

UIC John Marshall Journal of Information Technology & Privacy Law

Volume 20
Issue 3 *Journal of Computer & Information Law*
- Spring 2002

Article 2

Spring 2002

An "Opposition" to the Recently-Proposed Legislation Related to Business Model Patents, 20 J. Marshall J. Computer & Info. L. 397 (2002)

Gregory J. Maier

Thomas J. Fisher

Philippe J. C. Signore

Follow this and additional works at: <https://repository.law.uic.edu/jitpl>



Part of the [Computer Law Commons](#), [Internet Law Commons](#), [Privacy Law Commons](#), and the [Science and Technology Law Commons](#)

Recommended Citation

Gregory J. Maier, Thomas J. Fisher & Philippe J.C. Signore, An "Opposition" to the Recently-Proposed Legislation Related to Business Model Patents, 20 J. Marshall J. Computer & Info. L. 397 (2002)

<https://repository.law.uic.edu/jitpl/vol20/iss3/2>

This Article is brought to you for free and open access by UIC Law Open Access Repository. It has been accepted for inclusion in UIC John Marshall Journal of Information Technology & Privacy Law by an authorized administrator of UIC Law Open Access Repository. For more information, please contact repository@jmls.edu.

AN “OPPOSITION” TO THE RECENTLY-PROPOSED LEGISLATION RELATED TO BUSINESS METHOD PATENTS¹

GREGORY J. MAIER,[†]
THOMAS J. FISHER & PHILIPPE J.C. SIGNORE^{††}

I. INTRODUCTION AND BACKGROUND

The *Business Method Patent Improvement Act of 2001* (“the Act”),² introduced by Congressmen Berman and Boucher in the House of Representatives illustrates the ongoing legislative effort³ to change patent laws in reaction to criticism against the patent system in general and, more particularly, against the issuance of patents covering methods of doing business. This paper reviews the history of the business method exception to patentability and the events that led to the recent newsworthiness of patents for methods of doing business. The article then examines the real versus the perceived problems with business method patents, and acknowledges that the real problem is the lack of availability of relevant prior art during the examination process. This is a com-

[†] Gregory J. Maier is a managing partner in the law firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. in Alexandria, Virginia and is the past Chairman of the ABA Section of Intellectual Property Law.

^{††} Thomas J. Fisher and Philippe J.C. Signore are senior associate attorneys in the electrical/mechanical and litigation practice groups of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. The opinions expressed herein are solely those of the authors and do not represent those of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. or the ABA. The authors wish to thank Katherine Franke, a third year student at Washington University School of Law in St. Louis, Missouri, for her help in preparing this article.

1. This paper was written during the 107th Congress while both H.R. 1332 and H.R. 1333 were pending. At the time of publication, counterparts to H.R. 1332 and H.R. 1333 had not been introduced into the 108th Congress.

2. H.R. 1332, 107th Cong. (2001). The Act updates the *Business Method Patent Improvement Act of 2000*, H.R. 5364, 107th Cong. (2001).

3. See also *Patent Improvement Act of 2001*, H.R. 1333, 107th Cong. (2001); H.R. RES. 110, 107th Cong. (2001); *Patent Reexamination Enhancement Act of 2001*, H.R. 1866, 107th Cong. (2001); H.R. 1886, 107th Cong. (2001); and H.R. 2231, 107th Cong. (2001).

mon problem with patents in many areas of technology, and particularly with patents in developing technologies. The article then considers whether a legislative solution to these problems is warranted and argues that, in light of previous efforts to legislate patent laws by reaction in other fields of technology, Congress should proceed with caution and not carve out an exception for business method patents, or any other technology for that matter. The article then supports the Act's proposed post-issuance opposition procedure (as applied to all patents) because it directly tackles the problem related to the unavailability of relevant prior art. Finally, the article identifies provisions of the Act which discriminate against business method patents, contrary to fundamentals of patent law.

II. HISTORY OF THE BUSINESS METHOD EXCEPTION IN PATENT LAW BEFORE THE *STATE STREET* *BANK CASE*

The business method exception originated from earlier rules that disallowed "printed matter" and "business methods" from being patented.⁴ For instance, a party attempting to get patents for new business forms was rebuked in *United States Credit*,⁵ where the court concluded that any ingenuity involved in the new business forms originated from the uniqueness of the transactions with which they were involved.⁶

The business method exception was centered on the notion that ideas could not be patented, and a method of doing business was merely an idea.⁷ The court relied on this very concept as the basis for its holding in *Hotel Security Checking Co. v. Lorraine Co.*, widely recognized and cited as the case that originated the business method exception.⁸ In that case, the patent in question was for a system that used slips to keep track of dinner tickets to ensure that waiters were not stealing money.⁹ The court held that the claims were not directed to patentable subject matter because "a system of transacting business disconnected from the means for carrying out the system is not, within the most liberal inter-

4. Claus D. Melarti, *State Street Bank & Trust Co. v. Signature Financial Group, Inc.: Ought the Mathematical Algorithm and Business Method Exceptions Return to Business as Usual?*, 6 J. Intell. Prop. L. 359, 362-63 (Spring 1999).

5. *Id.* (citing *U.S. Credit Sys. Co. v. Am. Credit Indem. Co.*, 59 F. 139 (2nd C.C. 1893)).

6. *Id.* (citing *U.S. Credit Sys. Co.* at 143).

7. Colin P. Marks, *Opening the Door to Business Methods: State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 37 Hous. L. Rev. 923, 935 (Fall 2000).

8. *Hotel Sec. Checking Co. v. Lorraine Co.*, 160 F. 467 (2nd C.C. 1908).

