

The Continuing Controversy Over Business Methods Patents

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INTRODUCTION

In 1998, the Court of Appeals for the Federal Circuit (“CAFC”) clarified in its *State Street Bank* decision that methods of doing business could be patentable subject matter, and the Supreme Court denied certiorari.¹ Despite the Court’s ruling, the controversy over patentability of methods of doing business did not die.² Since 1998, although there has been a significant increase in the number of business methods patent applications filed, there has been continuing comment regarding their patentability.³ This

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¹ See *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 1093 (1999) (holding that business methods should be subjected to the same patentability tests as other process claims, rejecting attribution of unpatentability to any claims other than those for laws of nature, natural phenomena, or abstract ideas). For further discussion of this case, see *infra* notes 35–46 and accompanying text.

² See, e.g., Martin J. Adelman, *Patentable Subject Matter: The Road Ahead for Software and Business Methods Patents*, in INT’L INTELL. PROP. L. AND POL’Y – VOLUME 15 (forthcoming 2007).

³ See James S. Sfekas, *Controlling Business Method Patents: How the Japanese Standard for Patenting Software Could Bring Reasonable Limitations to Business Method Patents in the United States*, 16 PAC. RIM L. & POL’Y J. 197, 203 (2007) (noting that business methods patent applications had increased to 2,821 in 1999, to 7,800 in 2000, and continued to increase); see also Bronwyn H. Hall, *Business Method Patents*,

Note examines the attributes of business methods patents relevant to infringement litigation, and whether United States Patent and Trademark Office (“USPTO” or “PTO”) efforts to deal separately with such patents have been appropriate and effective. In light of the treatment of business methods patents by the USPTO and the courts, it suggests strategies for prosecuting and litigating such patents.

Part I of the Note begins with the surprisingly difficult task of defining a “business methods” patent. It goes on to provide context by briefly describing the significant decisions that established the patentability of business methods: Judge Pauline Newman’s dissent in *Schrader*,⁴ and the *State Street Bank*⁵ and *AT&T-Excel*⁶ decisions. Finally, it considers the economic effects of USPTO policies regarding examination and litigation: what level of investigation should be conducted and what level of validity should be presumed for issued patents. Part II examines events following the demise of the “business methods exception,” including the responses to *State Street Bank* by the public, Congress, the USPTO, and the courts, and notes the results of the Congressional and USPTO actions. It outlines criticisms of business methods patents and the immediate responses: the First Inventor Defense Act,⁷ the recently established *inter partes* reexamination procedure,⁸ and the USPTO Business Method Patent Quality Improvement Initiative.⁹ It also describes a new

Innovation, and Policy (UC Berkeley Dep’t of Econ., Working Paper No. E03-331, 2003), available at <http://repositories.cdlib.org/iber/econ/E03-331> (using broad definition of business methods patents to assert that the United States Patent and Trademark Office (“USPTO”) granted more than 10,000 of them in 2002). *But see* USPTO, *Patent Counts by Class by Year: CY 1977–2005*, <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cbcby.htm#PartA1> (last visited Sept. 7, 2007) (statistics showing only 786 business methods patents (Category 705) granted in 2005, up from 313 business methods patents granted in 2004, using narrow classification of business methods patents). Part II of this Note will address this apparent discrepancy.

⁴ See *In re Schrader*, 22 F.3d 290, 296–99 (Fed. Cir. 1994) (Newman, J., dissenting).

⁵ See *State Street Bank*, 149 F.3d 1368.

⁶ See *AT&T Corp. v. Excel Commc’ns, Inc.*, 172 F.3d 1353 (Fed. Cir. 1999).

⁷ See First Inventor Defense Act of 1999, 35 U.S.C. § 273 (2000).

⁸ See Optional Inter Partes Reexamination Procedure Act of 1999, 35 U.S.C. §§ 311–318 (2000) (providing for third-party participation in reexaminations).

⁹ See USPTO, *Business Methods Patent Initiative: An Action Plan* (2000), <http://www.uspto.gov/web/offices/com/sol/actionplan.html> [hereinafter USPTO Action

USPTO initiative directed at business methods patents, the Community Patent Review (or Patent Peer Review) project, considering the likely effects of that initiative.¹⁰ It goes on to examine several recent relevant decisions by the Board of Patent Appeals and Interferences and by the Court of Appeals for the Federal Circuit. Part III draws some conclusions about the current boundaries of business method patent claims based on recent case law.

I. CONTEXT OF THE PROBLEM: THE PATENTABILITY OF BUSINESS METHODS

A. *What IS a Business Method Patent, Anyway?*

One difficulty in discussing business methods patents is that there is not general agreement on a definition of such a patent.¹¹ The courts have not provided a clear definition of business methods patents, nor has Congress successfully enacted a statute providing an explicit definition of the term.¹² An unsuccessful House bill, the Business Method Patent Improvement Act of 2001, included a definition of the term, but that bill died in committee.¹³ The bill defined a business method as:

Plan]. See also USPTO, WHITE PAPER: AUTOMATED FINANCIAL OR MANAGEMENT DATA PROCESSING METHODS (BUSINESS METHODS) (2000), <http://www.uspto.gov/web/menu/busmethp/index.html> [hereinafter USPTO WHITE PAPER]. Note that Class 705 was created in 1997, but later statistics in the same section report the number of business methods patents granted since 1977. *Id.* at 6.

¹⁰ See Beth Simone Noveck, “Peer to Patent”: *Collective Intelligence, Open Review, and Patent Reform*, 20 HARV. J.L. & TECH. 123, 145 (2006).

¹¹ See Hall, *supra* note 3 (finding no precise definition or clear agreement on the meaning of “business method patent” and listing patent classes that could contain business methods).

¹² See John R. Allison & Starling D. Hunter, *On the Feasibility of Improving Patent Quality One Technology at a Time: The Case of Business Methods*, 21 BERKELEY TECH. L.J. 729, 766–68 (2006) (examining various proposed definitions of business methods patents, identifying as business methods activities relating to “advertising, shopping, sales, purchasing, financing, insurance, human resources activities, and specialized forms of communication within and between firms,” and proposing to extend the definition to include “practices that are often further upstream” than those commonly mentioned).

¹³ See Business Method Patent Improvement Act of 2001, H.R. 1332, 107th Cong. (2001). The Act was introduced by Reps. Howard Berman and Rick Boucher. Its aim

- (1) a method
 - (a) of (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).¹⁴

Commentators have offered various other definitions, frequently circular, but have not come to any agreement; in particular, they frequently fail to distinguish between business methods patents and software patents.¹⁵ Recent case law seems to make the important point that patentable business method claims are not limited to claims that recite a computer implementation of a method or process.¹⁶

The USPTO, for its own purposes, defines business methods patents as those classified in U.S. Patent Class 705, created in 1997: “data processing: financial, business practice, management,

was to increase the difficulty of obtaining, and the ease of challenging, a business method patent. Similar bills were introduced in 2003, 2005, and 2006, also to no avail.

¹⁴ *Id.* § 2.

¹⁵ See, e.g., Malla Pollack, *The Multiple Unconstitutionality of Business Method Patents: Common Sense, Congressional Consideration, and Constitutional History*, 28 RUTGERS COMPUTER & TECH. L.J. 61, 70 (2002) (defining business method as “a process where the point of invention lies in the entrepreneurial strategy”); see also Allison & Hunter, *supra* note 12, at 785 (calling act of defining business method “devilishly hard”); Matthew D. Thayne, *Business Method Patents, Franchises, and the First Inventor Defense Act: Something Must Give*, 2001 UTAH L. REV. 863, 864–65 (2001) (conceding the difficulty of “completely and adequately” defining business method, supplying examples of a variety of recently issued patents); Hall, *supra* note 11, at 2–3 (commenting that many scholars fail to distinguish business method, internet, and software patents).

¹⁶ See *Ex parte* Lundgren, 76 U.S.P.Q.2d 1385, 1387 (B.P.A.I. 2005) (rejecting imposition of a “technological arts” test, discussed *infra*, notes 139–140 and accompanying text).

or cost/price determination.”¹⁷ A director at the USPTO has further characterized the major subclasses within the 705 class as dealing with finding customers, informing customers, exchanging money and credit, and tracking resources.¹⁸ In considering this definition, however, one should realize that the classification process, the objectives of the process, and the classes themselves were not designed to facilitate clarification of the business method concept, but rather to facilitate routing patent applications to appropriate examiners and searching patent records by subject matter.¹⁹ Nevertheless, the USPTO has used the classification to establish separate procedures for the evaluation of patents it deems to be “business methods patents.”²⁰

B. Historical Developments

The U.S. Patent Code provides that patents may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof”²¹ According to the Code, then, patents may be issued for products (machines, manufactures, or compositions of matter), or for methods (processes, which consist of a series of acts or steps leading to a useful result).²² While the USPTO asserts a long history of patenting financial and management business methods,

¹⁷ See USPTO, Class Definition for Class 705, <http://www.uspto.gov/web/patents/classification/uspc705/defs705.htm> (last visited Sept. 7, 2007). See also USPTO WHITE PAPER, *supra* note 9, at 6 (observing that Class 705 was created from sections of computer classes 364 and 395).

¹⁸ See John J. Love, *Business Method Patents*, 7 RICH. J.L. & TECH. 8 (2000) (characterizing four major groupings of business methods patents within Classification 705).

¹⁹ See USPTO, OVERVIEW OF THE U.S. PATENT CLASSIFICATION SYSTEM (USPC) I-15 (2007), <http://www.uspto.gov/web/offices/opc/documents/overview.pdf> (identifying one purpose of patent classification system as a tool for routing applications to appropriate examiners); see also Allison & Hunter, *supra* note 12, at 735 n.17, 758–59, 786 n.141 (describing the process of patent classification and identifying its purpose as an aid for searching).

