

European Patent Office  
Erhardtstraße 27  
80469 München

- Enlarged Board of Appeal -

15 April 2009

## Patentability of programs for computers

Your ref.: G 3/08

Dear Sir or Madam,

In the above-mentioned proceedings, I am representing the BIKT - Bundesverband Informations- und Kommunikationstechnologie e. V., Kuhmühle 4, 22087 Hamburg and the persons and legally competent partnerships listed in the appendix. Powers of attorney have been appended to the pleading as an omnibus appendix.

On behalf of the above-named parties and on my own behalf, I hereby submit the following opinion to the legal issues of the proceedings in accordance with Article 10 of the Rules of Procedure of the Enlarged Board of Appeal:

### I. Introduction

The following opinion uses the terms computer and computer program as they are defined in the submission of the President of the European Patent Office (EPO), Ms Brimelow, of 22/10/2008 under Item 2. The term *software-related patents* (Keller, Softwarebezogene Patente, pp. 5-6) will be used in the following to mean patents which are related to problem solutions (teachings) which can be executed only by computers and possibly by the

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human brain as well (software-related problem solutions/teachings). The term problem solution will be used synonymously with the term of teaching below.

The interpretation of Art. 52, Subsection 2 (c) in conjunction with Subsection 3 of the European Patent Convention (EPC) by the EPO with respect to the patentability of teachings in the area of programs for data processing systems is marked by formal considerations and deliberations concerning the technicity of software. This also finds expression in the decisions of the Boards of Appeal of the EPO to which reference is made in the President's submission.

However, the EPO has not previously taken into consideration that the granting of software-related patents, at least with respect to the territory of the Federal Republic of Germany, leads to conflicts with the copyrights of the authors of computer programs. The granting of software-related patents touches in this context on the fundamental rights of the authors of computer programs. In particular, the rights of software authors arising from the guarantee of property rights pursuant to Art. 14 (1) of the German Grundgesetz (GG) must be given consideration in the interpretation of Art. 52 EPC. I refer in full to my study, "Softwarebezogene Patente und die verfassungsrechtlichen Eigentumsrechte der Softwareautoren aus Art. 14 GG" (Keller, Softwarebezogene Patente). Two copies are included with this submission for informational purposes. The results of the study and its fundamental reasoning will be repeated in brief here. Finally, the international aspects and the consequences resulting from the study will be considered and a proposal will be made for an interpretation of Art. 52, Subsection 2 (c) in conjunction with Subsection 3 EPC which takes into account the rights of the software authors pursuant to Art. 14 (1) GG.

## **II. The Granting of Software-Related Patents Effective for the Federal Republic of Germany Is in Violation of Art. 14 (1) GG**

### 1. The exploitation rights of the authors to their computer programs are protected in accordance with Art. 14 (1) GG as property

The creator of a computer program is entitled to the exclusive right to reproduce, distribute, revise or communicate to the public the developed computer program (Section 69 c German Copyright Act [UrhG] / Art. 4 Council Directive 1991/250/EEC of 14/05/1991 on the legal protection of computer programs or see Art. 3 (1) Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society of 22/05/2001). The exploitation rights of the software authors to their computer programs pursuant to Section 69 c UrhG are property within the sense of Art. 14 (1) GG (Sachs/Wendt, 4<sup>th</sup> Edition 2007, Art. 14 GG, Margin No. 63; Keller, Softwarebezogene Patente, pp. 11-12). Furthermore, the fundamental assignment of the yield on

the exploitation of a computer program to the author is part of the core area of copyright which is not at the disposal of the legislator (Keller, Softwarebezogene Patente, pp. 12-13; cf. BVerfGE<sup>1</sup> 31, 229 [240-241]).

## 2. The granting of software-related patents encroaches upon the property of the software authors which is protected by Art. 14 (1) GG

The granting of a software-related patent gives the holder of the patent a temporary monopoly. The programs which contain the patented teaching may not be used by third parties within the scope of protection of the patent without the consent of the holder of the patent.