9. *Id.* at 467.

pretation of the term, an art."¹⁰ Subsequent cases followed suit, rationalizing that ideas, with which business methods were equated, could not be patented.¹¹ Eventually, the business method exception became a judicially-recognized category of non-statutory subject matter.¹² It was understood that ideas alone could never incorporate the inventive essence necessary to be regarded as patentable subject matter.¹³

Since a business method was held not to be an art, a business method claim could be patentable only as part of an apparatus or system for carrying out the business method.¹⁴ Subsequent cases consistently held that an apparatus for carrying out a method of doing business could meet the statutory requirements of patentability, but the method itself could not.¹⁵

III. THE DEMISE OF THE BUSINESS METHOD EXCEPTION TO PATENTABILITY

A. THE *STATE STREET BANK* CASE

In recent years, courts began to realize that the business method exception was superfluous to statutory requirements for patentability.¹⁶ The courts clarified and limited the exception by holding that a patentable claim could be business-related, so long as it was directed to otherwise patentable subject matter.¹⁷ Furthermore, the exception was losing its usefulness since, in the new economy of high technology, the differ-

10. *Id.* at 469. The patent laws are derived from Article I, Section 8, of the United States Constitution, which grants Congress the power to "promote the Progress of Science and useful Arts." *Id.*

11. *Loew's Drive-In Theatres v. Park-In Theatres*, 174 F.2d 547, 551, (1st Cir. 1949). The plaintiff in this case had a patent for a system and means of aligning cars at a drive-in movie theater. *Id.*; *Application of Chatfield*, 545 F.2d 152 at 157 (Cust. & Pat. App. 1976). The patent application in question was for a computerized system. *Id.*

12. *Ex parte Murray*, 9 U.S.P.Q.2d 1819, 1820 (P.T.O. Bd. Pat. App. & Int. 1988). Patent application was for a paper accounting system that would aid business analyses. The court distinguished *Paine, Webber, infra* n. 16, by noting that the court there was dealing with an apparatus claim. *Id.*

13. *Loew's Drive-In Theatres*, 174 F.2d at 551; *In re Wait*, 73 F.2d 982 at 935, (C.C.P.A. 1934). Application for a patent for giving publicity to sales and receiving offers and acceptances was denied. *Id.* at 551, 983.

14. Marks, *supra* n. 7, at 935.

15. *Ex parte Murray*, 9 U.S.P.Q.2d at 1821; *In re Patton*, 127 F.2d 324, 327 (Cust. & Pat. App. 1942); *In re Wait*, 73 F.2d at 983; *Loew's Drive-In Theatres*, 174 F.2d at 552.

16. *Paine, Webber, Jackson & Curtis, Inc. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 564 F. Supp. 1358, 1369 (D. Del. 1983) The apparatus at the center of the claim was a computer program which had as a product a business service. *Id.*; see also *In re Schrader*, 22 F.3d 290, 296-99 (Fed. Cir. 1994) (Newman, J. dissent being cited); *Application of Chatfield*, 545 F.2d at 158.

17. *Paine, Webber*, 564 F. Supp. at 1369.

ence between methods and means claims was beginning to blur.¹⁸

The patent laws have built-in protections against issuing undeserving patents as technologies develop. For example, 35 U.S.C. §112, first paragraph requires that an invention be described sufficiently so as to enable a person of ordinary skill in the art to make and use the invention. This requirement prevents a mere "idea," unsupported by available technology, from being patented. As technology evolves, what was once merely an "idea" may evolve into a useful "system" through the application of a new technology making it deserving of patent protection. Also, the standard of obviousness precludes from patenting that which "would have been obvious *at the time the invention was made* to one of ordinary skill in the art."¹⁹ This requirement prevents obvious variants of already known technology from being patented. As technology evolves, what was once a non-obvious variant (e.g., computerization of a known method) may evolve into an obvious one making it non-patentable. The long-standing patent laws, as written, contemplate these evolutions and, when the standards are applied correctly, prevent the unwarranted patenting of systems and methods.

Court majorities and one strong dissenting opinion, seemingly recognized this built-in feature of the patent laws, and commenced the demise of the business method exception by relying on the statutes alone to govern what was patentable subject matter.²⁰ Courts also construed past cases that upheld the business method exception as having been decided on grounds of obviousness or lack of novelty.²¹ Stated differently, courts were intimating that the business method exception had never become precedent.

This understanding was made explicit with the 1998 Court of Appeals for the Federal Circuit ("CAFC") decision of *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*²² ("*State Street Bank*"). In this case, the court considered a claim directed to a data processing machine for managing financial services.²³ The court held that there was no "business method" exception, and never had been, again asserting that previous decisions were decided on other grounds found in the statutes, such as obviousness or lack of novelty.²⁴ The majority in *State*

18. *In re Schrader*, 22 F.3d at 298.

19. 35 U.S.C. §103(a) (2000) (*emphasis added*).

20. *Paine, Webber*, 564 F. Supp. at 1369; *In re Howard*, 394 F.2d 869 (C.C.P.A. 1968); *In re Schrader*, 22 F.3d at 298 (the dissenting opinion wanted to apply the statutes only); *Application of Chatfield*, 545 F.2d at 158.

21. *In re Schrader*, 22 F.3d at 298.

22. *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1370 (Fed. Cir. 1998).

23. *Id.* at 1371.

24. *Id.* at 1375.

Street Bank relied on Congressional intent and the 1952 Patent Act in justifying its ruling, which was applicable to all patent applications, not just those for machines.²⁵ The business method exception was determined never to have existed.

The exception, or lack thereof, was put to rest for several reasons. First, courts had been leaning toward a liberal construction as to what was patentable subject matter, seeking to encourage inventions.²⁶ Courts had done so after interpreting Congress' intent in passing 35 U.S.C. § 101 as being in agreement with such liberal construction.

Also, new advances in technology had led to a reshaping of business methods. With the advancement of computer technology came new possibilities for automating business methods. The automation of business methods made the apparatuses for carrying them out more tangible, and therefore, more likely to satisfy the statutory requirements of patentable subject matter.²⁷ This development had been recognized by the United States Patent and Trademark Office ("PTO"), which published its 1996 Manual of Patent Examining Procedure ("MPEP") without referring to the business method exception language that had been included in previous editions.

