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PRIOR USER RIGHTS FOR BUSINESS METHOD PATENTS

ROBERT C. HALDIMAN*

I. INTRODUCTION

The American Inventor’s Protection Act of 1999 (AIPA) introduces substantial changes in several aspects of the United States patent system, including the creation of a “First Inventor Defense.” “Prior User Rights” of varying scope have long been debated as a reform to the patent system as a whole.1 The 1998 holding in State Street Bank & Trust Co. v. Signature Financial Group, Inc.2 allowing the patenting of “Business Methods” proved to be the catalyst for passage of the form of Prior User Rights legislation in the AIPA.3 For guidance as to patent claims and defendants that qualify for the new special rights, the AIPA offers only the following ambiguity: “[t]he term ‘method’ means a method of doing or conducting business.”4

The legislative history of the AIPA reflects the dynamic tension between the advocates and opponents of Prior User Rights. The Committee report, debate and hearings contain language to support both the limitation of the new personal defense to cases asserting patents considered to be “Business Methods,” for example, with respect to patents under United States Patent and

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2. 149 F.3d 1368 (Fed. Cir. 1998).

3. The general consequences and wisdom of segregating a particular subject matter for different rights and procedures is beyond the scope of this article. It is notable that plants, computer chips (mask works) and designs are the subject of entirely separate statutes, which are clearly defined. Medical methods have been treated separately within 35 U.S.C. Chapter 7, but are a far smaller and less contentious area than Business Method Patents currently are.

Trademark Office (USPTO) Class 705\(^5\) and the expansive application of the defense to any method of conducting a company’s business, including manufacturing processes.

Since the State Street Bank decision in 1998, Business Method Patents have been perceived to be available as 35 U.S.C. § 101 subject matter *per se*.\(^6\) The case has engendered a race to the USPTO to claim patent estates on technology heretofore primarily protected only by trade secret law. The specter of second comers to a technology enjoining good faith prior inventors merely by beating them to the patent office motivated the 1999 reforms.\(^7\)

While the circumstances prompting the reform are well known, it has been left for the courts to define the extent and contours of what “methods of doing or conducting business” are subject to the reforms. Litigants will have strong strategic incentives to characterize patents asserted in infringement actions as business methods, or not. Tactics will be complicated by the fact that Prior User Rights do not invalidate the patent.\(^8\) In defending a non-Business Method Patent, prior art qualifying under 35 U.S.C. § 102(g) can invalidate the asserted patent. Further complicating a defense against infringement claims based on patents, which may or may not be “business method” patents is the fact that assertions of Section 102(g) prior art, often understood as “secret” prior art, have not enjoyed the benefit of clear, non-contradictory case law in all circumstances.\(^9\) Finally, a defendant is free to assert Prior User Rights and Section 102(g) invalidity against the method claims of the same or related patents and Section 102(g) invalidity against the apparatus claims simultaneously.

Some commentators have criticized the new AIPA for endorsing trade secret protection, discouraging disclosure, assigning different rights to different classes of patents and for the uncertainty of the AIPA in its failure to define its own scope.\(^10\) The creation of a patent system in which different rights will apply to different classes of subject matter raises concerns for all practitioners, especially since the dividing line between the different classes is unknown.

This article reviews the provisions of the AIPA. The arguments for broad application of the new defense will be reviewed and found to be less than

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7. See infra text accompanying notes 71 - 106, for a discussion on legislative history.
9. See infra text accompanying notes 144 - 156, for a discussion on § 102 case law. See also infra text accompanying notes 144 - 49.
compelling. Moreover, the background, including the legislative history, behind the AIPA will be examined. It will reveal a consensus that Prior User Rights should apply to *State Street Bank* and e-commerce type Business Method Patents and sharp conflict over any application beyond that. Significantly, the legislative history will also show that the “substance” of the type of the technology at issue should prevail over the form of the patent claims covering it when deciding if the new defense applies.

Additionally, avenues will be explored through which the scope of the new defense may be defined, including further legislation, the USPTO classification system and judicial construction. Furthermore, the history of the Business Method Patent exception will be outlined to shed light on what technology developers and patent practitioners consider the subject to include. A range will be found from a narrow reading of Business Method Patents only as those patents without novelty beyond the accounting methods or logistics solutions they execute, a broader reading including data processing and a still broader reading encompassing the software that actuates the business methods. Broadest of all is the Prior User Rights advocate’s goal of including all 35 U.S.C. § 100(b) processes.

Finally, the case law construing 35 U.S.C. § 102(g) will be reviewed. That section provides for the invalidity of a patent for lack of novelty if a prior user had reduced the same invention to practice, unless that prior user had “suppressed or concealed” her version of the invention. If the prior use was “suppressed or concealed,” as by a trade secret, Section 102(g) subordinates the prior user to the patent rights of the later inventor who disclosed the technology by filing for a patent. Application of the rule has not been so simple. Case law blurs Section 102(g)’s would be bright line rule by distinguishing between prior uses that inform the public to some extent and those that do not inform at all. In the former case, some prior users have successfully invalidated later patents.

In conclusion, a concordance is suggested between the public disclosure inherent in the exercise of software implemented Business Methods and the Section 102(g) case laws efforts to balance the policy of encouraging disclosure with any equities due a prior inventor who elects not to patent. Since this equitable balance is the stated goal of the First Inventor Defense, it is further suggested that defining the scope of that defense in view of Section 102(g) evaluation of the degree to which a prior use informed the public may provide a method for construing the new defense that does the least violence to the traditional patent system and provides greater certainty in its application.
II. PRIOR USER RIGHTS DEFENSE UNDER THE AIPA

A. Generally

The 1999 legislation enacts several significant reforms in U.S. patent practice, including new provisions such as publication of applications after eighteen months from filing,\(^\text{11}\) special protection for individual inventors\(^\text{12}\) and Prior User Rights for Business Method Patents.\(^\text{13}\) It also refines some old provisions, such as limited inter partes re-examination\(^\text{14}\) and term extensions for “USPTO” delays.\(^\text{15}\) The primary focus of this paper is the Prior User Rights Defense for Business Method Patents.

