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WHO'S AFRAID OF AMAZON.COM V. BARNESANDNOBLE.COM?

¶ 1 On October 2, 2000, the Court of Appeals for the Federal Circuit heard the appeal in the case of *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*¹ This appeal revolves around the alleged infringement by Barnesandnoble.com of a one-click web-shopping system patented by Amazon.com. The one-click system is among a series of recent controversial "business method" patents.² According to some, business methods are legitimate inventions that deserve the protection of the US Patent and Trademark Office (PTO). According to others, business methods are unworthy of patent protection and may inhibit innovation in e-commerce. The outcome of this case has been widely anticipated by both sides of the business method patent debate as a signal that these patents will or will not be upheld by courts.

¶ 2 This iBrief first describes the history behind business method patents, and discusses the factual and legal issues in the original patent infringement suit brought by Amazon.com against Barnesandnoble.com. This iBrief then explores three possible scenarios that might unfold after the Federal Circuit issues its opinion, and concludes that the decision will have little impact beyond the litigants because the PTO has adopted a strategy that will minimize issuance of "trivial" business method patents.

History of Business Method Patents

¶ 3 United States Patent No. 5,960,411 (the '411 patent) granted to Amazon.com is perhaps the most prominent example of the increasingly popular business method patent. These patents are granted to companies and inventors that have devised a novel technology or means of doing business via computers or the Internet.³ Other important business method patents include the online "reverse auction" strategy employed by Priceline.com, the electronic distribution of coupons employed by CoolSavings.com, and many others.⁴

¶ 4 The idea of patenting a company's way of doing business appears to be relatively new. Up until last year, the conventional wisdom was that the means of conducting a business was not patentable subject matter.⁵ Section 101 of the Patent Act requires that in order for a person to qualify for a patent, he or she must invent a "new and useful *process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.*"⁶ The Supreme Court had

interpreted this language to exclude mathematical formulas, natural phenomena, or abstract ideas from being patented,⁷ and many observers believed that this exclusion also applied to business methods. In *State Street Bank*, however, the Federal Circuit declared that, although laws of nature and mathematical formulas have been excluded from patent coverage, there is no such exception for business methods.⁸ As long as the business method meets the other requirements established by the patent statute, there is no bar on its patentability.⁹

¶ 5 Although approved by the courts, the patenting of business methods remains highly controversial. Supporters of business method patents see business methods as any other invention and believe those who have spent the time and money developing the new method of conducting business should be rewarded for their efforts just like any other inventor.¹⁰ On the other hand, critics argue that conducting common business practices on the Internet does not constitute an "invention" worthy of patenting and runs contrary to the purposes of the patent statute. According to George Washington law professor John R. Thomas, the purpose of the patent system in this country was to ensure that the British practice of giving "exclusive rights to engage even in *ordinary business activities*" did not occur in this country.¹¹

¶ 6 Second and more importantly, critics argue that allowing patents over Internet business technologies will stifle eCommerce and hurt the Internet economy. Business method patents will "restrict[] the use of some fairly simple and universal ideas, making it harder for e-commerce to flourish."¹² More adamant critics argue that "[t]hese patents amount to the ability to impose a private. . . E-Commerce Tax on all online commerce" and that it will be "impossible to run a viable e-business" in light of these patents.¹³

¶ 7 In spite of the critics' outcries, more and more businesses continue to seek the protection offered by patenting their business methods. In fact, the PTO granted over three hundred business method patents last year, as compared to only one in 1995.¹⁴

The Case in the District Court

¶ 8 The '411 patent describes a method by which customers can purchase an item displayed online by using only "a single action such as clicking mouse button."¹⁵ In the District Court case, Amazon.com alleged that Barnesandnoble.com's Express Lane feature, which allowed registered customers to purchase products by pressing a button labeled "Buy it now with just 1 click," violated its patent on one-click shopping methods.¹⁶ Amazon.com moved for a preliminary injunction stopping Barnesandnoble.com from using the one-click technology.

