

U.S. COMMENTS ON THE DRAFT EUROPEAN PARLIAMENT AMENDMENTS
REGARDING THE PROPOSED EUROPEAN UNION DIRECTIVE
ON THE PATENTABILITY OF COMPUTER-IMPLEMENTED INVENTIONS

I. Background

On February 20, 2002, the European Commission submitted to the European Parliament a proposed Directive on the Patentability of Computer-Implemented Inventions (hereinafter, the term "Directive" will be used to refer to the February 20, 2002 text). The Directive is intended to harmonize the standards for patentability of computer-implemented inventions throughout the European Union (EU) member states and thereby eliminate the variations currently plaguing European patent law in this area of technology. Another goal of the Directive is to create transparency by clearly defining those standards, thereby providing the degree of legal certainty necessary for promoting investment and innovation. The Directive is further intended to reassure EU member states that patents will not be granted for mere algorithms, mental processes, or business methods, in keeping with current European patent law.

On June 17, 2003, the Committee on Legal Affairs and the Internal Market, to which the proposed Directive had been referred by the Parliament, adopted a draft legislative resolution (hereinafter the term "Resolution" will be used to refer to the June 17, 2003 text) containing proposed amendments to the Directive and tabled its report on June 18, 2003. Consideration of the Resolution by Parliament has been postponed until at least September 22, 2003.

On August 21, 2003, United States officials met with Mr. Wim van Velzen, a member of the European Parliament, to discuss various matters of mutual interest, including the Directive and the amendments proposed by the European Parliament in the Resolution. During the course of the discussions, specific provisions of the Directive and specific amendments in the Resolution were addressed, and it was agreed that the United States would submit comments on these provisions for consideration by the European Parliament. We are pleased to now present those comments, which focus on the following three Articles: Article 4 and the definition of "technical contribution," Article 6 and the proposed "reverse engineering" exception to infringement, and Article 6(a) and the proposed "interoperability" exception to infringement. Of these, Article 6(a) is of the greatest concern to the United States because of its apparent inconsistency with international obligations and its potential for weakening patent protection in Europe. Understanding the concerns

underlying the proposal, however, and in the spirit of cooperation, we have also suggested language that would alleviate some of our concerns with this provision. We hope that discussion of these issues between our two jurisdictions will continue as we work together toward our mutual goal of a harmonized patent system.

II. Comments on Articles of Significant Concern to the U.S.

A. Article 4

Article 4, both as presented in the Directive and in the proposed amendments of the Resolution, requires a computer-implemented invention to be susceptible of industrial application, be new and involve an inventive step. These requirements are basic, universal components of patent laws around the world. Article 4 additionally requires, however, that as a condition of involving an inventive step, a computer-implemented invention must make a "technical contribution." The Resolution explains that the idea behind the "technical contribution" provision is to ensure that patents will not be granted for the mere processing of data. Thus, a business method implemented on a computer would not be patentable if the computer merely processed the business data because the problem being solved in such a situation is business-related, not "technical," and therefore the contribution made is also non-technical. By contrast, the Resolution notes that a method for increasing the processing speed of a computer would be a "technical contribution" because processing speed is "technical" in nature.

Whatever its intent, Article 4 is problematic for a number of reasons. First, it blurs the distinction between what constitutes patentable subject matter and what constitutes an inventive step. Generally, an invention must first fall within a legally-defined category of invention in order to be patented, i.e., it must first comprise patentable subject matter. The inventive step requirement (referred to as "non-obviousness" in United States patent law) ensures that, even though an invention falls within the scope of patentable subject matter, a patent may not be granted if the difference between the invention and what was known at the time it was made (referred to in patent law as the "prior art") is something that would have been obvious to a person of ordinary skill in the relevant field of invention. It is our understanding that the "technicality" inquiry is already a part of the patentable subject matter test in Europe by virtue of the requirement of "invention" in European Patent Convention Article 52. By including a "technicality" inquiry in the inventive step test as well, Article 4 inappropriately combines two requirements that are intended to serve two different

purposes within the patent law.

The second concern, which is related to the blurring of the patentable subject matter and inventive step requirements, is that the invention may not be considered as a whole when determining issues of patentability. The experience of the United States in the case of *Diamond v. Diehr*, 450 U.S. 175 (1981), may help to illustrate the point. In *Diehr*, the invention was a rubber molding process that used a programmed digital computer to calculate a mathematical formula to improve curing of the rubber. It had been argued that invention was unpatentable because all of the parts of the rubber-molding machine were known, and the only "new" part was a mere mathematical formula or algorithm, which under U.S. patent law (and under European patent law) is not patentable subject matter. The U.S. Supreme Court rejected this type of "piecemeal" approach to patentability, recognizing that "if carried to its extreme, [such an analysis would] make all inventions unpatentable because all inventions can be reduced to underlying principles of nature which, once known, make the implementation obvious." Article 4, however, seems to contemplate the same type of analysis repudiated by the Court in *Diehr* because it defines patentability solely in terms of the type of contribution made by a part of the invention, irrespective of the character of the invention as a whole or whether the differences between the invention as a whole and the prior art would have been obvious to the person skilled in the art.

