

Draft legislative resolution

§1. Approves the Commission proposal **as amended** ;

§1. Rejects the Commission proposal ;

Justification from Greens(translated from French, may not be 100% accurate)

By proposing the patentability of computer-impemented inventions, the Commissions opens the road to patentability of human thinking. Moreover, this directive does not respond to economical, scientific and cultural stakes in the software industry nor to the need for promoting innovation. For all these reasons and to answer the strong opposition of scientists and software creators, the proposed directive must be rejected.

Title

Proposal for a directive of the European Parliament and of the Council on the patentability *of computer-implemented inventions*

Proposal for a directive of the European Parliament and of the Council on the *limits of patentability with respect to automated data processing and its fields of application*

Justification

The term "computer-implemented invention" is not used by computer professionals. It is in fact not in wide use at all. It was introduced by EPO in May 2000 to legitimate business method patents, so as to bring EPO practise in line with the USA and Japan. The term "computer-implemented invention" is a programmatic statement. It implies that calculation rules framed in the terms of the general-purpose computer are patentable inventions. This implication is in contradiction with Art 52 EPC, according to which algorithms, business methods and programs for computers are not inventions in the sense of patent law. It can not be the aim of the current directive to declare all kinds of "computer-implemented" ideas to be patentable inventions. Rather the aim is to clarify the limits of patentability with regard to automatic data processing and its various (technical and non-technical) fields of application, and this must be expressed in the title in plain and unambiguous wording.

Recital 1

(1) The realisation of the internal market implies the elimination of restrictions to free circulation and of distortions in competition, while creating an environment which is favourable to innovation and investment. In this context the protection of inventions by means of patents is an essential element for the success of the internal market. effective and harmonised protection of computer-implemented inventions throughout the Member States is essential in order to maintain and encourage investment in this field. Deleted

Justification

There is no evidence to support the Commission's suggestion that patents promote innovation in the field of software. Various economic studies suggest the contrary.

Recital 6

(6) The Community and its Member States are bound by the Agreement on trade-related aspects of intellectual property rights (TRIPS), approved by Council Decision 94/800/EC of 22 December 1994 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the agreements reached in the Uruguay Round multilateral negotiations (1986-1994). Article 27(1) of TRIPS provides that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Moreover, according to TRIPS, patent rights should be available and patent rights enjoyable without discrimination as to the field of technology. These principles should accordingly apply to computer-implemented inventions.

Deleted

Justification

According to Art 27 TRIPS there are limits to what can be subsumed under "fields of technology". This article is not designed to mandate unlimited patentability but rather to avoid frictions in free trade.

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Recital 6

The Community and its Member States are bound by the Agreement on trade-related aspects of intellectual property rights (TRIPS), approved by Council Decision 94/800/CEC of 22 December 1994 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the 42 agreements reached in the Uruguay Round multilateral negotiations (1986-1994). Article 27(1) of TRIPS provides that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Moreover, according to TRIPS, patent rights should be available and patent rights enjoyable without discrimination as to the field of technology. These principles should accordingly apply to computer-implemented inventions.

The Community and its Member States are bound by the Agreement on trade-related aspects of intellectual property rights (TRIPS), approved by Council Decision 94/800/CEC of 22 December 1994 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the 42 agreements reached in the Uruguay Round multilateral negotiations (1986-1994). Article 27(1) of TRIPS provides that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are susceptible to industrial application. Moreover, according to TRIPS, patent rights should be available without discrimination as to the field of technology. ***This means that patentability must be effectively limited in terms of general concepts such as "invention", "technology" and "industry", so as to avoid both unsystematic exceptions and unoverseeable extensions, both of which would act as barriers to free trade. Thus inventions in all fields of applied natural science are patentable, whereas innovations in fields such as mathematics, data processing and organisational logic, are not patentable, regardless of whether a computer is used for their implementation or not.***

Justification

It must be made clear that there are limits as to what can be subsumed under "fields of technology" according to Art 27 TRIPS and that this article is not designed to mandate unlimited patentability but rather to avoid frictions in free trade, which can be caused by undue exceptions as well as by undue extensions to patentability. This interpretation of TRIPS is indirectly confirmed by recent lobbying of the US government against Art 27 TRIPS on the account that it excludes business method patents, which the US government wants to mandate by the new Substantive Patent Law Treaty draft.

