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**Patents on Business Methods**

by  
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The US Patent and Trademark Office (PTO) is granting an increasing number of patents on methods of doing business. Proponents of the trend argue it is necessary to encourage innovation in the “competitive arts,” just as patents on gadgets are necessary to foster the “industrial arts.” Critics fear that these patents constrict the use of techniques that should be available to all, and will throw sand in the gears of commerce, create patent gridlock, and inhibit rather than promote innovation.<sup>1</sup> The most dramatic recent example of a business-methods patent is that on Amazon’s “one-click” method of Internet shopping, which was upheld by the US District Court and is now on appeal to the Federal Circuit.<sup>2</sup>

**Background.** In 1980, the US Supreme Court decision in *Diamond v. Chakrabarty* made clear that “anything under the sun that is made by man” is eligible for patent protection.<sup>3</sup> In 1998, the US Court of Appeals for the Federal Circuit, the only appellate court short of the Supremes with jurisdiction over patent cases, ruled in *State Street Bank & Trust Co. v. Signature Financial Group* that business methods are within this rule.<sup>4</sup>

Experts dispute whether *State Street* was a change in the law, but they do not dispute that it encouraged patents on business methods.<sup>5</sup> The number of applications in patent class 705 (Data Processing: Financial, Business Practice, Management or Cost/Price Determination) doubled from 1,285 in FY1998 to 2,600 in FY1999. The number of business-methods patents is not overwhelming; in 1999, 600 were issued out of a total of 169,000 patents.<sup>6</sup> But the topic attracts attention and arouses anxiety out of proportion to the bare numbers because it is new, intertwined with the Internet revolution (most business patents involve software implementation), and in a state of some confusion.

Amazon’s one-click patent has received considerable attention, but others are also cited as examples of excess. As Congressman Howard Berman (D-Calif.) has noted, questions have arisen about patents granted for a method of selling music and movies in elec-

tronic form over the Internet (Pat. No. 5,191,573), a method of developing a statistical “fantasy” football game using a computer (Pat. No. 4,918,603), a method of allowing car purchasers to select options for cars ordered over the Internet (Pat. No. 5,825,651), a method of rewarding on-line shoppers with frequent-flier miles (Pat. No. 5,774,870), and an arguably very broad patent on managing secure on-line orders and payments using an “electronic shopping cart” to purchase goods on the Internet (Pat. No. 5,745,681).<sup>7</sup> [Note: All patents can now be found on the Patent and Trademark Office website, [www.uspto.gov](http://www.uspto.gov).]

**Patent criteria.** *State Street* answered only the threshold question under patent law, that innovations of this particular kind—business methods—are indeed subject to being patented. They are not to be rejected summarily by the Patent Office.

After this initial hurdle of basic patentability is cleared, the law requires that an invention meet still other criteria. It must actually exist; it cannot be an abstract thought never reduced to corporeal reality. It must be useful, which means that specific applications of the idea must be identified. It must be novel, not to be found in the prior art in its field. And it must be non-obvious to someone skilled in the art to which it pertains. PTO and the courts must also be careful in construing the patent application’s claims as to the scope of the invention, avoiding over-breadth. Nothing in *State Street* undercuts the importance of these criteria.

**Analysis.** Some experts advocate the abolition of business-methods patents. Others promote legislation that would allow them, but impose special limitations. An effort to eliminate the category “business methods” would create great confusion. These grants shade into other categories, such as patents on software, on processes, and even on physical inventions, and trying to draw lines dividing them would create a whole new litigation industry. Current problems have two basic causes, both of which are on the road to improvement.

First, any change in technology strains PTO. New skills must be brought to bear. Existing examiners must be trained or new ones hired, substantive standards and organizational structures put in place, administrative routines developed, and methods of quality control perfected. Commissioner Q. Todd Dickinson makes a persuasive case that all these steps are in train; for example, the number of examiners has jumped from 1,806 in FY1992 to 3,224 in FY1998.<sup>8</sup>

Second, some confusion has accompanied the application of the basic patent criteria of “novelty” and “non-obviousness.” In judging these factors, examiners are trained to look at previous patents and at defined bodies of technical literature. In looking for precedents for Internet-related business methods, the relevant place to look for prior art and pre-existing uses is often in the brick-and-mortar world or the obscure domain of trade secrets, or simply by a resort to common sense.