B. *STATE STREET BANK* PUTS PATENT LAW ONTO THE FRONT PAGES

Prior to *State Street Bank*, the complexity of patent law rendered it an infrequent topic of coverage in the popular press. Subsequently, however, high-profile cases asserting business method patents plucked patent law from the specialized legal journals and spread it across the front pages of the popular press.

As the Internet boomed and "brick-and-mortar" business models gave way to e-commerce business models, patent application filings related to these Internet-enabled businesses boomed.²⁸ Patents began to issue, and then the inevitable happened - the patents were asserted. The Internet was already part of mainstream society. Perhaps the defining moment in the frenzy surrounding patents, the Internet, and "business methods" was in 1999 when Amazon.com asserted its "one-click" patent against Barnesandnoble.com.²⁹

25. *Id.* at 1373-75.

26. Marks, *supra* n. 7, at 944-45.

27. D.S. Chisum, *Chisum on Patents* vol. 1, § 1.03[5] (Matthew Bender 1978, as updated Aug. 2002).

28. U.S. Pat & Trademark Off. <http://www.uspto.gov/we/menu/pbmethod/application_filing.htm> (filings in Class 705 have increased from 330 in 1995 to over 8000 in 2001) (accessed Aug. 30, 2002).

29. See *Amazon.com v. Barnes & Noble.com*, 73 F. Supp. 2d 1228, 53 U.S.P.Q.2d 1115 (W.D. Wash.1999); *vacated*, 239 F3d 1343, 57 U.S.P.Q.2d 1747 (C.A.F.C. 2001); see also *Temporary Injunction a Click for Amazon*, L.A. Times, Business C3 (Dec. 3, 1999).

This case involved two of the most successful Internet businesses, both household names. The subject matter of the patent was easy to comprehend even for those not familiar with patent law.³⁰ It dealt with purchasing a product over the Internet through a single mouse click. What's more, Amazon.com was issued a preliminary injunction (indicating that the court found a strong likelihood that the patent was valid) to enjoin Barnesandnoble.com from further use of its accused technique for purchasing products.

Other cases that made the headlines of the popular press include *AT&T v. Excel Communications Inc.* in which AT&T sued Excel for infringing a patent that protected a method for adding a field to a telephone call record for use by a billing system.³¹ The court held that, since the AT&T method produced a "useful, concrete, and tangible result," the invention was patentable.³² In another high-profile case, Priceline.com sued Microsoft for infringing its patent covering methods for performing reverse auctions that had become a popular use of the Internet.³³ In the Coolsavings.com cases, this online coupon distributor sued competitors for infringing a patent entitled "Interactive Marketing Network and Process Using Electronic Certificates."³⁴ In a more controversial case, British Telecom seeks royalty payments for its U.S. Patent No. 4,873,662 covering hyperlink technology.³⁵ Clearly, these cases illustrate that patent law was dealing in more and more interesting areas, at least as it was perceived by the now Internet-crazed public.

Based on these cases and others, those who were not on notice regarding the potential use of patents in the new world of the Internet, now were. The popular press began to cover stories of criticism of the PTO for granting these patents.³⁶ Factions of the software community supporting open source software initiatives were appalled, taking the position that these patents would stop innovation, not promote it. They would express their concerns to whomever would listen. Legal academics weighed in as well, not only challenging the patentability of business

30. See U.S. Patent 5,960,411.

31. *AT&T v. Excel Comm. Inc.*, 172 F.3d 1352, 1354, 50 U.S.P.Q.2d 1447 (Fed. Cir. 1999), cert. denied 120 S. Ct. 368 (1999).

32. *Id.* at 1361, 50 U.S.P.Q.2d at 1454.

33. See e.g. W. Scott Petty, *Aggressive Pursuit of Internet Patents Leads to Litigation*, Intellectual Property Today 46 (May 2001).

34. Roger O. Crockett, *E-coupons Take a Cut at Each Other*, Business Week 10 (Dec. 13, 1999).

35. See W. Scott Petty, *Can BT Successfully Stretch Hyperlink Patent Claims with a 'Central' Computer to Cover the Internet?*, Intellectual Property Today 21 (Apr. 2002) (citing Civ. No. 00 9451 (CM) S.D.N.Y.).

36. The authors wonder if the Internet itself, and its unparalleled ability to disseminate information provided the fuel to make Internet-related patents more newsworthy than they perhaps otherwise would have been.

methods, but also questioning the patent system as a whole as to its ability to “keep up with the pace of change.”³⁷

C. THE SIGNIFICANCE OF THE *STATE STREET BANK* DECISION

So what made *State Street Bank* such an interesting case? The CAFC and the PTO were already in agreement that software inventions were patentable subject matter. The PTO had already rewritten their Manual of Patent Examining Procedure to remove the reference to a business method exception. The court in *State Street Bank* even went so far as to state the “the business method exception has never been invoked by this court, or the CCPA, to deem an invention unpatentable.”³⁸

Did *State Street Bank* make new law in the area of software patents? No - it was in line with the decisions leading up to it regarding software patents.

Did *State Street Bank* make new law in the area of business method patents? No - it merely disposed of a judicially-created exception, which the court explained had never been applied (or, for that matter, created) anyway.

So why did such an arguably predictable case initiate such a maelstrom around patent law, bringing it to the front pages of the legal, business, and popular media? One word . . . timing. As discussed in the previous section, *State Street Bank* came at a time when the Internet's popularity exploded, becoming a favorite medium of expression, a place of unparalleled efficiency for exchange of information, and a favorite topic of conversation. This “Wild West” of the information age offered new markets, new opportunities for commerce, and new sources of intellectual property. Naturally, the divergent interests created conflicts among the pioneers and the Internet became a legal battleground. Some uninformed commentators, who missed the old days of this e-Gold Rush, declared the *State Street Bank* decision as the culprit.