Recital 7

(7) Under the Convention on the Grant of European Patents signed in Munich on 5 October 1973 and the patent laws of the Member States, programs for computers together with discoveries, scientific theories, mathematical methods, aesthetic creations, schemes, rules and methods for performing mental acts, playing games or doing business, and presentations of information are expressly not regarded as inventions and are therefore excluded from patentability. This exception, *however*, applies ***and is justified only to the extent that a patent application or patent relates to such subject-matter or activities as such***, because the said subject-matter and activities ***as such*** do not belong to a field of technology.

(7) Under the Convention on the Grant of European Patents signed in Munich on 5 October 1973 and the patent laws of the Member States, programs for computers together with discoveries, scientific theories, mathematical methods, aesthetic creations, schemes, rules and methods for performing mental acts, playing games or doing business, and presentations of information are expressly not regarded as inventions and are therefore excluded from patentability. This exception applies because the said subject-matter and activities do not belong to a field of technology.

Justification

A clarification in accordance with the EPC

Recital 7 (a) (new)

(7a) Parliament has repeatedly asked the European Patent Office to review its operating rules and for the Office to be publicly accountable in the exercise of its functions. In this connection it would be particularly desirable to reconsider the practice in which the Office sees fit to obtain payment for the patents that it grants, as this practice harms the public nature of the institution

In its resolution¹ on the decision by the European Patent Office with regard to patent No EP 695 351 granted on 8 December 1999, Parliament requested a review of the Office's operating rules to ensure that it was publicly accountable in the exercise of its functions

Justification

Parliament has repeatedly said, in a number of resolutions, that the European Patent Office's practices need reforming. The European Patent Office is not a European Union institution. Parliament has raised the question of its accountability in the past

Recital 8

Patent protection allows innovators to benefit from their creativity. Whereas patent rights protect innovation in the interests of society as a whole; they should not be used in a manner which is anti-competitive.

Patents are temporary exclusion rights granted by the state to inventors in order to stimulate technical progress. In order to ensure that the system works as intended, the conditions for granting patents and the modalities for enforcing them must be carefully designed. In particular, inevitable corollaries of the patent system such as restriction of creative freedom, legal insecurity and anti-competitive effects must be kept within reasonable limits.

Justification

Innovators can benefit from their creativity without patents. Whether patent rights "protect" or stifle innovation and whether they act in the interests of society as a whole is a question that can only be answered by empirical study, not by dogmatic statements in legislation.

Recital 9

In accordance with Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, the expression in any form of an original computer program is protected by copyright as a literary work. However, ideas and principles which underlie any element of a computer program are not protected by copyright.

In accordance with Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, ***property in computer programs is acquired by copyright. General ideas and principles which underlie a computer program must stay freely usable, so that many different creators may simultaneously obtain property in individual creations based thereon.***

Justification

Copyright does not only apply to literary works, but also to textbooks, operation manuals, computer programs and all kinds of information structures. Copyright is the system of "intellectual property" for computer programs, not only a system for a "literary" side aspect of computer programs. If copyright does not cover the "underlying idea" of a book or a program then that is not an indication of an insufficiency of copyright but rather an indication of the need to keep "underlying ideas" (general concepts) free, so that many different creators have a chance to obtain property in individual works based on these general concepts.

Recital 10

In order for any invention to be considered as patentable it should have a technical character, and thus belong to a field of technology.

In order for any *innovation* to be considered a *patentable invention* it should have a technical character, and thus belong to a field of technology.

Justification

The Commission text is not in line with Art 52 EPC. Art 52(2) EPC lists examples of non-inventions. It is not permissible to subsume these under "inventions" and then test their technical character. Moreover, while it can not be inferred from Art 52 EPC that all technical innovations are inventions, it can, based on a unanimous tradition of patent law, be assumed that all inventions have technical character.

Recital 11

(11) Although computer-implemented inventions are considered to belong to a field of technology, in order to involve an inventive step, in common with inventions in general, they should make a technical contribution to the state of the art

Deleted

Justification

Computer programs are abstract and do not belong to any particular field. The Commission text removes the independent requirement of invention ("technical contribution") and merges it into the requirement of non-obviousness ("inventive step"). This leads to theoretical inconsistency and undesirable practical consequences.

