NOTE

from :	General Secretariat
to :	Permanent Representatives Committee / Council
Subject :	Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions – Outcome of the European Parliament's first reading (Strasbourg, 22 to 25 September 2003)

I.   INTRODUCTION

The rapporteur, Ms McCARTHY (PSE - UK), presented a report consisting of 28 amendments to the proposal for a Directive, on behalf of the Committee on Legal Affairs and the Internal Market. Moreover, the political groups put forward 101 additional amendments at the plenary.

During the plenary debate, the rapporteur underlined the need to regulate the patentability of computer-implemented inventions, at a time of rapidly changing technical possibilities and evolving practices on the part of patent authorities around the world. She expressed concern at recent decisions from the European Patent Office in which patents had been granted to pure software innovations and she underlined that the proposed Directive should contribute to avoiding such a drift. The rapporteur also emphasized the need to create a good legal framework for small businesses which would reward innovative companies while creating a workable system for the protection of patents.

The majority of the political groups expressed their support for the approach advocated by the rapporteur. In particular, the PPE/DE underlined the need to avoid an increase in the number of patents granted for pure software while, at the same time, protecting SMEs though patent rules which are open to innovation. The group also underlined the relevance of such rules for the competitiveness of European industry. The PSE expressed similar views and underlined the difference between intellectual property rules, which offer software designers fully adequate protection, and patent rules which should apply to inventions with a clear industrial application.

On behalf of the Commission, Mr Bolkestein stressed that his Institution shared the concerns expressed by the rapporteur and the other speakers. He underlined that the proposal did not introduce software patents and that nothing would become patentable through this Directive that was not already patentable. He indicated that around 15% of new patent applications fell under the scope of the proposed Directive and that, consequently, it had become urgent to regulate the patentability of computer-implemented inventions. Mr Bolkestein also expressed his concern at the number of amendments tabled by the political groups and he warned parlamentarians that a failure to reach an agreement on the Commission's proposal could imply that the relevant rules would instead be created and implemented through a renegotiation of the European Patent Convention, outside the reach of the Community legislator. The Commissioner then went on to describe the Commission's position on the various amendments.

II. VOTE

Of the 129 amendments tabled, the plenary adopted 64. The position of the Commission on the amendments adopted was the following (the amendments are listed in the order in which they appear in the annex to the present note):

1. Amendments acceptable in part, in full or after suitable reformulation

Amendments 1, 2, 3, 85, 7, 8, 9, 11, 12, 13, 15, 16, 17, 19, 76, 92, 23, 25, 26, 89, 27 and 28.

**2.	Amendments not acceptable**

Amendments 88, 31, 32, 112, 95, 84, 114, 125, 34, 115, 86, 75, 36, 42, 117, 107, 69, 55, 97, 108, 38, 44, 118, 45, 100, 57, 99, 110, 70, 60, 102, 111, 72, 103, 119, 104, 120, 71, 24, 81, 93 and 94.

The text of the amendments adopted and the European Parliament's legislative resolution are set out in annex hereto.

_____

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)[1],

– 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[2],

– 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.

---

[1] OJ C 151 E, 25.6.2002, p 129.
[2] OJ C 61, 14.3.2003, p. 154.

Text proposed by the Commission	Amendments by Parliament

Amendment 1
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.

(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, transparent* and harmonised protection of computer-implemented inventions throughout the Member States is essential in order to maintain and encourage investment in this field.

Amendment 2
Recital 5

(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.

(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.*

Amendment 88
Recital 5 a (new)

(5a) The rules pursuant to Article 52 of the Convention on the Grant of European Patents 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.

Amendment 31
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

Amendments 32 and 112
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.

Amendment 3
Recital 7a (new)

(7a) The aim of this Directive is not to amend the aforementioned Convention, but to prevent different interpretations of its provisions.

Amendment 95
Recital 7b (new)

(7b) The European 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 whereby 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 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 1999¹, Parliament requested a review of the Office's operating rules to ensure that it was publicly accountable in the exercise of its functions.

