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SVENSKA INDUSTRINS
IP FÖRENING

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To:
Enlarged Board of Appeal
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Amicus Curiae brief regarding G 3/08 about the patentability of programs for computers

Dear Sirs,

The Association of IP Professionals in Swedish Industry[1] (SIPF) would hereby like to submit our amicus curiae brief regarding the referral under Art 112(1)(b) EPC by the President of the EPO to the Enlarged Board of Appeal, pending under Ref. no. G 3/08.

The usage of computer programs to solve technical problems is today substantial and seems to continue to grow in many technical fields as well as most branches of society. Technological advances achieved with the aid of computer programs as well as the benefits to society they give seem to be impossible to accurately predict, but it would be very surprising if engineers in the future would not be working in completely new fields unknown today.

In order to enable a fair return on R&D investments in computer implemented inventions, it is vital for companies to be able to properly protect their computer implemented inventions. The core of the computer implemented inventions is often embodied in computer programs and it is therefore necessary that the European patent system provides such proper protection also for inventions which basically are implemented (and could be distributed) as computer programs. Depriving applicants of their right to a patent in changing technological environments would boost the incentive for companies to keep their inventions as trade secrets and to a higher degree generate scattered, isolated and

[1] The Swedish name of the association is "Svenska Industrins IP Förening". The association was founded in 1939 and currently has more than 400 members working with intellectual property for a wide range of companies in Sweden.

(with respect to standards) incompatible solutions, The latter would of course be detrimental for some systems on which the European society today depends on, such as the standardized telecommunications systems.

A patent relates to three fields: business, technical and legal. The Paris Convention[2] and other reforms during that period (the nineteenth century) were highly based on both the legal and business aspects. The patent system in Europe has been moving slowly towards the legal field, taking less and less consideration to the business field. By moving more towards the legal field, the patent system has become reactive, since the legal field tends to be slower than the technological progress and the changes in the society. However, SIPF believes that it is crucial for the patent system to take into consideration the balance between the legal field and the business field. From the business point of view the system should be proactive in order to continue being of adequate value for R&D companies in technical fields with fast technological progress. This affects also the society's view on the system.

In order for the patent system to be more beneficial to the society and the R&D companies, it should try to become more proactive, especially regarding software since this has become a fundamental part and a tool for companies and the European Society. The credibility of the European patent system lies in the handling of software issues so that it provides a tool, not least to SME:s in Europe, to be able to develop, protect and market their products in their home market. Hence SIPF hopes that the possible answers to the questions of the Referral will at least not make it harder for companies to adequately protect their inventions than that provided today by the current EPO practice.

SIPF doubts that there really is a conflict between at least some of the decisions of the Boards of Appeal as suggested in the President's referral (see especially our comments on Question 2). The admissibility of the referral could therefore be questioned[3].However we believe that, should the Enlarged Board of Appeal choose to answer the questions of the referral, the answers would give a positive impact on the harmonization of the practices exercised by European national courts and offices regarding inventions implemented by computer programs. There is still some divergent case law of different European national courts and an answer from the Enlarged Board of Appeal would provide the national courts

[2] Paris Convention for the Protection of Industrial Property: see http://www.wipo.int/export/sites/www/treaties/en/ip/paris/pdf/trtdocs_wo020.pdf

[3] In addition, the former President of the EPO, Dr. Alain Pompidou replied to Jacob LJ in March 2007 that there was:

> "...insufficient legal basis for a referral under Article 112(1)(b) EPC. Leaving aside Board of Appeal case law the line of reasoning of which has been abandoned by later case law, I believe there are insufficient differences between current Board of Appeal decisions dealing with Article 52 EPC exclusions on important points of law that would justify a referral at this stage."

There has been no significant change in the law since then, especially since the BoA decisions cited in the Referral predates the reply from Dr. Pompidou. On the contrary, there have been further harmonization between the EPO practice and some national practices, e.g. the UK and Swedish practice.

and patent offices with powerful and influential case law which can be used for further harmonization. SIPF also believes that it would impact non-European legislation and practices, which is good as such. After all, besides the desire for adequate and predictable possibilities for patent protection for all kinds of technical inventions, harmonized patent laws and patent practices on a global basis is of the greatest concern for SIPF.

SIPF therefore would like to comment on the questions referred to you by the President of 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?