The Prior User Rights provision is limited to “methods of doing or conducting business.”\(^\text{16}\) The defense is personal and available only to an entity that reduces to practice and commercially uses the subject Business Method technology.\(^\text{17}\) Establishment of the defense does not invalidate the patent asserted against it.\(^\text{18}\)

The defense is established as follows: a defendant must have acted in good faith;\(^\text{19}\) the defendant must have actually reduced the invention to practice at least one year before the effective filing date of the asserted patent;\(^\text{20}\) and the method must have been commercially used before the filing date of the asserted patent.\(^\text{21}\) “Commercial use” means use in the United States, “...in connection with an internal commercial use or an actual arms-length sale or other arms-length commercial transfer of a useful end result, whether or not the subject matter at issue is accessible to or otherwise known to the public . . . .”\(^\text{22}\) Premarking regulatory review is within the scope of commercial use under the Act.\(^\text{23}\) Nonprofit researchers’ use by universities or hospitals, for example, qualifies as commercial use.\(^\text{24}\) Nonprofit use may be asserted as a defense only

\(^{17}\) Id. § 273(b)(6).
\(^{18}\) Id. § 273(b)(9).
\(^{19}\) Id. § 273(b)(1).
\(^{20}\) Id. § 273(b)(1). This bright line limitation coincides with § 102(b)’s one-year period that bars patentability if the technology has been publicly used, sold or offered for sale by anyone, including the patent applicant, more than one year before filing.
\(^{22}\) Id. § 273(a)(1).
\(^{23}\) Id.
\(^{24}\) Id. § 273(a)(2).
by the nonprofit entity and such a defensible use may not be subsequently licensed out for commercial use.25

Methods defensible under the AIPA may not have been derived from the patentee or its privities.26 Abandonment of use abandons the defense as well, although revival of the use may qualify if the limitations of the Act are met by the revived activity, without reliance on the pre-abandonment activities.27 The defense may not be transferred unless it is an, “...ancillary and subordinate part of a good faith assignment or transfer for other reasons of the entire enterprise or line of business to which the defense relates.”28 In such cases of transferred operations, the defense only applies at those sites at which the method is in use.29 “Site” is not defined under the AIPA.30

Products of processes immunized by Prior User Rights may be bought without subjecting the buyer to an infringement action based on the covering patent from which the process is immune. Patent rights subject to the defense may not be asserted against the buyer or user of a protected product or service generated with use of the defensible method. “The sale or other disposition of a useful end product by a patented method shall exhaust the patent owners rights under the patent to the extent such rights would have been exhausted had such sale or other disposition been made by the patent owner.”31

The defendant has the burden of establishing the defense by clear and convincing evidence.32 If unsuccessful and without a “reasonable basis for asserting the defense” the court “shall find the case exceptional for awarding attorneys fees under 35 U.S.C. § 285.33

Importantly, the defense is to be asserted on a claim by claim basis.34 The defense is “not a general license under all claims of the patent at issue, but extends only to the specific subject matter claimed in the patent with respect to which the person can assert a defense under this chapter...”35 Presumably, the non-invalidity provision, which states, “a patent shall not be deemed to be invalid under Section 102 or Section 103 of this title solely because a defense

25. Id. § 273(a)(2)(a) & (b).
27. Id. § 273(b)(5).
28. Id. § 273(b)(6).
29. Id. § 273(b)(7).
30. It remains to be seen if the pervasive e-commerce patents, which lie at the heart of the Business Method Patent controversy, will be subject to the defense according to the bricks and mortar "site" of an e-commerce business office, or the virtual "site" of that business' URL.
32. Id. § 273 (b)(4).
33. Id. § 273(b)(8).
34. Id. § 273(b)(3)(c).
35. Id.
is raised or established under this section,"36 will also be applied on a claim by claim basis.

The “First Inventor Defense” has been available in actions begun after November 28, 1999.37 There is no provision in the Act mandating an election between affirmative defenses, although the prior user rights are clearly intended to apply where 35 U.S.C. § 102(g) prior uses have been “suppressed and concealed,” which formerly prevented prior trade secrets from invalidating later patents.

B. Applying the Act’s New Defense

The new Act has been carefully crafted to mesh with the existing statutory framework, although that precision in drafting was not achieved in the contentious area of defining the breadth of the prior user right. The defense is designed to apply only to trade secrets.38 The method must be reduced to practice and in commercial use more than one year before the filing of the asserted patent. If not a trade secret, subject technology would be Section 102(a) art (known or used), Section 102(b) art (in public use or on sale) or Section 102(g) art (made by another). The Act is further consistent with Section 102(g) by containing its own abandonment clause, which vitiates the defense, just as abandonment vitiates any opportunity to invalidate an asserted patent under Section 102(g). Hence, the new defense is designed to fit within the “suppressed and concealed” exception to Section 102(g) art.

Although the new defense is expressly intended to protect those who elect trade secret protection over patenting,39 the defense does not require that those asserting it establish any element of trade secret qualification typically required by state law. If a method is in commercial use it will qualify, whether reasonable steps have been implemented to guard its secrecy or not. It is assumed that if the other Section 102 invalidating defenses are available, they will be asserted as alternative affirmative defenses. Hence the body of law that will be brought to bear on the issue of whether a defendant’s or third party’s

36. AIPA, § 4302, 35 U.S.C. § 273(b)(9) (1999) (emphasis added). A logical reading of the word “patent” in § 273(b)(9) is that it be in accord with the word “claims” in § 273(b)(3)(c) that is, that invalidity is also on a claim by claim basis. But this would afford defendants the tantalizing opportunity to have their cake and eat it too. Some claims may be defended with Prior User Rights, while broader claims may be subject to invalidation attempts under § 102(g) with the same technology and record of reduction to practice.


prior practice is a personal (secret) prior use or a invalidating public use will be Section 102(g) case law, which is not thoroughly developed.40

