FÉDÉRATION INTERNATIONALE DES CONSEILS EN PROPRIÉTÉ INDUSTRIELLE
Julian Crump
Secrétaire Général

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By email : pmesserli@epo.org

GBK · EBA · GCR
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Mr. Peter Messerli,
EPO Vice President,
Directorate General of Appeals
Erhardtstraße, 27
D-80298 München
Germany

Re. Amicus Brief to the EPO Enlarged Board of Appeal for case G3/08

Dear Dr. Messerli,

In the name of FICPI, I am pleased to submit herewith for your consideration an Amicus Brief prepared by our Federation for consideration in relation to the above issue.

A copy of this document is also being sent to Mr Gert Kolle, EPO Director of International Legal Affairs, and to the Registrar of the Enlarged Board of Appeals.

Yours sincerely,

Julian Crump
Secretary General

Enc.

c.c. Gert Kolle (mailto:gkolle@epo.org)
c.c. Registrar of Enlarged Board of Appeals

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FÉDÉRATION INTERNATIONALE DES CONSEILS EN PROPRIÉTÉ INDUSTRIELLE

Written statement under Art.10 (1) of the Rules of Procedure of the Enlarged Board of Appeal in the case G 3/08

Established in 1906, Fédération Internationale Des Conseils En Propriété Industrielle ("FICPI") is a Switzerland-based international and non-political association of more than 5,000 intellectual property attorneys from over eighty countries. FICPI's members represent individual inventors as well as large, medium and small companies. One of the members' major roles is to advise inventors in intellectual property matters and secure protection for industrial innovation.

FICPI herewith submits to the Enlarged Board of Appeal under Art.10(1) of the Rules of Procedure the following written statement as amicus curiae brief in the case G 3/08.

1. Legal Background

In a letter of October 22, 2008 the President of the EPO has referred four legal questions relating to the exclusion of computer programs as such under Art. 52 (2), (3) EPC to the Enlarged Board of Appeal for decision. The Enlarged Board of Appeal assigned the referral case number G 3/08 and invited the public to file written statements.

Under Art. 112(1) (b) EPC the President of the Office,

- in order to ensure uniform application of the law, or
- if a point of law of fundamental importance arises,

can refer a point of law to the Enlarged Board of Appeal for decision

- where two Boards of Appeal have given different decisions on that question.

The President of the EPO argues in her referral that a uniform application of the law on the patentability of computer programs no longer exists due to a number of diverging decisions of the Board of Appeal 3.5.1 over the last twenty years. She requests the Enlarged Board of Appeal to clarify this situation by providing answers to the four legal questions.

The present legal situation with respect to the patentability of computer-implemented inventions can be briefly summarized as follows. According to Art.52 (2), (3) EPC computer programs as well as, for example, business methods or mental acts "as such" are explicitly excluded from patentability. According to the established case law of the Technical Boards of Appeal computer programs having no technical character are regarded as non-patentable computer programs "as such", whereas computer programs having technical character are regarded as patentable under the EPC. Following the decision **T 258/03** (*Auction method/HITACHI)* of April 21, 2004 a two-step test is applied for examining computer-implemented inventions:

In a first step it is established whether or not the invention falls under the "as such" exclusion. According to the *HITACHI*-decision the necessary technical character may be "*implied by the physical features of an entity or the nature of an activity*" or "*by the use of technical means*". That is, the first hurdle can be overcome by citing hardware means in an apparatus claim or by the use of hardware means in a method claim. In addition to these claim types patent claims directed to a computer program per se or stored on a carrier medium are allowable as well.

In a second step it is judged whether or not the invention having technical character also is new and involves an inventive step. In order to overcome this second hurdle the invention must solve a technical problem with technical means, whereas the technical problem can be in the field of software and does not need to have any effects outside the computer, which is in line with e.g. the London Appeal Court in the recent *Symbian* case. Interestingly, this all-important second step of the test is not mentioned at all in the referral.