Comment on Question 1:

It is righteous to say that the substance of a claim is what matters, rather than its form. Nevertheless, the form of a claim is very important in practice for both the applicants and the courts, due to the various requirements of patent infringement in Europe. To state something else would be very naive. A technical method implemented via a computer program or an apparatus claim should not be regarded as being a computer program as such, since they simply are not computer programs. It is not logic to say that, e.g. a computer comprising (combined with) a computer program is a computer program as such. A computer, which must be said to be a technical device no matter how common it is, does not suddenly become non-technical by the addition of a computer program[4].

In practice the answer therefore should be "Yes, but only provided it does not have a further technical effect when run on a computer". To determine the scope of a "computer program as such" according to Art 52(2)(c) and (3) EPC may not be an easy task, but we are clearly inclined to state that it should be interpreted narrowly[5] and without forgetting

[4] This is supported by BGH X ZB 15/98 –Sprachanalyseeinrichtung.
[5] See for example T1173/97, cf reasoning in G1/04 (http://legal.european-patent-office.org/dg3/pdf/g040001e.pdf) in relation to the exclusion of patentability under Article 52(4) EPC in respect of diagnostic methods. See also BGH X ZB 16/00 Suche fehlerhafter Zeichenketten: http://www.jurpc.de/rechtspr/20010253.htm.

The narrow interpretation is also supported by the legislative history of Article 52 (2) EPC, then Article 50. There it was the clear intention of the contracting states that this list of "excluded" subject matter should not be given a too broad scope of application. (see the Historical Documentation (Travaux préparatoires) relating to the European Patent Convention, Munich 1999, document M/11 of March 1973, Vol. 35E, No. 21 and document M/PR/I, Vol. 42E, No. 42).

Furthermore, looking back at the numerous documents in the course of the revision of EPC2000, it is immanent that not only the Committee on Patent Law and the Administrative Council (MR/2/00, page 43) but as well a number of delegations were in favor of a deletion of "programs for computer" from Article 52(2)(c) EPC and that the only concern which lead to the remaining of said element within the Article was the concern that the removal might be seen as a broadening

the principle that all technical inventions should be patent-eligible[6]. The mere inclusion of Art 52(3) EPC is seen as an expression for a "narrow interpretation". Otherwise protection for an increasing number of technical computer implemented inventions will not be adequate. People that do not like "software patents" sometimes states that a narrow interpretation which does not exclude every computer program would render Article 52(2)(c) and (3) EPC meaningless. That opinion is not true, since computer programs that do not cause a technical effect when run on a computer are excluded by that Article. Also, claims worded with explicit programming language shall not be regarded as inventions within the meaning of EPC.

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?

Comment on Question 2:

Before giving our observation on Question 2 more directly, we would like to comment on a key issue raised by the President in paragraphs of "3.2.III The Divergence":

"Regarding T 1173/97, in its analysis of TRIPS (Reasons 2.3) the Board noted that Art. 27(1) TRIPS states that 'patents shall be available for any inventions, whether products or processes, in all fields of technology'. It interpreted this provision as not excluding programs for computers. Consequently the Board must have equated programs for computers to either a product or a process.

Further on in the decision, the Board indicated that the substance of a computer program claim lies in the method which it is intended to carry out when being run on a computer (Reasons, 9.6, 2nd paragraph, lines 1-3). As such it must be assumed that the Board Considered 'programs for computers' to be a type of method claim. This would also be in line with G 2/88 (Reasons, 2.2) which defines the two basic types of claims as being physical entities and physical activities."

SIPF believes that the Referral goes too far when it assumes that T 1173/97 means that computer program claims belong to the category of method claims. We cannot see that T1173/97 supports that conclusion, not even the Reasons 9.6. To begin with, T 1173/97 does not state that that computer program claims are method claims. On the contrary,

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although its removal was held not to imply any significant change in the legal position (MR/16/00).

[6] Article 27 (1) TRIPS which has been recognized in EPC through the insertion of "in all fields of technology" in Art 52 EPC.

T1173/97 may be interpreted as stating that computer program claims belong to the product claim category. See for example Reason 9.8 (emphasize added):

"The present decision is further supported by the reasons given in the "VICOM" decision under reasons,16, third and last paragraph, where the Board found that: "Finally, it would seem illogical to grant protection for a technical process controlled by a suitably programmed computer but not for the computer itself when set up to execute the control". In other words, it would seem illogical to grant a patent for a method but not for the apparatus adapted for carrying out the same method. By analogy, the present Board finds it illogical to grant a patent for both a method and the apparatus adapted for carrying out the same method, but not for the computer program product, which comprises all the features enabling the implementation of the method and which, when loaded in a computer, is indeed able to carry out that method."