¶ 9 Although it asserted other defenses, Barnesandnoble.com raised two important defenses to the infringement action: (1) that the '411 patent was invalid under 35 U.S.C §103 because one-click shopping was an obvious improvement over the prior art, and (2) that the '411 patent was invalid under 35 U.S.C §102 because all the invention's elements had been anticipated by the prior art.

¶ 10 In determining whether the '411 patent was anticipated by the prior art, the District Court examined several shopping technologies cited by Barnesandnoble.com, including Dr. John Lockwood's Web Basket, the Netscape Merchant System, Oliver's Market, U.S. Patent No. 5,708,780 (the '780 patent), and the CompuServe Trend system.¹⁷ After analyzing all of the teachings of the prior art cited by Barnesandnoble.com, the court found that none of the prior art anticipated or delineated the one-click shopping technology of the '411 patent. All of the references taught a means for purchasing online, but none consummated the transaction with only one click. Thus, the court found significant differences between the prior art and the claims of the '411 patent, and the '411 patent was held not to be invalid under 35 U.S.C §102.

¶ 11 The court also held that the level of ordinary skill in Internet commerce would not have made a one-click shopping method obvious. In reaching this conclusion, the judge gave great weight to the damaging testimony of Dr. John Lockwood, Barnesandnoble.com's own expert. Dr. Lockwood testified that although he was familiar with Web Basket and other online purchasing programs, it had never occurred to him to include a means for single-action ordering despite the fact that such a modification in the software would be easy to implement. According to the court, "[t]his admission serves to negate Dr. Lockwood's conclusory statements that prior art references teach to one of ordinary skill in the art the invention of the '411 patent."¹⁸ The court also found compelling objective evidence of nonobviousness in the fact that one-click shopping was commercially successful and had been copied by many other websites.¹⁹

¶ 12 Finally, the district court granted Amazon.com's motion for a preliminary injunction, ruling that Amazon.com had demonstrated that they could prove infringement,²⁰ that Amazon.com would suffer irreparable harm if the motion was not granted,²¹ that the balance of hardship fell in Amazon.com's favor,²² and that the public interest would be best served by enforcing Amazon.com's presumptively valid patent.²³

Possible Outcomes of Amazon.com v Barnesandnoble.com

¶ 13 Already, the controversy between Amazon.com and Barnesandnoble.com has created a great deal of press, and it is likely that a decision from the Federal Circuit will generate further

media attention. But once the dust has settled, what affect will the decision have on Internet companies and investors? In this section, we present three scenarios: (1) an Amazon.com victory significantly harms the Internet business community; (2) an Amazon.com victory has no effect on Amazon.com or other Internet business; and (3) a Barnesandnoble.com victory harms Amazon.com but has almost no impact on other businesses on the Internet. Although we do not claim to own a crystal ball, we believe that the latter scenario is the most likely outcome because of recent strategic changes at the PTO.

Outcome #1: A Victory for Amazon.com Would Ill Serve the Internet

¶ 14 Perhaps the favorite pronouncement from commentators is that a victory for Amazon.com would drastically stifle innovation on the Internet. The typical argument proceeds as follows. Upholding Amazon.com's patent would effectively allow Amazon.com to control the use of one-click shopping on the Internet. Giving control of such a basic function to a private company reduces the number of building blocks available to website developers. As a result, future inventors will have a more difficult time developing novel innovations because they will not be able to access desperately needed tools.²⁴ Moreover, these exclusive rights translate into higher prices for consumers, which could affect consumer spending on innovative products, and, consequently, inhibit innovation.²⁵

¶ 15 The fact that many innovations on the Internet are made by small, start-up companies only exacerbates these problems.²⁶ Start-up companies do not have the capital necessary to research or challenge these patents.²⁷ Moreover, companies without significant patent portfolios will have to pay cash to access patented technology, whereas large companies with correspondingly large patent portfolios enter into non-monetary cross-licensing agreements. This hidden cost within the high-tech economy primarily falls on small companies. One critic believes that such licensing agreements based on patents allow the "[t]he big players . [to] consolidate and create barriers to entry for the new players."²⁸

¶ 16 Finally, a victory for Amazon.com may actually force some companies to shut down. In the United States, patent applications are currently kept secret until the patent is issued, a process that may take several years.²⁹ This means that an Internet company, which fought to establish a market, could be faced with the daunting prospect of a patent being issued several years later, permitting a competitor to shut down the company.³⁰ These potential problems could take time and money away from innovation and further chill risk-adverse innovators.