Recital 11 (a) (new)

While computer programs are abstract and do not belong to any particular field, they are used to describe and control processes in all fields of applied natural and social science.

Justification

The Commission text declares computer programs to be technical inventions. It removes the independent requirement of invention ("technical contribution") and merges it into the requirement of non-obviousness ("inventive step"). This leads to theoretical inconsistency and undesirable practical consequences, as explained in detail in the justification of our amendment to 4(2).

Recital 12

Accordingly, *where* an *invention* does not make a technical contribution to the state of the art, *as would be the case, for example, where its specific contribution lacks a technical character, the invention will lack an inventive step and thus will not be patentable.*

Accordingly, an *innovation that* does not make a technical contribution to the state of the art *is not an invention in the sense of patent law.*

Justification

The European Commission text merges the "technical invention" test into the "inventive step" test, thereby weakening both tests and opening an infinite space of interpretation. This deviates from Art 52 EPC. It is theoretically inconsistent, and leads to undesirable practical consequences, such as making examination at some national patent offices infeasible.

Recital 13

(13) A defined procedure or sequence of actions when performed in the context of an apparatus such as a computer may make a technical contribution to the state of the art and thereby constitute a patentable invention. However, an algorithm which is defined without reference to a physical environment is inherently non-technical and cannot therefore constitute a patentable invention.

Deleted

Justification

It is absurd and contrary to the goal of clarification to try to make an artificial distinction between mathematical algorithms and nonmathematical algorithms. To a computer scientist, this makes no sense, because every algorithm is as mathematical as anything could be. An algorithm is an abstract concept unrelated to physical laws of the universe.

Recital 15

(15) This Directive should be limited to ***laying down certain principles as they apply to the patentability of such inventions, such principles being intended in particular to ensure that inventions which belong to a field of technology and make a technical contribution are susceptible of protection, and conversely to ensure that those inventions which do not make a technical contribution are not so susceptible.***

(15) This Directive should be limited to ***clarifying the limits of patentability and patent enforceability with regard to computer programs , so as to ensure in particular that only technical inventions are patentable, regardless of whether their implementation involves the use of data processing equipment .***

Justification

The term "computer-implemented inventions" is designed for abuse, as explained in the amendment to the title.

Recital 16

(16) The competitive position of European industry in relation to its major trading partners *would* be improved if the current *differences in the legal protection of computer-implemented inventions were eliminated and the legal situation was transparent.*

(16) The competitive position of European industry in relation to its major trading partners *could* be improved if the current *schism in judicial practice concerning the limits of patentability with regard to computer programs was eliminated.*

Justification

Unification of caselaw in itself is not a guarantee of improvement of the situation of European industry. This directive should not use a pretext of "harmonisation" for changing the rules of Art 52 EPC, which are already in force in all countries.

Article 1

This Directive lays down rules *for the patentability of computer-implemented inventions*.

This directive lays down the rules *concerning the limits of patentability and patent enforceability with respect to computer programs*.

Justification

The term "computer-implemented invention" is not widely used. It was introduced by the EPO in a document from May 2000, where it served to legitimate patents on "computer-implemented business methods", so as to bring EPO practise in line with the USA and Japan. Much of the European Commission's directive proposal is based on wordings from this document (Appendix 6). The term "computer-implemented invention" is a hidden programmatic statement. It implies that algorithms, business methods and in fact all ideas are patentable inventions, provided that they are claimed in terms of general-purpose data processing equipment. This implication is in contradiction with Art 52 EPC, according to which algorithms, business methods and programs for computers are not inventions in the sense of patent law. It can not be the aim of the current directive to declare programs for computers to be patentable inventions. Rather the aim is to clarify the limits of patentability with regard to computer programs, and this must be expressed clearly and unambiguously.

Article 2, point (a)

(a) “computer-implemented invention” means any invention the performance of which involves the use of a computer, computer network or other programmable apparatus and having ***one or more prima facie novel*** features which are realised wholly or partly by ***means of*** a computer program or computer programs;

(a) "computer-implemented invention" means any invention ***in the sense of the European Patent Convention*** the performance of which involves the use of a computer, computer network or other programmable apparatus and having ***in its implementations one or more non-technical*** features which are realised wholly or partly by a computer program or computer programs, ***besides the technical features that any invention must contribute;***

Justification

Art 52 of the EPC clearly states that a stand-alone computer program (or a “computer program as such”) cannot constitute a patentable invention. This amendment clarifies that an innovation is only patentable if conforms to Art 52 of the EPC, regardless of whether or not a computer program is part of its implementation.