The problems created by the “First Inventor Defense”41 Prior User Right’s statute are immediately manifest. Disclosure is discouraged when secrecy is rewarded. Uncertainty is rife as long as a “method of doing or conducting business” remains undefined. An immediate concern is whether “method” broadly means Section 100(b) “process” claiming convention,42 or narrowly means Business Method subject matter, like Class 705, whether claimed as an apparatus or a method. If the AIPA is construed broadly as covering Section 100(b) process claiming, the practitioner faced with suit will be forced into the untenable position of arguing that the accused technology is the same as the patentee plaintiff’s technology in order to use the safe harbor of Prior User Rights, while simultaneously arguing that the technology is different to avoid infringing the apparatus claims. Moreover, if broadly construed, this conundrum will be faced even when subject matter clearly within Class 705 is in litigation.43

III. BACKGROUND

A. Introduction

The United States patent system is unique in the world in that it awards priority to the first to invent. Like much in American jurisprudence, the substantive justice of applying that principle comes at a cost. The interference system of establishing priority is slow, costly and most frequently awards the patent to the first to file anyway.44 The rest of the world awards patents to the

40. Notably, the date of actual invention is irrelevant to the defense. The patentee’s filing date is compared to the defendant’s date of commercial use. This promotes certainty for attorney clearance opinions regarding issued or published patents.

41. It is generally accepted that the “first inventor defense” is a misnomer since use, not invention, is the requirement for the defense. If a first and second user both elect trade secret protection, the second user may assert the defense against a third user/first patent applicant, although the second user did not invent. See Hearings, supra note 39, at 180 (statement of Ronald J. Stern, President Patent Office Professional Assoc.). “Prior User Rights” as used in this article will refer to the “First Inventor Defense.”

42. The definition used in the original draft of the Act, H.R. 1907, 106th Cong. (1999).

43. Conversely, it is easy to conceive of a fact pattern where “abandoned, suppressed or concealed” are issues of fact and where defense counsel has mixed factual grounds from which he could argue that the apparatus claims asserted are invalid for unconcealed § 102(g) art, or the method claims are defensible for concealed § 273 art based on the same prior use.

first to file and, in most industrial countries, when that results in a potential injustice to a prior inventor, that inventor is granted immunity from an infringement action through Prior User Rights. By comparison, the U.S. has always had the strongest Prior User Rights in that the system awards the entire patent estate, not merely a defense, to the first to invent, provided that the first inventor elects to file.

In application, this system presents an inventor with a choice: disclose and patent or protect the technology as a trade secret and risk being enjoined by a second comer who patents. It is this choice between the vulnerability of trade secret protection and the expense of patenting that the advocates of Prior User Rights in the United States seek to obviate. In an increasingly global economy, advocates argue that it is unfair for foreign corporations to have domestic Prior User Rights insulating them from foreign patents owned by U.S. corporations, when U.S. corporations have remained vulnerable to foreign owners of U.S. patents who can enjoin domestic corporations’ domestic practice of their own technology. Patent protection, they argue further, is so expensive that protecting all patentable technology is cost prohibitive. It is common to patent the most valuable technology and conceal as trade secrets supportive methods or technology of more marginal value. Although it does not necessarily follow that foreign corporations will incur the expense of patenting here in all of the cases where a domestic inventor has elected cheap, risky trade secret protection, Prior User Rights advocates quantify their position by citing a foreign presence in the U.S. markets of 11%, while 46% of U.S. patents are awarded to foreigners.

The Global Agreement on Tariffs and Trade negotiations spurred the introduction in 1992 of the Patent Harmonization Act, which never passed into law. The prior user right debate was pursued, heard and legislation drafted to introduce prior user rights in the United States. This draft legislation included limits on and requirements for asserting the defense, including commercial use and the inclusion of technology whose commercial use was delayed by the regulatory process.

While the transactional costs of establishing broad Prior User Rights in the first to invent United States patent system is acknowledged, advocates insisted that the cost would be justified. They failed, however, to overcome their

45. Note that a third choice is to create a “freedom to operate” by publicly disclosing the new development.


47. Id.


opponents. Stalemate continued until the advent of the *State Street Bank* case in July 1998. *State Street Bank* was anticipated to be the final nail in the coffin of *Gottshalk v. Benson* which held that software (computer algorithms) was unpatentable subject matter under 35 U.S.C. § 101. The *State Street Bank* court held that as long as software provided "a useful, concrete and tangible result[,]" it was patentable subject matter. But the *State Street Bank* court went on to make the unanticipated move of addressing the "exception" from patentability of Business Methods. "We take this opportunity to lay this ill-conceived exception to rest."*53

*State Street Bank* reviewed the case law often cited in support of the proposition that Business Methods were unpatentable. The court found that those holdings were based on a straightforward application of Sections 102 and 103 invalidity arising from the prior art. Anticipating the law, in 1995 the USPTO removed the Manual of Patent Examining Procedure (MPEP) section stating that Business Methods were not patentable on subject matter grounds.*54 Following the *State Street Bank* holding, the USPTO issued a White Paper that more thoroughly debunked the myth that any case had denied a business method patentability on Section 101 subject matter grounds.*55 Despite the fact that business method unpatentability was mere dictum, the relevant community of practitioners and technology developers had always accepted the "rule" at face value. Whereas the expected holding of *State Street Bank* regarding the patentability of software was an incremental step in a continuum,*56 the abrogation of the business method exception came as something of a revelation. Coincidentally, the development of the Internet was exploding and the already developed body of programming art was being brought to bear upon it. The response to the elimination of the perceived rule against patenting

*50. 409 U.S. 63 (1972).*

*51. A quarter century of caselaw eroding this holding culminated in In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) (en banc), which held that it was § 101 subject matter to claim as an apparatus a programmed computer, because once programmed a computer was indeed a special purpose machine. *State Street* was then followed by AT&T v. Excel Communications, 172 F.3d 1352 (Fed. Cir. 1999), which endorsed method claiming for software.*

