

## ***Bilski* applied: The start of the ripple effect**

As reported in our April 2008 IP Update, the United States Court of Appeals for the Federal Circuit issued an *en banc* Order in the spring of 2008 that required the full Court to rehear the appeal of *In Re Bernard L. Bilski and Rand A. Warsaw*. In U.S. Court of Appeals practice, an *en banc* rehearing is typically granted only where a case is considered unusually important. The U.S. Court of Appeals for the Federal Circuit had expressly raised the possibility of overruling its own prior decisions on business-method patents, namely *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368 (Fed. Cir. 1998) and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999).

Oral argument in the *Bilski* case was heard in May 2008, and the eagerly awaited decision was issued on October 30, 2008 [*In re Bilski*, 545 F. 3d 843 (Fed. Cir. 2008)(*en banc*)]. The *Bilski* decision carves back the definition of patentable subject matter in the United States, thereby limiting the types of inventions that may receive patent protection. The effects of the *Bilski* decision are just starting to be seen, and in December 2008, the *Bilski* decision was used to reject claims in a biotechnology patent. This article sets out a brief history of the rise of the business-method patent in the U.S. after the *State Street* decision, and then reviews the *Bilski* decision, and its potential effects on patenting strategies in the U.S. and Canada.

### **The *State Street* Case**

The 1998 *State Street* decision, which was reconsidered by the United States Court of Appeals for the Federal Circuit, has been used since that date to support the patenting of claims in respect of the transformation of data by a machine; as well as business methods and software. The decision was controversial from the beginning, with critics pointing to the relative ease of obtaining software patents in the U.S. as compared to other jurisdictions, and the frequent issuance of U.S. patents for non-innovative ways to implement known methods using computers.

Prior to the *State Street* decision, the United States Patent and Trademark Office (USPTO) did not consider business methods to be patentable. *State Street* abolished the “business-method exception” to patentable subject matter, and held that business methods could be patentable if they could be applied to produce “a useful, concrete and tangible result” - that is, accomplish a practical application. The business method at issue in *State Street* was for a computer-based system of pooling mutual funds.

*State Street* opened the floodgates to business-method patent applications in the United States, resulting in a seven-fold increase in business-method patent application filings from 1998 to 2006. Numerous patents have been

This newsletter was prepared by members of the Intellectual Property Group at Stikeman Elliott.

**EDITOR: JUSTINE WHITEHEAD**  
jwhitehead@stikeman.com

granted for business methods, many for internet-based methods ranging from Amazon.com's "one-click" on-line ordering process to Priceline.com's on-line reverse auction for airline tickets. The *Bilski* decision could affect the validity of scores of patents issued since *State Street*.

## The *Bilski* Decision

In *Bilski*, the United States Court of Appeals for the Federal Circuit held that the test for patentable subject matter articulated in *State Street* was insufficient. It is now no longer enough for a claimed process to produce a "useful, concrete, and tangible result." Instead, the majority of the Court articulated a "machine-or-transformation test," which would restrict patenting to inventions that are either tied to a particular machine or apparatus, or that transform a particular article into a different state or thing. Furthermore, "the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity." In other words, use of the machine must play a meaningful role in the claimed method.

The test leaves some areas of ambiguity. For example, the word "article" has not been defined, and there is no discussion of the level of transformation that might be considered sufficient to meet the test. Such issues were not required to be resolved in considering the invention at issue in *Bilski*, which was a "method for managing the consumption risk costs of a commodity." The patent application described the method of hedging risk as one whereby an intermediate commodity-provider bought a commodity at a fixed price and sold the commodity at another fixed price, thereby protecting the provider from major changes in the demand and price of the commodity.

In rejecting the application, the USPTO noted that the claimed invention was not restricted to performance by machines and/or did not contain any limitation to prevent it from covering a purely mental process by individuals. The question before the Court in *Bilski* was whether the *Bilski* application was attempting to patent a fundamental principle, such as an abstract idea, or a mental process, which are examples of subject matter that had always been considered to be unpatentable.