If a software-related patent is granted as a process patent (Section 9, Item 2 German Patent Act [PatG]), the protected programs may no longer be used outside of the scope privileged in accordance with Section 11 PatG. Essentially, the strictly private utilisation (Section 11, Item 1 PatG) and the utilisation for experimental purposes (Section 11, Item 2 PatG) are privileged. If a software-related patent is granted as a device patent, it is prohibited to manufacture, offer or introduce to trade the program or to import or possess it for these purposes as well as to utilise it (Section 9, Item 1 PatG). As a rule, software-related patents are registered and granted as a process and device patent.

In this way, the authors of the computer programs covered by the software-related patent are themselves prevented from utilising their programs commercially or for other profit-making purposes. Since, in the case of device patents, it is prohibited to even offer or introduce to trade the relevant program, the distribution of such a program by the author is also impossible. Even in the unusual situation that a software-related patent is granted exclusively as a process patent, the sale to customers who want to use the program outside of the strictly private sphere is de facto excluded because these persons are also prohibited from using the program commercially or for profit-making purposes due to the patent.

As a consequence, the exploitation rights of the pertinent authors to their programs lose their commercial value when the patent is granted. The granting of software-related patents therefore represents a serious encroachment on the property rights, which are protected by the constitution, of the software authors to their programs. Due to the de facto devaluation of the evaluation rights to the programs covered by the software-related patents, there is also an encroachment in the core area of copyright law which is off limits to the legislator (Keller, Softwarebezogene Patente, pp. 40-41).

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<sup>1</sup> Collected Decisions of the Federal Constitutional Court

### 3. Constitutionally, the encroachment on the software authors' exploitation rights cannot be justified

According to Art. 14 (1) Sentence 2 GG, the legislator may determine the content and limits of property. However, it is bound by the principle of proportionality and must guarantee the core area of the constitutional property without any restrictions.

The fundamental objective of the German Patent Act is to secure the inventor's reward and to enrich the general public through the revelation of teachings. The EPC and the Act Regarding International Patent Treaties (IntPatÜG) of 21/06/1976 have not expanded this objective.

With respect to the securing of the inventor's reward, one must consider that there is an essential distinction between software and classic machinery or processes based on tangible mechanics. The problem solutions implemented in a concrete computer program are hidden in the executable binary code or can be hidden by the programmer through the use of programming techniques (Keller, Softwarebezogene Patente, pp. 34-35). The revelation of the problem solutions, which can be attained in the case of a mechanical machine by simply disassembling the machinery, is excluded in the case of computer programs. The problem solutions realised in the concrete source code of a computer program are made inaccessible by the process of translating the program into binary code. Computer programs which are distributed by their authors solely in binary code are protected from the take-over of the problem solutions contained in the program. Moreover, the decompiling prohibition pursuant to Section 69 c, Item 2 UrhG / Art. 4 b) Directive 1991/250/EEC and the provisions of the German Act Against Unfair Competition (UWG) offer supplementary legal protection which can be reinforced if necessary. The combination of these factors achieves adequate protection from the take-over or extraction of the problem solutions implemented in the programs (Keller, Softwarebezogene Patente, p. 37). The jeopardising of the inventor's reward owing to the take-over of the problem solution is effectively prevented in this way.

Copyright law offers every program author who has developed problem solutions the opportunity to exploit commercially the problem solution by realising it in a computer program and distributing the program. In this way, it guarantees that creators who have developed a problem solution independently of one another nevertheless have the chance to exploit the teaching commercially. Protection of the problem solution in the form of a patent, on the other hand, allows only the first party to register the solution to exploit the teaching commercially without any restrictions for the duration of the patent protection. Consequently, copyright law, unlike patent law, is in a position to secure the inventor's reward to a large number of creators in the sector of software-related problem solutions. When it is a question of software-related problem solutions, the copyright protection of computer programs is a more effective means of securing the inventor's reward (Keller, Softwarebezogene Patente, p. 33). Moreover, the protection of software-related problem

solutions by means of patents is not necessary because the characteristics of computer programs themselves and the supplementary legal protection in the form of the decompiling prohibition and UWG offer adequate protection from the take-over of the problem solutions without restricting third parties in their own development of the problem solution and the commercial exploitation of this development (Keller, Softwarebezogene Patente, pp. 38 and 40).