*52. State St., 49 F.3d at 1375.*

*53. Id. at 1375.*


*56. Diamond v. Diehr, 450 U.S. 175 (1981); Arrhythmia Research Tech., Inc. v. Corazonix Corp, 958 F.2d 1053 (Fed. Cir. 1992), In re Schrader, 22 F.3d 290 (Fed. Cir. 1994); In re Warmerdam, 33 F.3d 1354 (Fed. Cir. 1994); AT&T v. Excel Communications, 172 F.3d 1352 (Fed. Cir. 1999). See also In re Freeman, 573 F.2d 1237 (C.C.P.A 1978); In re Walter, 618 F.2d 758 (C.C.P.A 1980); In re Abele, 684 F.2d 902 (C.C.P.A 1982).*
business methods was sharp and strong. Applicants rushed to the USPTO to file for business method patents, particularly in Class 705. The stampede may prove to be of questionable consequentiality in terms of issued patents, especially since many of those applications were destined to be filed anyway, given the advent of the Internet. However the fact that State Street Bank initiated a “race to the Patent Office” with technologies complex (Signature Financial’s “Hub and Spoke” Mutual Fund Reconciling Program) and simple (Amazon’s “One Click” patents) is borne out by USPTO statistics. Class 705 applications rose from 330 in 1995 to 7,800 in 2000.

These applications are considered by many to be for technology applying well developed programming techniques that were, to a greater or lesser extent, already known or in use. For a brief and anomalous period, in this limited area, the U.S. may fairly be considered to have a de-facto first to file system.

In spite of the fact that a rule against patenting Business Methods never really existed, public debate over the State Street Bank holding has been contentious. Congress, however, took note of this fact. Fallout from State Street Bank proved to be a catalyst for passage of Prior User Rights and it also proved to be a successful, if unfinished, ground work for compromise between Prior User Rights’ advocates and opponents.

The framework of the previous Prior User Rights bill was modified to become the “first to invent defense” of the American Inventor’s Protection Act. To pass over the objections of opponents, the right was limited to Business Methods. Surviving from the original legislation are the commercial use requirement and a form of the Section 156 regulatory review qualification and the personal defense limitation. Lost to Prior User Rights advocates was the broad definition of methods as Section 100(b) processes. In its stead, the present definition passed. The current law has the architecture and the legislative history to support either a broad or narrow definition of “a method of doing or conducting business.”

57. See Morris, supra note 55.
61. See infra text accompanying notes 144 - 156, for a discussion on legislative history.
64. See H.R. 1907, 106th Cong. (1999). “The term ‘process or method’ means ‘process’ as defined in 35 U.S.C. § 100(b), and includes any invention that produces a useful end product or service which has been or could have been claimed in a patent in the form of a process.” Id.
B. Statutory Construction—The Argument For Broad Application Of The New Defense

Prior User Rights advocates argue that basic tenants of statutory construction indicate that a broad reading of “method of doing or conducting business” is correct.65 First, the language of the statute itself controls, particularly when read in context and in view of companion statutory provisions,66 and legislative history is to be examined only in situations of unresolvable ambiguity.67 Accordingly, advocates argue that the definition of “methods” must be Section 100(b) processes, because of the existence in the act of the Section 156 allowance that technology under regulatory review may qualify as being in commercial use to claim the benefit of the defense. Since such reviews, as by the FDA, are far broader in scope than any conceivable review of Internet or financial technology, the AIPA is properly construed as equally broad in scope. Second, advocates argue that the defense is site specific and that such a limitation is a fiction for Internet technology. Therefore, the AIPA is properly construed in a broad sense, since “site” is properly construed as applying to physical plants, where manufacturing processes occur. Finally, Prior User Rights advocates argue that the Act’s definition includes methods of “doing or conducting business.” The presence of two words is properly construed as meaning two types of methods are intended to be covered; “doing” business methods and “conducting” manufacturing processes.

These arguments may support a broad reading of the AIPA, but they do not compel it. While an application of the regulatory qualification clause of the AIPA supports a broad interpretation, ignoring it does not vitiate a narrow reading. Finally, of course, the clause is a modification from the broader unrestricted draft of the Harmonization Act,68 which did not pass into law until the State Street Bank compromise in 1999.69

The site specific limitation may be fairly construed as a Unique Resource Locator (URL). If the nature and extent of a website’s content and functionality are considered to be evanescent, it need only be recalled that the burden of proving what functionality existed at an accused website at a given time is on the defendant operator of that site, if they intend to use the prior user

65. The author wishes to acknowledge the generous contributions of Gary Griswold and Kent Kokko for sharing Power Point slides and conversations, notwithstanding the positions taken in this article.
defense.\textsuperscript{70} This is no less problematic than the dissection of often heterogeneous physical plants to determine if inter-operable processing across the hall, across the street, or across town will qualify as a single “site.” Most compelling is the fact that “site” must be construed to mean a website (preferably, a URL) if Internet business method patents are to be covered by the Act, which is the subject matter all sides agree the Act was meant to cover.

Finally, the words “doing or conducting” are not further defined or used in the AIPA and so their dual presence does not mandate that a separate or broad meaning be given to either or both of them. The language of the statute itself, then, does not compel a necessarily broad definition of Business Methods any more than it compels a narrow reading. Accordingly, even under the traditional statutory construction rules, the language of the statute is more than ambiguous enough for the courts to consider the legislative history as an extrinsic interpretation aide.\textsuperscript{71}

\section*{C. Legislative History}

Both the advocates and opponents of Prior User Rights made a record in the legislative history that the statue will bear their interpretation of it, either narrow or broad. In the Committee Reports, hearings, sponsor statements, history of legislative inaction and circumstances surrounding the introduction and passage of the bill, support can be found for both the broad and a narrow interpretation of the meaning of “methods of doing or conducting business.” While disparate language appears, when taken as a whole the legislative history clearly shows a consensus that the new defense be available to substantive, Class 705 type, Business Methods. There is no such consensus that the new defense apply more broadly than that.