The Court found that the claimed process "encompasses the exchange of only options, which are simply legal rights to purchase some commodity at a given price in a given time period. The claim only refers to 'transactions' involving the exchange of these legal rights at a 'fixed rate corresponding to a risk position.'" The Court confirmed that a claimed process where every step may be performed entirely in the human mind is not patentable. Such an exchange of legal rights was held not to qualify as a transformation because the transformed result is neither a physical thing nor a depiction of one. The Court made it clear, however, that the transformation does not require any underlying physical object. For example, generating a particular visual depiction of a physical object on a display using raw data qualifies as a transformation.

The Court also noted that a process involving a "physical step" might still be unpatentable if it does not involve a particular machine or apparatus. The Court declined to comment on the USPTO's position that a general-purpose computer is not considered a "particular machine," because the claimed process in the *Bilski* application did not involve any machine, even a computer. Therefore, the Court left for another day the question of whether a process that involves a general computer would suffice.

## Dissents

The majority decision in *Bilski* claims a middle ground between the poles of the dissenting opinions. Judge Mayer, in one dissenting opinion, took a very narrow view of the definition of patentable subject matter, arguing that the majority should have gone further to overrule completely *State Street Bank* and *AT&T v. Excel*. According to Judge Mayer, affording patent protection to business methods lacks statutory support and hinders innovation.

Judge Rader and Judge Newman took a much broader approach in their respective dissenting opinions. Judge Rader argued that the majority's decision relies heavily on past Supreme Court judgments that are no longer appropriate in the context of today's technology. In his view, the Federal Circuit unnecessarily and erroneously expanded on the Supreme Court's long-established principle that laws of nature, natural phenomena, and abstract ideas are excluded from patent protection, and Judge Rader was also concerned that the promotion of innovation will be limited as a result.

Judge Newman argued that the majority opinion is contrary to the statute and precedent, and a negation of the constitutional mandate because it "excludes many of the kinds of inventions that apply today's electronic and photonic technologies, as well as other processes that handle data and information in novel ways" and that have been patent-eligible in the past.

## **Bilski Applied**

On December 19, 2008, the United States Court of Appeals for the Federal Circuit mechanically applied the *Bilski* decision in *Classen Immunotherapies, Inc. v. Biogen IDEC et al.* (Fed. Cir. Dec. 19, 2008), which involved diagnostic claims in the field of life sciences. The claims at issue covered a “method of determining whether an immunization schedule affects the incidence or severity of a chronic immune-mediated disorder in a treatment group of mammals, relative to a control group of mammals” and a method of determining the optimal immunization schedule. The steps included immunizing mammals and comparing data between the two subject groups.

The district court ruled that claims to the relationship between the timing of the administration of vaccinations and the development of the disorder are unpatentable because they are claims encompassing a natural phenomenon. The appellate court affirmed this decision with a terse judgment, which consists (in its entirety) of the following:

In light of our decision in *In re Bilski*, 545 F.3d 843 (Fed. Cir. 2008) (*en banc*), we affirm the district court’s grant of summary judgment that these claims are invalid under 35 U.S.C. §101. Dr. Classen’s claims are neither “tied to a particular machine or apparatus” nor do they “transform a particular article into a different state or thing.” *Bilski*, 545 F.3d at 954. Therefore we affirm.

The Court provided no additional reasoning or explanation of *Bilski*, for example, with respect to what “transformation” means. It may be possible that the claim would be patentable if the development of the disorder was visually depicted on a diagnostic computer or if the process was tied to an apparatus in some other way.

A similar issue arises in respect of the invention claimed in *Prometheus v. Mayo*, which deals with a correlation between the amount of drug metabolite in the body and optimal drug dosage. This invention was similarly held by the USPTO to be an unpatentable natural phenomenon, and the case is currently pending review by the Federal Circuit. It will be interesting to see whether the Federal Circuit applies *Bilski* in a similar way as in *Classen*.