When a patent is granted, a software-related problem solution is taken away from the general public with respect to its utilisation for commercial or other profit-making purposes for the duration of the patent protection. Third parties may not utilise the patented teaching outside of the area privileged pursuant to Section 11 PatG, in particularly commercially, without the consent of the holder of the patent until after the lapse of a period of no more than 20 years since registration of the patent. This alone indicates that there is no enrichment of the general public through the teachings revealed within the scope of the granting of the patent. The decisive point, however, is that software-related problem solutions and their realisation in source code are made available to the general public by freely making software accessible in source code, above all in the form of the so-called open-source software, in all of the commonly used application areas. So it must be assumed that every software-related problem solution will be revealed through source code in a common application area, even outside of the procedure for granting a patent, within the legal term of a patent pursuant to Section 16 (1) Sentence 1 PatG / Art. 63 (1) EPC. The prospect of being able to utilise a patented teaching for profit-making purposes after the lapse of the protection term does not offer any advantages to third parties vis-à-vis the revelation of knowledge through open-source software. Thanks to open-source software, the general public receives not only software-related problem solutions, but also the know-how for the realisation of the solutions without being troubled by patents. So there is a transfer of knowledge to the general public in the area of software-related problem solutions outside the scope of procedures for granting patents which is more substantial and can also be used for profit-making purposes as of the point in time it becomes accessible. Furthermore, it must be considered that software-related patents also prohibit the utilisation of open-source software outside of the area privileged by Section 11 PatG in the protected area of their patent claims without the consent of the holder of the patent. In this way, the utilisation of the knowledge made available by open-source software by the general public is obstructed. There is also a risk that the development of open-source software as a whole will be disrupted by the possibility of claims being asserted against authors on the basis of software-related patents.

An enrichment of the general public by the revelation of software-related teachings within the framework of the process of granting patents which would offer an additional value over the transfer of knowledge through open-source software cannot be determined on the basis of a

holistic consideration (Keller, Softwarebezogene Patente, p. 31). The granting of software-related patents is therefore neither suitable nor necessary to realise the legal objective of enrichment of the general public through the revelation of knowledge (Keller, Softwarebezogene Patente, p. 40).

All of the above arguments show that the granting of software-related patents is not a reasonable method to realise the legal purpose of the PatG and the IntPatÜG in conjunction with the EPC in the sector of software-related problem solutions. Since the granting of software-related patents encroaches on the core area of copyright law, the encroachment on the exploitation rights of the software authors would in other respects not even be justifiable even if the granting of software-related patents were a reasonable method to realise the objectives of the PatG and EPC (Keller, Softwarebezogene Patente, pp. 40-41).

The granting of software-related patents is in violation of the rights of software authors to their programs protected as property pursuant to Art. 14 (1) GG. It is consequently irreconcilable with the German Grundgesetz. Section 1 PatG and Art. 52 EPC must be interpreted in line with the constitution so that the granting of patents on software-related problem solutions is no longer permitted (Keller, Softwarebezogene Patente, p. 41).

### **III. International Aspects**

The WIPO Copyright Treaty of 20/12/1996 (WCT) provides in Art. 4 that computer programs, whatever the mode or form of their expression, are protected as literary works within the meaning of the Revised Berne Convention for the Protection of Literary and Artistic Works (RBC). Art. 10 (1) WCT provides that contracting parties may, in their national legislation, provide for limitations or exceptions to the rights granted to authors under the WCT in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the authors. In Art. 10 (2) WCT, this regulation is carried over to the application of the RBC by the contracting parties. These regulations show that the contracting parties had the clear intention of preventing, as far as possible, any restrictions on the exercise of the exploitation rights of the authors by other laws.

Art. 10 (1) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) also provides that computer programs are to be protected as literary works under the RBC. Art. 13 TRIPS contains a regulation similar to that of Art. 10 WCT. As described above, the granting of software-related patents, at least on the territory of the Federal Republic of Germany, results in the devaluation of the exploitation rights of authors of computer programs which fall under the

