

## **P5\_TA(2003)0402**

### **Patentability of computer-implemented inventions \*\*\*I**

**European Parliament legislative resolution on the proposal for a directive of the European Parliament and of the Council on the patentability of computer-implemented inventions (COM(2002) 92 – C5-0082/2002 – 2002/0047(COD))**

**(Codecision procedure: first reading)**

*The European Parliament,*

- having regard to the Commission proposal to the European Parliament and the Council (COM(2002) 92)<sup>1</sup>,
  - having regard to Article 251(2) and Article 95 of the EC Treaty, pursuant to which the Commission submitted the proposal to Parliament (C5-0082/2002),
  - having regard to the opinion of the European Economic and Social Committee<sup>2</sup>,
  - having regard to Rule 67 of its Rules of Procedure,
  - having regard to the report of the Committee on Legal Affairs and the Internal Market and the opinions of the Committee on Industry, External Trade, Research and Energy and the Committee on Culture, Youth, Education, the Media and Sport (A5-0238/2003),
1. Approves the Commission proposal as amended;
  2. Calls on the Commission to refer the matter to Parliament again if it intends to amend the proposal substantially or replace it with another text;
  3. Instructs its President to forward its position to the Council and Commission.

## **P5\_TC1-COD(2002)0047**

**Position of the European Parliament adopted at first reading on 24 September 2003 with a view to the adoption of Directive 2003/.../EC of the European Parliament and of the Council on the patentability of computer-implemented inventions**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

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<sup>1</sup> OJ C 151 E, 25.6.2002, p 129.

<sup>2</sup> OJ C 61, 14.3.2003, p. 154.

Having regard to the proposal from the Commission<sup>1</sup>,

Having regard to the opinion of the *European Economic and Social Committee*<sup>2</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty<sup>3</sup>,

Whereas:

- (1) The realisation of the internal market implies the elimination of restrictions *on free movement* 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, transparent* and harmonised protection of computer-implemented inventions throughout the Member States is essential in order to maintain and encourage investment in this field.
- (2) Differences exist in the protection of computer-implemented inventions offered by the administrative practices and the case law of the different Member States. Such differences could create barriers to trade and hence impede the proper functioning of the internal market.

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<sup>1</sup> OJ C 151 E, 25.6.2002, p. 129.

<sup>2</sup> OJ C 61, 14.3.2003, p. 154.

<sup>3</sup> *Position of the European Parliament of 24 September 2003.*

- (3) Such differences have developed and could become greater as Member States adopt new and different administrative practices, or where national case law interpreting the current legislation evolves differently.
- (4) The steady increase in the distribution and use of computer programs in all fields of technology and in their world-wide distribution via the Internet is a critical factor in technological innovation. It is therefore necessary to ensure that an optimum environment exists for developers and users of computer programs in the Community.
- (5) Therefore, the legal rules ***governing the patentability of computer-implemented inventions*** should be harmonised ***so as to ensure that*** the resulting legal certainty ***and the level of requirements demanded for patentability*** enable innovative enterprises to derive the maximum advantage from ***their inventive process*** and provide an incentive for investment and innovation. ***Legal certainty will also be secured by the fact that, in case of doubt as to the interpretation of this Directive, national courts may, and national courts of last instance must, seek a ruling from the Court of Justice of the European Communities.***
- (6) ***The rules of the Convention on the Grant of European Patents signed in Munich on 5 October 1973, and in particular Article 52 thereof concerning the limits to patentability, should be confirmed and clarified. The consequent legal certainty should help to foster a climate conducive to investment and innovation in the field of software.***
- (7) ***Under the Convention 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 such subject-matter and activities do not belong to a field of technology.***

- (8) *The aim of this Directive is not to amend the aforementioned Convention, but to prevent different interpretations of its provisions.*
- (9) *In its Resolution of 30 March 2000 on the decision by the European Patent Office with regard to patent No EP 695 351 granted on 8 December 1999<sup>1</sup>, the European Parliament once again called for a review of the Office's operating rules to ensure that it was publicly accountable in the exercise of its functions. In this connection it would be particularly desirable to reconsider the practice whereby the Office sees fit to obtain payment for the patents that it grants, as this practice harms the public nature of the institution.*
- (10) Patent protection allows innovators to benefit from their creativity. Patent rights protect innovation in the interests of society as a whole, *and* should not be used in a manner which is anti-competitive.
- (11) In accordance with Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs<sup>2</sup>, 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.

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<sup>1</sup> *OJ C 378, 29.12.2000, p. 95.*

<sup>2</sup> OJ L 122 , 17.5.1991, p. 42. Directive amended by Directive 93/98/EEC (OJ L 290, 24.11.1993, p. 9).