²⁰ See *infra* notes 99–117 and accompanying text.

²¹ 35 U.S.C. § 101 (2000) (defining patentable subject matter).

²² See 1 DONALD S. CHISUM, CHISUM ON PATENTS § 1.03 (2006) (discussing the definition of process patent).

dating possibly as early as 1799,²³ it concedes that until the widespread use of the programmable digital computer, most such inventions included specialized apparatus, custom-designed to realize the inventor's processing concept.²⁴ Process patents were commonly issued for manufacturing processes.²⁵

Indeed, although several decisions had suggested or stated that methods of doing business were not patentable subject matter, the actual justification for that position, which was known as the "business methods exception," remains questionable.²⁶ The original basis for the statement seems to have been a case from 1908 which declared invalid a patent for a method of checking cash-register receipts to prevent fraud by waiters and cashiers in hotels and restaurants.²⁷ Although the ground for holding the patent invalid was lack of novelty, the court noted in dicta that, "A system of transacting business disconnected from the means for carrying out the system is not . . . an art. Advice is not patentable."²⁸ Although dicta, the doctrine was incorporated into several treatises on patent law and seemed thereby to have a solid foundation, remaining until quite recently.²⁹

²³ See USPTO, WHITE PAPER, *supra* note 9, at 2 (alluding to the lost Perkins patent for "Detecting Counterfeit Notes").

²⁴ See *id.*

²⁵ See CHISUM, *supra* note 22, at § 1.03 (describing *Cochrane v. Deener*, 95 U.S. 355 (1877) and *Tilghman v. Proctor*, 102 U.S. 707 (1881) as early process patent claims, and explaining the difficulty of distinguishing process claims from efforts to patent "abstract ideas").

²⁶ For a more detailed discussion of the history of the often-cited "business methods exception," see *Thayne*, *supra* note 15, at 866–69 (illuminating the problematic basis of business methods exception). See also, e.g., *Lowe's Drive-In Theatres, Inc. v. Park-In Theatres, Inc.*, 174 F.2d 547, 552 (1st Cir. 1949) (remarking in dicta, "a system for the transaction of business, . . . however novel, useful, or commercially successful is not patentable apart from the means for making the system practically useful, or carrying it out"); *In re Chatfield*, 545 F.2d 152, 157 (C.C.P.A. 1976) (explicitly including "methods of doing business" in the class of unpatentable subject matter).

²⁷ *Hotel Security Checking Co. v. Lorraine Co.*, 160 F. 467, 467–68 (2d Cir. 1908) (describing the patent claims).

²⁸ *Id.* at 469.

²⁹ See, e.g., 1 DONALD S. CHISUM, PATENTS: A TREATISE ON THE LAW OF PATENTABILITY, VALIDITY AND INFRINGEMENT § 1.03[5] (Supp. 2000) ("[B]usiness plans and systems are not patentable . . .").

1. Intimations: *In re Schrader*

In 1994, the CAFC in *In re Schrader* considered an appeal of the denial of a patent application that claimed a method for handling competitive bidding on any selected subset of a set of related items (such as tracts of land or government contracts).³⁰ The Court of Appeals affirmed the Board of Patent Appeals and Interferences' ("BPAI") denial of all claims for lack of patentable subject matter, identifying the claims as a mathematical algorithm and citing the Freeman-Walter-Abele test for determining the patentability of claims that recite an algorithm.³¹ The Freeman-Walter-Abele test for patentability of subject matter, which had become the standard for determining patentability of claims that incorporated mathematical algorithms, consisted of (1) determining whether a mathematical algorithm is recited in the claim, and, (2) if so, asking whether the invention is something more than the algorithm itself. If the claim involves the *application* of the algorithm in any manner to physical elements or process steps, the claim is patentable.³²

Judge Pauline Newman, however, dissented vigorously, arguing that the patent in suit met the definition of patentable subject matter. Judge Newman found more than a mere mathematical algorithm in the process claimed, demonstrating that the claims met the Freeman-Walter-Abele test for patentability,³³

³⁰ *In re Schrader*, 22 F.3d 290 (Fed. Cir. 1994).

³¹ *In re Schrader*, 22 F.3d at 292–94 (rejecting Appellant's contention that claims were more than mathematical algorithm and not finding the required "transformation or conversion of subject matter representative of or constituting *physical activity or objects*").

³² *See, e.g., In re Walter*, 618 F.2d 758, 205 U.S.P.Q. 397 (C.C.P.A. 1980); *In re Freeman*, 573 F.2d 1237, 197 U.S.P.Q. 464 (C.C.P.A. 1978).

³³ The court defined the Freeman-Walter-Abele test:

Starting with *Freeman*, the CCPA developed a more formal two-part test for statutory subject matter which eventually became known as the *Freeman-Walter-Abele* test, referring to the test in *Freeman*, as modified by *Walter* and *Abele*. Step one of the two-part test was to determine whether a mathematical algorithm was present. Step two was eventually modified to require "no more than that the algorithm be 'applied in any manner to physical elements or process steps,' provided that its application is circumscribed by more than a field of use limitation or non-essential post-solution activity. Thus, if the

questioning whether the claims constituted a “business method,” and criticizing the majority of the Court for its failure to adjust to changing technologies.³⁴

2. Clarification: *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*

Four years later, in *State Street Bank*, the CAFC analysis reached a very different conclusion.³⁵ The court explicitly considered whether the patent in suit claimed a method of doing business. Signature Financial Group was the assignee of a patent directed to a system (the “Hub and Spoke” system) for maintaining accounting information while pooling the assets of several mutual funds to achieve economies of scale and certain tax advantages.³⁶ Upon the failure of licensing negotiations, State Street Bank sued for and won a declaratory judgment that Signature’s claims were invalid, the Massachusetts District Court finding unpatentable subject matter. Signature appealed, and the CAFC reversed and remanded.³⁷

The district court had begun by construing each of the system “means” claims as process claims. It had gone on to find that the claims dealt with unpatentable subject matter under the mathematical algorithm exception or, alternatively, under the

claim would be ‘otherwise statutory,’ albeit inoperative or less useful without the algorithm, the claim likewise presents statutory subject matter when the algorithm is included.” (Citation omitted.) *Abele*, 684 F.2d at 907, 214 U.S.P.Q. at 686. If no mathematical algorithm was present, it was not necessary to get to the second step, and the subject matter was statutory. *See Freeman*, 573 F.2d at 1246, 197 U.S.P.Q. at 471 (Using a computer to typeset alphanumeric information: “The method claims here at issue do not recite process steps which are themselves mathematical calculations, formulae, or equations.”).

Ex parte Lundgren, 76 U.S.P.Q.2d 1385, 1409 (B.P.A.I. 2005).

³⁴ *Schrader*, 22 F.3d at 296–97 (Newman, J., dissenting) (contending that “the requirements of *section 101* are met when the formula is applied in a technological process to produce a useful result”).

³⁵ *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 1093 (1999).

³⁶ *Id.* at 1370.

³⁷ *Id.* at 1377.

business method exception.³⁸ The CAFC demurred, holding that, pursuant to § 112, ¶ 6, a machine was disclosed in each of the means claims to support the means recited.³⁹ The court went on to note, however, that classification of the claim as reading on machine or process was irrelevant for the § 101 analysis.

The court then examined both the mathematical algorithm exception and the business method exception. It acknowledged the mathematical algorithm exception as a valid doctrine, but opined that the exception should be very narrowly applied, and should only be used to exclude abstract ideas that were not useful, rather than to eliminate any mathematical calculations that resulted in a “useful, concrete or tangible” result.⁴⁰ It discarded the Freeman-Walter-Abele test in the light of the *Diamond v. Diehr*⁴¹ and *Diamond v. Chakrabarty*⁴² decisions, and focused on the use to which the algorithm is put to determine the patentability of claims that contain an algorithm. Regarding the business method exception, the court stated, “[w]e take this opportunity to lay this ill-conceived exception to rest.”⁴³ The court cited Judge Newman’s earlier dissent in *Schrader* that had referred to the business method exception as “an unwarranted encumbrance to the definition of statutory subject matter”⁴⁴ The court asserted that no precedential case had ever actually been decided on the basis of the ostensible exception, and that every decision that made reference to it actually contained “a ruling based on some clearer

³⁸ *Id.* at 1372–73. The “mathematical algorithm exception” is the term applied to the doctrine that mathematical algorithms are abstract ideas and, as such, are not patentable except as applied to some useful and practical application.

³⁹ 35 U.S.C. § 112, ¶ 6 (2000). A patent claim may be stated as a means for performing some function, in which case the claim is not limited to a specific apparatus, but encompasses apparatuses described in the specification and equivalent apparatuses that accomplish the stated function. *Id.*

⁴⁰ *State Street Bank*, 149 F.3d at 1373.

⁴¹ 450 U.S. 175 (1981) (holding that process patent that included application of mathematical algorithm as part of process could be patentable subject matter).

⁴² 447 U.S. 303 (1980) (famously quoting the characterization of patentable subject matter as “anything under the sun that is made by man” in holding that process that genetically modified bacteria to produce oil-consuming micro-organisms, and bacterium itself so produced, were patentable (quoting H.R. Rep. No. 1923 (1952))).

⁴³ *State Street Bank*, 149 F.3d at 1375.