## **What Next?**

In light of *Bilski*, companies should review their entire U.S. patent portfolio for patents that may now be vulnerable to impeachment by competitors on the grounds that the patents encompass nonpatentable subject matter. Patents issued in the last two years may still be in the window of opportunity that would allow the filing of a reissue-patent application to include additional limitations required by the machine-or-transformation test.

The *Bilski* decision does not have a significant impact on the drafting of Canadian business method and software patents, because the law in Canada has always been more restrictive in this field than in the United States. Since the 1981 decision of *Schlumberger Canada Ltd. v. Commissioner of Patents* [(1981) 56 C.P.R. (2d) 204 (FCA)], software-related inventions have been patentable if the new software was coupled with computer hardware, even if the hardware component is nominal.

Prior to 2005, the Canadian Intellectual Property Office (CIPO) applied a fairly restrictive approach to the *Schlumberger* decision, holding that computer programs *per se* are not patentable in Canada, because they are considered to be a mere scientific principle or abstract theorem. However, Canadian patents have been granted for systems and devices that use software. In one case, the inclusion of a specific piece of conventional computer hardware, namely read-only memory (ROM), was sufficient to render the ROM that stored the novel software program patentable.

Since 2005, CIPO has loosened its interpretation of the *Schlumberger* decision. CIPO guidelines now state that for a software invention to be patentable, it must be “an act or series of acts performed by some physical agent upon some physical object and producing in such object some change either of character or condition” and “it must produce an essentially economic result in relation to trade, industry or commerce.” The requirements of “physical agent” and “change” are aspects similar to the machine-or-transformation test now applied in the United States.

The *Bilski* case is widely expected to be appealed to the Supreme Court, which may, of course, alter or set aside the Court of Appeals decision. Therefore, this may not be the last we hear of *Bilski*.

For further information, please contact your Stikeman Elliott representative, the editor, Justine Whitehead ([jwhitehead@stikeman.com](mailto:jwhitehead@stikeman.com)) or any member of our Intellectual Property Group listed on the following page.

**Stikeman Elliott's  
Intellectual Property Group:**

**OTTAWA**

Stuart C. McCormack  
smccormack@stikeman.com  
Kim D.G. Alexander-Cook  
kalexandercook@stikeman.com  
Nicole Brousseau  
nbrousseau@stikeman.com  
D. Jeffrey Brown  
jebrown@stikeman.com  
Craig Collins-Williams  
ccollinswilliams@stikeman.com  
Eugene F. Derényi  
ederenyi@stikeman.com  
Randall Hofley  
rhofley@stikeman.com  
Nicholas McHaffie  
nmchaffie@stikeman.com  
Ryan Sheahan  
rsheahan@stikeman.com  
Alexandra Stockwell  
astockwell@stikeman.com  
Vivien Tzau  
vtzau@stikeman.com  
Justine M. Whitehead  
jwhitehead@stikeman.com

**TORONTO**

Kathryn I. Chalmers  
kchalmers@stikeman.com  
Martin Langlois  
mlanglois@stikeman.com  
Nicholas Whalen  
nwhalen@stikeman.com  
Alison J. Youngman  
ayoungman@stikeman.com

**MONTREAL**

Bruno Barrette  
bbarrette@stikeman.com  
Jonathan Auerbach  
jauerbach@stikeman.com  
Marc-André Coulombe  
macoulombe@stikeman.com  
Mortimer Freiheit  
mfreiheit@stikeman.com  
Benoît Huart  
bhuart@stikeman.com

**CALGARY**

Nick J. Kangles  
nkangles@stikeman.com

[www.stikeman.com](http://www.stikeman.com)

**STIKEMAN ELLIOTT**

To subscribe or unsubscribe to this publication, please contact us at [info@stikeman.com](mailto:info@stikeman.com)

This publication provides general commentary only and is not intended as legal advice. © Stikeman Elliott LLP