- (12) In order for any invention to be considered as patentable it should have a technical character, and thus belong to a field of technology.
- (13) ***In order to be patentable, inventions in general and computer-implemented inventions in particular must be susceptible of industrial application, new and involve an inventive step. In order to involve an inventive step, computer-implemented inventions must in addition make a new technical contribution to the state of the art, in order to distinguish them from pure software.***
- (14) ***Accordingly, an innovation that does not make a technical contribution to the state of the art is not an invention within the meaning of patent law.***
- (15) ***However, the mere implementation of an otherwise unpatentable method on an apparatus such as a computer is not in itself sufficient to warrant a finding that a technical contribution is present. Accordingly, a computer-implemented business method, data processing method or other method in which the only contribution to the state of the art is non-technical cannot constitute a patentable invention.***
- (16) ***If the contribution to the state of the art relates solely to unpatentable matter, there can be no patentable invention irrespective of how the matter is presented in the claims. For example, the requirement of technical contribution cannot be circumvented merely by specifying technical means in the patent claims.***
- (17) ***Furthermore, an algorithm is inherently non-technical and therefore cannot constitute a technical invention. Nonetheless, a method involving the use of an algorithm might be patentable provided that the method is used to solve a technical problem. However, any patent granted for such a method should not monopolise the algorithm itself or its use in contexts not foreseen in the patent.***

- (18) *The scope of the exclusive rights conferred by any patent are defined by the claims. Computer-implemented inventions must be claimed with reference to either a product such as a programmed apparatus, or to a process carried out in such an apparatus. Accordingly, where individual elements of software are used in contexts which do not involve the realisation of any validly claimed product or process, such use will not constitute patent infringement.*
- (19) The legal protection of computer-implemented inventions *does* not necessitate the creation of a separate body of law in place of the rules of national patent law. The rules of national patent *law remain* the essential basis for the legal protection of computer-implemented inventions. *This Directive simply clarifies the current legal position with a view to securing legal certainty, transparency, and clarity of the law and avoiding any drift towards the patentability of unpatentable methods such as trivial procedures and business methods.*
- (20) 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.
- (21) The competitive position of European industry in relation to its major trading partners *will* be improved if the current differences in the legal protection of computer-implemented inventions *are* eliminated and the legal situation *is* transparent. *With the current trend for traditional manufacturing industry to shift their operations to low-cost economies outside the European Union, the importance of intellectual property protection and in particular patent protection is self-evident.*

- (22) This Directive *should* be without prejudice to the application of the competition rules, in particular Articles 81 and 82 of the Treaty.
- (23) *The rights conferred by patents granted for inventions within the scope of this Directive should not affect acts permitted under Articles 5 and 6 of Directive 91/250/EEC, in particular under the provisions thereof in respect of decompilation and interoperability. In particular, acts which, under Articles 5 and 6 of that Directive, do not require authorisation of the rightholder with respect to the rightholder's copyrights in or pertaining to a computer program, and which, but for those Articles, would require such authorisation, should not require authorisation of the rightholder with respect to the rightholder's patent rights in or pertaining to the computer program.*
- (24) *At all events, the legislation of the Member States must ensure that patents contain innovations and involve an inventive step, so as to prevent inventions already in the public domain from being appropriated simply by being incorporated into a computer program.*
- (25) Since the objectives of the proposed action, namely to harmonise national rules on computer-implemented inventions, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the action, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary to achieve those *objectives*,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Scope

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

Article 2

Definitions

For the purposes of this Directive the following definitions shall apply:

- (a) “computer-implemented invention” means any invention *within the meaning 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;*
- (b) “technical contribution”, *also called “invention”*, means a contribution to the state of the art in *a field of technology*. *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. The use of natural forces to control physical effects beyond the digital representation of information belongs to a field of technology. The processing, handling, and presentation of information do not belong to a field of technology, even where technical devices are employed for such purposes;*

- (c) ***“field of technology” means an industrial application domain requiring the use of controllable forces of nature to achieve predictable results. “Technical” means “belonging to a field of technology”;***
- (d) ***“industry” within the meaning of patent law means the automated production of material goods.***

### ***Article 3***

#### ***Data-processing and patent law***

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

### ***Article 4***

#### ***Conditions for patentability***

- 1. In order to be patentable, a computer-implemented invention must be susceptible of industrial application, new and involve an inventive step. In order to involve an inventive step, a computer-implemented invention must make a technical contribution.***
- 2. Member States shall ensure that a computer-implemented invention making a technical contribution constitutes a necessary condition of involving an inventive step.***
- 3. The significant extent of the technical contribution shall be assessed by consideration of the difference between all of the technical features included in the scope of the patent claim considered as a whole and the state of the art, irrespective of whether or not such features are accompanied by non-technical features.***