Article 2, point (b)

(b) “technical contribution” means a contribution *to the state of the art in* a technical field which *is not obvious* to a person skilled in the art.

(b) "technical contribution", *also called "invention"*, means a contribution to the state of the art in technical field. *The technical character of the contribution is one of the four requirements for patentability. Additionally, to deserve a patent, the technical contribution has to be new, non-obvious, and susceptible of industrial application.*

Justification

The Commission text merges the invention (technical contribution) test with the non-obviousness (inventive step) test, thereby weakening both tests, deviating from Art 52 EPC, and creating practical problems.

Article 2, point (bb) (new)

(bb) "industry" in the sense of patent law means "automated production of material goods";

Justification

The word "industry" is nowadays often used in extended meanings which are not appropriate in the context of patent law.

Article 2, point (bc) (new)

(bc) "invention" in the sense of patent law means "solution of a problem by use of controllable forces of nature".

Justification

This is a standard patent doctrine in most jurisdictions. The EPO says that inventions are "technical solutions of technical problems" and understands "technical" as "concrete and physical". The term "controllable forces of nature" clarifies this further.

Article 2, point (bd) (new)

(bd) "technical field" means an industrial application domain requiring the use of controllable forces of nature to achieve predictable results. "Technical" means "belonging to a technical field". The use of forces of nature to control physical effects beyond the numerical representation of information belongs to a technical domain. The production, handling, processing, distribution and presentation of information do not belong to a technical field, even when technical devices are employed for such purposes.

Justification

The fact that a programmable apparatus, such as a generic computer, makes use of physical effects in order to process information should not be used to allow patent protection to the program running on such an apparatus.

This amendment synthesises Am. 16 Cult, Am. 19 Cult, Am. 23 Itre, Am. 24 Itre. and Am. 25 Itre (was: JURI 45). **WARNING: the definition of “technical” here conflicts with 2 (ba) (new) from above.**

Article 2, point (be) (new)

(be) A “calculation rule”, also called “algorithm”, is a teaching about relations within constructions of the human mind, such as models and axiomatic systems, including formal models of data processing equipment such as the Turing Machine or the Von Neumann Machine.

An “organization” rule is a teaching about relations between material phenomena that are not determined by controllable forces of nature. Methods of business and social engineering are organisation rules. Most organisation rules are direct applications of calculation rules to known models of social relations. “Rules of organisation and calculation” are teachings about cause-effect relations that are not determined by controllable forces of nature.

Justification

These additional definitions could help to establish terminology which can be used in order to refer to various types of non-inventions. The generic term "rules of organisation and calculation" is from the German patent jurisdiction of Dispositionsprogramm and later.

Article 3

Member States shall ensure that *a computer-implemented invention is* considered to belong to a field of technology.

Member States shall ensure that *an innovation is not* considered to belong to a field of technology *merely because its implementation involves the use of a computer.*

Justification

The European Commission text says that all ideas, including "computer-implemented business methods" etc, are patentable inventions. This is a too broad definition.

Article 3 (a) (new)

Member States shall ensure that ***an innovation is not*** considered to belong to a field of technology ***merely because its implementation involves the use of a computer.***

Justification

*Member States shall ensure that an innovation is not considered to belong to a field of technology merely because its implementation involves the use of a computer. **Same text as the amendment above, but as an insertion instead of as a modification. And yes, their justification is the same as the amendment text.***

Article 3, point (b) (new)

Member states shall ensure that data processing is not considered to be a field of technology in the sense of patent law, and that innovations in the field of data processing are not considered to be inventions in the sense of patent law.

Justification

Self-explanatory.

Article 4, paragraph 1

1. Member States shall ensure that *a computer-implemented invention is patentable on the condition that it is susceptible of industrial application, is new and involves an inventive step.*

1. Member States shall ensure that *patents are granted only for technical inventions which are new, non-obvious and susceptible of industrial application*

Justification

Article 4(1) should be coherent with the amended version of Article 2. There must not be distinctions between patentable and non-patentable inventions. This amendment synthesises Am. 11 Cult, Am. 20 Cult, Am. 28 Itr, and Am. 29 Itr.. (was: JURI 48)

Article 4, paragraph 1 bis (new)

Member States shall ensure that computer-implemented solutions to technical problems are not considered patentable inventions when they only improve efficiency in the use of resources within data processing systems.