protection of such a patent. The legal protection pursuant to a patent on software-related teachings has the de facto result that the provision of copyright protection of computer programs found in Art. 10 (1) TRIPS would be undermined with respect to these authors. Even an interpretation which is exclusively immanent to the contract should therefore interpret the vague legal term of “technology” in Art. 27 (1) TRIPS restrictively so that the protected area of Art. 10 (1) TRIPS is maintained in its full scope. Furthermore, the interpretation of the term “technology” from Art. 27 (1) TRIPS must keep in mind the fundamental principle that treaties under international law must be interpreted in such a way that they are not in violation of essential principles of the contracting parties (cf. Zemanek, ZaöRV, 24 (1964), 453 [463 and 471]), in particular of the parties’ constitutions (Ress, Wechselwirkungen zwischen Völkerrecht und Verfassung bei der Auslegung völkerrechtlicher Verträge, Berichte der Deutschen Gesellschaft für Völkerrecht, Issue 23, p. 1 [pp. 27-28]). Art. 14 (1) of the German Grundgesetz requires protection for computer programs by copyright law which is not encroached on by patent law (see above II. 3.). Consequently, the constitutional provisions of the German Grundgesetz must be taken into account for the interpretation.

The European Patent Organisation (EPOrg) is itself not a party to one of the above-mentioned multilateral treaties. Nor are the member states of the EPC all contracting parties to the RBC, TRIPS and WCT. If and when, however, reference is made to these treaties for the interpretation of Art. 52 EPC, consideration must be given to the fact that both the WCT and the TRIPS Agreement indicate that the copyright protection of computer programs should be restricted as little as possible by patent law.

#### **IV. Consequences of the Unconstitutionality of the Granting of Software-Related Patents**

##### 1. Binding force of the results for the German state authority

Pursuant to Art. 1 (3) GG, the legislative, executive and judicial branches of the government of the Federal Republic of Germany are bound by the fundamental rights as established law with immediate force. This means for the German Patent and Trademark Office (DPMA), which is a part of the executive branch, that it must safeguard the rights of the software authors to their programs as property within the meaning of Art. 14 (1) GG when applying Section 1 PatG. The consequence is that software-related teachings must be treated as non-patentable in accordance with Section 1 (3) Item 3, (4) PatG. The DPMA is therefore not permitted to grant software-related patents. The Patent Department of the DPMA must also take into account that software-related teachings are to be classified as non-patentable according to the constitutional interpretation of Section 1 PatG when conducting opposition proceedings pursuant to Section 59 PatG.

The same line of reasoning applies to the Federal Patent Court (BPatG) and the Federal Court of Justice (BGH) as part of the judicial branch. In particular, patents must be revoked during revocation proceedings before the BPatG and the related appeals before the BGH if and when they are software-related. This is also the case for revocation proceedings which are related to European patents.

Pursuant to Art. 138 (1) and (3) EPC in conjunction with Section 65 (1) PatG, the BPatG decides on the invalidity of a European patent for the territory of the Federal Republic of Germany. Art. II Section 6 IntPatÜG is authoritative for the assessment of the invalidity. According to Art. II Section 6 (1) Item 1 IntPatÜG, the question of the patentability of a European patent is to be answered in accordance with Art. 52 to Art. 57 EPC. Art. I IntPatÜG declares the ratification of the EPC by the German legislature, incorporating the EPC into the national law of the Federal Republic of Germany (cf. BVerfGE 30, 272 [284]). Treaties under international law generally acquire the status of a simple federal Law in the Federal Republic of Germany pursuant to the act of ratification (Sachs/Strein, Art. 59 GG, Margin Nos. 64 and 65; Schweitzer/Weber, Handbuch der Völkerrechtspraxis der Bundesrepublik Deutschland, 1<sup>st</sup> Ed. 2004, p. 108). Their status is lower than that of the constitution, which provides the basis for the application of international law treaties to the territory of the Federal Republic of Germany (BVerfGE 6, 309 [363]; Ress, Wechselwirkungen zwischen Völkerrecht und Verfassung bei der Auslegung völkerrechtlicher Verträge, Berichte der Deutschen Gesellschaft für Völkerrecht, Issue 23, p. 1 [pp. 41 and 47]). State treaties which have been transformed into national law must therefore be considered in the light of the provisions of the Grundgesetz, in particular of the fundamental rights (BVerfGE 6, 291 [295]). When applied on the territory of the Federal Republic of Germany, the EPC must be interpreted in such a way as to be in conformity with the requirements of the Grundgesetz (cf. BVerfGE 4, 157 [168]; 30, 272 [289]). There must be a guarantee that the interpretation of the EPC is not contrary to the fundamental rights (cf. Bleckmann DÖV, 1979, 309 [311]). Art. 52, Subsection 2 (c) in conjunction with Subsection 3 EPC must therefore be understood by German courts to mean that software-related teachings are not patentable.