This now well-established case law is widely understood by applicants and practitioners alike. Concerns about a divergent decision practice are not expressed. Under this case law it is generally relatively easy to overcome the first hurdle but can be difficult to overcome the second one. In practice there is consequently not much room anymore for the application of

the explicit exclusion of computer programs as such under Art. 52(2), (3) EPC as the vast majority of cases are decided based on inventive step, i.e. non-obviousness.

In FICPI´s view all four questions raised in the referral are to be rejected as inadmissible for lack of divergence in the decisions cited in the respective legal questions.

2. The Legal Questions

QUESTION 1

CAN A COMPUTER PROGRAM ONLY BE EXCLUDED AS A COMPUTER PROGRAM AS SUCH IF IT IS EXPLICITLY CLAIMED AS A COMPUTER PROGRAM?

The allegedly divergent decisions for Question 1 are **T 1173/97** (*Computer program product /IBM*) of February 4, 1999 and **T 424/03** (*Clipboard formats I/MICROSOFT*) of February 23, 2006.

According to the referral the *IBM*-decision placed the emphasis on the function of the computer program whereas the *MICROSOFT*-decision took a more formal approach looking at the form of the claims. In the view of the President a patent claim directed to a computer program implementing method x could according to *MICROSOFT* be excluded as unpatentable computer program as such under Art. 52 (2), (3) EPC but not a patent claim directed to computer-implemented method x, whereas following *IBM* both types of claims could be rejected in the same way as non-patentable subject-matter. This view is obviously based on the following reasoning at the end of paragraph 5.1 of the reasons for the *MICROSOFT*-decision:

> *"Thus, the board holds that the claim category of a computer-implemented method is distinguished from that of a computer program. Even though a method, in particular a method of operating a computer, may be put into practice with the help of a computer program, a claim relating to such a method does not claim a computer program in the category of a computer program. Hence, present claim 1 cannot relate to a computer program as such."*

A patent claim directed to a computer-implemented method can therefore not be excluded as an unpatentable computer program as such. This, however, does not mean that the "as

such" exclusion list cannot be applied to a claimed computer-implemented method. Instead of as a computer program as such, it can be rejected under Art. 52 (2), (3) EPC as a method of performing mental acts or a method of doing business as such, for example, if it relates to a purely abstract, non-technical concept. Under *MICROSOFT* as well, the function of the computer-implemented method has therefore to be judged and not the form of the claim.

The difference between the two decisions is therefore of a rather formal nature. Under *MICROSOFT* a computer program invention can be rejected as a computer program as such only if it is claimed as a computer program and as a method of performing mental acts or a method of doing business as such if it is claimed as a computer-implemented method. Following the older *IBM*-decision, both the claimed computer program and a corresponding computer-implemented method could be rejected as a computer program as such or as a method of performing mental acts or a method of doing business.

The *MICROSOFT*-decision citing and expressly approving the approach used in *IBM*, however, is not in contradiction to the earlier *IBM*-decision in substance. Both judgements conclude that patent claims directed to a computer program per se or stored on a carrier medium are allowable if they have technical character, as are claims directed to a computer-implemented method.

There is therefore no divergence between the two decisions *IBM* and *MICROSOFT*. Question 1 therefore is to be rejected as inadmissible.

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?

The allegedly divergent decisions for Question 1 are **T 1173/97** (*Computer program product/IBM*) of February 4, 1999 and **T 258/03** (*Auction method/HITACHI*) of April 21, 2004.

The asserted divergence lies in the "further technical effect" beyond the normal technical effects resulting from the interaction between hard- and software, which could according to the *IBM*-decision serve as a means to overcome the exclusion from patentability of computer programs as such. The younger *HITACHI*-decision, however, came to the conclusion that such further technical effect is not necessary to pass the first hurdle of patentability.

The President of the EPO recognized a divergence between the two decisions in a case in which, as in Question 1, the same invention is claimed in the form of a computer-implemented method and as a computer program implementing the method. According to the referral the *IBM*-decision is only applicable to the computer program claims necessitating a further technical effect, whereas the method claims have to be judged under *MICROSOFT* not requiring the further technical effect.

