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Here's an Idea, Why not Patent It?

A Brief Summary of the Issues and Complexities of Bilski v. Doll
BY STEVEN RUBIN

Following is a discussion of what has been characterized as the most important patent case in 50 years, now pending review before the United States Supreme Court [1]. At issue is nothing less than *what is patentable?* The Supreme Court will be deciding whether software is patentable, whether business methods are patentable and likely will make a ruling that will affect every invention that can be defined using a series of steps. As our fragile economy limps back toward recovery, the decision in *Bilski v. Doll* ("Bilski") will affect the patent monopoly incentive provided for virtually every new invention.

The Four "Doors" To Patent Protection

A brief overview of what can acquire patent protection in the United States may be helpful in understanding the issues in *Bilski*. In the United States, four "doors" must be passed in order to obtain and maintain patent protection: 1) statutory subject matter — is it the type of thing worthy of patent protection? 2) is it new to the world? 3) is it obvious in light of prior teachings? 4) have certain writing requirements been met?

Statutory subject matter is conventionally considered the first test (though there is no apparent rule of law requiring this order) that must be passed for patent protection, and the scope of that test is the subject of *Bilski*. Let me quickly cover the other three tests. *Novelty* — the invention has to be new to the world. Any teaching, publication, patent, etc. is part of the state of the art or the "prior art." If the prior art shows the claimed invention (i.e. the invention defined by the claims at the end of the patent), the prior art can bar patent protection for that invention. *Nonobviousness* — even if the claimed invention is not literally shown in the prior art, if the invention is merely an obvious modification of the prior art, then the invention is not patentable.

The fourth door has to do with certain writing requirements. The specification of the patent (everything but the claims) must define the invention so that people with

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ordinary skill in the pertinent art can practice the invention. The specification must also set forth the best way the inventor knew of for practicing the invention. Finally, the application/patent must include claims that clearly define the invention. So, aside from statutory subject matter, there are three other doors that must be passed in order to obtain patent protection. This is important because when understanding what the test should be for statutory subject matter, some tend to inappropriately import other requirements such as novelty or clarity of claims.

The first door, that of statutory subject matter, relates to the types of things that should be worthy of patent protection. The general idea here is that you cannot get a patent on an abstract concept or discovery in nature because those things are available to all people. Ideas are not patentable. Maxwell's equations, when discovered, would not be patentable. But a new application of those equations would be. Literally, the relevant statute reads as follows: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title." [2]

The *Bilski* Story

Getting back to *Bilski*, the inventor filed a patent application for an abstract process relating to energy trading. Specifically, one claim [3] recited the following:

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. [4]

The application was examined by the Patent Examiner in the Patent Office and he rejected the claim as not being directed to statutory subject matter. The inventor appealed to the Board of Patent Appeals and Interferences, which similarly rejected the claim. The Board articulated what I believe is the crux of the problem — non-machine implemented methods, because they are abstract, represent complex statutory subject matter issues.

Bilski appealed again to the Court of Appeals for the Federal Circuit — a specialty patent appellate court. That Court also rejected the claim and said that for a process to be statutory subject matter it must be 1) tied to a particular machine or 2) bring

about a transformation of subject matter. Bilski appealed the decision to the Supreme Court of the United States and the Supreme Court received briefs on the issue this summer.

Why is *Bilski* Important?

The Supreme Court will rule on whether the process in *Bilski* recites statutory subject matter and will inevitably articulate a test for processes. As you can imagine, a test that defines what processes are patentable can affect virtually every invention. Software in particular is vulnerable because it is frequently defined by a series of steps. However, most inventions, especially those in the electrical and computer science arts, can be defined with a series of steps. Must those steps be tied to a machine? Or transform subject matter? What machine? Is a general purpose microprocessor "particular" enough? What about a process performed over a network of any machines like in a "cloud"?

In light of the significant ramifications of the *Bilski* decision and the continual reduction in the value of patents by recent court decisions, the IEEE-USA Intellectual Property Committee ("IPC") agreed that the IEEE should advocate a position before the Supreme Court in the Bilski matter.

The IPC's Thoughts on a Test for Processes [5]

The IPC discussed this issue at length and decided the case was important enough to create a subcommittee focused on this issue. The subcommittee, of which I am a member, tried to articulate a proposed statutory subject matter test for processes for the Supreme Court that would appropriately represent the interests of IEEE members. This proved to be quite a difficult task.

We all agree that software and various other processes are strong drivers of innovation and the world economy. ANY limitation on such drivers will affect innovation and economic growth and lead to a reduction in skilled jobs. Clearly, that's a result which is adverse to our members' interests.

We know there is backlash against "business method" patents. However, it is perhaps impossible to distinguish a "business method" from software, especially if the business method is performed using a computer or network. Think of any business method and then add "sending the data over a network" somewhere and the business method turns into software. As a consequence, it would be disastrous to attempt to carve out, and prohibit patent protection of, "business methods," because doing so would inevitably also exclude software. Moreover, the concerns about business method patents are typically based on whether those patents are new — which is a question of novelty or nonobviousness — and are handled by other sections of the Patent Statute (35 U.S.C. §§102 and 103 respectively).

Final Thoughts

The subcommittee agreed that software should always be statutory subject matter. To that end, some proposed tests we considered for whether a process is statutory subject matter include looking at what the process acts upon — i.e. the process must act upon something physical, something that has a physical property or something

that represents something physical. However, even such tests may still include abstract processes performed by the human brain as the brain works on electrical impulses much like a computer works on voltage potentials. Should a physical transformation be required? How about requiring some machine? One prior test, which the patent appellate court abandoned, was whether there is a useful, concrete and tangible result — no one knows what those words mean. As you can imagine, any time we started a discussion of what the test should be for processes, our talk soon devolved into a philosophical discussion of what should be patentable, what is the purpose of the patent system (to promote the progress of science according to Article I, Section 8 of our Constitution), and whether the patent monopoly is a sufficient incentive for inventors to spend the time researching and inventing.

Innovation comes in ways that may be difficult to comprehend, appreciate and understand. However, because innovation is abstract and esoteric does not mean it should not be worthy of patent protection. The opposite is true. If a new technology is difficult to grasp, that likely means it is even more worthy of protection and more worthy of receiving the patent incentive for research and development.

So what is the test for whether a process recites statutory subject matter? Stay tuned...

References

[1] <http://www.law.com/jsp/nlj/PubArticleNLJ.jsp?id=1202432818872>

[2] 35 U.S.C. §101.

[3] The claims define the scope of the invention.

[4] As chairman of the local IEEE Power & Energy Society, I only recently fully appreciated the potential scope of this claim. As utilities consider moving to "smart grids" where meters on appliances and sources of alternative energy such as solar arrays and plug-in hybrid vehicles start to feed energy back to the grid, a patent on a process for energy trading may prove to be quite valuable.

[5] This section is the author's opinion of where the IEEE-USA Intellectual Property Committee (IPC) agreed and other members may differ on the statements set forth herein. This article is not intended to be a position advocated by the IPC.



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