In reality, the *State Street Bank* decision is of little legal significance. It merely made explicit what was already implied. The only

37. Lawrence Lessig, *Patent Problems, The Industry Standard* (Jan. 21, 2000) <<http://www.thestandard.com/article/display/0,1151,8999,00.html>> (accessed Oct. 10, 2002). In light of the discussion herein regarding the background of “business method patents,” the authors disagree with Professor Lessig's statements that business method patents were “discovered by a federal court in 1998” and that “this new monster was called forth from an old statute, reinterpreted by the Federal Circuit.” *Id.* at ¶¶ 6, 8. Furthermore, the authors do not agree that the technologies behind the development of the Internet are sufficiently different from other technologies that have developed under the current patent system to warrant excepting Internet-related inventions from patentability.

38. 149 F.3d at 1375 (citing Rinaldo Del Gallo, III, *Are 'Method of Doing Business' Financially out of Business as a Statutory Rejection?*, 38 IDEA: J.L. & Tech. 403, 435 (1998)).

merit of the decision is to be consistent with previously recognized principles.

IV. PERCEIVED PROBLEM VS. REAL PROBLEM

The fallout from *State Street Bank* in the popular and academic press has created a public perception that there has been a significant change in the law as to what is patentable. This perception has fueled an increase in filings for patents in technology areas in which many firms previously had not sought patent protection. Put another way, the fallout from *State Street Bank* served as a "wake-up call" to firms that sought either to carve out a niche through patent protection, or to secure defensive patents to prevent others from blocking them from practicing their business.

The reality of the situation is that 35 U.S.C. §101, defining patentable subject matter, was unchanged by *State Street Bank*, and has been unchanged since the *1952 Patent Act*. It is inevitable that as new technologies emerge, the ability of the PTO to properly examine applications directed to these technologies lags. This lagging effect results from the fact that the PTO develops prior art databases related to emerging technologies as the PTO examines applications directed to those technologies. Accordingly, those patents issued early in the development of an emerging technology can appear to be, in hindsight, overly broad. This phenomena is common to all technologies, including business method-related technologies.

Applying this phenomena to Internet-related technologies, it is expected that these technologies create clouded distinctions between new, useful, and nonobvious systems, and obvious modifications made to conventional business practices. As the PTO prior art databases in these areas develop, the distinctions should become more clear, and the scope and validity of patents directed to these technologies should become less newsworthy. In other words, quality patents necessarily lag technology development as the PTO's prior art databases mature. As further discussed below, improvements in the patent system will follow improvements in the availability of prior art, not modifications to the patent statutes. Nonetheless, our legislators read the popular press and they now want to add something to this debate, as discussed next.

V. LEGISLATION BY REACTION

A. HISTORICAL PERSPECTIVE

Legislative reaction to the patenting of developing technologies is not new. For example, there have been unsuccessful attempts to legislate in the fields of computer software, semiconductors and pharmaceuti-

cal. In light of these unsuccessful efforts, Congress should proceed with caution and not carve out an exception for business methods or any other technology for that matter.

1. *Examples of Other "Reactive" Legislations that Have Failed*

a) *The Semiconductor Chip Act*

In the late 1970s, members of the semiconductor industry believed their competitors were competing unfairly by stealing the masks used to manufacture semiconductor chips³⁹ and asked Congress to step in. In response, Congress enacted the *Semiconductor Chip Protection Act* in 1984 ("Chip Act") to protect mask works.⁴⁰ While the *Chip Act* was adopted in an attempt to solve the problems plaguing the semiconductor industry, it ultimately accomplished little.

At the time the *Chip Act* was proposed, processing technology within the semiconductor industry was uniform among all manufacturers.⁴¹ However, in the 1990s, technology advanced and diverged. For instance, the number of required masks to manufacture chips significantly increased.⁴² The method of processing chips also diverged so that a pirated mask was useless without the specific process used by the original manufacturer.⁴³ Today, the value in chips lies in proprietary "systems" of chips.⁴⁴ As a result, the incentive to copy individual chips dropped,

39. U.S. Copyright Office, *Information Circular*, Circular 100 <<http://www.copyright.gov/circs/circ100.htm#mask>> (accessed Oct. 10, 2002). Mask work is a series of related images, or masks, used to form (for example using deposition, implantation, or etching processes) a three-dimensional pattern on a semiconductor material, thereby forming a semiconductor chip. *Id.* at ¶ 2.

40. 17 U.S.C. §§ 901-14 (1991).

41. John G. Rauch, *The Realities of Our Times: The Semiconductor Chip Protection Act of 1984 and the Evolution of the Semiconductor Industry*, 3 *Fordham Intell. Prop. Media & Ent. J. L.* 403, 428 (Spring 1993) (citing Dr. Andrew S. Grove):

In 1979, when semiconductor chip protection was first proposed, processing technology among semiconductor manufacturers was alike from company to company. Technology used by Intel was very similar to technology used by Intersil and others. Each firm used substantially the same mask layers along with substantially the same processing steps.

Id.; see also H.R. Subcomm. on Courts, *Civil Liberties and the Administration of Justice of the Comm. on the Judiciary Copyright Protection for Imprinted Design Patterns on Semiconductor Chips*, Hearing on H.R. 1007, 96th Cong. 59 (1979) (noting each firm used substantially the same mask layers along with substantially the same processing steps making it easy for one firm to copy another firm's product on the same processing line).

42. Rauch, *supra* n. 41, at 429. In 1979 a typical process required 8 masks, in 1992 a typical process required 16 masks. *Id.* "Current processes are much more complex than past processes." *Id.*

43. "Current processes are much more complex than past processes. This complexity scuttles the pirate." *Id.*

44. *Id.* at 430.

and piracy of novel chips became difficult, if not impossible.⁴⁵ The anti-copy provisions of the *Chip Act* thus became moot. Researchers are now developing mask-less lithographic systems based on an array of microscopic lenses and mirrors,⁴⁶ that will eventually render the entire *Chip Act* a useless legal relic. The lesson that should be taken away from the *Chip Act* is that customizing intellectual property laws to a specific industry does not always work, and is especially ineffective for industries undergoing rapid technological advancement.

b) *The Drug Price Act*

The *Drug Price Competition and Patent Restoration Act of 1984* (“*Drug Act*”)⁴⁷ provides another good example of a legislative solution gone awry.⁴⁸ In the early 1980s, major concerns arose over the patent term of name brand drugs and the rights of generic drug manufacturers to develop and market generic alternatives.