\section*{D. Committee Reports}

Statements in Committee Reports are generally considered authoritative and are given great weight.\textsuperscript{72} The Committee Report from the House begins:

Title II strikes an equitable balance between the interest of U.S. inventors who have invented and commercialized business methods and processes, many of which until recently were not patentable, and later U.S. or foreign inventors who have patented the processes . . .

\textsuperscript{72} See Jorge L. Carro & Andrew R. Brann, The U.S. Supreme Court and the Use of Legislative Histories: A Statistical Analysis, 22 JURIMETRICS J. 294, 304 (1982) (estimating that over 60% of the Supreme Courts cites to legislative history over a forty year period were to Committee Reports); but see Blanchard v. Bergeron, 489 U.S. 87 (1989) (Scalia, J. dissenting) (noting the effect that particular constituencies make statements advocating their positions in Committee Reports, whose details are seldom seen by all the House members enacting the bill).
The title clarifies the interface between two key branches of intellectual property law—patents and trade secrets. Patent law serves the public interest by encouraging innovation and investment in new technology, and may be thought of as providing a right to exclude other parties from an invention in return for the inventor making a public disclosure of the invention. Trade secret law, however, also serves the public interest by protecting investments in new technology. Trade secrets have taken on a new importance with an increase in the ability to patent all business methods and processes. It would be administratively and economically impossible to expect any inventor to apply for a patent on all business methods and processes now deemed patentable. In order to protect inventors and to encourage proper disclosure, this title is limited to business methods and processes only.73

Interestingly, while the above quoted language from the Committee report remained intact, the House version of the Bill included the broad definition of methods retained from the earlier Harmonization Act. “(3) process or method means processes as defined in Section 100(b) of the Patent Act and includes inventions that were or could have been in a patent in the form of a process . . . .”74

i. Broad View

Broad interpretation advocates point to the following language from the report to support their position:

Subsection (b)(3) creates limitations and qualifications on the use of the defense. First, a person may not assert the defense unless the invention for which the defense is asserted is for a business process or method, the exclusive purpose of which is to produce a useful end product or service; that is, the defense will not be available if the subject matter itself is a useful end product or service that constitutes one or more claims of the patent . . . .

[T]he right to assert the defense can not be licensed, assigned or transferred . . . . To illustrate, a person is lawfully entitled to assert the defense as it relates to the operation of a specific piece of machinery. The person owns several other pieces of machinery that perform distinct functions which, taken together comprise the person’s business. That person may not transfer the defense as it relates to the specific piece of machinery to a third party unless the entire commercial establishment is transferred as well.75

The distinction from end products and the references to machinery support broad interpretation of methods as including manufacturing methods.

The report, however, also contains limiting language. In addition to that found in the introductory remarks quoted above, the report also says:

An invention is considered to be a process or method if it is used in connection with the production of a useful end product or service and is or could have been claimed in the form of a business process or a method in a patent. A software related invention, for example that was claimed by the patent draftsman as a programmed machine when the same invention could have been protected with process or method patent claims is a process or method for purposes of Section 273.76

This statement that substance will prevail over the claiming form means that “methods of doing or conducting business” must be a subject matter definition, i.e. Class 705 Business Methods, and not a patent claim form definition. If this were not so, this clause would mean that almost all claims to all apparatuses, which almost always include method claims,77 would be covered by the Prior User Right, whether a “business” method or otherwise. This, of course, is the Prior User Rights advocates’ intended result, but is not what opponents agreed to in passing the bill.

ii. Limited View

Other language in the Committee Report supporting a limited interpretation of the definition includes:

Accordingly, “arms length commercial transfer of a product or service” under proposed Section 273 includes the use of an invention for a process or method, the subject matter of which may be directed to an information or data processing system providing a financial service. These financial services may embody business methods or processes incorporated into any number of systems including, but not limited to, trading, investment and liquidity management, securities, custody and reporting, balance reporting, funds transfer, ACH, ATM process, on-line banking, check processing, and compliance in risk management. In each of these systems, multiple processing and methods steps are acting upon a customer’s data without its knowledge.78

This description of what is commonly and historically understood to be the core of Business Method Patenting is immediately followed by a Committee Report endorsement of the historical context in which this act was passed:

In the past, many of the financial institutions that developed and used such systems did so in a climate where trade secret protection was believed to be the only practical legal protection available. Under established law, these pre-existing systems do not now qualify for patent protection because they have been in commercial use for some time, albeit in secret. Such secret or “concealed” use may not prevent another, later inventor from obtaining patent

76. Id. at 46.
77. It is common among practitioners to draft claims “covering” an invention in all forms possible. See generally FABER LANDIS ON MECHANICS OF PATENT CLAIM DRAFTING (Pat. L. Inst. ed., 4th ed. 1998).
protection that would bar the earlier developer and user from continuing to use the business processes and methods that are her earlier inventions and that may have been in use for years or even decades.\textsuperscript{79}

This narrative is a clear reference to the 35 U.S.C. § 102(g) limitation that prior art that has been “abandoned, suppressed or concealed” by its owner may not serve to invalidate a patent later issued to a second comer to the technology.

E. Hearings And Floor Debates

Statements in hearing and floor debates receive less deference than do Committee reports. Witnesses and Congressmen frequently use such opportunities to advocate positions opposed to one another or even opposed to the draft legislation. Moreover, statements in debate may be amended or supplemented in the published version of the Congressional Record after legislators have voted.\textsuperscript{80} Nevertheless, the Courts are entitled to consider such testimony.\textsuperscript{81} The advocates of a broad reading of “methods of doing or conducting business” use the House Judiciary Committee’s Subcommittee on Courts and Intellectual Property Hearings, presided over by Representative Coble, to make their case.

i. Broad View

Michael K. Kirk, executive director of the American Intellectual Property Law Association, in endorsing the Prior User Rights section of the bill made arguments that also support a broad interpretation of “methods of doing or conducting business” to include manufacturing processes:

There are a number of reasons why it is not feasible or even possible to patent every invention which could be patented. First and foremost are costs. The costs of seeking and obtaining patent protection in the United States are high. These costs, as well as the costs of enforcing patents in this country, have become so high that U.S. companies, regardless of size, must carefully prioritize which inventions they seek to patent. These costs fall even more heavily on smaller U.S. firms, and especially on independent inventor-innovators, who are frequently limited to patenting only their most important inventions.\textsuperscript{82}

Industrial process technology presents another difficult dilemma for its creators. Identifying a competitor’s use of a patented process can be extremely

\textsuperscript{79} Id.