**4. In determining whether a given computer-implemented invention makes a technical contribution, the following test shall be used: whether it constitutes a new teaching on cause-effect relations in the use of controllable forces of nature and has an industrial application in the strict sense of the expression, in terms of both method and result.**

#### *Article 5*

##### *Exclusions from patentability*

**A computer-implemented invention shall not be regarded as making a technical contribution merely because it involves the use of a computer, network or other programmable apparatus. Accordingly, inventions involving computer programs which implement business, mathematical or other methods and do not produce any technical effects beyond the normal physical interactions between a program and the computer, network or other programmable apparatus in which it is run shall not be patentable.**

#### *Article 6*

**Member States shall ensure that computer-implemented solutions to technical problems are not considered to be patentable inventions merely because they improve efficiency in the use of resources within the data processing system.**

#### *Article 7*

##### Form of claims

**1. Member States shall ensure that a computer-implemented invention may be claimed *only* as a product, that is as a programmed *device*, or as a *technical production process*.**

**2. 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.**

**3. 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.**

**4. 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.**

**5. 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.**

#### *Article 8*

##### Relationship with Directive 91/250/EEC

**The rights conferred by patents granted for inventions within the scope of this Directive shall not affect acts permitted under Articles 5 and 6 of Directive 91/250/EEC, in particular under the provisions thereof in respect of decompilation and interoperability.**

## *Article 9*

### *Use of patented techniques*

***Member States shall ensure that, wherever the use of a patented technique is needed for a significant purpose, such as ensuring conversion of the conventions used in two different computer systems or networks so as to allow communication and exchange of data content between them, such use is not considered to be a patent infringement.***

## *Article 10*

### Monitoring

The Commission shall monitor the impact of computer-implemented inventions on innovation and competition, both within Europe and internationally, and on European businesses, ***especially small and medium-sized enterprises and the open source community, and*** electronic commerce.

## *Article 11*

### Report on the effects of the Directive

The Commission shall report to the European Parliament and the Council, *not later than ...*\*, on

- (a) the impact of patents for computer-implemented inventions on the factors referred to in *Article 10*;
- (b) whether the rules governing ***the term of the patent and*** the determination of the patentability requirements, and more specifically novelty, inventive step and the proper scope of claims, are ***adequate***;

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\* 54 months after the entry into force of the Directive.

- (c) whether difficulties have been experienced in respect of Member States where the requirements of novelty and inventive step are not examined prior to issuance of a patent, and if so, whether any steps are desirable to address such difficulties;
- (d) *whether difficulties have been experienced in respect of the relationship between the protection by patent of computer-implemented inventions and the protection by copyright of computer programs as provided for in Directive 91/250/EEC, and whether any abuse of the patent system has occurred in relation to computer-implemented inventions;*
- (e) *whether it would be desirable and legally possible having regard to the Community's international obligations to introduce a "grace period" in respect of elements of a patent application for any type of invention disclosed prior to the date of the application;*
- (f) *the aspects in respect of which it may be necessary to prepare for a diplomatic conference to revise the Convention on the Grant of European Patents, also in the light of the advent of the Community patent;*
- (g) *how the requirements of this Directive have been taken into account in the practice of the European Patent Office and in its examination guidelines;*
- (h) *whether the powers delegated to the Office are compatible with the need to harmonise Community legislation, and with the principles of transparency and accountability;*
- (i) *the impact on the conversion of the conventions used in two different computer systems to allow communication and exchange of data; and*
- (j) *whether the option outlined in the Directive concerning the use of a patented invention for the sole purpose of ensuring interoperability between two systems is adequate.*

*In this report the Commission shall justify why it believes an amendment of the Directive necessary or not and, if required, will list the points to which it intends to propose an amendment.*

## *Article 12*

### *Impact assessment*

***In the light of the monitoring carried out pursuant to Article 10 and the report to be drawn up pursuant to Article 11, the Commission shall assess the impact of this Directive and, where necessary, submit proposals for amending legislation to the European Parliament and the Council.***

## *Article 13*

### Implementation

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than ...\*. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive.

## *Article 14*

### Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European *Union*.

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\* *Eighteen months after the entry into force of the Directive.*

*Article 15*

Addressees

This Directive is addressed to the Member States.

Done at ,

For the European Parliament  
The President

For the Council  
The President