

THE NATIONAL LAW JOURNAL

DAILY UPDATES AT NLJ.COM

THE NEWSPAPER FOR THE LEGAL PROFESSION

MONDAY, NOVEMBER 12, 2007

ALM

PATENT LAW

Two Patentability Rulings

THE CONSTITUTION authorizes Congress to grant patents covering the “useful arts”—what today might be called technological innovation.

Section 101 of the current Patent Act—using language almost unchanged since the 1793 patent law was drafted by Thomas Jefferson—allows patents on “any new and useful process, machine, manufacture, or composition of matter.” Construing that language, the U.S. Supreme Court famously declared patentable “anything under the sun that is made by man.” *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980).

But the court has long refused to allow patents on abstract ideas and mental processes, laws of nature and natural phenomena, fearing that “basic tools of scientific and technological work” would be monopolized. *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). More than 150 years ago, it explained that a “principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented; as no one can claim in either of them an exclusive right.” *LeRoy v. Tatham*, 55 U.S. 156, 175 (1852). These limitations on patentability are in inevitable tension with the reach of the statute, particularly when the abstract idea in question arguably is “made by man.”

Two recent U.S. Court of Appeals for the Federal Circuit cases illustrate the delicate line-drawing courts have found necessary to

Lewis R. Clayton is a litigation partner at Paul, Weiss, Rifkind, Wharton & Garrison LLP, and co-chairman of the firm’s intellectual property litigation group. He can be reached at lclayton@paulweiss.com. Jayson L. Cohen, an associate with the firm, assisted in the preparation of this article.

By Lewis R. Clayton



attempt to identify patentable subject matter while preserving abstract ideas for public use. *In re Comiskey*, No. 2006-1286, 2007 WL 2728361 (Fed. Cir. Sept. 20, 2007), analyzed the most controversial kind of process claim—a business-method patent—and a split panel in *In re Nuijten*, No. 2006-1371, 2007 WL 2728397 (Fed. Cir. Sept. 20, 2007), considered whether an electromagnetic signal qualified as patentable.

Is a process for conducting arbitration patentable?

Comiskey focused on a patent application covering a process for conducting arbitration. Certain claims described nothing more than a series of mental steps—enrolling a contract in an arbitration program, incorporating language mandating arbitration, conducting the arbitration and ultimately reaching a binding determination. Others referred to a series of “modules”—for example, a “registration module,” an “arbitration module” and a “resolution module”—thereby requiring

use of a computer or standard communications facilities.

The Federal Circuit uses a two-part test to determine whether a process embraces patentable subject matter. First, patent claims must have a “practical application.” For example, *Benson* found that a set of instructions for converting binary-coded decimals to pure binary numerals, otherwise untied to any specific application, describes an unpatentable mathematical principle. Second, a process is only patentable if it is “tied to a specific machine” or “creates or involves a composition of matter or manufacture.” Thus a process is patentable only if it “is embodied in, operates on, transforms, or otherwise involves another class of statutory subject matter, i.e., a machine, manufacture, or composition of matter.”

Applying this test, the Federal Circuit had little difficulty finding Stephen W. Comiskey’s claims nonpatentable in so far as they simply claimed mental steps involved in an arbitration process. While those claims had practical application, they failed the second part of the test, lacking a link to a machine, manufacture or composition of matter. The statute “does not allow patents to be issued on particular business systems—such as a particular type of arbitration—that depend entirely on the use of mental processes.” The court noted its long-standing refusal to approve patents on a “mental process standing alone and untied to another category of statutory subject matter even when a practical application was claimed.”

The analysis was critically different, however, for *Comiskey*’s claims requiring the use of modules or communication systems. The module claims, “under the broadest

reasonable interpretation, could require the use of a computer as part of Comiskey's arbitration system." The communications-system claims required that access to the system be "established through the Internet, intranet, World Wide Web, software applications, telephone...or other communications means." Without detailed analysis, the court found that these claims, "in combining the use of machines with a mental process," were sufficient, without more, to embrace patentable subject matter.