More generally, we have concerns that the "technical contribution" requirement will adversely impact certain sectors of the economy, such as the software industry. According to a recent study by the Business Software Alliance, Western Europe's packaged software industry is expected to grow 14% to 109 billion euros by 2005. Because many software companies expend significant resources in research and development, they understandably desire to maximize protection for their developments, recoup investment costs and to prevent others in the market from getting a "free ride." While copyright protection is available, it essentially protects the lines of code in the software program against copying, not the underlying process of operation. Thus, copyright does not protect the functionality of the software, which is of significant value to the owner. Patents, however, do protect functionality and would thus allow companies to obtain the necessary protection.

Despite the foregoing comments, we understand that the language of Article 4 is intended to codify current practice at the European Patent Office (EPO). We believe, however, that further discussions between the United

States, the member states of the EU and the EPO are essential in order to continue progress in such fora as the Trilateral Patent Offices and the World Intellectual Property Organization toward increased cooperation and a harmonized international patent system. We suggest that, if this provision is maintained in the final Directive, the need for continued discussion of these matters be recognized. Therefore, the monitoring and reporting required by Articles 7 and 8 of the Directive should additionally provide for monitoring and reporting of whether the technical contribution standard, both generally and as particularly defined with regard to inventive step, represents the best standard for innovation policy with respect to computer-implemented inventions particularly, and other inventions generally.

3. Article 6

Article 6, both as presented in the Directive and in the proposed amendments of the Resolution, provides a limited exception to patent rights by permitting developers to reverse-engineer patented software for the purpose of achieving interoperability. The justification given for this provision is to "ensure that developers of software can continue to engage in the same acts to achieve interoperability under patent law as they are allowed to today within the limits of copyright law," referring to Articles 5 and 6 of the EU Software Copyright Directive (91/250/EEC).

Because this reverse-engineering exception applies only to computer implemented inventions, the EU may wish to consider whether Article 6 complies with Article 27(1) of the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (hereinafter "TRIPS"), which prohibits discrimination in the enjoyment of patent rights based on the field of technology involved. As recognized in TRIPS Article 28(1), one of the fundamental rights conferred by a patent is the right to prevent others from making or using the invention without authorization. Because Article 6 provides an exception to this right only for computer-implemented inventions, it might be argued that it discriminates against such inventions contrary to the requirements of TRIPS Article 27(1).

Moreover, the justification given for this provision, i.e., that developers should be permitted to infringe under patent law to the same extent permitted under copyright law, does not appear to account for the different purposes served by patent and copyright protection. Patents protect inventions. Copyright protects an author's particular expression of an idea. Justifying the permissibility of

acts with respect to the patent law on the basis that similar acts are permissible under copyright law does not appear to be appropriate, as the subject matter protected and the standards for obtaining protection under these two systems are completely different.

C. Article 6(a)

Proposed new Article 6(a) of the Resolution excepts from patent infringement the use of a patented technique "wherever the use of [that] patented technique is needed for the sole purpose of ensuring the conversion of the conventions used in two different computer systems or network [sic] so as to allow communication and exchange of data content between them[.]" The justification for this provision is that it ensures open networks and avoids abuse of dominant positions, consistent with the case law of the European Court of Justice.

This provision is much more problematic than Article 6 for several reasons. The scope of permissible activity is significantly broader than the specific acts permitted under the Software Copyright Directive referred to in Article 6. It would permit infringement of patented inventions with significant commercial value based solely on some undefined "need" to "exchange data." Virtually all computers exchange or are capable of exchanging data with other computers, and many require some "conversion of conventions" for communication. Thus, many data exchange methods would appear to fall under this exception. The justification given for Article 6(a) in the Resolution indicates that it is intended as a remedy for anticompetitive activity. Article 6(a), however, permits infringement even in the absence of the determination of anti-competitive activity. This broad exception to patent rights does not appear to be an appropriately limited exception and may fall outside the scope permitted under Article 30 of the TRIPS Agreement.

Overall, the scope of Article 6(a) is so broad that it would significantly undermine the rights of affected patent owners. In addition, Article 6(a) may result in the grant of compulsory licenses without the safeguards required by TRIPS Article 31. To avoid diminution of patent rights through liberalization of compulsory licenses, at a minimum, TRIPS Article 31 sets forth several safeguards that WTO member states must comply with to ensure that the patent owner's rights are respected. Article 6(a) provides no such safeguards. It simply permits infringement whenever an unauthorized entity feels a "need" to "exchange data" between computers.

The United States does, however, appreciate the concerns underlying this proposal, including the abuse of dominant market positions. On this point, the United States would like to point out that patents laws are also subject to antitrust laws and to the extent there is any abuse in market power, the appropriate remedy is through the application of relevant antitrust laws. When it happens that a patented product is so successful that it creates its own economic market or devours a major portion of an already existing market, there may be anticompetitive undertones. Like everyone else, a patentee is subject to the antitrust laws and when the patent owner improperly harms competition, that owner may become liable for antitrust violations. Thus, it is important to keep in mind that while the patentee has the right to exclude others, the patentee may not use the patent to extend power in the marketplace improperly. For these reasons, it is recommended that the broad exception to infringement in Article 5(a) be deleted.