In addition, as one expert points out, in deciding on obviousness, patent examiners have blurred the distinction between the *goal* of the method and the *means* of getting there.<sup>9</sup> The Amazon patent on ordering with only one click is a good example. The desirability of attaining the goal of one-click shopping was obvious; the means by which one might get to it was not. So PTO was correct to grant a patent on the *means*, on a specific computer program that achieved the goal of one-click. But PTO erred in extending the patent to cover the *goal*, and thus precluding other companies from inventing alternative means to the obviously desirable end.

Again, however, major resources are being channeled into efforts to sort out these problems, which are susceptible to solution by correct application of existing principles. Also, most high-tech companies are both users and producers of patents, so there is considerable incentive within the community to seek a principled outcome.<sup>10</sup> There is no immediate need for Congressional action. In fact, forcing the interested parties to respond to a new statute would divert energies and retard existing efforts.

**Policy recommendation.** Congress should not enact legislation on this issue during the forthcoming session. It should closely monitor developments in the executive and judicial branches, using its oversight powers to promote progress. Congress should pay close attention to the complaints of the high-tech community, that money paid in for patent fees is being siphoned off for other purposes. Intellectual property is the lifeblood of the New Economy, and the resources necessary for effective review and definition of these property rights should be available.<sup>11</sup>

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<sup>1</sup> For a summary of the arguments for and against these patents, see *Patenting Business Methods*, White Paper of the American Intellectual Property Law Association, adopted 27 November 2000; available at [www.aipla.org/html/whitepaper2.html](http://www.aipla.org/html/whitepaper2.html). An excellent short discussion of the current state of the law can be found in John J.

Regan and John J. Butts, *Business Method Patent Litigation in an Uncertain World* (Boston: Hale & Dorr, 2000); available at [www.haledorr.com](http://www.haledorr.com).

<sup>2</sup> *Amazon.com v. Barnesandnoble.com, Inc.*, 73 F.Supp.2d 1228 (W.D. Wash. 1999).

<sup>3</sup> 447 U.S. 303, 309 (1980).

<sup>4</sup> 149 F.3d 1368 (Fed. Cir. 1998), *cert. denied*, 119 S.Ct. 851 (1999).

<sup>5</sup> Prior to *State Street*, patents were granted on business methods, but many experts considered them invalid, based on some judicial language dating back to 1908. Thus, innovators were reluctant to invest the resources necessary to obtain and enforce such patents. See Josh Lerner, *Where Does State Street Lead? A First Look at Finance Patents, 1971-2000*, National Bureau of Economic Research, Working Paper No. 7918, September 2000; available at [www.nber.org/papers/w7918](http://www.nber.org/papers/w7918).

<sup>6</sup> Statement of Q. Todd Dickinson, Commissioner of Patents and Trademarks, Before the Subcommittee on Courts and Intellectual Property, Committee on the Judiciary, US House of Representatives, 27 October 2000; available at [www.house.gov/judiciary/dick0309.htm](http://www.house.gov/judiciary/dick0309.htm).

<sup>7</sup> Statement of Rep. Howard Berman (D-Calif.), Introduction of H. R. 5364, the Business Method Patent Improvement Act of 2000, 3 October 2000; available at [www.house.gov/berman/floor100300.htm](http://www.house.gov/berman/floor100300.htm). For further examples, see Floor Statement of Rep. Rick Boucher (D-Va.) on the Business Method Patent Improvement Act, 3 October 2000; available at [www.house.gov/boucher/docs/bmpiasstatement.htm](http://www.house.gov/boucher/docs/bmpiasstatement.htm).

<sup>8</sup> Dickinson, Before the Subcommittee on Courts and Intellectual Property.

<sup>9</sup> Vincent Chiapetta, "Defining the Proper Scope of Internet Patents: If We Don't Know Where We Want to Go, We're Unlikely to Get There," paper presented at Conference on E-Commerce and the E-Quivalence, George Washington University Law School, Washington, DC, 27 October 2000.

<sup>10</sup> For further discussion of these issues, see *Patenting Business Methods*.

<sup>11</sup> Detailed information on this issue can be found in Statement of Michael K. Kirk, Executive Director, American Intellectual Property Law Association, Before the Subcommittee on Courts and Intellectual Property, Committee on the Judiciary, US House of Representatives, on Oversight Hearing on the US Patent and Trademark Office, 9 March 2000; available at [www.aipla.org/html/oversight-hearing.html](http://www.aipla.org/html/oversight-hearing.html).