Justification

None

Article 4, paragraph 2

2. Member States shall ensure that it is a condition of involving an incentive step that a computer-implemented invention must make a technical contribution.

Deleted.

Justification

The Commission proposal becomes redundant with the previous amendments.

Article 4, paragraph 3

3. The technical contribution shall be assessed by consideration of the difference between *the scope of the patent claim considered as a whole, elements of which may comprise both technical and non-technical features*, and the state of the art.

3. The technical contribution shall be assessed by consideration of the difference between *all of the technical features of the patent claim* and the state of the art.

Justification

The wording of this article is self-contradictory, as it seems to state that a technical contribution may consist of non-technical features. One should ensure that the conditions of novelty and inventive step regard the technical contribution, otherwise any novel software running on a non-novel technical device could be patentable

This amendment synthesises Am. 32 Itr and Am. 33 Itr. (was: JURI 52)

Article 4, paragraph 4 (new)

2. Member States shall ensure that ***patents on computerised innovations are upheld and enforced only if they were granted according to the rules of Art 52 of the European Patent Convention of 1973, as explained in the European Patent Office's Examination Guidelines of 1978.***

Justification

This amendment avoids deviation from the European Patent Convention and therefore provides increased coherence and clarity.

Article 5

Member States shall ensure that a computer-implemented invention may be claimed as a product, that is as a ***programmed computer, a programmed computer network or other programmed apparatus***, or as a process ***carried out*** by such a computer, computer network or apparatus through the execution of software.

Member States shall ensure that a computer-implemented invention may be claimed ***only*** as a product, that is a ***set of equipment comprising both programmable apparatus and devices which use forces of nature in an inventive way***, or as a ***technical production*** process ***operated*** by such a computer, computer network or apparatus through the execution of software

Justification

The original wording of this article is confusing, since allowing to patent programmed generic computers would be equivalent to allowing to patent their software as such. Also, one must make sure that the production of information cannot be considered as an industrial production process.

This amendment synthesises Am. 24 Cult, Am. 25 Cult, Am. 37 Itr and Am. 38 Itr. (was: JURI 59)

Article 5 point (b) (new)

(b) Member States shall ensure that the production, handling, processing, distribution and publication of information, in whatever form, can never constitute direct or indirect infringement of a patent, even when a technical apparatus is used for that purpose

Justification

The terms ‘production, handling, processing, distribution and publication’ take more account of cases of patent claims for commercial methods (in fact the processing of information) that exist in the United States and should not exist in the European Union. Similarly, ‘even when technical apparatus is used for that purpose’ was added to ensure that the performance on any apparatus of programmes that do not contribute to any technical process cannot be considered patentable. Otherwise any generic software running on a programmable apparatus with novel features could be patentable, which is explicitly prohibited by the 1973 European Patent Convention, as mentioned in Recital 7

Article 5 point (c) and (d) (new)

(c) Member States shall ensure that the use of a computer program for purposes that do not belong to the scope of the patent cannot constitute a direct or indirect patent infringement.

(d) Member States shall ensure that whenever a patent claim names features that imply the use of a computer program, a well-functioning and well documented reference implementation of such a program shall be published as a part of description without any restricting licensing terms.

Justification

The effect of patents is to ensure an economic monopoly. It should not deter development and pursuit of innovation by competitors

Article 5 paragraph 2 (new)

Member States shall ensure that patent claims granted in respect of computer-implemented inventions include only the technical contribution which justifies the patent claim. A patent claim to a computer program, either on its own or on a carrier, shall not be allowed.

Justification

A patent claim to a computer program as such used in connection with patent-protected computer-implemented inventions, or to its recording on a carrier, is not permissible. A 'text claim' to computer programs in source or binary code would increase legal uncertainty, as simply possessing an expression or a carrier with a protected program would mean infringing patent law. The availability of a program in text form may be seen as a contribution to the disclosure requirement in respect of functionalities of computer programs for which patent claims are granted.