## 2. Binding force of the results on the European Patent Office

Whenever it grants patents, the EPO, as part of the EPOrg, exercises sovereignty rights which have been granted to the EPOrg by the contracting parties. The EPOrg is therefore authorised to exercise only derived sovereignty rights, the scope and limits of which are determined by the EPC. The sovereignty rights are limited by the purpose of the treaty as described in the Preamble. The intent of the contracting parties in concluding the EPC is to strengthen the cooperation among the European countries in the area of invention protection and to establish a uniform procedure for the granting of patents for these countries. The EPOrg, and with it the EPO, are merely means to achieve these objectives in the interest of the contracting parties. The EPOrg is therefore prohibited from exercising the sovereignty rights granted to it contrary to the interests of the contracting parties. It is consequently not allowed to exercise the sovereignty rights in contradiction to the legal situation of the contracting parties. It must therefore respect and safeguard the constitutions of the contracting parties and the fundamental rights they contain.

Moreover, it makes little sense from the viewpoint of the harmonisation of legal interpretation if the Opposition Department or the Board of Appeal under the EPC permit software-related patents for the territory of the Federal Republic of Germany which the BPatG or the BGH is forced to declare invalid in subsequent proceedings.

The interpretation of Art. 52 EPC by the EPO must observe the limits related to the patentability of software-related teachings which the constitutions of the contracting parties mandate. Since, as has previously been explained, the granting of software-related patents is in violation of Art. 14 (1) GG, the EPO is also obligated to deny the patentability of software-related teachings within the scope of the interpretation of Art. 52, Subsection 2 (c) in conjunction with Subsection 3 EPC.

## **V. Constitutional Interpretation of Art. 52, Subsection 2 (c) in Conjunction with Subsection 3 EPC Within the Meaning of the German GG**

A constitutional interpretation must ensure that software-related teachings can no longer become the object of a patent. As was noted above, teachings are software-related if and when they can be executed solely by computers and possibly by the human brain as well. To this extent, these teachings absolutely require a computer because the instructions to the computer in the form of a computer program are necessary to carry out the problem solution. Conversely, this means that a teaching is not software-related if and when the computer and possibly the human brain as well can be replaced as a means of realising the teaching.

Software-related teachings appear as granted or registered patents in various forms. Based on the patent claims, two lines can be distinguished here.

First, there are teachings which relate to software in terms of content in the patent claims. The relationship to the software can be established by using the terms computer program, program code mechanism, computer program product, computer system or others. Such teachings are also software-related solely if and when a computer cannot be replaced in its function as process environment for a computer program for the realisation of the teaching. However, such teachings require realisation in a computer program and the execution of the program on a computer from the wording of the patent claims alone<sup>2</sup>. Software-related teachings for which the wording of the patent claims in itself presumes a computer as the process environment for the realisation of the teaching can be designated as explicitly software-related teachings.

Then there are teachings for which the patent claims do not establish any relationship to software, but objectively speaking, the teaching can be executed only by a computer or the human brain. This is often the case when mathematical formulas are inextricably incorporated into the patent claims. Such teachings can be designated as hidden software-related teachings.

Teachings which do not mandate a computer as the required process environment, but which as a whole or with respect to certain features can be realised with the aid of a computer as well as of an electro-technical or mechanical component must be distinguished from software-related teachings. These teachings should be designated as software-supportable teachings.

In general, the realisation of a software-related teaching requires exclusively a computer and the appropriate standard peripheral devices (monitor, printer, etc.) as aids. These software-related teachings are limited in their immediate sphere to the computer and the peripheral devices. There are, however, teachings which include physical or mechanical handling processes outside of a computer and its peripheral devices in combination with the control by the latter. In view of the control element, these problem solutions may be classifiable as software-related or merely as software-supportable.

