilst the same innovation cannot be patent protectable if implemented in the form of a computer program. This principle was recognized in T0208/84 VICOM and we consider it to be good law. LESI therefore wishes patent protection to be available to all inventions on a non-discriminatory basis and does not agree with suggestions to "raise the bar" of patent eligibility for computer programs.

It is the nature of computer programs that they are not tied to particular physical structures or physical constraints and can therefore easily fall into the realm of abstract ideas. LESI considers it to be necessary to clearly define limits on the patent eligibility requirement. LESI approves of the recent development of the European case law initiated by the decisions T 641/00 – Comvik and T 258/03 – Hitachi, which has led to an examination that is clearer than in the past, leads to predictable results and is manageable without difficulties both by patent professionals and examiners.

LESI approves of the approach that all of the technical features of a claim, be they implicit or explicit, be initially determined and the combination of these technical features be subjected to the examination of the traditional criteria of novelty and inventive step. LESI notes that it is usually a rather straightforward task to determine the explicit technical features in a claim. Nevertheless, difficulties are still found to arise with determining the technical content of features that are either phrased in a non-technical or in functional language or features that are related to a non-technical subject matter, but, in combination with the remaining features of the claim, imply an additional technical content. The further development of the case law in this regard may provide more clarity, and LESI would greatly welcome guidance of the Board of Appeal in relation to these issues.

LESI notes that such guidance could also be helpful for the harmonization of European case law. National court systems are faced with a similar lack of guidance when assessing the validity of a patent in an infringement case, as was noted in the UK *Macrossan* case ([2006] EWCA Civ 1371) and in which a reference to the Enlarged Board of Appeal was originally suggested.



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It is important that business is in a position to assess whether a particular computer-implemented invention is eligible for patent protection or not. Even if a patent is granted, there is a risk under the current uncertainty that the patent will be subsequently invalidated in an opposition (in front of the European Patent Office) or during later national revocation proceedings based on software-specific reasons. The current degree of uncertainty affects investment decisions in Europe – and in other countries - and is detrimental to economic growth.

LESI notes that current practice on patent eligibility for computer program inventions among the trilateral offices, namely the EPO, the USPTO and the Japan Patent Office (JPO), seems to be moving in the direction of harmonization. We note that, in the U.S., in *In re Bilski* (545 F.3d 943) the CAFC in an en banc decision in 2008 abandoned the lenient “useful, concrete and tangible result” test and resumed “machine-or-transformation” test for the eligibility for patent protection. This test requires that a process invention be tied to a particular machine or apparatus, or the transformation of a particular article into a different state or thing. Likewise, the Examination Guidelines of the JPO clearly require “cooperation between information processing of software and hardware resources”, and “particular information processing apparatus directed to particular application” by way of an interpretation of statutory “law of nature utilization” requirement of patent eligibility. This interpretation has been affirmed by the IP High Court. The practices in the USPTO and JPO have some analogies to current practice at the EPO that requires “technicality”. LESI – as an international organization - supports this de facto harmonization.

There has been criticism in the past that the Patent Offices have granted patents on “trivial” inventions which represent a minor, non-inventive improvement. LESI suggests that the inventive step requirement is now sufficiently workable to enable rejection of trivial subject matter involving computer programs that are unworthy of patent protection, because prior art publications in the field of computer programs are now more easily accessible than in the past. Furthermore, a significant amount of Open Source Software code is accessible as prior art. We argue that, under such circumstance, there is no longer any possible need for a “stricter” threshold of patent eligibility. LESI notes also that the problem of patents on “trivial” inventions is not restricted to computer-implemented inventions.



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We shall now address the questions raised in the referral. It is LESI's opinion that the questions are phrased in a way that is less than optimal in terms of providing clarity to the underlying issue. We feel that they might even prove to be counter-productive in that respect. The responses below are provided under that proviso.

### II. The LESI Opinions on the Referred Questions

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

A: YES. It is a statutory requirement. We discussed the relevant provisions of the EPC above. There is a limited set of subject matters which are considered to be unpatentable. The EPC clearly sets forth that inventions for computer program are not considered as such to be inventions (EPC Art. 52 (2)(c) and 52(3)).

The answer to this question depends very much on the definition of the term "computer program". We consider a computer program to be a set of lines of codes which is – absent computer hardware resources on which the computer program runs – non-functional and, because the lines of code are non-functional they cannot operate on or transform any physical entity. The lines of code are not technical per se. Only in combination with the computer hardware resources and by instructing the computer hardware resources to execute a function do the lines of code have a technical effect.

2.(a) Can a claim in the area of computer program 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?

