

# Computer Software Patents Are On The Way

Computer technology, driven by consumer demand and the pursuit of profits by software developers, continues to advance and develop each year. Patent law, however, tends to lag behind technological innovations and developments. For years the status of computer software has been in a state of flux, as courts and patent attorneys wrestle with the question of whether computer software products are patentable. Thankfully, some answers may be close at hand. In June, the Patent Office issued its proposed guidelines for the examination of computer-implemented inventions (60 Fed. Reg. 28,778 (June 2, 1995)) which, when finalized, should help to clarify just how and when software—computer programs—will be protectable under the patent law.

## The Evolution of Software Patents

Under Section 101 of the United States Patent Act (Title 35, U.S. Code), only “statutory subject matter” may be patented. Sections 102-103 provide that the invention must also be novel, nonobvious, and useful. Statutory subject matter includes machines, processes, compositions of matter, articles of manufacture, and improvements of these things. The debate with regard to computer software concerns whether programs and related inventions are patentable subject matter. Before the 1980s, Section 101 of the patent act was usually narrowly interpreted in the software field, thus making it difficult to directly patent software. Some reasoned that software itself is not a machine, process, or article of manufacture, and thus did not fit into any of the statutory subject matter classifications. Starting in the early 1980s, computer-related inventions have gained more and more favor with the courts, and many tests for the patentability of computer-related inventions were issued by courts.

Recent decisions have become even more friendly to software-related patents. In 1994, the Court of Appeals for the Federal Circuit, which decides patent law issues, issued its opinion *In re Alappat* (31 USPQ2d 1545). In this case, the court held essentially that a computer programmed with a program may be patentable subject matter, in part because programming a general-purpose computer “creates a new machine.” If the software is novel, so is the new machine created when a general-purpose computer runs the software. Other cases handed down recently, such as *In re Lowry* (32 USPQ2d 1031), also appeared to broaden the protection available for software-related inventions. In response to these and other developments, the Patent Office issued its proposed guidelines which will be used by the Patent Office’s examiners in determining the patentability of computer-related inventions. After considering comments from the public, the Patent Office should issue final guidelines sometime soon.

## Software Patent Guidelines

The proposed guidelines are significant because they specifically direct examiners to recognize several software-related inventions as patentable subject matter. While decisions regarding patentability by the Patent Office do not have to be followed by the courts, the guidelines should have some weight, and are drafted in response to recent federal case law in this area. First, the guidelines provide for a presumption that “A computer or other programmable apparatus whose action are directed by a computer program or other form of ‘software’ is a statutory machine,” which follows the holding of the *Alappat* case. Thus, a general-purpose programmable computer which is programmed with a new and nonobvious software program should be

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## Computer Patents

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clearly patentable. This guideline is significant for those seeking to protect novel software, because it allows for an important instantiation of the product to be patented, that is, when it is loaded into a computer.

The proposed guidelines also provide for the protection of software programs stored on diskettes, by classifying them as "articles of manufacture," one of the enumerated types of statutory subject matter in Section 101 of the Patent Act. Specifically, the proposed guidelines provide the following presumption: "A computer-readable memory that can be used to direct a computer to function in a particular manner when used by the computer ... is a statutory article of manufacture." The significance of this type of claim lies in the fact that, if a floppy disk containing a program is itself patented, the patentee's patent is infringed when the disk (plus software) is manufactured and also when it is sold. This makes the software pirate a direct infringer, who can thus be sued directly for patent infringement. Otherwise, if only the consumer's computer programmed with the software were patentable, the consumer himself would be the direct infringer, and the pirate would only be a contributory infringer. In this case, the consumer himself must be named in the lawsuit before the contributory infringer can be liable for damages. This, of course, is undesirable to many software producers, who would prefer not to sue a diverse group of consumers, especially those who might also be the producer's customers.

Even if disks containing new software can be patented, crafty software pirates may be able to commercially distribute software over a network, without the use of a medium such as a floppy disk or similar storage medium. Thus, again, this software distributor would only be a contributory infringer, not a direct infringer. Until the U.S. patent system rec-

ognizes software *itself* as patentable subject matter, rather than a processor programmed with software or a disk storing software, some of these problems will persist.

### Claim-Drafting Techniques

The proposed guidelines also spell out various techniques for drafting claims and for preparing patent application specifications to ensure that the patentee receives maximum protection for his software-related inventions. For example, the guidelines state that features or elements of the invention that are necessary to provide the specific utility contemplated for the invention must be reflected in the claims. Also, for claims drafted in "means plus function" language, it should be clear what structure, materials or acts disclosed in the specification are intended to correspond to those elements. Then, if a "means plus function" claim is rejected because it is unclear to the Examiner what structure, materials, or acts correspond to the claimed means elements, the applicant will be able to identify the precise location in the specification where a description of the means elements can be found. The guidelines also make it clear that computer program related elements may serve as the specific structure, material, or acts that correspond to an element of an invention defined using a means plus function limitation in a claim. For example, a series of operations performed by a computer under the direction of a computer program may serve as "specific acts" that correspond to a means element.

If, as expected, the final guidelines embody most of the substance of the proposed guidelines, software inventions should have a bright future ahead—in both the market and the law. ■

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# IP REPORT

Developments in Intellectual Property Law: Patents, Trademarks, Trade Secrets & Copyrights

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*The Second Circuit recently held that archival copying by a corporate researcher was not a "fair use"*

## An IP Lawyer At Every Photocopier

Recent developments in copyright law present the very real potential for significant liability for companies whose employees systematically copy journal articles or the like without permission of the publisher-copyright owner. Any business where employees copy journal articles to further corporate sponsored research should review its practices to ensure, to the extent possible, compliance with these most recent developments in the copyright law.

Unlicensed copying of copyrighted works is *generally prohibited except for certain "fair uses"*

The basic premise of copyright law is that the copyright owner of an original work of authorship has the exclusive right to reproduce the work, distribute copies of the work, and prepare derivative works based on the original work. As a result, any person or entity who copies a copyrighted work may be liable for copyright infringement. One defense to a charge of copyright infringement is the so-called fair-use defense. Specifically, the copyright statute provides that the fair use of copies of copyrighted works made for purposes such as scholarship or research do not constitute copyright infringement. The statute directs that certain factors are to be considered in determining whether a particular instance of copying constitutes fair use.

For many, it may seem intuitive that journal subscribers should be entitled to copy individual articles for use in connection with specific research projects without obtaining a special license. How-

ever, the recent decision of the United States Court of Appeals for the Second Circuit in *American Geophysical Union v. Texaco, Inc.*, 15 U.S.P.Q.2d 1513 (2d Cir. 1994) (amended Dec. 23, 1994) (further amended July 17, 1995), casts a dark shadow on such practices.

The Second Circuit recently held that archival *copying by a corporate researcher was not a "fair use"*

In the *Texaco* case, publishers of scientific and technical journals brought a class action lawsuit against Texaco, claiming that "Texaco's unauthorized photocopying of articles from their journals constituted copyright infringement." Although Texaco employed between 400 and 500 researchers who copied articles from many different journals to which Texaco subscribed, the parties agreed to resolve their dispute by focusing on several specific instances of copying by a single researcher. Specifically, the researcher in question copied eight articles from a journal entitled "Catalysis." The journal was circulated by Texaco to a number of researchers who were encouraged to copy articles of interest. The researcher indicated that he made the copies for his own personal convenience so that he would have access to the  
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