If the patent claims for such a teaching include a direct reference to software, this is an indication of a software-related teaching. Independently of this, every single case requires an examination of whether the control can be realised solely and exclusively by using a computer as process

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<sup>2</sup> The replacement of the computer as a means of realisation of the teaching can then be imagined, if it is at all possible, only in the form of realisation of the teaching which is not in accordance with the wording (so-called equivalent realisation). In such a case, a teaching would not be *software-related* even though a reference to software is made in the patent claims.

environment for software. If this is the case, it is a matter of a software-related teaching. If the control can be realised with the aid of a computer, although this is not absolutely necessary, it is merely a case of a software-supportable teaching. The computer is here merely a replaceable (substitutable) aid.

If control decisions for the regulation of a process outside of a computer and its peripheral devices must be made on the basis of calculations carried out during the control process, the control task related to these calculations can, as a rule, be executed only by the human brain or a computer. So the computer and the human brain are not replaceable for the realisation of such a control. A teaching which contains such a control is therefore software-related with respect to the control and is not patentable in this form.

If, on the other hand, the control can be realised by means of mechanical components or non-programmable electro-technical switches, the fact that the control can also be carried out by a computer is not contrary to the patentability of the teaching. In this case, the instructions to the computer represent merely the process outside of the computer. An example of this is the electro-mechanical program control mechanism of conventional washing machines. An electric motor moves a cylinder which, by its rotations, represents a passage of time. Raised areas on this cylinder move a second cylinder with contacts which activate the control switches for the various steps in the wash program. These sequential control commands can also be incorporated into a computer program which replaces the program control unit. The patentability of such a wash procedure cannot be denied simply because the control can be realised by means of a computer as well as of a [mechanical] control unit.

The constitutional application of Art. 52, Subsection 2 (c) in conjunction with Subsection 3 EPC must distinguish software-related teachings as non-patentable. Software-supportable teachings, on the other hand, should not be denied the possibility of patent protection.

The substitution rule below satisfies the above requirements. This rule should make it possible for anyone applying the law to determine if a teaching is software-related and therefore not patentable.

If the teaching as it is described in the patent claims can be executed by a computer, in whole or in part, it must be determined if the computer (and possibly the human brain as well) is replaceable (substitutable) as a means for the realisation of the teaching. In the event it is substitutable, it is merely a software-supportable teaching. Otherwise, there is, in whole or in part, a software-related teaching which is to this extent not patentable.

The exclusion of programs for data processing systems as such established in Art. 52, Subsection 2 (c) in conjunction with Subsection 3 EPC includes, within the framework of a constitutional interpretation, the significance that software-related teachings are not patentable.

## **VI. Answers to the Questions of the Proceedings**

### 1. Question 1

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

A teaching is excluded from patentability if and when it is software-related. This is required on constitutional grounds. Software-related teachings can establish a direct relationship to software in the patent claims (explicit software-related teachings). However, this is precisely not the case in the form of the hidden software-related teaching. The answer to Question 1 must therefore be “No”.

### 2. 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?“

### 2.1 Question (A)

Whether a teaching in the area of Art. 52, Subsection 2 (c) “programs for computers” in conjunction with Subsection 3 EPC is patentable or not must be decided on the basis of whether it is software-related. This is the case if the teaching can be executed only by computers or possibly by the human brain as well. Whether it is software-related can be determined by applying the substitution rule described above. If there is reference to the use of a computer or a machine-readable data carrier in the patent claims, this indicates, on the contrary, that it is a matter of an explicitly software-related teaching. By no means can such a reference alone exclude the lack of patentability. The answer to Question 2 a) must therefore be “No”.

### 2.2 Question (B)

The approach of limiting the patentability of teachings in the area of computer programs by means of the characteristic of technicity cannot succeed. It ignores the fact that the granting of patents on software-related teachings is not reconcilable with Art. 14 (1) GG. Software-related teachings are per se not patentable, regardless of whether they have a technical character. Nor is an “additional technical effect” relevant. The sole decisive issue for the question of patentability of teachings in the area of computer programs is whether a teaching is software-related or not.

### 3. 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?“

Question 3 also deals with aspects of technicity which are of no significance for the exclusion of the patentability in the area of computer programs.

#### 4. 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?“

Question 4 also deals with aspects of technicity which are of no significance for the exclusion of the patentability in the area of computer programs.

Faithfully yours,

Attorney-at-law