This alleged discrepancy, however, is based on an incorrect understanding of both cited cases:

Both decisions are based on the same well-established principle that computer programs are to be regarded as patentable inventions if they have technical character (see paragraph 5.3 of the reasons in *IBM* and paragraph 3.1 of the reasons in *HITACHI*). In contrast thereto non-technical computer programs of purely abstract nature are not patentable (paragraph 5.2 of the reasons in *IBM* and paragraph 4.5 in *HITACHI*).

In order to distinguish patentable inventions having technical character from non-patentable computer programs as such, *IBM* suggests that the technical character could be based on a further technical effect beyond the normal physical interactions between software and hardware deriving from the execution of any software on the computer hardware (paragraphs 6.2 and 6.4 of the reasons in *IBM*). The Board, however, did not say that this further technical effect is necessary in order to qualify as a computer program having technical character. In paragraph 6.5 of the decision other examples of technical computer programs are mentioned as well, as programs managing an industrial process or the working of a piece of machinery.

In a different composition the Technical Board of Appeal 3.5.1 further developed the case law in *HITACHI*. The necessary technical character of a claimed invention may be "*implied by the physical features of an entity or the nature of an activity*" (paragraph 3.7 of the reasons) or "*by the use of technical means*" (paragraph 4.7 of the reasons). The Board of Appeal knowingly deviated from its earlier jurisprudence (see paragraph 4.6 of the *HITACHI*-reasons)

> *"The Board is aware that its comparatively broad interpretation of the term "invention" in Art. 52(1) EPC will include activities which are so familiar that their technical character tends to be overlooked, such as the act of writing using pen and paper. Needless to say, however, this does not imply that 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."*

The Appeal Board in *HITACHI* explicitly deviated from their own earlier decisions in order to treat method and apparatus claims in the same way, namely by requiring physical features of an entity (i.e. a computer) or the use of technical means (i.e. computer means) in the claim. With *HITACHI* the focus of the examination was shifted from the definition of an invention according to Art.52 EPC to novelty and inventive step. Citing *IBM* the Board found in *HITACHI* that any comparison with the prior art is "*inappropriate for examining the presence of an invention.*"

HITACHI therefore is an explicit further development of earlier case law. Such development in case law is not only desirable but necessary for the functioning of the European patent system. This view is certainly shared by the President of the EPO. In order to construe a divergence between the two decisions it is assumed in the referral that *IBM* is applicable only to computer program claims and *HITACHI* only to apparatus and method claims. Since the same invention can be formulated in a similar way as a computer program and a computer-implemented method, however, the divergence as outlined above should arise.

The following assumptions, on which the alleged discrepancy between the two decisions cited in Question 2 rely, however, are not correct.

a) In order to distinguish patentable inventions having technical character from non-patentable computer programs as such, *IBM* requires a further technical effect being present going beyond the normal physical interactions between software and hardware.

The Board, however, did not say that this further technical effect is necessary to overcome the patentablility bar of the exclusion list but is one possibility to do so. Other possibilities are programs managing an industrial process or the working of a piece of machinery.

b) *IBM* is applicable only to computer program claims

While the *IBM* decision became well-known for accepting the new claim category of computer program claims, the reasoning in paragraphs 4 to 8 of the reasons for the decision, including the idea of the further technical effect, indeed related to all types of claims and generally discuss the important question of what a computer program as such is. Only in paragraph 9 did the Board start to discuss the claim type of computer program and computer program product, on which the Board solely had to decide the case as corresponding method and apparatus claims had already been granted by the Examining Division. The use of the expression "computer program" in the text of paragraphs 4 to 6 of the *IBM*-decision is based on the text of Art. 52 (2), (3) EPC excluding computer program as such from patentability and cannot be taken as an indication that the discussion should relate only to computer program claims. In this respect one must keep in mind that the expression "computer-implemented invention" was coined only after the IBM-decision during the run-up to the EPC revision conference in Munich in November 2000. The Appeal Board found in *IBM* that the necessary technical character of an invention in order to overcome the exclusion of Art.52 (2), (3) EPC could be based on a further technical effect. This finding is applicable to all claim types, not only computer program claims.