If computer program claims are supposed to be method claims, then the computer program claims would be considered as generally being useless in a European patent application/patent, since most of the applications comprise method claims anyway. Furthermore, if computer program claims would be method claims, then applicants would not have to state any means in the means-plus-function fashion as many applicants do today to specify means that best are characterized by what they do. With the incorporation of computer program claims and computer program product claims in an application in addition to method claims, it is generally the intention of the applicant that the computer program claims/computer program product claims belong to the category of products in order to achieve protection for a computer implemented invention already before the method actually is infringed/performed and to be able to catch an infringer based on "direct infringement" rather than "contributory infringement", since a company producing a computer implemented product/computer program sometimes does not perform the corresponding method. The above mentioned *interpretation* of T 1173/97 in the Referral therefore goes against the intention and aim of applicants that prefer to incorporate computer program claims in their applications. If computer program claims would be deemed as method claims, the scope of protection for an increasing number of technical computer implemented inventions would be lower than for mechanical and chemical inventions.

It is also observed that a statement that computer program claims belong to the method category is not followed by other modern and influential, non-European jurisdiction. One example is the Japanese practice, where it is explicitly stated that computer program claims and computer program product claims are product claims[7]. Another example is the Taiwanese practice[8] where computer program product claims are considered to be within

[7] Examination Guidelines for Patent and Utility Model in Japan, Part VII, Chapter 1.1: http://www.jpo.go.jp/cgi/linke.cgi?url=/tetuzuki_e/t_tokkyo_e/1312-002_e.htm

[8] Substantive examination guidelines for invention patent – Section II, Chapter 9, 2.2: http://www.tipo.gov.tw/en/AllInOne_Show.aspx?path=2531&guid=98c50f60-3afd-46ec-9a13-14289d2ba135&lang=en-us

the category of article claims together with apparatus and system claims. Again, world-wide harmonization of patent laws is highly desirable. Even though the patent systems in Japan and Taiwan may be regarded as completely different from the European patent system, they may still give some useful indications[9].

The last paragraph of "3.2.III The Divergence"
"The divergence arises when one considers the same method claimed in the form of a computer implemented method or as a computer program. Following T 258/03, the former claim form requires only that technical means are involved (the computer) in order for it to be considered as having technical character. For the latter claim form, on the other hand, this is not sufficient. In this case a further technical effect is required which must go beyond the normal technical effects resulting from the involvement of a computer. Thus different standards for deciding on patentability are applied to the same subject-matter."

SIPF believes that there is no divergence between T 1173/97 and T258/03 regarding the claim categories since T1173/97 shall not be interpreted as meaning that computer program claims are method claims. Different "standards" for deciding on patentability with respect to a method claim and a product claim are nothing new. For example, a screw does not cause a technical effect in itself, but only when it is engaged with one or more physical objects.

Now turning to Question 2 more directly. Question 2(a) is ambiguous and therefore could be answered with both "No" and "Yes" dependent on how you interpret the question. It should not only be a matter of whether or not the use of a computer or a computer-readable data storage medium is mentioned, but also *how* it is mentioned in connection with other technical features of the claimed computer program. However, a good faith interpretation of Question 2a, i.e. that the use of the computer is tightly intermingled with other technical features within the scope of the claim, gives that the answer to question 2a should be *affirmative*. Computers and computer-readable storage media are simply technical devices and should be recognized as such, even though they may not contribute to inventive step.

Although it may not be the concern of the Enlarged Board, we would here like to state our support for the current EPO practice as outlined in e.g. T 154/04[10] (and supporting T258/03). This practice is supported by more recent case law from the Technical Board of Appeal[11] and European national court decisions[12] that have interpreted EPC as well as the case law of the Boards of Appeal. The practice of T 154/04 is considered to provide not only an intelligible practice of what is constituted as patentable subject matter within EPC, but also provides the most predictable practice, which of course is of the greatest