The *Drug Act* was the result of a “congressionally-supervised” compromise between brand-name and generic manufacturers to make lower-cost generic copies of approved drugs more widely available, while at the same time ensuring brand-name manufacturers had adequate economic incentives to invest in the development of new drugs.⁴⁹

Although initially viewed as a success, the *Drug Act*’s shortcomings have been called to attention in the past few years.⁵⁰ Critics have pointed to the fact that many of the provisions of the *Drug Act* are useless and have unexpected and undesired effects. A series of legislative proposals have been made to try to fill in the blanks where the *Drug Act*

45. “Changes in technology have left the pirate dead in the water. . . . There’s no incentive to copy these large proprietary chips.” *Id.* at 429-30.

46. See e.g. Alexandra Stikeman, *Lithography Unmasked (new ways to design microchips)* 25 *Tech. Rev.* (Sept. 2001) <<http://www.technologyreview.com/articles/innovation10901.asp>> (accessed Oct. 10, 2002).

47. The *Drug Act* is also referred to as the *Hatch-Waxman Act*, Pub. L. No. 98-417, 98 Stat. 1585 (codified in sections of 15 U.S.C. (2000), 21 U.S.C. (2000), 28 U.S.C. (2000), and 35 U.S.C. (2000)).

48. See generally Alfred B. Engelberg, *Special Patent Provisions for Pharmaceuticals: Have They Outlived Their Usefulness?*, 39 *IDEA: J.L. & Tech.* 389 (1999) (examining the events leading up to the enactment of the 1984 *Drug Act* and its many unintended consequences); see also Anna Cook, Congressional Budget Office, *How Increased Competition From Generic Drugs Has Affected Prices and Returns in the Pharmaceutical Industry* (Washington, D.C., July 1998) <<http://www.cbo.gov/showdoc.cfm?index=655&sequence=5>> (accessed Oct. 10, 2002) (noting the 1984 *Drug Act* has not protected brand-name manufacturer’s profits from the dramatic rise in generic competition as intended).

49. Engelberg, *supra* n. 48, at 389-91.

50. 144 Cong. Rec. S 12847 (daily ed. Oct. 21, 1998). Statement of Sen. Hatch, co-sponsor of the *Drug Act*, questioning the Act’s effectiveness, “So there are many issues that merit consideration as we reassess the adequacy of the laws pertaining to the generic and pioneer sectors of the pharmaceutical industry.” *Id.*

has fallen short.⁵¹ Additionally, unforeseen changes in the market and industry have brought about new issues not covered by the *Drug Act*, essentially pushing the legislators back to a position similar to the one from which they started.⁵²

The *1984 Drug Act* is a good example of how legislating by reaction leads to compromise, whereby legislators attempt to satisfy the competing interests of all involved parties. Such compromise inevitably leads to diluted, misplaced, and/or contradictory statutory language. Legislating by reaction can also lead to more complex laws that require clarifying legislation and that create more litigation.⁵³ As exemplified with the *Drug Act*, Congress' attempt to micromanage patent law for a specific industry can fall short, ultimately bringing with it a whole host of new problems requiring attention, and offering no further protection for members of the industry it originally set out to serve.

2. *Software Patents: An Example Where "Reactive" Legislation Was Resisted*

Throughout the past thirty years, computer software patents have been the subject of much controversy among both the software industry and the intellectual property community.⁵⁴ The PTO first opposed the

51. See 145 Cong. Rec. E789-01, 106th Cong. Session 1 (Apr. 28, 1999). Statement of the Honorable Ed Bryant introducing legislation attempting to remedy the regulatory delays created by the *Hatch-Waxman Act*. *Id.* at ¶ 12. See also 146 Cong. Rec. E1529-05, 106th Cong. Session 2 (Sept. 19, 2000) (discussing the proposed *Drug Price Competition Act of 2000*, created to close the loopholes created by the *Hatch-Waxman Act*). *Id.* at ¶¶ 5, 6.

52. Examples of new issues brought about by the *1984 Drug Act* are increased litigation, secret deals between brand name and generic manufacturers, and unforeseen regulatory delays in the generic drug patent approval process; see 146 Cong. Rec. E1529-05, 106th Cong., Session 2 (Sept. 19, 2000) "[Brand drug companies] are using loopholes in the *Hatch-Waxman Act* to file frivolous administrative and legal challenges to keep generic competitors out of the marketplace." *Id.*; *Driving Up Drug Prices*, N.Y. Times A22 (July 26, 2000) (discussing how the 180-day grace period provision has led to secret deals that allow the generic manufacturer to claim the 180-day grace period to block other generic drugs from entering the market while, at the same time, get paid by the brand-name manufacturer not to sell the generic drug); see 145 Cong. Rec. E789-01, 106th Cong., Session 1 (Apr. 28, 1999). Regulatory delay at the PTO has deprived manufacturers from critical portions of their patent life, thus undermining the patent term extension provision of the Act. *Id.*

53. See e.g. Joseph P. Reid, *A Generic Drug Price Scandal: Too Bitter a Pill for the Drug Price Competition and Patent Term Restoration Act to Swallow*, 75 Notre Dame L. Rev. 309, 333 (Oct. 1999) (noting that "[p]ioneer companies have attempted to slow [the competition from the generic manufacturers] through lawsuits").

54. Kenneth W. Dam, *Some Economic Considerations in the Intellectual Property Protection of Software*, 24 J. Legal Stud. 321, 371-73 (June 1995); Peter S. Menell, *The Challenges of Reforming Intellectual Property Protection for Computer Software*, 94 Colum. L. Rev. 2644, 2652-55 (Dec. 1994); Pamela Samuelson et al. *Manifesto Concerning the Legal Protection of Computer Programs*, 94 Colum. L. Rev. 2308, 2310-13 (Dec. 1994); Richard H.

patenting of software primarily based on budgetary concerns.⁵⁵ The PTO feared a deluge of applications for software-related inventions that would require the creation of new prior art databases and the hiring and training of new examiners that were qualified to work in this area. Because of its skepticism about receiving additional federal funding, the PTO fought the patentability of software by systematically rejecting claims directed to software-related inventions.