⁴⁴ *Id.* (quoting *In re Schrader*, 22 F.3d 290, 298 (Fed. Cir. 1994) (Newman, J., dissenting)).

concept of Title 35”⁴⁵ It found such a reliance in the case before it, noting that the district court had complained that Signature’s claims would “foreclose virtually any computer-implemented accounting method necessary to manage this type of financial structure,” and advising the lower court that, “[w]hether the patent’s claims are too broad to be patentable is not to be judged under § 101, but rather under §§ 102, 103, and 112”⁴⁶ The *State Street Bank* decision, thus, rejected the specialized Freeman-Walter-Abele test for software patentability, and, more importantly, explicitly brought business methods under patent protection—not only computer-implemented business methods, but business methods as such.⁴⁷

3. A Last Nail: *AT&T Corp. v. Excel Communications, Inc.*

Shortly after *State Street Bank*, in the 1999 *AT&T Corp. v. Excel Communications, Inc.* opinion, a different panel of the CAFC considered the validity of patent claims covering the addition of a new data item to the records used for billing long-distance telephone customers.⁴⁸ The case was a not-unexpected outgrowth of the breakup of AT&T resulting from antitrust litigation in 1983.⁴⁹ The proliferation of interexchange (long-distance) carriers and local exchange carriers made the routing and allocation of calls, costs, and charges a complex process: AT&T had made changes to the process to facilitate differentially routing and billing calls involving only a single interexchange carrier from calls utilizing multiple interexchange carriers, and had been granted a patent for some of those changes.⁵⁰ AT&T sued Excel for infringement of its method claims. While technological in

⁴⁵ *Id.*

⁴⁶ *Id.* at 1377.

⁴⁷ See Rochelle Cooper Dreyfuss, *Are Business Method Patents Bad For Business?*, 16 SANTA CLARA COMPUTER & HIGH TECH. L.J. 263, 267 (2000) (pointing out the dual holdings of *State Street Bank*).

⁴⁸ 172 F.3d 1353 (Fed. Cir. 1999) [hereinafter *AT&T-Excel I*].

⁴⁹ See *AT&T Corp. v. Excel Commc’ns, Inc.*, 1999 WL 1050064 (D. Del. Oct. 25, 1999) [hereinafter *AT&T-Excel II*] (mentioning history of AT&T breakup); see also *U.S. v. AT&T Corp.*, 552 F. Supp. 131 (D.D.C. 1982), *aff’d sub nom. Maryland v. U.S.*, 460 U.S. 1001 (1983) (issuing order for AT&T to divest itself of its regional subsidiaries).

⁵⁰ See U.S. Patent No. 5,333,184 (filed May 6, 1992).

nature, the claims were directed to billing processes. Nevertheless, the court focused on the mathematical algorithm exception arguments in its validity analysis;⁵¹ it barely mentioned the issue of business methods. That mention, however, made clear the panel's agreement with the *State Street Bank* decision that the business method exception was no more.⁵² The district court had granted summary judgment on the grounds of patent invalidity due to unpatentable subject matter; the CAFC reversed and remanded for further examination on other grounds, holding only that subject matter patentability was achieved on the basis of producing a "useful, concrete, tangible result . . ."⁵³ Significantly, on remand the District Court of Delaware held the patent claims invalid due to anticipation and obviousness.⁵⁴

The next section presents a brief economic analysis of the operation of the USPTO and of the patent litigation system.

C. Economic Considerations of Patent Prosecution and Litigation

The realization by the business community that the business methods exception was no longer good law led to increased burdens on the already over tasked USPTO examiners. Not only were more patent applications being filed, but they dealt with areas not previously deemed patentable, complicating the location and identification of relevant prior art.⁵⁵ While many have complained about increasing problems and errors in the USPTO examination system,⁵⁶ scholars concede that the "optimal error rate" for the patent examination process is not zero: perfection in patent

⁵¹ See *AT&T-Excel II*, 1999 WL 1050064, at *9–28.

⁵² See *AT&T-Excel I*, 172 F.3d at 1355–60 (adverting to its *State Street Bank* decision as having "discarded the so-called 'business method' exception").

⁵³ *Id.* at 1359, 1361.

⁵⁴ See *AT&T-Excel II*, 1999 WL 1050064, at *17–23.

⁵⁵ See Sfekas, *supra* note 3, at 197–98, 203, 211 (citing increased numbers of applications, noting the growing backlog at USPTO, and asserting that one problem for examiners is the difficulty of finding relevant prior art).

⁵⁶ See, e.g., Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1496 (2001) (summarizing criticisms of USPTO efficacy, efficiency, and accuracy); Carl Shapiro, *Patent System Reform: Economic Analysis and Critique*, 19 BERKELEY TECH. L.J. 1017, 1019 (2004) (detailing deleterious economic effects of improperly issued patents and positing regulatory capture of Patent Office).

examination would come at too high a cost.⁵⁷ There is agreement that a vastly increased number of applications has not been matched by increases in PTO personnel, leading to significant delays in processing of applications for all areas, not just business methods.⁵⁸ There is disagreement over the actual social costs of this situation and how best to improve patent quality.

Professor Mark Lemley argues that improperly granted patents are not a very serious problem. Noting the minuscule portion of patents that are ever asserted against a competitor, he posits that improving efficiency at the PTO would primarily affect the many patents that are never asserted.⁵⁹ A substantial number of granted patents are abandoned before their terms expire, through failure to pay required maintenance fees.⁶⁰ Moreover, motivations for obtaining patents differ, leading to disparate values and disparate uses of granted patents.⁶¹ Sophisticated patentees and potential infringers are aware of the limitations of the system and presumably factor those uncertainties into their decision-making.⁶² In rejecting calls for improvement of the USPTO examination process, however, Professor Lemley gives scant consideration to whether the presumption of validity accorded to all issued patents has any deterrent effect on the direction of future innovative

⁵⁷ See Joseph Farrell & Robert P. Merges, *Incentives to Challenge and Defend Patents: Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help*, 19 BERKELEY TECH. L.J. 943, 946 (2004) (explaining that perfect patent examination would be too costly, and that backstop methods exist to invalidate improperly granted patents).

⁵⁸ See *id.* at 944–45 (recognizing that inadequate resources at the PTO can result in superficial analysis of applications).

⁵⁹ See Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSPECTIVES 75, 75 (2005) (observing that only 1.5 % of issued patents are ever litigated and only 0.1% go to trial); Lemley, *supra* note 56, at 1497 (maintaining that because a great majority of patents are never either litigated or licensed, improving PTO examinations is not cost-effective).

⁶⁰ See Lemley, *supra* note 56, at 1503 (noting that nearly two-thirds of patents are allowed to lapse, almost half in the first ten years of their terms).

⁶¹ See *id.* at 1505–07 (characterizing various types of patentees and their various uses of patents).

⁶² See *id.* at 1514–15 (asserting that sophisticated parties in this market are aware of uncertainties regarding patent validity).

development.⁶³ Lemley's model also assumes that improving examinations would necessarily require increased costs from patent applicants, overlooking the point that the USPTO in recent years has generated surplus funds that have been appropriated by Congress for other purposes.⁶⁴

Although litigation is frequently mentioned as one means of correction for invalid patents, other commentators point out the deterrent effect that issued patents, including incorrectly issued patents, can have on future innovations before litigation is even contemplated.⁶⁵ In addition, Professors Joseph Farrell and Robert Merges demonstrate another inadequacy of litigation as a cure for improperly granted patents.⁶⁶ Their analysis shows that the benefits, and thus the incentives to litigate, are significantly higher for patentees than for alleged infringers, in part because of the economic effects of pass-through and the public good problem.⁶⁷

Pass-through effects occur when competing infringers pass the costs of royalties through to consumers or end users, thus mitigating their own costs while affecting supply-demand optimal values.⁶⁸ Because the royalty costs are passed through to end users, the licensees have less incentive to contest the demands for royalties.⁶⁹ The public good problem occurs when the benefit of a good is available to everyone, while the cost of producing it must be borne by only a few.⁷⁰ Patent infringement litigation has the

⁶³ See 35 U.S.C. § 282 (2002) (according a presumption of validity to issued patents); *Rockwell Int'l Corp. v. United States*, 147 F.3d 1358, 1362 (Fed. Cir. 1998) (requiring "clear and convincing evidence" to establish the invalidity of an issued patent).

⁶⁴ See Lemley, *supra* note 56, at 1508–09 (hypothesizing the fifty percent increase in cost of prosecution to double examination time, and the deterrent effect on applicants from increased cost, but failing to address any downstream effects of improperly granted patents on corporate strategic decisions). *But see* Noveck, *supra* note 10 (characterizing examiners as "isolated," and judicial review as too late to solve problems with patents). This article is discussed further, *infra* notes 131–135 and accompanying text.

⁶⁵ See Dreyfuss, *supra* note 47, at 270 (decrying *in terrorem* effects of patents); Farrell & Merges, *supra* note 57, at 945–46 (identifying the effects of patents in deterring innovation); Shapiro, *supra* note 56, at 1033–34 (analyzing the current state of the patent system and its effects on economy).

⁶⁶ Farrell & Merges, *supra* note 57, at 951–54.

⁶⁷ See *id.*

⁶⁸ See *id.* at 953.