Outcome #2: A Hollow Victory for Amazon.com

¶ 17 Another possible outcome is that, despite all of the hoopla described above, a victory for Amazon.com may simply be hollow and of no consequential value. This contrarian point of view finds support in the patent claim language, as interpreted by the District Court, which leaves adequate room for Amazon.com's competitors to create their own "one-click" shopping methods. For example, the term "single action" is defined by the District Court as "one action (such as clicking a mouse button) that a user takes to purchase an item once the following information is displayed to the user: (1) a description of the item; and (2) a description of the single action the user must take to complete a purchase order for that item."³¹ Any other "one-click" shopping method that does not meet the description display requirement, however, may be permitted in the court's definition of "single action." A page that does not describe the action that a user needs to take, but instead substitutes a button with a suggestive name that encourages the consumer to buy the displayed item, would not infringe under the court's definition.

¶ 18 In addition, the court's definition of single action is ambiguous. The court's definition of single action gives the example of clicking a mouse button,³² but does not state what other types of actions still count as a single action. Although one might assume that a double click on an ordering icon or moving the mouse on the screen to click an ordering icon would still count as a single action, there is no explicit inclusion of these items in the court's definition. The court's examination of prior art suggests that the court intended to base the definition of "one-click" shopping on the number of steps that a user takes to complete a purchase,³³ but its construction of the claim also supports other interpretations of single action.

¶ 19 In summary, if the Federal Circuit simply upholds the lower court's opinion, it allows adequate room for "one-click" ordering systems in the future. Amazon.com would have earned a monopoly right protecting its unique patent system, but its patent may not provide complete control over "one-click" ordering systems.

Outcome #3: What if Barnesandnoble.com wins? A Sea-Change or the Final Tide?

¶ 20 Although many Internet users and developers may be highly satisfied if the Federal Circuit finds the preliminary injunction against Barnesandnoble.com to have been improvidently granted,³⁴ the decision itself will not likely have any lasting impact on the Internet and eCommerce. Changes in strategy adopted by the PTO towards business method patents will be a more significant engine for change.

¶ 21 Without a doubt, a clear victory for Barnesandnoble.com will almost certainly cause Amazon.com's stock to plummet. Although to date Amazon.com has not had a single profitable month, investors have supported the company because of Amazon.com's perceived advantage, as first-mover, in fending off the competition. If this critical portion of Amazon.com's intellectual property is held invalid, Amazon.com will look even more vulnerable and over-priced.³⁵ Similarly, other controversial web-based patents (and their patent holders) might look like attractive targets for would-be infringers.³⁶

¶ 22 Regardless of the aforementioned repercussions, however, the revolution has already begun. The PTO has recently issued two documents on web-based business method patents.³⁷ Perhaps the most interesting article has as its conclusion nineteen detailed descriptions of computer implemented business method patents, sixteen of which are deemed properly rejected.³⁸ As a result, the PTO appears to have developed a protocol for analyzing and combining prior art such that e-commerce patents are already significantly more difficult to obtain.

¶ 23 But what impact will this have on already issued business method patents? In principle, patent holders already have something to fear. Under §§ 301-307 of the Patent Act, outside parties have the right to submit prior art (either issued patents or printed publications) to the PTO and request a re-examination of a patent. If the PTO determines that new issues of patentability have been raised, then an issued patent will be re-examined. In such a proceeding, claims in an issued patent could be found invalid and unpatentable. As a result, the patent holder would no longer be able to exclude others from practicing the invention. In combination with the PTO's new strategy on business method patents, patent re-examination could have a more significant impact than any victory for Barnesandnoble.com.

