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Brandeis' Jaffe On Frivolous Web Patents

By Ira Carnahan
Investor's Business Daily

Amazon, Priceline and other Internet companies have drawn criticism for a strategy of patenting their business models. Critics say some of the concepts under patent are too broad and unoriginal to be patented.

Amazon holds a patent for its "method and system for placing a purchase order via a communications network," according to the patent. Priceline holds a patent for its "method, apparatus and program for pricing, selling and exercising options to purchase airline tickets."

Do such patents encourage innovation or stifle it? *Investor's Business Daily* spoke with patent expert Adam Jaffe, an economist at Brandeis University.

Q&A

Adam Jaffe

- Professor of Economics, Brandeis University
- Former senior staff economist, President's Council of Economic Advisers
- Ph.D., Harvard University
- S.B. and S.M., Massachusetts Institute of Technology

IBD: *Why are some inventions patentable while others aren't?*

Jaffe: There are several criteria for patentability. One is novelty; you're supposed to be doing something that nobody has done before. Another requirement is non-obviousness, which means that someone who is skilled in the area wouldn't immediately know how to do it if he wanted to.

There's also a usefulness requirement, although that is usually fairly mild. In principle, it's supposed to be something that somebody might actually use someday, but if you look at all the patents they publish in the newspaper as a joke, you can see that this is a fairly weak requirement in practice.

IBD: *Do the criticized patents held by Amazon, Priceline and other Internet companies fit in with these criteria?*

Jaffe: The controversy is over whether they have satisfied the novelty and non-obviousness requirements. Critics claim that these are things that have been done before, or that these are things that everyone who is a programmer or a software expert or an Internet expert knows how to do.

IBD: *Do you think these concepts are legitimately patentable?*

Jaffe: It's difficult to judge without reviewing the details. For example, although one of Priceline's patents is often represented in the press as a patent on doing auctions online, the patent itself actually contains a fair amount of information about exactly how the auction is conducted and the way the software is set up to do it.

There's also a more general concern that the Patent Office, in moving into the software and Internet business methods area, is not doing as good a job as usual in making sure that patents meet the novelty and non-obviousness requirements.

IBD: *And why might that be?*

Jaffe: One reason might just be that it's a relatively new area, and when you do something new it's hard to do it really well at first. And so it wouldn't be surprising if it takes the Patent Office a little while to get really good at it.

Also, there are tens of thousands of patents granted every year, so even once they get good at it you would expect that occasionally they'll make mistakes.

There's also a more subtle argument. It's that there is something inherent about software that makes it not amenable to patenting, because every piece of software is part of a larger system and interconnected with other pieces of software. So you can never really identify the independent contribution made by a particular new kind of software.

I don't really find that argument very compelling because, in general, technology is always interdependent, and the Patent Office has always had to deal with sequences of inventions that are related to each other and build on each other.

IBD: *Some critics argue that patent examiners are issuing too many patents in this area. If they are, is it more costly to err in issuing too many patents or in issuing not enough?*

Jaffe: That's a hard question. If they are issuing too many, the cost is that the courts have to sort it out. It's costly to do that, and the uncertainty that is created because it doesn't get resolved for a few years is somewhat harmful.

What we really worry about is that by making the wrong decisions they'll slow the pace of invention or the development of new industries. But I really have seen very little evidence that that's going on.

IBD: *Should the length of patents depend on the particular type of invention?*

Jaffe: Economists have been writing about this for about 35 years.

It's easy to show that having the same length patent for different kinds of technologies with different properties is less than ideal. It's much harder to say exactly how the length should vary, and there's a general sense that varying it would introduce a lot more complexity into the system.

And it may not matter that much, because in many cases the technology becomes obsolete before the patent expires. So what determines the life of the product isn't the patent at all but the pace of technology.

IBD: *Is the number of new patents issued in the U.S. rising?*

Jaffe: It's true that the rate of patenting has increased a lot in the last 15 years, not just in software or biotechnology but across the board. And there are some people who think that's not necessarily a good thing because there will be more litigation.

But while it's true the number of patents is up, if you look at the total number issued relative to the magnitude of research and development expenditures we're still well below the level we were at in the late 1960s or early 1970s.

There was a very significant decline in patenting that has now turned around, and we've also had a very significant increase in research and development expenditures. So, the additional patents are just what you would expect from that additional R&D.