⁶⁹ See *id.*

⁷⁰ See *id.* at 952.

attributes of a public good because, while a single infringer or group of infringers bears the cost of litigating against a patentee, finding a patent invalid benefits all infringers and potential infringers.⁷¹ This situation encourages potential infringers to wait and allow some other party to litigate, so that they can “free-ride,” or share the benefits without incurring the costs.⁷² It discourages attacks on patents by any individual. Both these disparities in costs and benefits diminish the likelihood of litigation being initiated.⁷³ (The Farrell and Merges analysis, however, does not consider the economic effects of injunctions being imposed on infringers, focusing only on royalty payments or other monetary penalties.)⁷⁴ Farrell and Merges conclude that the unbalanced incentives to litigate are likely to result in outcomes that depart from optimal efficiency, and they warn that the pressure to settle is an expected result of the economic realities, leading to a costly drain on the economy as a whole as improperly granted patents go unchallenged.⁷⁵

In light of these acknowledged problems, the next section examines responses to the *State Street Bank* and *AT&T-Excel I* decisions from various stakeholders.

II. HAUNTED BY THE BUSINESS METHOD EXCEPTION

As has been stated earlier, the demise of the business method exception was greeted with widespread criticism.⁷⁶ This section outlines measures that have been taken by Congress, the patent office, and the courts to address some of the problems perceived as

⁷¹ See *id.*

⁷² See *id.*

⁷³ See Farrell & Merges, *supra* note 57, at 948–55 (analyzing the public good problem of estoppel application of an invalidity determination and pass-through problem as mitigating costs to infringers).

⁷⁴ Given the recent decision of the Supreme Court in *eBay v. MercExchange* that injunctions should no longer be issued in patents cases as a matter of course, but only after due consideration of the “four factors,” Farrell & Merges’s analysis seems not incomplete, but prescient. See *eBay, Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1838 (2006).

⁷⁵ See Farrell & Merges, *supra* note 57, at 968.

⁷⁶ See, e.g., Allison & Hunter, *supra* note 12, at 730–31 (noting widespread criticism of business methods patents by academics, journalists, and politicians).

arising from the ruling that business methods are patentable subject matter.

A. *Public Reaction and the Amazon Patent*

Criticisms of business methods patents were both substantive and procedural, including arguments against their essential constitutionality,⁷⁷ but most commonly focused on the perceived poor quality of the issued patents.⁷⁸ Some critics did concede the greater difficulty of finding prior art for such patents, given the newly recognized patentability of subject matter: prior art was more likely to be in materials other than previous patents—including sources such as academic and trade journals, company and industry publications, even software and websites—or to be protected as trade secrets.⁷⁹

Each critic had his own list of horrible examples of outrageous and improvidently granted patents.⁸⁰ High on, if not topping, many lists was the Amazon.com “one-click” patent.⁸¹ Filed in 1997 and issued in 1999, the Amazon patent claimed a method and system that allowed customers to make on-line purchases without

⁷⁷ See also Dreyfuss, *supra* note 47, at 274 (warning that even valid business method patents stifle innovation and adversely affect economy). See generally Pollack, *supra* note 15 (castigating the Federal Circuit for its decision and asserting unconstitutionality of business methods patents as contrary to common sense and Congressional intent, not falling within Constitutional concepts of “useful arts,” and having no tendency to “promote progress”).

⁷⁸ See John R. Allison & Emerson H. Tiller, *The Business Method Patent Myth*, 18 BERKELEY TECH. L.J. 987, 992 (2003) (reporting that many have maligned business methods patents for lack of quality); Sfekas, *supra* note 3, at 210–11 (identifying lower quality as major concern with business methods patents).

⁷⁹ See Andrew Kopelman, Note, *Addressing Questionable Business Method Patents Prior To Issuance: A Two-Part Proposal*, 27 CARDOZO L. REV. 2391, 2393 (2006) (illuminating difficulty of locating relevant prior art for business methods patents); Allison & Hunter, *supra* note 12, at 733–34 (noting critics’ recognition of importance of non-patent prior art in determining validity of business methods patents).

⁸⁰ See, e.g., Greg Aharonian, (*Walker Asset’s*) *Trivial/Obnoxious Business Method Patents*, <http://lists.essential.org/pipermail/random-bits/2000-April/000143.html> (2000) (listing recent questionable business methods patents issued).

⁸¹ See Allison & Hunter, *supra* note 12, at 731–32 (mentioning Amazon’s patent as “frequently cited” in criticism); Sfekas, *supra* note 3, at 212 (indicating Amazon’s patent as illustrative of problems with business methods patents).

re-entering their shipping and billing data.⁸² Amazon asserted the patent against one of their major competitors, suing Barnes & Noble for infringement and obtaining a preliminary injunction, later overturned.⁸³ Many in the public believed the patent to be invalid, and a website, BountyQuest.com, was even set up to solicit from the public suggestions of prior art that would demonstrate anticipation or obviousness for the Amazon patent and several other controversial patents.⁸⁴ Barnes & Noble settled with Amazon for undisclosed terms, and Amazon has not publicly asserted the patent against any other parties.⁸⁵

Besides the critical comments, another result of the *State Street Bank* decision and the accompanying publicity was a significant jump in the number of patent applications filed in the area of business methods. USPTO statistics show that the number of Class 705 patent applications grew from 1,425 in Fiscal Year (“FY”) 1998 to 3,023 in FY 1999 and to 9,288 in FY 2001.⁸⁶ The FY 1998 figure represented only about 0.6% of total utility applications filed, while the FY 2001 figure represented about 2.9% of utility applications.⁸⁷ The most recent figures show 8,959 applications for FY 2006, representing about 2.2% of total utility

⁸² Method & Sys. for Placing a Purchase Order via a Communications Network, U.S. Patent No. 5,960,411 (filed Sept. 12, 1997).

⁸³ See *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 73 F. Supp. 2d 1228 (W.D. Wash. 1999), *vacated*, *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343 (Fed. Cir. 2001).

⁸⁴ See Jacob Birnbaum, *The Case for the U.S. Patent and Trademark Office’s Adoption of an Open-Source “Bounty” System for Reviewing Business Method and Software Patents, in Light of the Patent Infringement Battles Featuring the U.S. Financial Exchanges that Have Been Waged in Recent Years*, 2006 UCLA J.L. & TECH. 2, 55–57 (2006) (describing creation of BountyQuest). The search for invalidating prior art was not successful. Recently, however, a cameraman from New Zealand filed a request with the USPTO for reexamination of Amazon’s patent, and the USPTO granted the request. The reexamination is currently in progress. See Nate Anderson, *Amazon’s “One Click” Patent Reconsidered*, ARSTECHNICA, May 19, 2006, <http://arstechnica.com/news/ars/post/20060519-6872.html>.

⁸⁵ See Troy Wolverton, *Amazon, Barnes & Noble settle patent suit*, CNET NEWS, Mar. 6, 2002, <http://news.com.com/2100-1017-854105.html> (reporting settlement of the suit).

⁸⁶ See USPTO, Patent Business Methods - Class 705 Application Filing and Patents Issued Data, <http://www.uspto.gov/web/menu/pbmethod/applicationfiling.htm> (last visited Sept. 19, 2007).

⁸⁷ See *id.*

applications. Possible reasons for the apparent leveling off are discussed *infra*.⁸⁸

B. Congressional Action and Inaction

Responding to the storm of public criticism with uncharacteristic alacrity, Congress incorporated the First Inventor Defense Act into an omnibus bill addressing intellectual property rights.⁸⁹ The Act provided a defense to patent infringement for a party who had reduced the subject matter of the claim to practice at least one year prior, and commercially used the subject matter of the claim prior, to the effective filing date.⁹⁰ The defense was available only against complaints of infringement of patents on methods of doing business.⁹¹ This defense has not yet been litigated, possibly in part because of the uncertainty surrounding the definition of a business method patent, and also because the party who loses an infringement action in which he asserted the first inventor defense is then liable for the patentee's attorney's fees.⁹²

In the same bill, Congress also provided for a new *inter partes* reexamination procedure.⁹³ The new procedure was an alternative to, but not a replacement for, the earlier, often-criticized *ex parte* reexamination. It provided for increased participation by any party wishing to challenge the validity of any issued patent, not limited to business methods patents.⁹⁴ In an effort to prevent possible abuses, however, the Optional Inter Partes Reexamination Procedure Act estopped a third-party participant from later raising in litigation any issue that he had raised or *could have raised*

⁸⁸ See *infra* notes 111–117 and accompanying text.

⁸⁹ See First Inventor Defense Act of 1999, Title IV, Subtitle C, Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No.106-113, 113 Stat. 1501, app. I 1501A-521 (1999).

⁹⁰ See *id.* § 4302.

⁹¹ See *id.* §§ 4301–03.

⁹² See Kopelman, *supra* note 79, at 2407 (speculating on reasons for underutilization of the first inventor defense).

⁹³ See Optional Inter Partes Reexamination Procedure Act of 1999, Title IV, Subtitle F, Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, app. I 1501A-521 (1999) (codified at 35 U.S.C. §§ 311–18 (2000)).

⁹⁴ See *id.*

during reexamination.⁹⁵ Many patent experts believe the risks associated with the procedure are too great, and, in the first four years following its enactment, there were only twenty-six requests for *inter partes* reexaminations.⁹⁶

The following year, Representatives Howard Berman (CA) and Rick Boucher (VA) introduced the Business Method Patent Improvement Act of 2000 to address some of the issues raised by industry.⁹⁷ The bill proposed to create a formal opposition process, only available for business method patents, which could be initiated within nine months of the patent grant, required publication of all business method patent applications after eighteen months, and enhanced public participation.⁹⁸ The bill died in committee, as did a similarly-named bill in 2001.⁹⁹

C. Actions of the USPTO

The USPTO has taken its own initiatives in response to the controversy over business methods patents, with continuing efforts to address various aspects of the publicly perceived problems of those patents. Not waiting for congressional action, the PTO has established several programs to mitigate the problems patent examiners face in dealing with the expansion of patentable subject matter.