A: YES. The nature of a computer program is necessarily to require computer hardware resources in order to execute a particular function described in program codes (as discussed in connection with question 1) Accordingly, the mere citation of the user of a computer or computer-readable data storage medium in a claim should clear the "computer program as such" bar, so that substantially all kinds of inventions implemented on computer hardware resources and requiring a computer program to operate the computer hardware resources should be patent eligible.



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This interpretation would make the statutory patent eligibility bar set forth in Art. 52(2)(c) and (3) much narrower than is argued for in some quarters. The requirements of novelty and inventive step ensure that only computer-implemented invention are patented which, when comparing the invention with prior art, obey the “traditional” elements of patentability. We note below that we agree with the case law that only such elements of a claim need to be taken into consideration that in combination, contribute to a technical effect.

Let us take as an example computer software which implements a business method, such as a novel financial model, which is stored on a data carrier. This method as such would remain unpatentable because of lack of novelty/inventiveness. The novel financial method has no elements that have a technical effect. A software program implementing the business method and producing a specific operation of a computer, e.g. by organizing the data-processing steps in such a manner that they can be more efficiently processed by a computer or by causing another technical effect, for example in external technical devices, would be patentable.

2.(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?

A: We agree that criteria to limit patent eligibility are necessary in order to exclude unwarranted attempts at monopolizing abstract ideas. The concept of the “further technical effect” has been required in order to differentiate patentable subject matters from unpatentable subject matter beyond those effects inherent in the use of a computer or data storage medium. The recent case law, starting with T 641/00 – Comvik, has established the additional criterion that the technical features of a claim have to constitute the solution of a technical problem in order to define a patentable invention. This latter criterion has led to a consistent and predictable practice and should be favoured. LESI believes that there is no contradiction between the two criteria.

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?



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A: NO. We feel that this is a useful bright line test for deciding which types of computer implemented invention should be eligible for patentability. The criterion is, however, not a necessary one. Obviously, if the claimed feature defines a physical entity in the real world or a property thereof, this contributes to the technical character of the claim as well. LESI also notes that a step of a method carried out in the real (physical) world is also to be considered to be technical and thus contribute to the technical character of the claim. We further note that it is not necessary for the end result of a method to be itself “technical”. It is sufficient that at least one of the integers of the claim is technical.

3.(b) If question 3(a) is answered in the positive, is it sufficient that the physical entity be an unspecified computer?

A: YES. There is no need per se to specify a computer. This becomes irrelevant to the claim. Engineering developments in the field of computer program art have enabled computer programs to be independent of a particular physical constraint and interface of hardware. These days the majority of computer programs are written to be executable on a general purpose computer. It would be unreasonable to require the inclusion of a reference to a specific computer into the claims as this would lead to an unreasonable restriction of the scope of protection. We agree that as an example of the operation of the invention, it may be advantageous (and may be required in order to comply with Art. 83) to describe the hardware in detail in the description, if the invention requires hardware which is beyond the knowledge of the skilled person at the priority date. We agree that a certain level of concreteness as to the operation of the information processing carried out by the computer program should be required in order to comply with the description requirement.

4.(a) Does the activity of programming a computer necessarily involve technical considerations?

A: The answer depends of the definition of “technical”/“technicality” and also what is meant by “activity of programming a computer”, but generally YES. We note first of all that the subject matter of a patent application is not – generally – the activity of writing a program, but rather the result of programming. The “technical consideration” criteria discussed in T0769/92 SOHEI require “technical” aspects both in the problem to be solved and in the solution to the problem. In that sense, higher-level computer programs tend to be less “technical”.



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These higher-level computer programs are executable on a middleware computer program and are generally more independent from a particular hardware configuration. We note that even such higher-level computer programs can be open to patent protection when “technical considerations” can be found – and disclosed in the description. Examples given in the Guidelines include higher-speed processing, lower consumption of memory resources, optimization of storage, and less communication cost.

4.(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?

A: We note that the European Patent Office has traditionally viewed claims as a “whole”. The claimed features are combined organically so as to solve a technical problem. Thus the claimed features should be analyzed as a whole and a feature-by-feature analysis is generally meaningless, when determining patent eligibility for the claimed invention. We consider, however, that when assessing the inventiveness of a patent claim, it makes sense to only consider those features which contribute to the technical character of the claims. This should not lead, however, to a feature-by-feature analysis. The examination should be based on considering all those features which in combination solve the technical problem.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Jean-Christophe Troussel', written in a cursive style.

Jean-Christophe Troussel  
Chairman, LESI European Committee  
Brussels, 30 April 2009