[9] This has in essence been said in T935/97, Reason 2.6: http://legal.european-patent-office.org/dg3/pdf/t970935eu1.pdf
[10] http://legal.european-patent-office.org/dg3/pdf/t040154ep1.pdf
[11] Examples: T1543/06 Gameaccount Ltd (http://legal.european-patent-office.org/dg3/pdf/t061543eu1.pdf), T1188/04 Sharp (http://legal.european-patent-office.org/dg3/pdf/t041188eu1.pdf), and T1351/04 Fujitsu (http://legal.european-patent-office.org/dg3/pdf/t041351eu1.pdf).
[12] Examples: 05-001 and 04-329 of the Swedish Court of Patent Appeals

importance not only to applicants, but also to third parties. Even though the hurdle to pass Art 52(2)(c) and (3) EPC may seem too low to some, the article still prevents pure business methods and computer-programs in a programming language form and the application still has to pass the novelty and inventive step criteria.

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?

Comment on Question 3:

Question 3(a) should be answered in the *negative*. 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. Having a criterion that state that a feature must "cause a technical effect on a physical entity in the real world…" would effectively hamper patentability of clearly technical inventions. This would be contrary to Article 27(1) of the TRIPS agreement and is furthermore not in line with EPO case law such as T1227/05[13] and a number of European nation cases[14]. Such hampering would not promote technical progress, which is a purpose of the EPC[15], since it drastically would decrease the possibility of providing proper protection for many very valuable technical inventions and therefore decrease the possibility for companies to get return on their R&D investments.

In addition to the simulation system discussed in T1227/05 there is a number of technical inventions which may not fulfill a criterion of causing "a technical effect on a physical entity in the real world". One example is a method of voice compression, where both the data representative of voice and the compression algorithm features may not by themselves cause a technical effect on a physical entity, since only their application to computer switches as part of an executing computer program does this, and yet as a combination provides a technical solution. Another example is diagnostic methods implemented in one or several computers for checking the status of network nodes, such as vehicle internal nodes and telecommunications network nodes. There should not be a

[13] http://legal.european-patent-office.org/dg3/pdf/t051227ep1.pdf
[14] Examples: Germany: BGH X ZB 11/98 Logikverifikation (http://www.jurpc.de/rechtspr/20000072.htm), BPatG 23 W (pat) 24/00 Kabelbaum (http://www.european-patent-office.org/epo/pubs/oj003/05_03/05_2173.pdf), United Kingdom: Court of Appeal [2008] EWCA Civ 1066 Symbian (http://www.bailii.org/ew/cases/EWCA/Civ/2008/1066.html)
[15] See e.g. reason 10.2 of T935/97.

requirement to e.g. display all fault codes generated by such a (typical) diagnostic method, since e.g. a driver of a vehicle would be exposed by too many distractions if he/she had to see every possible fault without consideration as to its urgency, seriousness and accuracy. Yet another example is updating, testing and diagnostic routines run internally in a stand-alone computer.

The answer to Question 3(c) must be answered in the *positive* for the same reasoning as in the paragraph above. As indicated above a high level compression method could be implemented on any type of computer and still perform its compression function.

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?

Comment on question 4

Regarding Question 4(a), programming does not *necessarily* involve technical considerations, but *it often does* and depends on the programming language and interfaces used. The term programming encompasses numerous forms of programming; on the machine level at one end and a high level programming language on the other end. All these forms may be used by a programmer to solve technical problems. We must not forget that technical considerations are sometimes so small that we tend to forget that they in fact are technical. One example of when technical considerations clearly are involved is the decision of where (i.e. in which network node) program modules of a distributed application/computer program should be installed. A second example is the consideration of how parameters should be stored in the case of a plurality of memories (which is the rule rather than the exception) in a computer. A third example is when a computer is programmed to repeat certain steps until a condition is met. The decision step can be programmed in a positive (i.e. repeating a step until a certain value is reached) or in a negative manner (i.e. performing a step as long as a certain condition is not met). The outcome of a positive decision may lead to less routine cycles than a negative decision. In this situation the programmer often has to think about whether the repetition of the certain step or anyone of the steps subsequent to the repeated step are time critical. Such a consideration is without doubt of a technical nature.

Since programming may involve technical considerations, features resulting from programming may result in different novel computer architectures. One example is that novel architectures are technical systems in themselves and do not rely on a further technical effect. The answer to Question 4(c) shall therefore be *negative*.

Yours faithfully,

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Enclosures:
Swedish Court of Patent Appeals 04-329
Swedish Court of Patent Appeals 05-001

Note: References which have already been cited by the Referral or can be retrieved through the links in the footnotes are not enclosed.