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Committee on Culture, Youth, Education, the Media and Sport

9 January 2003 PE 312.545/14-35

AMENDMENTS 14-35

Draft opinion **(PE 312.545)**
Michel Rocard
Patentability of computer-implemented inventions

Proposal for a directive (COM(2002) 92 – C5-0082/2002 – 2002/0047(COD))

Text proposed by the Commission	Amendments by Parliament

Amendment by Raina A. Mercedes Echerer

Amendment 14
Recital 7 a (new)

	(7a) In its resolution (published in OJ C 378, 29.12.2000, p. 95) on a decision by the EPO with regard to patent No EP 695 351 granted on 8 December 1999, the European Parliament demanded a review of the EPO to ensure that it becomes publicly accountable in the exercise of its functions.

Or. en

Justification

The EPO is not an EU institution and concerns have previously been raised about its accountability.

Amendment by Geneviève Fraisse

Amendment 15
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 ***technical solution the implementation 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;

Or. fr

Justification

The definition of a ‘computer-implemented invention’ is the key point of the directive. All computer programs could be considered patentable under the directive as it now stands, provided that the patentability claims were carefully worded. It is vital to confine patentability to the physical and material sphere. Nothing belonging to the non-material sphere (information, knowledge) should be patentable.

Amendment by Michel Rocard

Amendment 16
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" means a contribution to the state of the art in a technical field which is not obvious to a person skilled in the art. ***The use of natural forces to control physical effects beyond the digital representation of information belongs to a technical field. The processing, handling, and presentation of information do not belong to a technical field, even where technical devices are employed for such purposes.***

Or. fr

Justification

There is general agreement on the need to distinguish computer-implemented inventions that

can be patented from those which cannot, because they do not belong to a technical field. The reference to natural forces is not sufficient in itself; the crucial issue is the nature of the effects to which those natural forces are used. The use of physical effects in computers to manipulate information must not serve to justify the patentability of algorithms or interfaces.

Amendment by Geneviève Fraisse

Amendment 17
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” means a contribution to the state of the art in a technical field which is not obvious to a person skilled in the art***, that is to say, a new lesson in the relationships of cause and effect involved in the controlled use of natural forces***.

Or. fr

Justification

The definition of a ‘computer-implemented invention’ is the key point of the directive. All computer programs could be considered patentable under the directive as it now stands, provided that the patentability claims were carefully worded. It is vital to confine patentability to the physical and material sphere. Nothing belonging to the non-material sphere (information, knowledge) should be patentable.

Amendment by Raina A. Mercedes Echerer

Amendment 18
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” ***or “technical invention” or “invention”*** means ***a teaching about the cause-effect relation in the use of controllable forces of nature***.

Or. en

Justification

It is important to draw a border between technical inventions, which belong to the material world and are patentable, while computer programs as such are protected by copyright like mathematics, ideas, information ... (European Patent Convention 1972).

Amendment by Geneviève Fraisse

Amendment 19
Article 2, point (b a) (new)

	(ba) "technical field" means a field of application necessitating the controlled use of natural forces to obtain foreseeable results. The processing, handling, dissemination, and presentation of information do not belong to a technical field, even where technical devices are employed to perform these operations.

Or. fr

Justification

The distinction between what can and cannot be patentable lies in the definition of an invention. To avoid legal ambiguity, it is therefore necessary to define a 'technical field', a concept mentioned in Article 2(b) of the proposal for a directive.

Amendment by Raina A. Mercedes Echerer

Amendment 20
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 a computer-implemented invention is patentable on the condition that it is susceptible of industrial application, is new, ***non-obvious,*** involves an inventive step***, and belongs to a technical field***.

Or. en

Justification

It is important to draw a border between technical inventions, which belong to the material world and are patentable, while computer programs as such are protected by copyright like mathematics, ideas, information ... (European Patent Convention 1972).

Amendment by Geneviève Fraisse

Amendment 21
Article 4, paragraph 2

2. Member States shall ensure that it is a condition of involving an inventive step that a computer-implemented invention must make a technical contribution.	2. Member States shall ensure that it is a condition of involving an inventive step that a computer-implemented invention must make a technical contribution***, that is to say, it must impart a new lesson in the relationships of cause and effect involved in the controlled use of natural forces***.

Or. fr

Justification

The changes are intended to ensure that patentability applies only to technical fields and are in line with the amendment to Article 2.