\textsuperscript{80} See Reed Dickerson, Statutory Interpretation: Dipping Into Legislative History, 11 HOFSTRA L. REV. 1125 (1983).


\textsuperscript{82} It is argued by more than a few that Prior User Rights benefit large corporations far more than individuals. See, e.g., Hearings, supra note 39, at 213 (statement of Gabrial P. Katona).
difficult in the United States and virtually impossible in foreign countries. Even if obtaining patents in the United States and abroad were economically feasible, the patent’s disclosure of the process presents a significant risk to the patentee in the United States and foreign markets. Especially in the case of products made abroad and imported into the United States, it is very difficult to prove that the products were made by a particular process that infringes a patent in the United States or the country of origin.

For these and other practical reasons, many U.S. companies and especially smaller U.S. companies are forced to forego patenting of many inventions. In the case of Industrial Process Technology and certain manufacturing equipment, these companies seek to protect their technology under trade secret laws. Because patents may not completely protect such technology, and because infringement by others which occurs within the confines of their own factories is virtually undetectable, disclosing such technology through patents is not the best way to protect it. Practicing the technology in secret is more effective. This creates the possibility that a second, later U.S. or foreign inventor may obtain a U.S. patent on technology already being commercially used, but which has not been publicly disclosed. This later inventing U.S. or foreign holder of a U.S. patent could then obtain an injunction and prevent the U.S. manufacturer from further use of the invention, even though the U.S. manufacturer has the made the benefits of the invention available to the public through its commercial trade secret use of the invention.83

Although not in the legislative history, the AIPLA has made its position clear in a White Paper:

The AIPLA recommends that the first inventor defense be applied to all commercialized methods without regard to the technologies in which they are implemented or to the formats in which they are claimed. To the extent that this is not clear from the language of the statute and the legislative history, the statute should be revised.84

At the Committee hearings Norman Balmer, president of the Intellectual Property Owners, stated:

The first to invent defense in the Committee print preserves trade secrets that are the life blood of American manufacturing and service companies. . . .

It can take years and millions of dollars to engineer and construct a manufacturing plant using new technology or producing a new product. . . .

Inventions such as manufacturing processes often can be protected most effectively against copying by U.S. competitors by keeping them as trade

83. Id. at 104.
secrets instead of obtaining a U.S. patent. Moreover, U.S. patents can be a blueprint for foreign competitors to steal technology.85

Interestingly, both Kirk and Balmer backed up their statements by arguing the impact of *State Street*:

This decision will have significant ramifications. By December 1998 the Patent and Trademark Office reported a 40% increase in patent applications for business method software. Firms in the financial industry that developed and commercially used business methods in secret before 1998 are foreclosed from obtaining their own patents because of their own prior commercial use (35 U.S.C. § 102(b)). Yet, later developers of the same methods can now obtain a U.S. patent. [The first inventor defense] will make more certain the validity of newly filed “business method” patents while allowing prior inventors the ability to continue serving the public interest in their business.

In summary, the first to invent defense is essential to protect and encourage business investments and manufacturing its services and prevent a costly give away of American know-how to foreign competitors through patent inventions that are better protected by secrecy.86

Kirk stated:

This [*State Street*] decision put to rest the notion that “methods of doing business” were not patentable subject matter. Thus, many businesses that eschewed seeking patents for similar subject matter may now find that the techniques they have used as trade secrets in their daily operations are being patented by others, putting them in considerable risk.87

Thus, although these advocates of the Bill are also advocates of a broad interpretation of it and had been advocates of across the board Prior User Rights in earlier draft legislation, they argued their points by making statements regarding the *State Street Bank* decision that are consistent with a narrow interpretation of the definition of “methods of doing or conducting business,” although that was clearly not the intent of these witnesses at the hearings.

There is good reason for the testimony of Balmer and Kirk not more directly addressing the issue of the breadth of the definition of “methods of doing or conducting business.” The draft of the Bill at the time of their testimony still defined methods as Section 100(B) processes. It was only after the March 26, 1999 hearing that the draft was amended to limit the defense to “methods of doing or conducting business.” Representative Rohrabacher, in a May 5, 1999 fact sheet, said that “[t]he rationale for the more narrowly tailored defense is to address the precedent set forth by *State Street Bank*. That case

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85. *Hearings, supra* note 39, at 86.
86. *Id.*
87. *Id.* at 106.
gave patent protection to data processing systems and eliminated the business method exception to patentability.88

At the end of the hearing a letter from the National Association of Manufacturers written on April 5, 1999 was read into the record. The letter argued that the Prior User Rights would not decrease the disclosure of technology which the patent laws seek to incentivize, because “this statutory defense could only come into play after one party had been granted a patent, with its intended public disclosure.”89 This of course does not take into account that the patent laws are designed to incentivize the original inventor to disclose his technology.90

The letter goes on to make the more persuasive argument that under the current system the result of litigation between a second comer/patentee and a first inventor/trade secret user of the technology is harsh: a “death sentence” for either the trade secret or the patent, referring to Section 102(g).91

ii. Limited View

Even before Congressman Rohrabacher’s comments, the Committee Hearings contained statements consistent with the narrow construction of Prior User Rights. In questioning the passage of a Prior User Rights bill at all, Representative Tom Campbell from California stated:

I have checked with as many high tech companies as I can . . . [they] said that this undermines the whole idea of encouraging people to file for a patent....

