

Software Patents in a Post-*Bilski* World

Over the past few months, the patent community has been abuzz about a case that seems to have created more questions than it answered. You may have even read about it in some journals. Discussion of *In re Bilski*¹ has been everywhere—and for good reason. The ruling from the Court of Appeals for the Federal Circuit has changed the landscape of business method and software patents, and businesses everywhere are taking note.

To understand the importance of *Bilski*, we must first take a brief look at the history of patent protection



for business methods and specifically software. Until 1998, when the Federal Circuit ruled in the case commonly referred to as *State Street*,² software was protected primarily by copyright law or as a trade secret. But, both copyright law and trade secret protection have their limitations and neither has provided strong legally enforceable rights to companies. Nothing in copyright law prevents a company or an individual from reverse engineering the functionality of software or creating a similar program

from the ground up. Suffice it to say that, even if you are not technically savvy and have no idea how to reverse engineer something, it's easy enough for the right person to duplicate the functionality of most programs. Similarly, protection as a trade secret can also be difficult to enforce and has its own set of limitations. The premise behind protecting a source code as a trade secret is to protect the code as a confidential

business secret. Just as KFC takes steps to protect its secret recipe of 17 herbs and spices, so too must a software company protect its source code. However, this approach simply protects the source code itself and nothing prevents others from duplicating the functionality of the software and creating their own product.

In 1998, *State Street* changed the game and opened the door for software patents by allowing for protection of business methods that had a practical application and produced a “useful, concrete and tangible result.”

Some observers would go so far as to say that *State Street* opened the floodgates for software patents because, since the time that it was decided, thousands of software

patents have been issued under the guidance provided in the ruling, including Amazon's patent for its 1-Click option.³ The ruling in *State Street* was clearly a turning point in patent law, which provided patent protection for a number of new inventions that may not have fit into the traditional idea of what constituted an invention. No longer did you need to invent a physical widget that solved a problem; now your invention could constitute a couple of lines of code that made it easier to buy an item in an online store. More important, patent protection now allowed companies to obtain protection not just for the software code but for its functionality as well.

Late last year, the world of business method patents was left in an uncertain state when the Federal Circuit handed down its decision in *In re Bilski*. Although *Bilski* failed to explicitly overrule *State Street*, the decision seems to have created just as many questions as it answered. In *Bilski*, the court was faced with determining whether a method for hedging bets and minimizing risk could be patented as a business method. All claims in the application had already been rejected by the patent examiner, and the Board of Patent Appeals and Interferences (BPAI) upheld the examiner's rejection. Both parties had determined that the transformation of financial risks was not patent-eligible subject matter and therefore could not be patented. The rejection was immediately appealed to the Federal Circuit, and on Oct. 30, 2008, the court handed down its ruling.

The court affirmed the BPAI's decision and concluded that *Bilski*'s method for hedging risks in commodities trading was simply outside the scope of subject matter that could be patented. In fact, one of the first steps taken by the court was to reject the previous *State Street* test defining the scope of patentable subject matter as that which produces a “useful, concrete and tangible result.” The court instead focused on the traditional “machine or transformation” test as the sole test for defining what is patentable, and, because the method claims of the patent did not “transform any article to a different state or thing,” the court determined that the claims were outside the scope of patent protection. But, the important question is the following: What does this actually mean for inventors trying to obtain patent protection for a software program? The exact meaning of the “machine or transformation” test is still very nebulous with regard to software or business method patents.

Although innocuous at first sight, the change in the test used to determine what a patentable method is has far-reaching consequences and has left the patent



community waiting for more guidance on the matter. The court did not expressly rule out software patents, but it did make them much more difficult to obtain. Claims must now be tied to a particular machine or apparatus or they must transform any article into a different state. The problem is that no one is really sure just what those statements mean in the context of software. An immediate concern was whether the inclusion of a computer, for example, as part of the claims for software would be sufficient to satisfy the “machine” requirement. The simple answer is that it probably doesn’t. In early 2009, the BPAI issued a non-precedential decision in *Ex parte Cornea-Hasegan*,⁴ in which the board rejected claims directed at performing a series of mathematical calculations executed by a computer processor. The BPAI stated that claiming a processor or even computer media in an application for software is insufficient in itself to satisfy *Bilski*.

The transformation aspect of the test has been no easier to define. In *Bilski*, the court provided some guidance from the *Abele*⁵ case and distinguished the patentable process of displaying X-ray attenuation data by a computer tomography scanner from the unpatentable process of displaying “variances of data from average values” without further specifying those values. The problem is that the court’s decision fails to provide much guidance with regard to what transformation actually entails. Even though the transformation in *Abele* did not necessitate an actual physical transformation, it did require the data to represent “physical objects of substances representative of physical objects or substances.” In short, even a transformation of data on the screen must be tied to a physical object in some fashion.

The post-*Bilski* world of business method patents is one of uncertainty over the future direction that case law may take. In fact, a petition for certiorari was filed

earlier this year in hopes that the U.S. Supreme Court would hear the *Bilski* case on appeal and clear up any confusion. Well, the day has come; the Supreme Court granted certiorari in *Bilski* on June 1, 2009. Although practitioners and academics are in disagreement over whether this is the “right” case to bring before the Court, the hope is that we emerge with a clearer view of what is patentable subject matter. Until that happens, no one can be sure about the future of these patents. Given the fact that patents usually take a few years to even reach an examiner, an application filed today could be written to satisfy a completely different standard than what may exist two years from now. Nevertheless, patent protection is still the most expansive type of protection available for intellectual property, and the risk associated with filing a patent application for software these days may still be worth taking. **TFL**

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Endnotes

¹*In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008).

²*State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368 (Fed. Cir. 1998).

³U.S. Pat. No. 5,960,411.

⁴*Ex parte Cornea-Hasegan*, 89 U.S.P.Q.2d 1557 (B.P.A.I. 2009).

⁵*In re Abele*, 684 F.2d 902 (C.C.P.A. 1982).

CYBERIA *continued from page 14*

collected plays of Shakespeare are hosted on Wikisource, not on Wikibooks. This project is working toward completion of several textbooks in numerous languages that the site’s founders hope will be followed by mainstream adoption and use. The project is also working on a separate series of books for children.

Wikiversity

Wikiversity (en.wikipedia.org/wiki/Wikiversity) is a center for the creation and use of free learning materials and the provision of learning activities. Wikiversity is one of many wikis used in educational contexts as well as one of many initiatives that are creating free and open educational resources. Wikiversity’s self-proclaimed primary priorities and goals are to create and host a range of free-content, multilingual learning materials and resources for all age groups in all languages and to host scholarly activities and learning projects and communities that support these materials.

The Wikiversity e-Learning model, as the site calls

it, emphasizes “learning groups” and “learning by doing.” Wikiversity’s motto and slogan is “set learning free.” Wikiversity’s learning projects include collections of wiki Web pages that focus on exploration of a particular topic. Wikiversity participants are encouraged to express their learning goals, and the Wikiversity community then—at least in theory—collaborates to develop learning activities and projects to designed to achieve those goals. However, because the project is still in its early stages, its e-Learning model is still in development.

Wikiversity resources include teaching aids, lesson plans, curricula, links to off-site resources, course notes, examples and problem sets, computer simulations, reading lists, and other learning devices created by participants, but they do not include final polished textbooks. Instead, texts are hosted at the Wikibooks site where they are updated and maintained. Learning groups with interests in each subject area create a

CYBERIA *continued on page 23*