⁹⁵ See *id.* (amending 35 U.S.C. § 315(c) (2000)).

⁹⁶ See Farrell & Merges, *supra* note 57, at 967 (speculating on reasons for paucity of requests for reexamination).

⁹⁷ See Business Method Patent Improvement Act of 2000, H.R. 5364, 106th Cong. (2000); see also *supra* note 13 and accompanying text.

⁹⁸ See WILLIAM FISHER & GERI ZOLLINGER, THE BERKMAN CENTER FOR INTERNET & SOCIETY, BUSINESS METHODS PATENTS ONLINE (June 22, 2001), <http://cyber.law.harvard.edu/ilaw/BMP/>.

⁹⁹ See Business Method Patent Improvement Act of 2001, H.R. 1332, 107th Cong. (2001). For comprehensive information on bills and their status, see THOMAS, http://thomas.loc.gov/home/bills_res.html (U.S. Library of Congress bill tracker) (last visited Sept. 19, 2007). Ensuing efforts to enact legislation in this area have been similarly unsuccessful, although Bruce Lehman, Chairman of the International Intellectual Property Institute, believes that a bill addressing some of these issues, introduced to the current Congress, is likely to pass. See Bruce A. Lehman, *Bracing for the Impact of Patent Reform: Prospects for Legislation in the 110th Congress*, in INT'L INTELL. PROP. L. AND POL'Y – VOLUME 15 (forthcoming 2007) (manuscript on file with author).

1. The Business Methods Patent Initiative

The first USPTO action was a program started in March 2000 to improve the quality of business method patents, the Business Methods Patents Initiative.¹⁰⁰ Recognizing the complexity of the transition it was facing because of the new and unfamiliar subject matter, the PTO established a two-pronged program: industry outreach and quality improvement.¹⁰¹ The industry outreach program aimed to involve its critics in the patent examination process. It established quarterly meetings with stakeholders in the software, Internet, and electronic commerce industries to encourage them to air their concerns.¹⁰² It promised to solicit industry feedback not only on prior art resources that were or should be used by the USPTO but also on other databases, on information collection procedures, and on alternative sources, in a targeted effort to expand prior art collection.¹⁰³ The quality improvement plan comprised hiring more and differently-trained examiners for business methods patents, special training for business methods patent examiners, increasing the search and library support available to perform non-patent literature searches for examiners, providing a set of identified sources for non-patent prior art that examiners were required to search, substantially increasing the sample size of business methods patents selected for quality review by the Office of Patent Quality Review, and beginning a program called Second Pair of Eyes Review (“SPER”), which mandated a second round of examination for all business methods patents after their initial allowance.¹⁰⁴ The second round examination was conducted by an experienced examiner or supervisor, and could result in re-opening the examination of the patent.¹⁰⁵ After implementation of the SPER program, allowance rates in Class 705 dropped significantly: to 47% at the end of the first quarter of the 2001 fiscal year, down

¹⁰⁰ See Allison & Hunter, *supra* note 12, at 734.

¹⁰¹ See USPTO ACTION PLAN, *supra* note 9 (describing plans for industry outreach and quality improvement).

¹⁰² See *id.*

¹⁰³ See *id.*

¹⁰⁴ See USPTO WHITE PAPER, *supra* note 9, at 13–21 (explaining training and enhanced review programs).

¹⁰⁵ See Allison & Hunter, *supra* note 12, at 737.

from 57% before SPER.¹⁰⁶ The allowance rate for business methods patents has continued to drop, to a low of 11% in FY 2004, although it rose slightly, to 19%, in 2005 and 2006.¹⁰⁷

The figures noted above, however, do not tell the entire story; the aim of the USPTO initiatives, one must remember, was to improve the quality of business methods patents. The quality of a patent is a difficult feature to measure directly.¹⁰⁸ Nevertheless, Professors John R. Allison and Starling D. Hunter had independently conducted research on the quality of business methods patents, and had both concluded that, contrary to widespread opinion, they were not inferior to other patents issued by the USPTO.¹⁰⁹ Indeed, they found that business methods patents cited significantly more prior art than other patents, and that patent examiners spent more time on business method applications than on other patents with the same number of claims, proposing these metrics as an acceptable analogue for a measure of quality.¹¹⁰

¹⁰⁶ See ROBERT STOLL, INTERNATIONAL CONFERENCE ON INTELLECTUAL PROPERTY, THE INTERNET, ELECTRONIC COMMERCE, AND TRADITIONAL KNOWLEDGE, RECENT DEVELOPMENTS AND CHALLENGES IN THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS: NEW DEVELOPMENTS IN BUSINESS METHODS AND SOFTWARE PATENTS 8 (2001), http://www.wipo.int/edocs/mdocs/ip-conf-bg/en/wipo_ectk_sof_01/wipo_ectk_sof_01_2_1.doc (lauding the effectiveness of Second Pair of Eyes Review).

¹⁰⁷ See Ladas & Parry, L.L.P., *The USPTO's Spring 2006 Business Methods Partnership Meeting*, May 2006, <http://www.ladas.com/BULLETTINS/2006/USPTOBusinessMethodsMeetings.html> (quoting USPTO allowance statistics for business methods applications).

¹⁰⁸ See Allison & Tiller, *supra* note 78, at 996 (defining patent quality as the likelihood that it is truly novel and non-obvious advance over prior art); see also John E. Dubiansky, *An Analysis for the Valuation of Venture Capital-Funded Startup Firm Patents*, 12 B.U. J. SCI. & TECH. L. 170, 172, 176–80 (2006) (conceding the complexity of valuing patents, and devising a method for doing so).

¹⁰⁹ See Allison & Hunter, *supra* note 12, at 735–36 (noting that business methods patents cited significantly more prior art). See generally Allison & Tiller, *supra* note 78 (finding both patent and non-patent prior art references more frequent in business methods patents); Starling D. Hunter, *Have Business Method Patents Gotten a Bum Rap? Some Empirical Evidence*, (MIT Sloan Sch. Mgmt. Working Paper No. 4326-03, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=424081 (criticizing the conventional wisdom of lower business methods patent quality).

¹¹⁰ See Allison & Tiller, *supra* note 78, at 1068–73 (reporting longer pendency times for business methods patent applications than for other patent applications with comparable numbers of claims).

In a recent, more-thorough analysis of business methods patents undertaken to determine the effectiveness of the SPER program, Allison and Hunter found that this differential had increased: during their examination process, examiners added more prior art references and particularly non-patent prior art references to patents in the SPER program.¹¹¹ However, the researchers identified another, unanticipated side-effect of the program: classification to avoid the review.¹¹² The SPER program defined business methods patent applications as those whose primary classification was 705, and it required enhanced review only for Class 705 applications as meeting the USPTO definition of business methods patent applications.¹¹³ This limitation made the program inherently under-inclusive, both because other classifications included applications claiming business methods, and because patent applications with a *secondary* 705 classification were exempt from the review.¹¹⁴ Even worse, Allison and Hunter's research suggested strongly that, because the increased scrutiny of SPER was only accorded to primary Class 705 patent applications, fewer patents were being assigned to that primary class.¹¹⁵ They noted a significant post-SPER change in the relative proportions of primary Class 705 applications (subject to SPER scrutiny) versus secondary Class 705 applications (not subject to such scrutiny).¹¹⁶ Their conclusion was that a focused initiative like SPER invited gaming of the system and failed to address the

¹¹¹ See Allison & Hunter, *supra* note 12, at 758 (finding significant increases in prior art references in primary Class 705 patents issued after SPER, but no such increase in secondary Class 705 patents).

¹¹² See *id.* at 738.

¹¹³ See *id.* at 759.

¹¹⁴ See *id.* at 735 (pointing out under-inclusiveness of SPER initiative); see also Hall, *supra* note 11, at 2–3 (noting that business methods patents exist in classes other than 705).

¹¹⁵ See *id.* at 738.

¹¹⁶ See *id.* at 738, 758–60 (attributing the increase in proportion of applications given secondary classification of 705 relative to those with primary classification of 705 to efforts to avoid SPER, given “dramatic migrations” of patents from primary to secondary Class 705).

systemic problems at the USPTO brought about by increasing workloads.¹¹⁷

2. A New New Program to Identify Prior Art: Community Patent Review

The non-obviousness requirement is one of the most important criteria for patentability:¹¹⁸ it is both the most commonly litigated patent validity issue and the most likely to be the basis of a determination of invalidity.¹¹⁹ The Patent Code provides that an invention is not patentable if the differences between the invention and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art”¹²⁰ Determination of a patent’s non-obviousness thus requires a careful and thorough examination of prior art.¹²¹ The standard for determining non-obviousness is that, for a combination of prior art to have been obvious, there must have been some suggestion to make that combination (the TSM Test).¹²² As earlier noted, one problem in examining a business method patent is the difficulty of locating relevant prior art.¹²³ Scholars have suggested various ways to mitigate this problem, some recommending that the applicant should be

¹¹⁷ See *id.* at 785–87, 789 (pointing to SPER as incentive for examiners not to place patents in Class 705, positing similar incentive for applicants to draft claims to avoid Class 705, and characterizing patent quality problems as systemic).

¹¹⁸ See generally *KSR Int’l Co. v. Teleflex Co.*, 127 S. Ct. 1727 (2007) (discussing the proper standard of non-obviousness to be applied to patents in general). Analysis of the effect of this recently-issued decision as it relates to the complex issue of non-obviousness, however, is beyond the scope of this paper.

¹¹⁹ See Gregory Mandel, *Patently Non-Obvious II: Experimental Study on The Hindsight Issue Before The Supreme Court in KSR v. Teleflex*, 9 YALE J. L. & TECH. 1 (2007) (asserting non-obviousness “stands at the center of innovation policy”).