c) *HITACHI* in contrast thereto is applicable only to apparatus and method claims

This assumption is incorrect as well. There is no indication in *HITACHI* that different claim types should be treated differently. To the contrary, paragraph 7 of the reasons for the decision says that different claim types should be judged in the same way:

"The computer program of claim 4 is defined by the same steps as the method of claim 1 and is therefore also not patentable because it does not involve an inventive step (Art. 56 EPC)."

Again, there is no divergence between the two cited decisions *IBM* and *HITACHI,* but only an incremental, non-contradictory development. Question 2 therefore should also be rejected as inadmissible.

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?

The allegedly divergent decisions for Question 3 are **T 163/85** (*Television signal/BBC*) of March 14, 1989 (!) and **T 190/94** (no headword) of October 26, 1995 on the one hand and **T 424/03** (*Clipboard formats I/MICROSOFT*) of February 23, 2006 and **T 125/01** (*Gerätesteuerung /HENZE)*) of December 11, 2002 on the other hand.

The *BBC*-decision required a television signal, in order not to fall under the exclusion of "presentation of information as such", to inherently imply technical features of a television system and **T 190/94** required that the difference of a claimed invention over the prior art should "*manifest itself in the real world in a technical effect on a physical entity*".

Turning to the second group of cases, in *MICROSOFT* functional data structures being independent of the cognitive content of the data were regarded as being able to contribute to the technical character of the claimed invention (paragraph 5.2 of the reasons for the decision) and in *HENZE* the Board regarded a particular software structure of a control module as a technical feature in analogy to a particular structure of a control module implemented in hardware (paragraph 4.2 of the reasons for the decision).

The referral saw the divergence in that the former two decisions required an invention, in order to contribute to its technical character, to have effects outside the computer ("in the real world"), whereas according to the latter two decisions technical effects being apparent within the computer would be sufficient.

It is correct that the established case law of the Boards of Appeal of the EPO does not require any technical effects to take place outside the computer in order to be qualified as technical. *MICROSOFT*, citing *HITACHI*, regarded a computer-implemented method as having technical character, because (5.2 of the reasons for the decision)

> *"the claimed steps provide a general purpose computer with a further functionality: the computer assists the user in transferring non-file data into files".*

This is, however, not in contrast to the above-cited older Board of Appeal decisions of the second group of cases.

In **T 190/94** the novel features "*manifesting itself in the real world in a technical effect on a physical entity*" were in fact a different display of a rotated image as a result of a different rotation algorithm. The distinction with respect to the prior art was a different algorithm providing quantitatively different rotation angles and the only effect to the outside world became apparent if the image calculated by the new algorithm having different rotation angles was displayed on a display screen (paragraphs 5.10 and 5.11 of the reasons for the decision). No real technical effects outside the computer were thus required by this decision.

Even the very old *BBC*-decision actually granted a patent on a television signal having a particular picture format which became visible only when a viewer regarded the signal on his/her TV apparatus. Again, the "technical effect on a physical entity in the real world" cited in Question 3 (A) from **T 190/94** became apparent only in the eye of the observer, not different from a clipboard format in *MICROSOFT.*

Contrary to the allegations in the referral, there are no Board of Appeal decisions requiring technical effects manifesting themselves outside the computer in order to be able to contribute to the technical character of an invention. As no divergence is present, Question 3 is also inadmissible.

In the last two paragraphs of the comments to Question 3 the President of the EPO criticises the *MICROSOFT*-decision and reveals that she is not so concerned with divergencies between different Appeal Board decisions, but apparently does not agree with the established case law. It is questionable whether the procedure of Art. 112 EPC is the appropriate forum to raise (for whatever reasons) such criticism.

