Federal Circuit Narrows Eligibility Requirements for Business Method Patents

New standards demand sophisticated patent-drafting skills

By Bruce D. Sunstein, Partner

In its much anticipated Bilski decision, the Federal Circuit – the final arbiter of patent law short of the Supreme Court – articulated on October 30 a new requirement for patenting a "process". To be eligible for a patent, the process must either transform matter or be carried out by a machine. In an *en banc* 9-3 opinion, the Federal Circuit held that the claims at issue failed these requirements and were thus ineligible for patent coverage.

The Federal Circuit has departed from the simple rule it articulated a decade ago in *State Street Bank & Trust Co. v. Signature Financial Group* (holding business methods eligible for patents), and a companion case, *AT&T Corp. v. Excel Communications, Inc.* The essential test then was whether the method produces "a useful, concrete, tangible result."

The Federal Circuit's new test is more demanding. A process is patent-eligible if "(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing."

Although the new test is more specific, the Federal Circuit expressly refrained from excluding business methods. In fact, the requirements of the *Bilski* decision can probably be met by adept patent drafting. (I say "probably", because, as discussed below, there is a risk that the patent eligibility of processes will be narrowed even further. My sense, however, is that such a narrowing is unlikely, at least by the Federal Circuit itself.)

Because business methods often require the use of computers, a business-method patent application can likely avoid the *Bilski* trap if its claim limitations are tied to use of a computer. Moreover, claims in computer-related inventions can sometimes be constructed to show a transformation of data.[1] Although the Federal Circuit has said that it has left open the scope of patent eligibility for computer-related inventions, the court's heavy reliance on its 1994 *Alappat* decision (holding that an anti-aliasing rasterizer for reducing jagged edges in pixelated displays is patent eligible), and its statement that an older test[2] for patent eligibility is unduly narrow, suggest there is considerable room for such inventions when the claims are properly drafted.

Tying a process claim to a computer requires more than merely reciting "computer" – one must infuse each claim limitation with machine-based activities.[3] In this way, the claimed business method is properly "tied to a particular machine or apparatus," namely, the computer.

By contrast, the claims[4] in *Bilski*, which recite merely "initiating a series of transactions", "identifying market participants", and further "initiating a series of transactions" are hopelessly abstract. It would have been a different ball game if each of these steps were recited in the context of a process carried out in a computer.

In fact, the *Bilski* claims might well have failed tests for specificity under section 112 of the patent law. (In dissent, Judge Newman points out that the *Bilski* claims were not vetted for compliance with other requirements of patent law, and quotes the *State Street* decision: "Whether the patent's claims are too broad to be patentable is not to be judged under §101 [the patent eligibility section], but rather under §§102, 103, and 112.")

The Federal Circuit in *Bilski* spends considerable effort in harmonizing Supreme Court precedents that, in the opinion of this author, are irreconcilable.[5] The preoccupation of the Federal Circuit with the Supreme Court is no doubt explained by the fact that the high court has reversed the Federal Circuit in three big recent decisions, in each case diminishing the availability of patent protection.[6]

The last time the Supreme Court spoke on the specific subject of inventions that use computer software was

more than a quarter century ago in *Diamond v.* Diehr, holding that a method of manufacturing molded articles is not precluded from being patented "simply because it uses a mathematical formula, computer program, or digital computer."

In *Diehr*, the Supreme Court told us only that software used in controlling the molding of rubber is patentable as part a rubber-molding process. From this narrow ruling we cannot really deduce how the Supreme Court would regard the ideas articulated by the Federal Circuit in *Bilski*. In fact, in an exchange last year between Justice Breyer and a lawyer arguing a case for Microsoft, Justice Breyer observed that the Court has never held that software is patentable.

The *Bilski* decision can be viewed as the Federal Circuit's attempt to stake out a moderate position regarding computer-related inventions that might be palatable to the Supreme Court, notwithstanding its recent decisions reining in the scope of patent protection. By seizing the middle ground, the Federal Circuit draws a line preventing some inventions from being patent-eligible while preserving the possibility of patents for software-based inventions; and it articulates a test that resonates with prior decisions of the Supreme Court. The Supreme Court would thus be challenged to further narrow the Federal Circuit's reasoned middle position.