But use of these machines would not seem to be necessary for effective practice of the arbitration process described in the Comiskey application. Including these elements in the claims may have done little more than allow the patentee to argue that the second part of the Federal Circuit's test was satisfied. By contrast, in *State Street Bank & Trust Co. v. Signature Fin. Group Inc.*, 149 F.3d 1368, 1371 (Fed. Cir. 1998), the landmark decision endorsing business-method patents, the court found that a computer was "a virtual necessity" to practice the invention, a complex system for monitoring and recording financial information about related mutual funds. The *Comiskey* court itself noted that "the mere use of a machine to collect data necessary for application of the mental process does not make the claim patentable subject matter."

Even though it found patentable subject matter, the court did not ignore the arguably tenuous connection between the claimed machines and the other elements of the invention. It went on to hold that the issue should be addressed on the question of obviousness under § 103 of the Patent Act. It noted that the machine claims "at most merely add a modern general purpose computer [and modern communication devices] to an otherwise unpatentable mental process." Citing *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), the court found that "the routine addition of modern electronics to an otherwise unpatentable invention typically creates a prima facie case of obviousness." Thus, it directed the Patent Office on remand to determine whether the machine claims should be rejected as obvious.

Comiskey can be read to endorse a liberal rule for determining whether an application claims patentable subject matter under § 101, allowing claims whenever any machine is claimed. However, that may turn out to be a Pyrrhic victory for business-method patentees, if the case is construed as mandating a tougher obviousness analysis for process patents claiming use of a computer.

Are electromagnetic signals patentable?

The Federal Circuit's split decision in *Nuijten* considered the ethereal issue of whether a "signal" can qualify as a patentable "manufacture" under § 101.

Petrus A.C.M. Nuijten's application concerned digital watermarking of signals carrying information, such as a radio broadcast or output from a CD player. Like a watermark associated with the maker of a piece of paper, digital watermarking can be used to identify the originator of the signal, such as the owner of a copyright in a song. Watermarking typically changes a signal somewhat, introducing distortion into the broadcast. Nuijten's invention reduces the distortion.

Two recent Federal Circuit cases illustrate the delicate line between patentable subject matter and abstract ideas.

Nuijten received patent claims for his watermarking process, for machines that generated his watermarked signals and for a device that stored them (e.g., a watermarked CD). All were patentable under § 101. The issue that divided the panel was whether the signal itself could be patented. The majority held the signal unpatentable, as it failed to fall within the four categories of § 101. It was not a "process," a category that requires "action"—the signal is a "thing." It was not a "machine," as it lacks a "concrete structure." Nor was it a "composition of matter," because it does not combine two or more substances. The closest question was whether it qualified as a "manufacture." Clearly, it is manmade—it is "encoded, generated and transmitted by artificial means." But the majority held that a "manufacture" is a tangible article or commodity—"a transient electric or

electromagnetic transmission does not fit within that definition."

Judge Richard Linn, dissenting, saw the case as presenting "challenging questions that go beyond the single patent claim at issue," requiring the court to "reconcile cutting-edge technologies" with ancient statutory language, against a "backdrop of ongoing controversy regarding the wisdom of software patenting" and the *State Street* decision. He found the signal patentable, concluding that the term "manufacture" is "not limited to tangible or non-transitory inventions."

Linn then reached a question not considered by the majority—finding that the signal was not an unpatentable abstract idea. In contrast to the *Comiskey* court's analysis, Linn focused on whether the signal was "new" and "useful" within the meaning of § 101. In this view, a new and useful invention is far enough removed from abstract ideas and principles to allow for patentability. The utility requirement differentiates "patentable inventions involving the manipulation or transmission of information from unpatentable inventions whose only utility lies in the particular information they convey." This split decision illustrates ongoing debate in the Federal Circuit over the fundamental issue of patentable subject matter.

Last year, the Supreme Court accepted for review a petition challenging a patent covering a method of diagnosing certain vitamin deficiencies by measuring the level of a particular amino acid. When certiorari was dismissed as improvidently granted, three justices dissented, finding that the patent covered an unpatentable natural phenomenon—a correlation between the measurement and the disease. *Lab. Corp. of America Holdings v. Metabolite Labs. Inc.*, 126 S. Ct. 2921 (2006). The Supreme Court may yet accept for review a case like *Comiskey* or *Nuijten*, raising these difficult issues of patentable subject matter. Certainly, the debate will go on.