¹²⁰ 35 U.S.C. §103 (specifying non-obviousness criterion for patentability).

¹²¹ See generally USPTO, FORMULATING AND COMMUNICATING REJECTIONS UNDER 35 U.S.C. 103 FOR APPLICATIONS DIRECTED TO COMPUTER-IMPLEMENTED BUSINESS METHOD INVENTIONS (2006), <http://www.uspto.gov/web/menu/busmethp/busmeth103rej.htm> (providing instructions for examiners on procedures for non-obviousness investigation and determination).

¹²² See, e.g., *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987) (articulating requirement for some teaching, suggestion, or motivation to combine prior art).

¹²³ See USPTO, *supra* note 121; see also Sfekas, *supra* note 3, at 210–11 (observing that business methods are poorly documented for patent searches and not easily accessible).

required to supply more information about prior art,¹²⁴ and others that various levels of patents be issued with varying degrees of presumption of validity, depending on the level of review accorded during examination.¹²⁵

To address this problem, the USPTO recently announced a pilot project to solicit information about patent applications from the public.¹²⁶ The Community Patent Review Project, or “Peer to Patent” Project, is a “social software” project that will provide an online open review process, wherein interested parties can review selected patent applications and contribute information about prior art to supplement the normal patent examination process.¹²⁷ While there have been previous efforts to harness the Internet user community to identify prior art for questionable patents, notably the BountyQuest.com website arising from the controversy surrounding the Amazon “one-click” patent,¹²⁸ earlier efforts focused on issued patents rather than applications and did not involve the cooperation of the USPTO.¹²⁹

The Institute for Information Law & Policy at New York Law School, under its Director, Beth Noveck, is designing the system in collaboration with industry co-sponsors, including IBM, Microsoft, Red Hat, and Hewlett-Packard.¹³⁰ Decrying an “information deficit” in the USPTO, caused in part by isolation of the examiners from the scientific and technical community, Noveck notes that, with recent statutory changes providing for most patent applications to be published after eighteen months, a significant

¹²⁴ See, e.g., Farrell & Merges, *supra* note 57, at 960–63 (advocating that the USPTO require more thorough search and disclosure from applicants).

¹²⁵ See Lemley & Shapiro, *supra* note 59, at 85 (suggesting that applicants select a level of examination for their applications).

¹²⁶ See Alan Sipress, *Open Call from the Patent Office*, WASH. POST, Mar. 5, 2007, at A1 (describing the project and identifying key participants).

¹²⁷ See Noveck, *supra* note 64, at 145 (describing project as supplementing USPTO examination).

¹²⁸ See Ruth Walker, *Whose Idea Is It, Anyway?*, CHRISTIAN SCI. MONITOR, Jan. 17, 2002, at 11 (describing the Bounty Quest program).

¹²⁹ See Paul S. Hunter, *Peer-Reviewed Patent Applications: A Quixotic Undertaking*, NAT'L L. J., Mar. 19, 2007, <http://www.law.com/jsp/nlj/PubArticleNLJ.jsp?id=1173863013424> (criticizing the focus on applications instead of issued patents).

¹³⁰ See *Community Patent Review Highlighted in Two Projects*, 7 COMPUTER TECH. L. REP. (BNA) 414, (Sept. 15, 2006).

amount of information is available to the public before patents are issued, making a public review system feasible.¹³¹ She argues that peer review as traditionally practiced in the scientific community is ill-suited to the process of patent examination, occurring in the main *ex post* instead of *ex ante*.¹³² The pilot project will initially address only a set of some 250 to 400 software patent applications supplied voluntarily, and examination of those applications will be given priority by the Patent Office.¹³³ Participants in the project will contribute prior art, comments on and rankings of prior art, ratings of patent claims, and ratings of other participants.¹³⁴ While many questions remain about issues such as possible copyright protection of prior art, validity of comments and ratings, and the possibility of capture of the system by interested parties, Noveck is confident that the project will be of significant benefit to the USPTO, to innovators, and to society at large.¹³⁵ Others, however, are less sanguine.¹³⁶

3. Drawing the Boundaries of Patentability of Subject Matter: *Lundgren and Bilski*

Two recent decisions by the Board of Patent Appeals and Interferences (“BPAI”) illustrate the complexity of discerning the limits of patentability of business methods.¹³⁷ The decisions may,

¹³¹ See Noveck, *supra* note 64, at 129 (noting factors that make the project possible). It should be noted, however, that the requirement of publication after eighteen months can be evaded by a declaration that the applicant will not attempt to patent this invention outside of the United States. Since business methods have not been deemed patentable in other countries, this author suggests that many business methods applicants are likely to make such a declaration and avoid publication of their applications.

¹³² See *id.* at 138–39 (discussing limitations of traditional peer review).

¹³³ See *id.* at 145 (noting expedited review for patents in project).

¹³⁴ See *id.* at 128, 145–50 (describing features of project).

¹³⁵ See *id.* at 155–61.

¹³⁶ See Dennis Crouch, PATENTLY-O, Feb. 26, 2007, http://www.patentlyo.com/patent/2007/02/community_revie.html (giving a brief evaluation of possible benefits and detriments of the project); Hunter, *supra* note 129 (characterizing efforts to deal with vast number of applications as “quixotic”).

¹³⁷ While at least one brief in a pending Supreme Court case, *Microsoft v. AT&T, Inc.*, argues for a court decision categorically denying patentability of software, that is not the major issue before the court, and speculating whether the court will address that issue is beyond the scope of this paper. See Dennis Crouch, *Microsoft v. AT&T: Transnational Patent Law At The Supreme Court*, PATENTLY-O, Dec. 19, 2006,

however, offer some guidance for both prosecutors and litigators regarding those limits under 35 U.S.C. § 101.¹³⁸ In 2005, the BPAI issued a precedential opinion¹³⁹ in the case of *Ex parte Lundgren*, holding that a claimed method of setting compensation for a manager at a firm so as to reduce the incentive for collusion with comparison firms was not unpatentable subject matter under 35 U.S.C. § 101.¹⁴⁰ The Board rejected the patent examiner's requirement that a claimed invention be within the "technological arts" as improper and not supported by precedent. The Board cited the Federal Circuit decision in *AT&T-Excel I* as establishing the standard that a process claim must produce a "useful, concrete and tangible" result,¹⁴¹ and further restated that the only exceptions to patentable subject matter were "laws of nature, physical phenomena and abstract ideas."¹⁴²

The BPAI opinion in *Ex parte Bilski* the following year, though not marked precedential, bears careful reading. Indeed, the BPAI listed it as an "informative" opinion, meaning that it should provide guidance to practitioners.¹⁴³ The BPAI upheld rejection of claims for a method of managing consumption risks of a commodity on the grounds of nonstatutory subject matter. The examiner's position was that the invention "merely manipulates [an] abstract idea . . . without any limitation to a practical application."¹⁴⁴ The Board noted, however, that the rejection relied, among other sources, on *In re Musgrave* which articulated

http://www.patentlyo.com/patent/2006/12/microsoft_v_att.html (discussing major issues in case and mentioning brief advocating against software patentability).

¹³⁸ See 37 C.F.R. § 1.633 (1995) (defining interference procedures and the role of BPAI).

¹³⁹ See John Gladstone Mills III et al., 3 PAT. L. FUNDAMENTALS APP. 16(D): STANDING ORDER ¶ 12.3 (2d ed. 2007) (providing for BPAI ability to declare decisions precedential).

¹⁴⁰ See *Ex parte Lundgren*, 76 U.S.P.Q.2d 1385, 1385–86 (B.P.A.I. 2005) (reciting claims of patent in suit and rejecting examiner's contention of unpatentability under 35 U.S.C. § 101).

¹⁴¹ *Id.* at 1389–92 (contradicting examiner's assertion of an accepted "technological arts" test).

¹⁴² *Id.* at 1387 (citing *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

¹⁴³ See Dennis Crouch, PATENTLY-O, Feb. 16, 2007, http://www.patentlyo.com/patent/2007/02/bpai_informativ.html (complaining that the BPAI decision in this case "flips" *Lundgren*).

¹⁴⁴ See *Ex parte Bilski*, 2006 WL 4080055, at *1 (B.P.A.I. Sept. 26, 2006).

the “technological arts” test.¹⁴⁵ Citing and incorporating the detailed analysis of *Lundgren*, the Board nevertheless demurred at the interpretation that the “useful, concrete and tangible result” test had been accepted as a general test for statutory subject matter, or that those terms had been clearly defined in *State Street Bank*.¹⁴⁶ The Board conceded, however, that a patentable process need not require a machine or computer to carry it out, and reiterated that the only unpatentable subject matter was “laws of nature, natural phenomena, and abstract ideas.”¹⁴⁷ It went on to acknowledge the difficulty of drawing a clear line between patentable and unpatentable claims for business methods, but asserted that it was better to deny a doubtful claim than to allow it.¹⁴⁸ While some have warned that *Bilski* marked a retreat from the acceptance of business methods as patentable, the Board opinion explicitly states that the problem was that the claims of this patent application were so broad as to preempt all ways of performing the indicated steps, and thus amounted to an attempt to assert patent claims over an entire “abstract idea.”¹⁴⁹ Since this case has been appealed to the federal courts, more explanation and clarification may be forthcoming.¹⁵⁰

D. Further Developments in Case Law

At this point, the positions of the courts, Congress, and the USPTO regarding business methods patents seem anomalous. In *State Street Bank* and in *AT&T-Excel I*, the CAFC held that there was no business method exception; business methods were not unpatentable, and there was no basis for treating claims on business methods differently from other patent claims.¹⁵¹ In contrast, Congress and the USPTO have used legislation and regulations to distinguish patents on methods of doing business as

¹⁴⁵ See *In re Musgrave*, 431 F.2d 882, 893 (C.C.P.A. 1970).