In separate courageous and brilliant dissents to the *Bilski* decision, Judges Newman and Rader argue that the Federal Circuit majority improperly narrows patent eligibility requirements. Judge Newman carefully analyzes the statutory and judicial precedent and concludes that the precedent supports a broad, rather than narrow, interpretation of the word "process" in the patent law. She objects also to the new test as introducing uncertainty: "Uncertainty is the enemy of innovation. These new uncertainties not only diminish the incentives available to new enterprise, but disrupt the settled expectations of those who relied on the law as it existed."

Judge Rader in his dissent complained that majority opinion "links patent eligibility to the age of iron and steel at a time of subatomic particles and terabytes", and argues that Supreme Court precedent supports a broad interpretation of patent eligibility requirements. He also seeks to enlighten a minority of the Supreme Court who, in 2006, had wanted to deny patent eligibility to a medical diagnosis method in *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.* That case involved a patent for a test procedure for identifying a vitamin deficiency by harnessing a discovery linking the deficiency to an elevated level of an amino acid in the body. Justice Breyer, joined by Justices Stevens and Souter, criticized the grant of a patent for the method and unsuccessfully sought to have the case reviewed by the Court. In his analysis, Justice Breyer used the concept of "natural phenomenon" to remove from consideration for patent eligibility the harnessing of the discovery itself. Judge Rader's dissent in *Bilski* says that the Supreme Court minority has "a fundamental misapprehension of the distinction between a natural phenomenon and a patentable process." He explains the critical difference between a natural phenomenon (unpatentable) and an application of that phenomenon to achieve a useful and tangible result (patentable).

By contrast to Judges Newman and Rader, Judge Mayer dissented in *Bilski* because he believes business methods should be ruled ineligible for patent protection altogether.

Given these circumstances, it is a fair bet that the Federal Circuit's middle ground in patent eligibility will live on, and, with it, the need to draft patent applications satisfying the Federal Circuit's new requirements.

Endnotes

1 The Federal Circuit provided an example, discussed in note 3 below.

2 The so-called *Freeman-Walter-Abele* test: (1) determining whether the claim recites an "algorithm", then (2) determining whether that algorithm is "applied in any manner to physical elements or process steps."

3 The Federal Circuit, citing prior cases, stated that the recited machine or transformation must "impose meaningful limits on the claim's scope" and must involve more than "insignificant extra-solution activity". It provides some examples that satisfy the new test, such as the visual depiction of x-ray data, noting that "the claim was not required to involve any transformation of the underlying physical object that the data represented". Moreover, in that instance "the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical objects or substances." A mere data gathering step followed by an algorithm is viewed as not patent eligible.

4 Claim 1, quoted by the Federal Circuit, reads as follows:

"A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

"(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;

"(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

"(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions."

5 In 1972, the Supreme Court held in *Gottschalk v. Benson* that a computer-implemented method for converting binary coded decimal numbers to pure binary numbers was not patentable. In *Benson*, Justice Douglas, who was not a fan of patents, wrote that:

> "It is conceded that one may not patent an idea. But in practical effect that would be the result if the formula for converting BCD numerals to pure binary numerals were patented in this case. The mathematical formula involved here has no substantial practical application except in connection with a digital computer, which means that if the judgment below is affirmed, the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself."

Justice Douglas proved too much. First of all, the method claimed was limited to use in a computer. Secondly, there are other ways of converting BCD numerals to pure binary numerals. In the opinion of this author, the Supreme Court simply changed its mind after *Benson*. Under this interpretation, the Supreme Court's decisions cannot be reconciled.

6 In *eBay v. MercExchange*, 547 U.S. 388 (2006), the Supreme Court made it harder to get injunctions in patent cases, rejecting the Federal Circuit's "general rule" that a permanent injunction will issue once infringement and validity have been adjudged in patent disputes. In *KSR v. Teleflex*, 550 U.S. ___ (2007), the Supreme Court made it easier to attack patents on obviousness grounds (and harder to overcome obviousness rejections by the Patent and Trademark Office on applications that are pending). In *MedImmune v. Genentech*, 549 U.S. 118 (2007), the Supreme Court made it easier for a party in licensing negotiations with a patent owner to initiate a lawsuit for declaratory judgment attacking validity of the patent.