For nearly thirty years, the PTO resisted. However, a series of 1994 CAFC decisions upholding the patentability of software forced the PTO to capitulate.⁵⁶ The PTO's reaction to this "defeat" was proactive and commendable. In 1995, the PTO proposed examination guidelines for computer-related inventions and requested comments thereon.⁵⁷ In 1996, the PTO officially adopted the guidelines, thereby providing a structural framework for the examination of software-related inventions.⁵⁸

These Computer Guidelines gave examiners a framework for examining software applications within the existing law. Under this framework, new, useful, and non-obvious remain the thresholds for any invention, even a software invention. However, prior art must be available in order to issue valid patents. As discussed above, gaining access to prior art in developing technologies has always been a difficulty for the PTO, and will continue to be in the future. It is this inevitability that justifies the existence of a reexamination process under our current law, or better yet, an opposition process, as argued below. Reexamination, or opposition, provides an opportunity for prior art that was not available, or not discovered, to the PTO during examination, to be brought forward. The PTO has worked, and continues to work, with industry in developing and gaining access to prior art databases. This trend continues now in the area of business method patents. The development of the software patent story provides an example as to how the courts, the PTO, and industry can work together within the framework of the existing laws to apply those laws and to adapt procedures to new technologies so that valid patents can be issued.

Stern, *The Future of Software Protection: The Bundle of Rights Suited to New Technology*, 47 U. Pitt. L. Rev. 1229, 1232-38 (Summer 1986).

55. See Gregory J. Maier & Robert C. Mattson, *State St. Bank in the Context of the Software Patent Saga*, 8 Geo. Mason L. Rev. 307, 308-10 (Winter 1999).

56. *Id.* at 326-29 (reviewing how the *In re Alappat*, *In re Warmerdam*, *In re Lowry* and *In re Beauregard* decisions lead to "the PTO's complete repudiation of its long-standing policy of refusing patent protection for software inventions").

57. 60 Fed. Reg. 28778 (June 2, 1995).

58. 61 Fed. Reg. 7478, 7479 (Feb. 28, 1996).

3. *Lessons to Draw From this Historical Perspective*

As technology continues to advance it is imperative that our patent system also move forward. The similarities that exist between business methods and computer software should allow the PTO to implement the lessons it learned when dealing with the software issues. In fact, by establishing the Business Method Patent Initiative,⁵⁹ the PTO already seems to have taken steps in the right direction. The shortcomings of past legislative efforts in the fields of semiconductors and pharmaceuticals should make us wary of any proposed custom-made legislation for the field of business method patents, or for that matter any developing technology.

B. PROPOSED *BUSINESS METHOD PATENT IMPROVEMENT ACT OF 2001* (“THE ACT”)

1. *The Proposed Opposition System Addresses the Real Problem - Availability of Prior Art*

a) *The Present Reexamination System*

As discussed above, the real problem in patenting business methods is the same as that which plagues all emerging technologies: prior art is not readily available to the PTO. We submit that the proper approach to solve this problem is two-fold: (1) keep the PTO’s searching tools as current as possible, and (2) provide a forum through which owners and or developers of the new technology who have a financial interest at stake (and thus are highly motivated to find the best prior art) can come forward with prior art relevant to the issued patents.

This forum exists under our current laws through the third party reexamination, wherein a third party can request that the PTO re-examine an issued patent because a patent or a printed publication raises a “substantial new question of patentability.”⁶⁰ In one type of reexamination (the “*ex-parte* reexamination”),⁶¹ once the original request for a reexamination is filed, the third party is barred from participating in the reexamination of the patent.⁶² In the other type of reexamination (the

59. See U.S. Pat. & Trademark Off., *Business Method Patent Initiative: An Action Plan* <<http://www.uspto.gov/web/offices/com/sol/actionplan.html>> (accessed Aug. 8, 2002) (discussing the patent office’s planned improvements to address problems associated with business method patents and the current application process such as: enhancing technical training for examiners, revising examination guidelines, and expanding current search capabilities to assist applicants in locating more comprehensive prior art).

60. See 35 U.S.C. §§ 303, 312 (2000).

61. See 35 U.S.C. §§302-307 (2000).

62. See 37 C.F.R. 1.550(g) (2000). “The active participation of the *ex parte* reexamination requester ends with the reply pursuant to § 1.535, and no further submissions on behalf of the reexamination requester will be acknowledged or considered.” *Id.*; 37 C.F.R.

“*inter partes* reexamination”),⁶³ the third party can participate.

Recent changes in the law have addressed some of the more glaring problems that had been present in the reexamination system.⁶⁴ These changes were long overdue, and will hopefully begin to provide an incentive for third parties to come forward to the PTO with prior art. As discussed next, the *Patent Improvement Act of 2001* introduces an interesting approach to improving our reexamination system, one known to our European and Japanese counterparts for years: an opposition system.

b) *The Proposed Opposition System*

In their bill entitled the *Patent Improvement Act of 2001*, Messrs. Berman and Boucher propose to form a PTO Administration Opposition Panel composed of eighteen administrative judges who would hear oppositions between patentees and third parties.⁶⁵ An opposition would have to be requested by a third party within nine months of the issue date of a patent. The basis for the opposition could be any of the usual statutory requirements for patentability: utility, patentable subject matter, novelty, non-obviousness, enablement, and written description. In addition to the arguments presented in statements and replies, the judges would consider other evidence, including oral testimony, exhibits, and expert testimony. Each side would have an equal right to appeal to the PTO’s Board of Patent Appeals and Interferences and ultimately to the CAFC.

The opposition would create only two reasonable estoppels: (1) a party would not be permitted to file an opposition on a basis that had already been finally decided against that party in a civil action or an *inter partes* reexamination, and (2) the party requester who lost in an opposition may not “bring a civil action” on the basis of issues raised in the opposition.