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?

The allegedly divergent decisions for Question 4 are **T 833/91** (no headword), **T 769/92** (*General-purpose management system/SOHEI),* and in particular **T 204/93** (no headword) of October 29, 1993 on the one hand and **T1173/97** and in particular **T 172/03** (*Order management/RICOH)* of November 27, 2003 on the other hand.

Question 4 relates to the general issue of whether or not the act of programming a computer program is a technical activity and consequently a programmer can be the relevant person skilled in the art for judging inventive step. In *RICOH*, for example, a software project team was regarded as the appropriate person skilled in the art.

In the referral some older decisions (mostly not published in the OJ) are cited as pointing in a different direction. The referral particularly relies on **T 204/93** relating to a system and method for generating software programs, in which the Board found (paragraph 3.2 of the reasons for the decision):

> *"Computer programs as such are explicitly excluded from patentability by Article 52(2)(c) in conjunction with Article 52(3) EPC. A programmer's activity of writing*

a computer program is also excluded by that Article because it requires performing mental acts as such."

T 833/91 states that "*a programmer's activity would involve performing mental acts and therefore also fall within the exclusions according to Article 52(2)(c)*".

In **T 769/92**, the well-known *SOHEI*-decision, in which the technical character requirement was formulated for the first time, the Board stated in the Reasons, 3.7, 5th paragraph cited in the referral:

"Mere programming as such would, in the Board's view, also be excluded from patentability by virtue of the fact that it is an activity, which essentially involves mental acts excluded and, in addition, only results in computer programs which are also excluded from patentability by the same Article 52(2)(c) EPC. However, the implementation, in the claimed system and by the claimed method, of the said "interface" in the form of said "transfer slip" is not merely an act of programming but rather concerns a stage of activities involving technical considerations to be carried out before programming can start."

Mere programming as such is therefore not regarded as a technical activity, but technical considerations in pre-programming activity are regarded as sufficient to lend an invention the required technical character.

The President of the EPO wishes to get from the Enlarged Board of Appeal a clarification whether the activity of programming in itself is of technical nature or if one has to look closer at what the software developer actually is programming. Question 4 (A) thus asks whether the activity of programming a computer necessarily involves technical considerations. This question, however, has not been positively answered by *RICOH* or any of the decisions cited in the referral. Consistent with all cited Appeal Board decisions, Question 4 (A) can therefore be answered in the negative, namely that the activity of programming a computer does not necessarily involve technical considerations, but of course may involve technical considerations depending on what is actually programmed.

Therefore, no divergence with respect to Question 4 (A) exists. Question 4 (B) is not relevant as Question 4 (A) can be answered negative consistent with the EPO case law and

for Question 4 (C) no divergence has been alleged in the referral. Question 4 thus has also to be rejected as inadmissible.

3. Conclusions

In summary, all four questions have to be rejected as inadmissible as in a previous referral of the President under case number G 3/95. No divergency between the cited different Appeal Board decisions can be recognized, which, by the way, are all from the same Board of Appeal 3.5.1.

Moreover, contrary to the EPO President's view the recent case law is seen as rather consistent by most EPO users. The decision **T 258/03** (*Auction method/HITACHI)* of April 21, 2004 can resolve most if not all of the purported divergencies.

There is the impression that the referral is less concerned with the uniform application of the law within the EPO, but more with divergencies between the EPO case law on the one hand and some national court decisions and public opinion on the other hand. This aspect becomes clear from section "1. Summary of the Referral":

> *"Currently there are concerns, also expressed by national courts and the public, that some decisions of the Boards of Appeal have given too restrictive an interpretation of the breadth of the exclusion. "*

It is, however, highly questionable whether the procedure of Art. 112 (1)(b) EPC is the appropriate forum to bring the EPO case law in line with national jurisprudence or concerns expressed by the public.

Observations prepared by
Alexander Esslinger, CET 7 Chair

Respectfully submitted by
Julian Crump, FICPI Secretary General
April 30, 2009