The rebuttal is very strong. The rebuttal says, for heaven sake. That is what you get for not patenting it. The idea here is to get people to patent so that it is not secret. If you allow an exception, which your bill does in title II for a prior commercial use, I think it undermines that incentive in an important way.92

This invocation of disclosure encouragement as the time honored way to achieve the constitutional mandate of “promoting the progress of the useful arts”93 is further developed in the comments of Representative Rohrabacher from California:

As I have always held, due to the constitutional issues and Supreme Court precedent, we simply cannot champion trade secret protection over patent protection for clearly patentable subject matter. We cannot betray our founding fathers by abandoning the foundation upon which our patent system

89. Hearings, supra note 39, at 222.
90. Id. Of course this raises a useful topic for quantitative study: Are more patent applications filed, and disclosures made, if a series of “inventors” are given the opportunity for a valid patent, instead of just the first?
91. Id. at 225.
92. Id. at 14.
is based. We cannot allow state based rights to trump long standing federally created intellectual property rights. We cannot openly advocate secrecy when our patent system calls for us to vigorously promote the progress of science through the sharing of critical technology information.

With that said, however, all is not lost. Perhaps there is a way in the context of an overall agreement that I could support a narrow application of a first to invent defense.94 Representative Rohrabacher then went on to endorse the Bill’s limitations on the availability of the defense, without specifically addressing the definition of methods of doing business.

F. House Floor Debate

Hence, all partisans both in favor of and opposed to a broad application of Prior User Rights made statements at the House Committee Hearings that would support both narrow and broad definitions of methods of doing or conducting business. The most accurate and candid summation of the legislative history in the House was made by the subcommittee chairman, Congressman Coble, in response to a question from Congressman Lofgren from California about the extent of the impact of the Bill:

Mr. Speaker, it is limited, I say to the gentlewoman from California, to the State Street Bank case. There was some discussion early on that perhaps the first inventor defense should apply to processes as well as methods. But we finally concluded that we would restrict it to methods only, and that, by having done that, we were able to satisfy some folks who were opposed to the Bill otherwise.95

On August 3, 1999, Representative Rohrabacher went on to say:

Instead of a prior user defense that applies to all inventions . . . HR 1907 contains a very limited prior user defense that applies only to those business methods which have only been considered patentable in the last few years, and this, of course, flows from an adverse case before the Court that changed the patent law.96

On August 4, 1999, HR 1907 passed the House by a 376 to 43 vote. After the amendment, comments on the breadth of the “methods” to which the defense would apply became even more pointedly divisive.

94. Hearings, supra note 39, at 22.
i. Broad View

Some of the Senate’s section by section analysis of S. 1948 indicates the defense is not limited to the facts of the State Street Bank case:

To be “commercially used” or in “commercial use” for purposes of Subsection A, the use must be in connection with either an internal commercial use or an actual arms length sale or other arms length commercial transfer of a useful end result. The method that is the subject matter of the defense may be an internal method for doing business, such as an internal human resources management process, or a method for conducting business such as a preliminary or intermediate manufacturing procedure, which contributes to the effectiveness of the business by producing a useful end result for the internal operation of the business or for external sale. Commercial use does not require the subject matter at issue to be accessible to or otherwise known to the public.97

On November 19, Senator Charles Schumer said, “[t]he defense will be applicable against method claims as claims involving machines or other articles the manufacturer used to practice such methods.”98 Furthermore, Representative Jerrold Nadler of New York stated that, “[t]he first inventor defense is intended to protect both method claims and apparatus claims.”99

ii. Narrow View

In his remarks introducing the Bill in the Senate, Senator Hatch said:

The Bill responds to recent changes in PTO practice and the Federal Circuit’s 1998 decision in State Street Bank and Trust Co. v. Signature Financial Group, 149 F.3d 1360 (Fed. Cir. 1998), in which it formally did away with the so called “business methods” exception to statutory patentable subject matter. As a result, patent filings for business methods are up by 75% this year, and many who have been using business methods for many years pursuant to trade secret protection—believing such methods were not patentable—are now faced with potential patent infringement suits from others who, while they may have come later to the game, were the first to reach the Patent Office after the bar to patentability for business methods was lifted.100

The legislative history makes it clear that there is a consensus that the prior user defense applies to substantive business methods such as those typified by Class 705 and State Street. No such consensus exists for broader application of the defense.

G. Substance Over Form

Probably the most useful quote from the legislative history is from Chairman Coble:

The issue of whether an invention is a method is to be determined based on its underlying nature and not on the technicality of the form of the claims in the patent. For example, a method for doing or conducting business that has been claimed in a patent as a programmed machine, as in the State Street case, is a method for purposes of Section 273 if the invention could have as easily been claimed as a method. Form should not rule over substance.101

This statement is in accord with the case law. In the long struggle over software patentability that ultimately lifted the bar on Business Method patenting as well, distinctions between method claims and machine claims were discounted in the final analysis. In AT&T v. Excel Communications the court held, “[w]e consider the scope of Section 101 to be the same regardless of the form—machine or process—in which a particular claim is drafted.”102 In In Re Alappat, Judge Rader, in his concurring opinion, writes, “Judge Rich, with whom I fully concur, reads Alappat’s application as claiming a machine. In fact, whether the invention is a process or a machine is irrelevant.”103 In State Street Bank the court held, “for the purposes of a Section 101 analysis, it is of little relevance whether claim 1 is directed to a machine or process . . . . . . .”104 The AT&T court concluded that:

[T]he Supreme Court’s decisions in Diehr, Benson, and Flook, all of which involve method (i.e. process) claims, have provided and supported the principles which we apply to both machine and process type claims. Thus, we are comfortable in applying our reasoning in Alappat and State Street to the method claims at issue in this case.105

This refusal to consider an artificial and problematic distinction in Section 101 analysis should be, as Congressman Coble indicated, applied to prior use analysis. This will avoid tortuous claim drafting by practitioners attempting to avoid or invoke the two different sets of rights that the recent legislation has created. Rejecting such an artificial distinction will also avoid the prospect of putting defendants in the position of arguing that their technology is the same as plaintiff patentee’s technology for purposes of invoking the defense on the method claims, while simultaneously arguing that the machine which performs the method is different than the plaintiff’s technology to avoid infringing the apparatus claims.