¹⁴⁶ See *Bilski*, 2006 WL 4080055, at *9.

¹⁴⁷ *Id.* at *22.

¹⁴⁸ *Id.* at *7 (believing public interest best served by rejecting questionable cases) (citing *Ex parte Lundgren*, 76 U.S.P.Q.2d (BNA) 1385, 1402–03 (B.P.A.I. 2005)).

¹⁴⁹ See *id.* at *4–8.

¹⁵⁰ See Patently-O TidBits, Patent Law Blog (Patently-O), <http://www.patentlyo.com/patent/2007/03/index.html> (reporting that case has been appealed) (Mar. 11, 2007).

¹⁵¹ See *supra* notes 35–54 and accompanying text.

meriting special treatment.¹⁵² In the meantime, patent examination workloads are increasing, and so is pendency time, the time between application and issuing of a patent.¹⁵³ It would be surprising if, given the increase in workload, quality of patents had not suffered.¹⁵⁴ More recent developments at the USPTO have only shed further light on the incongruities. Meanwhile, the federal courts have continued to render decisions involving business methods patents in all stages of litigation.

1. Injunctions in Infringement of a Business Methods Patent:
eBay v. MercExchange

In a series of cases illustrative of the complexity of modern patent litigation, eBay and Half.com, two heavily-used e-commerce sites, sparred with MercExchange, owner of several patents relating to conducting Internet auctions.¹⁵⁵ The recent and widely discussed Supreme Court decision dealt solely with the issue of whether the district court had abused its discretion in declining to grant a permanent injunction against eBay¹⁵⁶ following a jury verdict that eBay had infringed MercExchange's patent.¹⁵⁷ The earlier Virginia district court decision, however, considered the validity of the business method patents at issue in determining whether Half.com (a co-defendant) had infringed, and

¹⁵² See *supra* notes 86–104 and accompanying text.

¹⁵³ See USPTO, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2006, http://www.uspto.gov/web/offices/com/annual/2006/50304_table4.html (showing total average pendency for utility patents of 31.1 months); http://www.uspto.gov/web/offices/com/annual/2006/50302_table2.html (showing total utility patent applications filed of 415,551 in FY 2006).

¹⁵⁴ See Lemley & Shapiro, *supra* note 59, at 76 (observing that nearly half of litigated patents are held invalid).

¹⁵⁵ See, e.g., *MercExchange, L.L.C. v. eBay, Inc.*, 271 F. Supp. 2d 789 (E.D. Va. 2002); *MercExchange, L.L.C. v. eBay, Inc.*, 275 F. Supp. 2d 695 (E.D. Va. 2003), *rev'd*, 401 F.3d 1323 (Fed. Cir. 2005), *rev'd*, 126 S. Ct. 1837 (2006) (illustrative, but not exhaustive, list of litigation between the parties).

¹⁵⁶ See *eBay, Inc. v. MercExchange, L.L.C.*, 126 S. Ct. at 1838–39 (vacating Court of Appeals decision, and holding district court did not abuse its discretion by applying four factor test to issuance of permanent injunction).

¹⁵⁷ See *MercExchange, L.L.C. v. eBay, Inc.*, 275 F. Supp. 2d at 710–15 (declining to issue permanent injunction against eBay).

also considered the *nature of the patents as business methods patents* in determining whether to issue an injunction.¹⁵⁸

The district court's highly fact-specific validity analysis did not address any unique business-methods-related characteristics of the patents.¹⁵⁹ In its analysis of the motion for a permanent injunction, however, the court considered defendants' argument that the patents, as business methods patents, should be accorded less presumption of validity, stating that, while "not dispositive . . . [it] lends additional weight" against an injunction.¹⁶⁰ In its reversal of the decision on appeal, the Court of Appeals for the Federal Circuit also noted this argument, although finding it to be insufficient support for the lower court's refusal to enjoin eBay.¹⁶¹

Addressing the denial of injunction, the Supreme Court opinion by Justice Clarence Thomas did not accord any special significance to the nature of the patents at issue, focusing instead on the more general issue of whether the traditional four-factor test for injunctive relief should apply to disputes arising under the Patent Act.¹⁶² The opinion rejected both the district court's refusal to grant an injunction and the appellate court's reversal of that refusal as unnecessarily broad.¹⁶³ In a concurring opinion, however, four justices examined more detailed aspects of the case, noting that injunctive relief could have different effects in different situations, and particularly that the consequences of enjoining the infringement of business methods patents might be different, given the "potential vagueness and suspect validity" of some business methods patents.¹⁶⁴ None of the courts addressed whether the patents in suit, which had been filed between November 1995 and

¹⁵⁸ See *id.* at 699–705, 713–14 (examining patents under 35 U.S.C. § 103).

¹⁵⁹ See *id.* at 699–705.

¹⁶⁰ See *id.* at 712 (stating defendants' argument against presumption of validity).

¹⁶¹ See *MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005) (warning that "general concern regarding business-method patents" was not sufficient to justify denial of injunction).

¹⁶² See *eBay, Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1838–39 (2006) (reciting four factors to consider in granting an injunction: irreparable harm, inadequate remedy, balance of hardships, and public interest).

¹⁶³ See *id.* at 1840 (disparaging lower court rulings as "expansive," "categorical," and "broad").

¹⁶⁴ *Id.* at 1842 (Kennedy, J., Stevens, J., Souter, J., Breyer, J., concurring).

March 1999 and issued between December 1998 and March 2001, had been examined under the SPER initiative, a point which, arguably, could bear on the presumption of validity.¹⁶⁵

2. Exorbitant Litigation Costs, and a Settlement: *NTP, Inc. v. Research in Motion, Ltd.*—The BlackBerry Case

In 2001, Research In Motion (“RIM”), developer of the BlackBerry handheld personal digital assistant, was sued by NTP for infringement of NTP patents covering systems and methods for providing wireless e-mail.¹⁶⁶ In the district court, NTP ultimately asserted against RIM sixteen system and method claims in five different patents, and a jury found that RIM had infringed, awarding NTP \$53.7 million in damages.¹⁶⁷ The district court enjoined RIM from further infringement, but stayed the injunction pending appeal.¹⁶⁸ On a rehearing of the appeal, the Court of Appeals for the Federal Circuit issued a complex and nuanced decision, and the battle continued.¹⁶⁹ While the claims in litigation were clearly technological in nature and were classified as telecommunications rather than business methods patents, some issues addressed by the court in this decision bear on the abstract nature of many process claims, including business methods patent claims.¹⁷⁰

¹⁶⁵ See U.S. Patent No. 5,845,265 (filed Nov. 7, 1995) (issued Dec. 1, 1998); U.S. Patent No. 6,202,051 (filed Feb. 19, 1999) (issued Mar. 13, 2001); U.S. Patent No. 6,085,176 (filed Mar. 8, 1999) (issued July 4, 2000).

¹⁶⁶ See Birnbaum, *supra* note 84, at 6 n.20 (recounting the NTP–RIM litigation and its costs, noting the high costs of patent litigation in general, and advocating a bounty system to reward parties who identify prior art to invalidate patents on business methods or software, although the NTP process patents would not have been covered by a classification-specific system).

¹⁶⁷ See *NTP, Inc. v. Research In Motion, Ltd.*, 2003 WL 23100881 (E.D. Va. 2003), *aff’d in part, rev’d in part, vacated in part*, *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005).

¹⁶⁸ See *id.*

¹⁶⁹ See *NTP, Inc.*, 418 F.3d 1282.

¹⁷⁰ See U.S. Patent No. 5,436,960 (filed May 20, 1991); U.S. Patent No. 5,625,670 (filed May 18, 1995); U.S. Patent No. 5,819,172 (filed Apr. 23, 1997); U.S. Patent No. 6,067,451 (filed Sept. 28, 1998); U.S. Patent No. 6,317,592 (filed Dec. 6, 1999).

The analysis of infringement was complicated by the fact that RIM was a Canadian company.¹⁷¹ Although the determination of infringement of the system claims was fairly straightforward, the court engaged in extensive analysis of unique aspects of methods or process claims, acknowledging the difficulty of determining infringement when no product or machine was claimed.¹⁷² One problem was whether or not the process had been *used* within the United States when one or more steps of the process had been performed outside the United States.¹⁷³ The Court concluded that RIM could not infringe on NTP's process claims under U.S. patent law because of the location of the RIM Relay computer system, an essential part of the system, in Canada.¹⁷⁴ In further analysis, the court opined that the only way in which it was possible to infringe the method claims was by *use*, since the concept of *sale* necessarily involved transfer of title or property, and it could not reconcile that sale of property concept with a *process*, which comprises a series of acts.¹⁷⁵ Its analysis notwithstanding, the court refused to explicitly draw such a conclusion for all methods claims. In the particular claims in suit reading on processes that were not manufacturing processes, however, no saleable product was produced, and thus no making or selling could occur to infringe.¹⁷⁶

In the meantime, in 2003 the USPTO initiated reexamination of eight of NTP's patents, resulting in the initial invalidation of five of the patents, and a final invalidation of one of them before November 2005, when the district court on remand declined to stay

¹⁷¹ See *NTP, Inc.*, 418 F.3d at 1287 (noting amicus briefs filed by the Canadian Chamber of Commerce and the Government of Canada).