Amendment by Raina A. Mercedes Echerer

Amendment 22
Article 4, paragraph 2

2. Member States shall ensure that it is a condition of involving an inventive step that a computer-implemented invention must make a technical contribution.	2. Member States shall ensure that it is a condition of involving an inventive step that a computer-implemented invention must make a technical contribution, ***meaning a teaching about the cause-effect relation in the use of controllable forces of nature***.

Or. en

Justification

It is important to draw a border between technical inventions, which belong to the material world and are patentable, while computer programs as such are protected by copyright like mathematics, ideas, information ... (European Patent Convention 1972).

Amendment by Raina A. Mercedes Echerer

Amendment 23
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 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. ***If the technical contribution is not an invention then it is not patentable.***

Or. en

Justification

It is important to draw a border between technical inventions, which belong to the material world and are patentable, while computer programs as such are protected by copyright like mathematics, ideas, information ... (European Patent Convention 1972).

Amendment by Raina A. Mercedes Echerer

Amendment 24
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 programmed device, ***or as a production process***.

Or. en

Justification

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

Amendment by Geneviève Fraisse

Amendment 25
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 ***the forms of claims in respect of*** a computer-implemented invention ***may be made only to the effect that the invention is a product***, that is a programmed computer, a programmed computer network or other programmed apparatus, or a ***technical*** process carried out by such a computer, computer network or apparatus through the execution of software.

Or. fr

Justification

The present wording of Article 5 is confusing because a 'process carried out by a computer' could be taken to denote any piece of software when that software were claimed to produce the technical effect of displaying information on a computer screen, which in reality is what a computer is designed to do. A process carried out by computer has no technical effect in itself. The purpose of the changes is to ensure that no computer process can be patentable as such.

Amendment by Janelly Fourtou

Amendment 26
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

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***,*** other

programmed apparatus, or as a process carried out by such a computer, computer network or apparatus through the execution of software.	programmed apparatus, ***a programme stored on a carrier or distributed in the form of a signal,*** or as a process carried out by such a computer, computer network or apparatus through the execution of software.

Or. fr

Justification

The European Patent Office (EPO) and several national courts are already accepting claims relating to pieces of software as products (and hence not just as processes). If the Commission proposal were to be adopted as it stands, this practice would be markedly curtailed, which would run counter to the general purpose of the proposed directive, namely to codify existing practice and law, without limiting or extending the protection afforded by patent law.

The wording of Article 5 proposed by the Commission is such that a patent could not be claimed for a computer-implemented invention as a product unless the invention were implemented on 'a programmed computer, a programmed computer network or other programmed apparatus'. In other words, the holder of a patent for a product could not assert his rights until the invention incorporated in the software had been implemented on a computer, a computer network, or some other apparatus. As a result, the patent would be enforceable only in relation to the end user because a situation in which the invention were contained in a programme, but the programme had not been installed in a computer or on a machine, would not satisfy the conditions under which the holder could lay claim to his rights under the patent. The implication is that manufacturers and suppliers of programmes incorporating an invention protected by a patent could not be sued directly. This would be an unacceptable state of affairs because consumers and professional users would be made to bear the risk.

The severe restriction on claims relating to products resulting from the narrow terms in which the concept of a product is defined (as a programmed computer, programmed computer network, or other programmed apparatus) would create other legal problems. Article 27(1) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) states that 'patents shall be available for any inventions, <u>whether products or processes</u>, in all fields of technology'. The exclusion of certain patents for products, as laid down in the proposal for a directive, is incompatible with this provision of international law, since it would lead to discriminatory treatment of invented products in a 'field of technology', the field of computer-implemented inventions (the following sentence of Article 27(1)of the TRIPS Agreement stipulates that 'patent rights [shall be] enjoyable without discrimination as to ... the field of technology').