_____

¹ OJ C 378, 29.12.2000, p. 95.

Amendment 84
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.

(11) *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*.

Amendments 114 and 125
Recital 12

(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.*

(12) 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.*

Amendments 34 and 115
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.

Amendment 85
Recital 13a (new)

> *(13a) 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.*

Amendment 7
Recital 13b (new)

> *(13b) 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 for technical contribution cannot be circumvented merely by specifying technical means in the patent claims.*

Amendment 8
Recital 13c (new)

> *(13c) 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.*

(13d) 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.

(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*.

(14) 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 present 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.*

(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 *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 present 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.

Amendment 12
Recital 17

(17) This Directive **shall** be without prejudice to the application of the competition rules, in particular Articles 81 and 82 of the Treaty.

(17) This Directive **should** be without prejudice to the application of the competition rules, in particular Articles 81 and 82 of the Treaty.

Amendment 13
Recital 18

(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**.

(18) **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 on the legal protection of computer programs by copyright, 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.**

Amendment 75
Recital 18 a (new)

(18a) 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.

(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 *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 possess;*

(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 a 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. 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.*

(ba) "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".

Amendments 38, 44 and 118
Article 2, point (bb) (new)

(bb) "industry" within the meaning of patent law means the automated production of material goods;

Amendment 15
Article 3

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.

Deleted.

Amendment 45
Article 3a (new)

Article 3a

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.

Amendments 16, 100, 57, 99, 110 and 70
Article 4

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. *In order to be patentable, a computer-implemented invention must be susceptible of industrial application and 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 *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 a computer-implemented invention *making* a technical contribution *constitutes a necessary condition of involving an inventive step*.

3. The technical contribution shall be

3. *The significant extent of* the technical

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.

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*.

3a. 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.

Amendment 17
Article 4a (new)

Article 4a

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.

Amendment 60
Article 4b (new)

Article 4b

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.

<div align="center">

Amendments 102 and 111
Article 5, paragraph 1

</div>

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*.

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.

<div align="center">

Amendment 72
Article 5, paragraph 1 a (new)

</div>

1a. 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.

<div align="center">

Amendments 103 and 119
Article 5, paragraph 1 b (new)

</div>

1b. 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.

<div align="center">

Amendments 104 and 120
Article 5, paragraphs 1 c and 1 d (new)

</div>

1c. 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.

1d. 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.

Amendment 19
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 trademarks, shall not be affected through the protection granted by patents for inventions within the scope of this Directive.*

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 on the legal protection of computer programs by copyright, in particular *under the* provisions thereof *in respect of* decompilation and interoperability.

Amendment 76
Article 6a (new)

Article 6a

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.

Amendment 71
Article 7

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.

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.

(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

(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; and

Amendment 23
Article 8, point (ca) (new)

(ca) 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;

Amendment 24
Article 8, point (cb) (new)

(cb) 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;

Amendment 25
Article 8, point (cc) (new)

(cc) 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;

Amendment 26
Article 8, point (cd) (new)

> *(cd) how the requirements of this Directive have been taken into account in the practice of the European Patent Office and in its examination guidelines.*

Amendment 81
Article 8, point (c e) (new)

> *(ce) whether the powers delegated to the EPO are compatible with the need to harmonise Community legislation, and with the principles of transparency and accountability.*

Amendment 89
Article 8, point (cf) (new)

> *(cf) the impact on the conversion of the conventions used in two different computer systems to allow communication and exchange of data;*

Amendment 93
Article 8, point (cg) (new)

> *(cg) 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;*

Amendment 94
Article 8, paragraph 1a (new)

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

Amendment 27
Article 8a (new)

Article 8a

Impact assessment

In the light of the monitoring carried out pursuant to Article 7 and the report to be drawn up pursuant to Article 8, the Commission shall assess the impact of this Directive and, where necessary, submit proposals for amending legislation to the European Parliament and the Council.

Amendment 28
Article 9, paragraph 1, subparagraph 1

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.

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.

_____

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

_____