Conclusion

¶ 24 This iBrief has presented an overview of the patent infringement dispute between Amazon.com and Barnesandnoble.com. The central controversy of this case has been whether Amazon.com's patent claims to one-click shopping should be held invalid because of being legally obvious or anticipated at the time of their invention. Many commentators have predicted the end of eCommerce if the Federal Circuit holds that the claims are valid, and as a result, these commentators have pled for a victory for Barnesandnoble.com.

¶ 25 Regardless of how the Federal Circuit may rule, we conclude that the dispute between Amazon.com and Barnesandnoble.com may be more interesting from an historical

perspective (as one of the initial court battles over control of the Internet) rather than a legal perspective. The impact of any decision by the Federal Circuit will likely be fleeting, and then only on the combatants themselves, because changes in patent law and policy have already conspired to correct many of the problems.

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Footnotes

1. The Federal Circuit has not yet issued its final opinion in the case. To view the current docket for the Federal Circuit, go to <http://www.fedcir.gov/calendar.html> (last visited Feb. 6, 2001).

2. Shortly after the district court granted the injunction, the Federal Circuit issued a temporary stay pending receipt and consideration of Amazon.com's response. However, the Federal Circuit lifted the stay several days later and Barnesandnoble.com was precluded from using one-click shopping during the busy holiday seasons. See Matthew Bernstein, *One Click. Two Click: The Litigation of Internet Business Method Patents: Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, at http://www.gcwf.com/articles/ipu/ipu_sum00_1.html (last visited Feb. 6, 2001).

3. See Scott Thurm, *It's the Patent - and Critics Say it Threatens to Undermine the Very Nature of the Internet*, at <http://www.e-centives.com/corp/nw041700.html> (last modified April 17, 2000).

4. See *id.*

5. See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *cert. denied* 525 U.S. 1093 (1999).

6. 35 U.S.C §101 (1994) (emphasis added).

7. See *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

8. See *State Street Bank*, 149 F.3d at 1375.

9. See *id.*

10. See Thurm, *supra* note 3.

11. John R. Thomas, *The Patenting of the Liberal Professions*, 40 B.C. L. REV. 1135, 1185 (1999) (*quoting* *In re Shao Wen Yuan*, 188 F.2d 377, 380 (CCPA 1951)).

12. Thurm, *supra* note 3.

13. *No Web Patents*, at <http://www.nowebpatents.org> (last visited Feb. 6, 2001). In response to the Amazon.com patent, numerous groups have formed websites such as *No Web Patents* and *No Amazon.com*, at <http://noamazon.com> (last visited Feb. 6, 2001) to boycott and protest the patent. See Jesse Berst, *How Patent Attorneys are Stealing Our Future*, ZDNet, at http://www.zdnet.com/anchordesk/story/story_4364.html (Jan. 18, 2000); James Gleik, *Patently Absurd*, THE NEW YORK TIMES MAGAZINE, March 12, 2000, available at http://courses.cs.vt.edu/~cs3604/lib/Copyrights.Patents/Patently_Absurd.htm (last visited Feb. 6, 2001).

14. See Thurm, *supra* note 3.

15. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 73 F. Supp.2d 1228, 1236 (W.D. Wa. 1999).

16. See *id.*

17. See *Amazon.com*, 73 F. Supp.2d at 1233-35. Web Basket is a system that requires users to accumulate items into a virtual shopping basket and to check these items out when they are finished shopping. The Netscape Merchant System describes a shopping cart ordering model where a user places an item into their cart, sends the information to the merchant's computer, and reviews the checkout information to complete the transaction. Oliver's Market is a system where a user adds an item to their shopping cart, prompts the user to specify time and mode of delivery, and indicate when the user is done shopping. The '780 patent is entitled Internet Server Access Control and Monitoring System, and describes a system for controlling user access to web documents within a particular domain. Finally, the CompuServe Trend System is a non-world wide web application that allows subscribers to obtain stock charts.