The reason that the Commission gives for this departure from the existing European law is this: 'It should be noted that the proposal has not followed the practice of the EPO in permitting claims to (sic) *computer program products either on their own or on a carrier, as this could be seen as allowing patents for computer programs ''as such''. This interpretation of the exclusion of 'computer programs' ' as such' (as provided for in Article 52(2)(c) and (3)*

of the European Patent Convention) is not correct. The programs 'as such' that are not patentable are those which are not of a technical character. What serves to distinguish that which is patentable (a program that is not a pure algorithm) from that which is not (a program as such) is the 'technical contribution' criterion and not the fact that the programme is to be found on a carrier (separate from a machine) or built into a computer/machine. A technical invention is still technical when a program is stored on a tangible carrier (a CD-ROM, for example) or takes another form such as a signal transmitted on the Internet, even if it has not yet been implemented. In other words, the exclusion of programs 'as such' does not mean that claims have to be ruled out when they relate to products or computer-implemented inventions as products (other than a programmed computer, a programmed computer network, or another kind of programmed apparatus).

Amendment by Raina A Mercedes Echerer

Amendment 27
Article 5 a (new)

	Article 5a
	Member States shall ensure that the publication or distribution of information in whatever form can never constitute a direct or indirect patent infringement.

Or. en

Justification

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

Amendment by Geneviève Fraisse

Amendment 28
Article 5 a (new)

	Article 5a
	Member States shall ensure that the processing, handling, dissemination, and presentation of information in whatever form do not constitute a direct or indirect patent infringement.

Or. fr

Justification

The object of the changes is to ensure that patents are not broadened out to excess. It should be permissible to use the functions of similar software systems when their applications are designed to serve different purposes. If that were not the case, research and innovation would be in danger of being obstructed by legal actions brought when similar software was alleged to be counterfeit.

Amendment by Raina A. Mercedes Echerer

Amendment 29
Article 5 b (new)

	Article 5b
	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.

Or. en

Justification

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

Amendment by Geneviève Fraisse

Amendment 30
Article 5 b (new)

	Article 5b
	Member States shall ensure that the use of a computer program for purposes not requiring the use of the technical contributions claimed in the patent does not constitute a direct or indirect patent infringement.

Or. fr

Justification

The object of the changes is to ensure that patents are not broadened out to excess. It should be permissible to use the functions of similar software systems when their applications are designed to serve different purposes. If that were not the case, research and innovation would be in danger of being obstructed by legal actions brought when similar software was alleged to be counterfeit.

Amendment by Raina A. Mercedes Echerer

Amendment 31
Article 5 c (new)

Article 5c

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 the description without any restricting licensing terms.

Or. en

Justification

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

Amendment by Geneviève Fraisse

Amendment 32
Article 5 c (new)

Article 5c

Member States shall ensure that whenever a patent claim mentions features entailing the use of a computer program, an operational and well-documented reference run of that program is published as part of the patent description without any

	restricting licensing terms.

Or. fr

Justification

Just as, whenever an innovation is claimed in the research field, the details are published and discussed among fellow researchers, so should an invention be shown to be technically effective at the time when the patent application is filed.

Amendment by Janelly Fourtou

Amendment 33
Article 6

Acts permitted under Directive 91/250/EEC on the legal protection of computer programs by copyright, in particular provisions thereof relating to decompilation and interoperability, or the provisions concerning semiconductor topographies or trade marks, shall not be affected through the protection granted by patents for inventions within the scope of this Directive.	***deleted***

Or. fr

Justification

See justification for the new Article 6a.

Amendment by Janelly Fourtou

Amendment 34
Article 6 a (new)

	Article 6a
	The rights conferred by patents granted for inventions within the scope of this Directive shall be without prejudice to acts permitted by way of exception under

Directive 91/250/EEC on the legal protection of computer programs by copyright, in particular the acts specified and described in the closed list set out in Articles 5(2) and (3) and 6 of Directive 91/250/EEC.

Or. fr

Justification

Under Directive 91/250/EEC on the legal protection of computer programs by copyright, persons who have legitimately acquired such programs may perform certain acts that would otherwise be covered by copyright, in particular the acts of reproduction and translation, which are 'indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs' (see Article 6). The directive has established a delicate balance between the interests of rightholders and those of parties seeking to develop interoperable programs. The proposal for a directive on the patentability of computer-implemented inventions must not call that balance into question. The amendment proposed to Article 6 has the advantage of being clearer than the more general wording of the Commission text, not least because it specifies the relevant provisions of Directive 91/250/EEC.

Amendment by Raina A. Mercedes Echerer

Amendment 35
Article 8, point (c a) (new)

(ca) whether the powers delegated to the EPO are compatible with requirements for harmonisation of the EU legislation, together with the principles of transparency and accountability.

Or. en

Justification

None.