This post-grant opposition system would permit third parties to bring to the attention of the PTO any evidence of unpatentability, including, of course, prior art patents and publications. The third party would not be discouraged to take such action because: (1) it would have the possibility to appeal the PTO decision to the CAFC, and (2) it would be able to use the same evidence to defend itself in a law suit brought by the

§ 1.535 (West 2002) permits the reexamination requester to file a “Reply by Requester” if and only if the patentee files a “Patent Owner’s Statement.” Patentees, however, generally do not file such statements so as to prevent the third party requester from replying. *Id.* Instead, patentees are better off waiting for the first Office Action to present their arguments into a “response,” thus excluding the third party requester from participating. *Id.*

63. See 35 U.S.C. §§ 311-18 (2000). Introduced in 1999 to make the reexamination procedure a more viable alternative to litigation.

64. See H.R. 2215 signed into law on November 2, 2002.

65. See H.R. 1333, 107th Cong. (2000).

patentee. Third parties facing a law suit on the basis of a patent are the parties with the most incentive, greater than the patentee's and the PTO's respective incentives, to find the best prior art. A system that aims at issuing valid patents should give such parties the opportunity to perform a thorough search and to come forward with the results.

One caveat to such an opposition system is that large companies with great financial resources have an advantage over smaller companies and individual inventors. Large companies could harass individual inventors by systematically filing oppositions against each patent issued in their field of technology. To counter such harassment, the opposition system could include a threshold similar to the one used in the reexamination system: the third party requester would summarize, in its request for an opposition, why it has a good faith belief that the claimed invention is not patentable. The PTO would review this summary and decide whether it raises a significant question of patentability. If the PTO grants the request for an opposition, the parties can fully brief and document their respective positions. A third party who loses the request for opposition and who is found to lack sufficient evidence to support its initial good faith belief of unpatentability could be liable for the patentee's attorney fees.

Finally, we note that the *Business Method Patent Improvement Act of 2001*⁶⁶ introduces the same opposition system as the *Patent Improvement Act of 2001*,⁶⁷ but seems to restrict the system to business method patents. As discussed further below, we believe that such restriction amounts to an improper discrimination against inventors of business methods. Furthermore, and as discussed above, the problem faced today by business method patents (the lack of available prior art) is a recurring one that will arise again when another new technology emerges. A post-grant opposition system applicable to all patents would address this problem for all new technologies.

2. *Other Aspects of the "Act" Are Discriminatory Against Business Method Patents Contrary to Fundamental Principles of Patent Law*

In *Diamond v. Chakrabarty*, the United States Supreme Court provided its interpretation as to what constitutes patentable subject matter under 35 U.S.C. §101.⁶⁸ In doing so, the Court looked not only to the policy behind the patent laws, but also to the legislative history of the *Patent Act of 1793*, authored by Thomas Jefferson, and the *Patent Act of 1952*. The common theme throughout the development of the United

66. H.R. 1332, 107th Cong. (2000).

67. H.R. 1333, 107th Cong. (2000).

68. 447 U.S. 303, 309-10, 206 U.S.P.Q. 193, 196-97 (1980).

States patent laws has been the broad language in defining what falls within statutory subject matter for patentability. From Thomas Jefferson's proclamation that "ingenuity should receive a liberal encouragement" to the Committee Reports accompanying the *Patent Act of 1952* that included a statement that patentable subject matter should include "anything under the sun that is made by man," the desire for breadth of patentable subject matter has been consistent throughout this country's history.⁶⁹

This historically broad interpretation as to what constitutes patentable subject matter has not been limited to the United States. Indeed, this concept has become a cornerstone for international treaties concerning intellectual property. In particular, the TRIPS provisions of the GATT agreements provide that:

. . . patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. . . . patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.⁷⁰

To either carve out business method patents as directed to unpatentable subject matter, or to limit the rights conferred to inventors of business method patents would run afoul of longstanding principles of both United States and international patent law. These principles have been cornerstones of United States patent law since its conception. They have survived the evolution of technology from the days of horse-drawn buggies and candlelight to the days of space exploration and genetic engineering.

There are several provisions in the Act that would undermine the principles of broad availability of subject matter and non-discrimination based on technology type.

a) Proposed Definitions of "Business Method" and "Business Method Invention"

As an initial matter, it is repulsive to these principles of patent law to even attempt to draft a definition of "business method patent". Section 2 of the Act defines "business method" and "business method invention" as:

- (f) The term 'business method' means –
- (1) a method -
- (A) of -

69. *Id.* at 309.

70. *Agreement on Trade-Related Aspects of Intellectual Property Rights (1994) in Agreement Between the World Intellectual Property Organization and the World Trade Organization (1995)* Article 27, at 31 (World Intellectual Property Organization) <http://www.wto.org/english/docs_e/legal_e/27-trips_04c_e.htm#5> (accessed Oct. 13, 2002).

- (i) processing data; or
- (ii) performing calculation operations; and
- (B) which is uniquely designed for or utilized in the practice, administration, or management of an enterprise;
- (2) any technique used in athletics, instruction, or personal skills; and
- (3) any computer-assisted implementation of a method described in paragraph 1 or a technique described in paragraph 2.
- (g) The term 'business method invention' means -
 - (1) any invention which is a business method (including any software or other apparatus); and
 - (2) any invention which is comprised of any claim that is a business method.⁷¹

b) Proposed Director's Determination of "Business Method Inventions"

The Act provides for a new Chapter 32 to be added to Title 35 of the United States Code. Chapter 32 is entitled "Patents On Business Method Inventions." Proposed §321 provides for the definition of a "business method invention" to be applied by the Director in making a determination as to whether a particular application fits in the "business method invention" category.⁷² This is *per se* discrimination based on technology, and therefore contrary to not only fundamental principles of U.S. patent law, but also to TRIPS.

c) Proposed Post Grant Opposition Procedure for "Business Method Patents"

The Act also provides for a post grant opposition procedure for any patent on a business method invention. Again, this is *per se* discrimination since such proceedings are not available to oppose any other type of patents.⁷³ As discussed above, however, a post grant opposition procedure for patents in all technology areas would be beneficial because such an opposition procedure would alleviate the real recurring problem of the unavailability of prior art.

d) Proposed Lowering of Burden of Proof to Invalidate "Business Method Patents"

Proposed §324(a) of the Act lowers the burden of proof for invalidating or establishing that a patent is directed to ineligible subject matter to a mere preponderance of the evidence for patents on business method inventions only. Again, this is *per se* discrimination based on the tech-

71. H.R. 1332, 107th Cong. § 2 (2002) (Section 2, Definitions).

72. *Id.* at § 3 (Patents on Business Method Inventions).

