In re Bilski: Federal Circuit Addresses Standard for Patentability of Business Methods

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On October 30, 2008, the Court of Appeals for the Federal Circuit issued the long-awaited decision in *In re Bilski*. The *Bilski* decision clarifies the test for patentable subject matter, particularly as it relates to business methods. Although the specific claims at issue in *Bilski* were ruled unpatentable, the Federal Circuit did not hold that all methods of doing business are unpatentable. This **Stroock Intellectual Property Practice Group Special Bulletin** provides a brief overview of the *Bilski* decision and its potential effect on issued patents and pending patent applications directed to business methods, software, and computer-implemented financial processes.

The Decision

The patent at issue in *Bilski* was directed to a "method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price." Bilski claimed a series of commodity transactions that are initiated between a commodity provider and a consumer, in which the commodity is purchased at a fixed rate based on historical prices and the fixed rate corresponds to a risk position of the consumer. Market participants for the commodity having a counter-risk position are then identified. Lastly, another series of transactions are entered at a second fixed rate that balances the risk position of the consumer transactions. The patent claims reviewed by the court did not recite performing the process on a computer.

During prosecution, the claims were rejected by the United States Patent and Trademark Office (the "Patent Office") as failing to claim patent-eligible subject matter under 35 U.S.C. § 101. Whether an invention is patent-eligible subject matter is a threshold inquiry. Under § 101, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter … may obtain a patent therefore…." At issue in *Bilski* was whether the claimed method for managing the consumption risk costs fell within the meaning of the term "process" in § 101. As the Federal Circuit expressly acknowledged, the subject matter inquiry is separate and distinct from the other patentability inquiries, such as whether the alleged invention is novel and non-obvious.

At the core of the subject matter inquiry is the long-standing legal principle that laws of nature, natural phenomena, and abstract ideas (referred to in the decision as "fundamental principles") are not

patentable, unless the invention seeks only to claim a particular application of a fundamental principle. In *Bilski*, the primary question before the Federal Circuit was how to analyze whether a claim seeks to preclude use of a fundamental principle entirely (and therefore is *not* patent-eligible) or encompasses only a particular application of that fundamental principle (and therefore *is* patent-eligible).

After reviewing the relevant Supreme Court precedents and its own prior cases, the Federal Circuit held that a claimed 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." Dubbed the "machine-or-transformation" test, the Federal Circuit clarified that the enunciated test was the only acceptable test under the Supreme Court's precedent. In so doing, the Federal Circuit abandoned its own prior tests, including the "useful, concrete, and tangible result" test of *State Street Bank & Trust Company v. Signature Financial Group, Inc.*[1] (although the Federal Circuit reaffirmed the *State Street* decision rejecting the categorical business method exception to patentability).

The "Machine-or-Transformation" Test

According to the Federal Circuit, a fundamental principle may be patentable if it is "tied to a particular machine or brings about a particular transformation of a particular article." The court reasoned that in such cases, the public is not preempted from all uses of the fundamental principle because the principle as claimed is limited to a particular use or a specific application. In other words, according to the Federal Circuit, the machine-or-transformation test ensures that a fundamental principle cannot be claimed in a manner that would preclude all uses of the principle.

Unfortunately, the Federal Circuit provided little explanation of the machine-prong of the test, because the *Bilski* claims did not require a machine. As a result, the court left to future cases the question of "whether or when recitation of a computer suffices to tie a process claim to a particular machine." Thus, as discussed further below, for many, the *Bilski* decision may leave more questions than it resolves.

With respect to the second prong of the test, *i.e.*, transformation of a particular article into a different state or thing, the Federal Circuit first focused on the question of what, under the test, would constitute "articles" that could be transformed. In connection with this inquiry, the court defined three main areas in which transformable articles could be found: the "traditional arts," "information-age processes," and "business methods."

- **Traditional Arts**. For processes in traditional arts, the court reasoned that it was self evident as to what articles could be transformed, namely raw materials being transformed into finished products.

- **Information-age Processes**. The court explained that the raw materials of information-age processes are "electronic signals and electronically manipulated data."

- **Business Methods**. With respect to business methods like those at issue in *Bilski*, the court noted that the raw materials of modern business involved "the manipulation of even more abstract constructs such as legal obligations, organizational relationships, and business risks."

The Federal Circuit then posed the following question: "Which, if any, of these processes qualify

as a transformation or reduction of an article into a different state or thing constituting patent-eligible subject matter?" Here, the court principally focused on when a computer-implemented process qualifies under the transformation test. However, the court did not expressly answer the question, opting instead to frame the answer as a sort of safe harbor or minimum threshold:

> So long as 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 physical objects or substances**, there is no danger that the scope of the claim would wholly pre-empt all uses of the principle. (*emphasis added*).

Thus, if a process transforms specific data into a visual depiction of physical objects or substances, then the process is eligible for patent protection. The Federal Circuit gave the example of a process for transforming X-ray data to produce a visual depiction of the objects, *e.g.*, skeletal bones, being X-rayed. The court reasoned that the transformation of raw data into a particular visual depiction of a physical object is sufficient to render the process patent-eligible.

In relation to the claims at issue in *Bilski*, the court held that the process as claimed did not transform any article into a different state or thing. The court explained that transformations of "public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances."

The court also found that the claimed process, as a whole, was directed to the mental and mathematical process of identifying transactions that would hedge risk. However, according to the court's reasoning, this process of identifying transactions, even when coupled with the requirement in the claims that the identified transactions actually be executed, did not meet the court's transformation test for patent-eligible subject matter.

The Potential Impact of *Bilski*

The Federal Circuit refused to fashion a bright-line test for patentability (no doubt cognizant of the still fresh rebukes of the Supreme Court concerning bright-line tests in other areas of the law). As such, the *Bilski* decision does not categorically exclude the patentability of business methods. Instead, the decision attempts to clarify the framework for determining patent eligibility by providing a flexible test, although the contours of that framework may require further judicial explanation.

To some degree, the *Bilski* case presented a poor set of facts (*i.e.*, a claim that most practitioners agreed was unpatentable for a number of reasons even under the existing case law) to address issues more relevant to the manner in which many business, financial, and software-related inventions are claimed. For this reason, the *Bilski* opinion leaves many questions unanswered.

First, and perhaps most importantly, the decision does not address whether performing a process on a general-purpose computer is, as was the case under pre-*Bilski* law, sufficient to render the process patent-eligible. Thus, to the extent the processes performed on a computer do not preempt a fundamental principle from use, they are presumably still patentable. However, it is clear that this issue will receive much attention in future cases involving computer-implemented processes in which only data is transformed.

Second, if the Federal Circuit's statement regarding "a visual depiction that represents physical objects or substances" is applied literally,

then most, if not all, processes that only transform data would seem not to meet the transformation prong of the test. Moreover, the Federal Circuit affirmed prior law that data-gathering functions and insignificant post-solution activity, such as printing of a report, were insufficient to elevate a claim to patentable subject matter. However, although the Federal Circuit used several computer-related examples in reaching its decision, because the *Bilski* claims did not claim a computer, the issue of data transformation was never fully addressed.

These open questions are sure to be addressed in future decisions. For now, though, business method, software, and financial patents will continue to be sought and are likely to be obtained in various forms. The *Bilski* decision places a premium on the careful drafting of patent claims and knowledge of the "machine-or-transformation" test as formulated by the *Bilski* court, as well as relevant Supreme Court and Federal Circuit jurisprudence that remains valid in the wake of the *Bilski* decision.

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1. 149 F.3d 1368 (Fed. Cir. 1998).

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