18. *Id.* at 1235.

19. *Id.* at 1242 ("The commercial success of the invention, the failure of others to solve the problem addressed by the patented invention, and the fact that the [invention] has become the industry standard is compelling objective evidence of the nonobviousness of the claimed invention") (*quoting* Hayes Microcomputer Prod, Inc. v. Ven-tel, Inc., 982 F.2d 1527, 1540 (Fed. Cir. 1992)).

20. *See id.* at 1245.

21. *See id.* at 1237-38.

22. *See id.* at 1248 ("The court must weigh the threatened injury to the patent holder if injunctive relief is not granted against the injury to the accused infringer if the preliminary injunction is granted").

23. *See id.* at 1249.

24. *See* James Gleick, *Patently Absurd*, THE NEW YORK TIMES MAGAZINE, March 12, 2000, available at http://courses.cs.vt.edu/~cs3604/lib/Copyrights.Patents/Patently_Absurd.htm (last visited Feb. 6, 2001).

25. *See id.*

26. The State Street case, along with Priceline.com and Amazon.com cases, have led to a 700 percent increase in the number of business method patents application filings, according to the National Law Review. *See Business-method Patents Take on Prominence in Battle for Internet Dominance*, PR Newswire, August 1, 2000.

27. *See* Gleick, *supra* note 25.

28. *See* Maria Seminerio, *Are Pending Patents Stifling Web Innovation? Industry Trend or Event?*, PC WEEK, April 17, 2000.

29. Recent changes in the patent law, which will take effect on November 29, 2000, will partially obviate this problem. Under the new law patent application will generally be published within 18 months after being filed in the PTO. *See* American Inventors Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501 §4502 (to be codified as amended in 35 U.S.C. §122(b)).

30. See *Seminerio*, *supra* note 29.

31. *Amazon.com*, 73 F. Supp. at 1244.

32. See *id.*

33. See, e.g., *id.* at 1239 (describing the Web Basket system as requiring five separate actions to complete an order, not one).

34. The widespread and sometimes caustic criticisms have not been confined to Jeff Bezos and Amazon.com, but have also spread to the PTO and patent lawyers in general. See, e.g., Richard Stallman, *Boycott Amazon!*, at <http://linuxtoday.com/stories/13652.html> (last modified Dec. 22, 1999) (listing the more than 250 comments sent in response to Linux Guru Richard Stallman's call for a boycott of Amazon.com); Hiawatha Bray, *Click Here for a U.S. Patent*, at <http://www.digitalmass.com/columns/software/0103.html> (last visited Feb. 6, 2001) (criticizing the PTO and patent lawyers).

35. For Amazon's stock quote and research summary, see <http://biz.yahoo.com/z/a/a/amzn.html> (last visited Feb. 6, 2001).

36. See, e.g., Jeffrey A. Berkowitz, *Business Method Patents: Everyone Wants to be a Millionaire*, 609 PLI/Pat 7, 32-37 (June 2000) (describing some of the more important recent e-commerce-based patent litigation, including *Network Engineering Software v. eBay*; *Coolsavings v. Online "Coupon" Distributors*; *Priceline.com v. Microsoft*; and *DoubleClick Inc. v. L90 Inc.*).

37. The *White Paper on Automated Financial or Management Data Processing Methods (Business Methods)* and *Formulating and Communicating Rejections under 34 U.S.C. 103 for Applications Directed to Computer-Implemented Business Method Inventions* can be found at <http://www.uspto.gov/web/menu/busmethp/index2.htm> (last visited Feb. 6, 2001)

38. For example, in Example 2 the PTO describes a claimed invention for a remote banking system that allows a bank's customers to make standard banking and investment transactions via the Internet. The prior art consists of two software packages - Remote Banking and Remote Investing - and an article that describes how conventional banks are now allowing customers to make both banking and investment decisions in face to face transactions. The PTO then describes how combining the software with conventional banking practices makes the claimed

invention obvious and thus unpatentable.