

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

(2002/C 151 E/05)

COM(2002) 92 *final* — 2002/0047(COD)

*(Submitted by the Commission on 20 February 2002)*

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,

Having regard to the proposal from the Commission,

Having regard to the opinion of the Economic and Social Committee,

Acting in accordance with the procedure laid down in Article 251 of the Treaty,

Whereas:

- (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.
- (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.
- (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 as interpreted by Member States' courts should be harmonised and the law governing the patentability of computer-implemented inventions should be made transparent. The resulting legal certainty should enable enterprises to derive the maximum advantage from patents for computer-implemented inventions and provide an incentive for investment and innovation.
- (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) <sup>(1)</sup>. 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.
- (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.
- (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.

<sup>(1)</sup> OJ L 336, 23.12.1994, p. 1

- (9) In accordance with Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs <sup>(1)</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.
- (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.
- (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.
- (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.
- (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.
- (14) The legal protection of computer-implemented inventions should 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 should remain the essential basis for the legal protection of computer-implemented inventions as adapted or added to in certain specific respects as set out in this Directive.
- (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.
- (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.
- (17) This Directive shall be without prejudice to the application of the competition rules, in particular Articles 81 and 82 of the Treaty.
- (18) 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.

- (19) 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 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;
- (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.

#### Article 3

##### Computer-implemented inventions as a field of technology

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

#### Article 4

##### Conditions for patentability

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.
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.

<sup>(1)</sup> OJ L 122, 17.5.1991, p. 42 — Directive amended by Directive 93/98/EEC (OJ L 290, 24.11.1993, p. 9).

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.

*Article 5*

**Form of claims**

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.

*Article 6*

**Relationship with Directive 91/250/EEC**

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.

*Article 7*

**Monitoring**

The Commission shall monitor the impact of computer-implemented inventions on innovation and competition, both within Europe and internationally, and on European businesses, including electronic commerce.

*Article 8*

**Report on the effects of the Directive**

The Commission shall report to the European Parliament and the Council by [Date (three years from the date specified in Article 9(1))] at the latest on

- (a) the impact of patents for computer-implemented inventions on the factors referred to in Article 7;
- (b) whether the rules governing the determination of the patentability requirements, and more specifically novelty, inventive step and the proper scope of claims, are adequate; and
- (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.

*Article 9*

**Implementation**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than [Date (last day of a month)]. 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 10*

**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 Communities*.

*Article 11*

**Addressees**

This Directive is addressed to the Member States.