¹⁷² See *id.* at 1318–20.

¹⁷³ For a more complete discussion of the extraterritorial issue in U.S. patent law and in this case in particular, see Robert Pierson, Note, *Extraterritorial Reach of U.S. Patent Law: Has the Federal Circuit Gone Too Far?*, 17 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 651, 683–86 (2007).

¹⁷⁴ See *NTP, Inc.*, 418 F.3d at 1318 (holding that infringement of process claim under 35 U.S.C. § 271(a) required that each step of the process claimed be performed within the U.S.).

¹⁷⁵ See *id.* at 1318–20 (expressing belief that Congress intended by 35 U.S.C. § 271(a) to limit infringement of process claims to *use* of method).

¹⁷⁶ See *id.*

its decision any longer.¹⁷⁷ In March 2006, RIM and NTP announced a settlement of the suit, with RIM agreeing to pay \$612.5 million.¹⁷⁸

3. Strategies in Preliminary Motions: *Dell*¹⁷⁹ and *Farradyne*¹⁸⁰

Two cases from opposite ends of the country illustrate some of the difficulties of pursuing infringement charges on business methods patents.

In Virginia, a district court issued a memorandum opinion denying Dell Inc.'s ("Dell") Motion for Rule 11 Sanctions against DE Technologies ("DE Tech"). Dell countered a DE Tech suit for patent infringement with a motion claiming that DE Tech had not done an adequate investigation before filing its Complaint, which alleged that Dell's procurement system infringed DE Tech's patent.¹⁸¹ DE Tech's patent, issued in 2002, claims "a computer system for facilitating international computer-to-computer commercial transactions"¹⁸² DE Tech's suit asserted that Dell, after visiting DE Tech's proof of concept website between 1997 and 2000, began to perform the business operations claimed in the DE Tech patent using some combination of its own and third party software.¹⁸³ The court noted the difficulty of performing analysis to support an infringement complaint in the absence of a "tangible product, device, or equipment" that could be acquired for comparison to the patent-in-suit.¹⁸⁴ Another significant point in the court's analysis was the uncontested integration of Dell's sales and procurement systems, which exacerbated the difficulty of determining the exact process incorporated into each of the two systems.¹⁸⁵ Finally, the court pointed out that DE Tech and its

¹⁷⁷ See Steven Levy, *BlackBerry Deal: Patently Absurd*, NEWSWEEK, Mar. 13, 2006, available at <http://www.msnbc.msn.com/id/11677343/site/newsweek/> (disparaging patents in suit and criticizing court's refusal to wait for completion of reexamination).

¹⁷⁸ *Id.*

¹⁷⁹ *DE Tech., Inc. v. Dell Inc.*, 2006 WL 467984 (W.D. Va. Feb. 28, 2006).

¹⁸⁰ *PB Farradyne, Inc. v. Peterson*, 2006 WL 132182 (N.D. Cal. Jan. 17, 2006).

¹⁸¹ See *DE Tech.*, 2006 WL 467984, at *2.

¹⁸² *Id.* at *1 n.1; see also U.S. Patent No. 6,460,020 (filed Dec. 29, 1997).

¹⁸³ See *DE Tech.*, 2006 WL 467984, at *1.

¹⁸⁴ *Id.* at *4, *12.

¹⁸⁵ See *id.* at *7-8.

attorneys had done a “rather extensive” pre-filing investigation of Dell’s systems from an external, functional perspective, which was all that was possible without benefit of discovery.¹⁸⁶

In 1995 and 1996, Thomas Peterson filed patents claiming systems for calculating the shortest elapsed time route information and route tracking information, and providing that information to users. The patents were granted in 1996 and 1998.¹⁸⁷ PB Farradyne, Inc. (“Farradyne”) supplied a system for calculating trip information to the San Francisco Metropolitan Transportation Commission.¹⁸⁸ Beginning in 2003, Peterson alleged in letters to Farradyne that Farradyne had infringed his patents, and demanded the opportunity to examine Farradyne’s source code.¹⁸⁹ In 2005, following a breakdown in negotiations between the parties, Farradyne sought a declaratory judgment of non-infringement, invalidity and unenforceability due to inequitable conduct by Peterson.¹⁹⁰ In an opinion on Peterson’s motion to dismiss, the court asserted its jurisdiction, but rejected Farradyne’s claims as providing insufficient specificity and notice, with leave to amend the claims and provide additional information that would render them well-formed.¹⁹¹ Farradyne also asserted a first inventor defense under 35 U.S.C. § 273.¹⁹² The court, noting that this issue was one of first impression, declined to address it until a fuller record became available in the course of future litigation.¹⁹³

¹⁸⁶ *Id.* at *10.

¹⁸⁷ *See* Method and Apparatus for Providing Shortest Elapsed Time Route Information to Users, U.S. Patent No. 5,523,950 (filed May 8, 1995); Method and Apparatus for Providing Shortest Elapsed Time Route and Tracking Information to Users, U.S. Patent No. RE38,724 (filed Nov. 21, 2000) (reissue of U.S. Patent No. 5,845,227 (filed Feb. 9, 1996)).

¹⁸⁸ *See* PB Farradyne, Inc. v. Peterson, 2006 WL 132182, *1 (N.D. Cal. Jan. 17, 2006).

¹⁸⁹ *See id.*

¹⁹⁰ *See id.* at *1, *3.

¹⁹¹ *See id.* at *2–4.

¹⁹² *See id.* at *5.

¹⁹³ *See id.*

III. HANDLING BUSINESS METHODS PATENTS IN THE CURRENT LEGAL ENVIRONMENT

Analysis of those recent decisions allows some admittedly tentative conclusions regarding issues that are likely to arise for business methods patents. The PTO is correct to consider the characteristics of business methods patent claims that distinguish them from other claims, because patent examiners must work from the perspective of those skilled in the art to be able to evaluate the novelty and non-obviousness of the claims. Based on Allison and Hunter's analysis, however, PTO efforts thus far to establish more stringent procedures for business methods patent applications have been at least in part self-defeating.¹⁹⁴ Given the small percentage of patents ever litigated,¹⁹⁵ the widely acknowledged *in terrorem* effects of improperly issued patents and the asserted effects of improperly issued patents in shaping the direction of future research,¹⁹⁶ eventual invalidation of improperly issued patents does not remedy the harms that they can cause. Unfortunately, the planned PTO effort to involve the broader community in identifying prior art for patent applications, while possibly mitigating some search problems, does not address all the PTO problems of short staffing and lack of expertise. PTO performance could be significantly improved if a larger share of its income derived from patent applications were allocated to increasing staff and upgrading technology rather than being returned to the general treasury.

A. Prosecuting Business Methods Patents

Business methods patent claims must be carefully drafted to avoid their being construed as abstract ideas. *Bilski* demonstrates that the PTO will not give a blank check to overly broad claims that might deter further innovation.¹⁹⁷ Additionally, the Allison and Hunter study suggests that drafting claims appropriately could affect the primary classification selected, and classification as

¹⁹⁴ See *supra* notes 109–117 and accompanying text.

¹⁹⁵ See *supra* notes 59–62 and accompanying text.

¹⁹⁶ See *supra* note 65 and accompanying text.

¹⁹⁷ See *supra* notes 143–150 and accompanying text.

other than a business methods patent could avoid the delays of the SPER process.¹⁹⁸

When filing a business method patent application, the applicant should consider whether requesting fast track status is desirable. Pendency times for business methods patent applications are long, and can be significantly reduced by the fast track option, but the potential for increased visibility in a program such as the Community Patent Review could lead to greater expense in prosecuting the patent because of additional identified prior art that must be researched and distinguished. The question of whether it is preferable to find out about prior art that bears on obviousness claims early in the application process, or to delay and potentially have an issued patent invalidated by prior art discovered and litigated after grant of the patent is one that must be made by the applicant and his patent agent. Because such a small percentage of patents are ever actually litigated, this decision is not straightforward. Applicants may not be willing to bear the increased costs associated with a more-complex application process, when the potential benefits accruing from the patent are difficult to measure.

B. Litigating Business Methods Patents

Litigators should be aware of the obviousness problems posed by non-patent prior art. If the application process did not include thorough searches for prior art, the likelihood of such art being unearthed during protracted and expensive litigation is a serious concern. However, if the patents being litigated were subjected to the SPER or the Community Patent Review programs, it can be argued that more credence should be given to the presumption of validity. Litigators should be aware of the potential for significant effects from an involved and assertive Internet user community, possibly resulting in even more expensive trials.

Finally, litigators should consider the abstract nature of business methods claims in drafting motions for discovery. Determining exactly what was claimed and what constitutes infringement will be highly fact-specific. The first inventor

¹⁹⁸ See *supra* notes 109–117 and accompanying text.

defense for business methods claims is unique in U.S. patent law and still awaits trial.

CONCLUSION

As the U.S. economy increasingly depends on the commercial manipulation of information and adjusts to new practices made possible by the Internet, the stakes of changing policy on patenting business methods are high. It is unlikely that major corporations will acquiesce quietly to the destruction of their present property rights in proprietary business methods. Nevertheless, there are widely-recognized flaws with the USPTO's current practices, and a variety of solutions to those flaws have been proposed. Indeed, new bills addressing patent reform have just been introduced into both the House and the Senate, but their fate, of course, is uncertain. While litigators of business methods patents cannot assume that their environment will change drastically in the near term, they must remain aware of the continuing changes resulting from Congressional, administrative, and court actions; and they should adjust their own practices to take account of those changes. In particular, they should consider the ways in which unique attributes of business methods patents further complicate the tasks of litigating patent infringement and validity issues.