Patent law: patentability of computer-implemented inventions

2002/0047(COD) - 24/09/2003 - Text adopted by Parliament, 1st reading/single reading

The European Parliament voted 361 votes in favour, 157 against and 28 abstentions on the resolution regarding patentibility of computer-implemented inventions. The rapporteur was Arlene McCARTHY (PES, United Kingdom). Please see the previous document. The following principal amendments were made to the Commission's proposal: - 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; - 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; - 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; - 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; - "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, besides the technical features that any invention must possess; - to limit the scope of the directive, Parliament also defined what is meant by the "technical contribution", also called "invention". The term 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; - in determining whether a given computer-implemented invention makes a technical contribution, the following test will 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. Parliament went on to define what was not patentable: - a computer-implemented invention is not 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 inwhich it is run is not patentable; - Member States must 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. Additionally, Member States must 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. Finally, Parliament also wanted to the Commission to investigate whether it would be desirable and legally possible 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. It has been strongly argued that a grace period is necessary to avoid an inventor being deprived of his or her invention when it has been made public before applying for a patent, for instance in order to test its attractiveness to the market. It is maintained that this would be particularly useful for innovative SMEs and cooperation between universities and industry. However, such an innovation could not be introduced solely for patents for computer-implemented inventions without a prior study of its impact and its compatibility with the Community's international obligations under the TRIPs Agreement.