73. *Id.* at § 322 (in proposed form). As discussed above, the authors are in favor of an opposition procedure, however, they would not limit its availability to only a certain class of patents.

nology of the patent. Today, the standard of proof for invalidating all patents is clear and convincing. This proposed change would not only be contrary to the principles of patent law discussed above, but would also devalue all patents on business method inventions.

Given a lower burden of proof required to "knock out a patent," in combination with the complexities of both the underlying technology and the patent laws, one would anticipate that patents on business method inventions would be under attack much more frequently than other patents. Potential infringers might take a chance at getting a favorable jury verdict to invalidate a patent rather than taking a license. Furthermore, treble damages for willful infringement would be much more difficult to award because the infringer would presumably be able to rely on an opinion that establishes invalidity by a mere preponderance of the evidence.

e) Proposed Presumption of Obviousness for "Business Method Inventions"

The Act also proposes to modify 35 U.S.C. §103 by adding a new paragraph (d) which would provide for a presumption of obviousness for certain business method inventions. This proposed modification of §103 is *per se* discriminatory as with the other proposals discussed above. This discriminatory treatment of business method inventors is fundamentally unfair and is in violation of the anti-discrimination clause of the TRIPS agreement.

Today, the law is clear that the initial burden of production and persuasion to establish obviousness is on the USPTO. The USPTO must first make a *prima facie* case of obviousness before the patent applicant is required to provide evidence of non-obviousness.⁷⁴ The proposed presumption of obviousness would shift the initial burden of production for establishing patentability from the USPTO to the applicant and would therefore be contrary to today's patent laws. Of course, Congress has the power to make new patent laws and change existing ones, as long as the

74. See e.g. *In re Epstein*, 32 F.3d 1559, 1570, 31 U.S.P.Q. 1817, 1825 (Fed. Cir. 1994), Judge Plager concurring: "In patent law[,] the rule is that the burden of persuasion is on the PTO to show why the applicant is not entitled to a patent." *Id.*; see also *In re Oetiker*, 977 F.2d 1443, 1449, 24 U.S.P.Q.2d 1443, 1447 (Fed. Cir. 1992).

The burden is on the Commissioner to establish that the applicant is not entitled under the law to a patent . . . [W]hen obviousness is at issue, the examiner has the burden of persuasion and therefore the initial burden of production. Satisfying the burden of production, and thus initially the burden of persuasion, constitutes the so-called *prima facie* showing. Once that burden is met, the applicant has the burden of production to demonstrate that the examiner's preliminary determination is not correct. The examiner, and if later involved, the Board, retain the ultimate burden of persuasion on the issue.

Id.

laws are constitutional. While such a presumption may be legally acceptable, it contradicts tradition and logic.⁷⁵

In particular, the Act requires a showing by a preponderance of the evidence that the business method invention is not obvious to a person of ordinary skill in the art. Legally proving that an invention is non-obvious amounts to proving a negative proposition. It requires demonstrating what a person of ordinary skill in the art knows. A person of ordinary skill in the art is a person who knows all the pertinent prior art available against the application.⁷⁶ The universe of such prior art is practically infinite because it includes every pertinent publication ever published, every pertinent patent ever issued anywhere in the world (prior to the application filing date), and every pertinent public use or sale in this country that took place more than one year prior to the application filing date.⁷⁷ Therefore, proving that an invention is non-obvious would require collecting and addressing a nearly infinite body of prior art, which is virtually impossible. Even proving that an invention is non-obvious by a preponderance of the evidence would require collecting over half of all the prior art available, i.e., half of infinity, which remains impossible. Therefore, it is virtually impossible to rebut the presumption of obviousness under the Act.

f) *Proposed Requirement for Inventors of "Business Method Patents" to Disclose Search for Prior Art*

One further clause of the Act that is *per se* discriminatory against business method inventions is the requirement that inventors of these inventions disclose in the application the extent to which the applicant searched for prior art.⁷⁸ The clause includes providing for penalties for failing to comply with the requirement.⁷⁹ This requirement is troubling for reasons beyond those just mentioned. First, current United States patent rules include a provision for an examiner to require from the applicant a submission of information as to the extent to which a search was done.⁸⁰ Second, an applicant should not be required to predict that the Director will categorize his invention as being directed to a business method invention. Moreover, an applicant should not be penalized for

75. See Philippe Signore, *There is Something Fishy About a Presumption of Obviousness*, 84 J. Pat. & Trademark Off. Socy. 148 (2002).

76. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962, 1 U.S.P.Q.2d 1196, 1201 (Fed. Cir. 1986). "The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art." *Id.* at 962, 1201. See also *Chisum*, supra n. 27, at § 5.04.

77. See 35 U.S.C. § 102 (2002) (defining what is prior art).

78. H.R. 1332, 107th Cong. § 5 (requirement to disclose search).

79. *Id.* at § 5 (requirement to disclose search).

80. 37 C.F.R. §1.105 (2002) (requirements for information).

failing to make this disclosure in his application prior to the Director making such a determination.

VI. CONCLUSION

Legislation specifically targeting business method inventions is unwarranted. Such custom-made legislation would not address the real problems with patents directed to business method inventions, but would create new problems. Any perceived problems with business method patents can be addressed through an opposition system and better availability of prior art.