102. AT&T, 172 F.3d at 1450.
103. In re Alappat, 33 F.3d at 1581.
104. State St., 149 F.3d at 1372.
105. AT&T, 50 U.S.P.Q. 2d at 1451.
Since the law, the legislature and logic all dictate that substance shall control over claim drafting form, it can be seen that the original draft definition of “methods” as Section 100(b) processes would, in practical application, affect across the board Prior User Rights for all technology, exclusive only of articles of manufacture and compositions of matter. This may be what Prior User Rights advocates intended. It may also be what ultimately happens with this statute. If the legislature does not again intervene to define the scope of Prior User Rights, this statute may later be interpreted by the courts, just as Section 43(a) of the Lanham Act was later interpreted by the courts to be broad in scope. The following question remains: Does the tautological definition of business methods passed into law also represent the germination of an exception that could swallow the rule?

IV. TOWARDS A MORE PRECISE DEFINITION

Broadly applied, Prior User Rights represent a fundamental change in the architecture of the United States patent system. Prior scholarly and legislative debate has been closely contested. Accordingly, this subject deserves plenary consideration and debate in the legislature, as opposed to the eleventh hour compromise that produced the ambiguous “first inventor defense.” Limited legislation has already been introduced suggesting a sharper definition of “Business Methods” as:

1. a method of—(a) administering, managing, or otherwise operating an enterprise or organization, including a technique used in doing or conducting business; or (b) processing financial data;
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.

106. 15 U.S.C. § 1125(a), Lanham Act § 43(a). The scope of the ban on false advertising took decades to reach its full breadth as courts and practitioners expanded it. See DONALD CHISUM, UNDERSTANDING INTELLECTUAL PROPERTY LAW, Section 6E[1].

107. See Harmonization Act Hearings, supra note 43; see also Harriel, supra note 1; Brownlee, supra note 1; Frank Robbins & Karl Jorda, The Rights of the First Inventor – Trade Secret User as Against Those of the Second Inventor-Patentee, 61 J. PAT. OFF. SOC’Y 575 (1979); Robert L. Rohyback, Prior User Rights: Roses or Thorns?, 2 U. BALTIMORE INTELL. PROP. L.J. 1 (1993); Griswold, supra note 2, at 233; Griswold & Ubel, supra note 2, at 567.

108. It is beyond the scope of this article to consider the relative merits of the debate over broadly applied prior user rights. Rather, this article is directed towards anticipating an appropriate and workable definition of the methods to which the first inventor defense of the American Inventors Protection Act should apply.

Short of legislation breaking the decade old stalemate over prior user rights, efforts will need to be directed towards defining the scope of the current defense. It will be helpful to consider information from the following sources to discern the public policies articulated on the subject of prior trade secret use: the USPTO classification system, the history of the “Business Method” case law, and the case law interpreting 35 U.S.C. § 102(g). It will be seen that those policies promote disclosure of technology and, separately, promote to the extent possible, certainty and predictability of the patent system for those who develop technology and invest in it. Finally, the nature of current patents on Business Methods will be considered in light of those policies.

A. The USPTO Classification System

The first step in determining whether or not an asserted patent is subject to Prior User Rights or not will be to determine whether or not the patent in question is classified as a Business Method. This section will briefly review how the USPTO classifies patent applications.

The USPTO has authority to maintain the classification of patents by subject matter. Classification has heretofore been directed towards administrative purposes and maintaining a database of patents that may be efficiently searched. Under the new AIPA, exercise of that authority will generate classifications that will be presumptively valid and subject to review as a matter of law. Hence, although not entitled to interpret the law, the USPTO may elect to take the initiative of enumerating those classes considered to be Business Methods to which the defense would apply, thereby giving some limited guidance to applicants and potential applicants. Indeed, that guidance would be mandated under the proposed Business Method Patent Improvement Act.

Generally, patents are classified principally in terms of their utility. The focus is upon the function, effect or product of a process or apparatus. The primary criterion is the most comprehensive claim; that is, the most narrow, independent claim. If two or more claims are comprehensive enough for original classification, as for example an apparatus claim and a method claim, selection between them is next based on priority of statutory category of invention. The patent is placed in the class providing for the claimed category that appears highest in the following list:

1. Process (of using product 2, e.g., using a fuel or radio transmitter)
2. Product (of manufacture, e.g., a fuel or radio transmitter)
3. Process (of making product 2)
4. Apparatus (to perform 3 or to make 2, e.g., machine, tool, etc.)
5. Materials (used in 3 to make 2)

If selection is still not clear, placement is next determined by considering the highest category below that provides for claimed subject matter:
1. Relating to maintenance or preservation of life
2. Chemical subject matter
3. Electrical subject matter
4. Mechanical subject matter
   a. Dynamic (relates to moving things or combinations of relatively moving parts)
   b. Static (stationary things or parts nonmoveably related)\(^{113}\)

Classification criteria are directed towards the “proximate” effect on a process.\(^{114}\) The proximate effect is the immediate output of a process, as opposed to the overall output of the process as it may be applied to various industries. For example, a process may proximately cause pasteurization and would be classified as such, as opposed to being classified as a process for producing milk or beer.

Claims are taken as they are read, in light of the disclosure. “Any attempt of a post classifier to go behind the record and decide the case upon what is deemed to be the “real invention” would, it is believed, introduce more errors than such action would cure.”\(^{115}\) When the application is received by the USPTO, it is routed through the office of Initial Patent Examination where an initial classification decision is made by classifiers who are not experts in any particular field.\(^{116}\) Thereafter, it is the duty of the examiner\(^{117}\) to review the classification propriety, and also the supervisory patent examiner to review proper classification. Transfer procedures for reclassification through a “post classifier” are spelled out at MPEP Section 903.08(d). The patent may be reclassified at allowance.\(^{118}\)

\(^{113}\) Id. See also MPEP, supra note 55, at § 903.07.
\(^{114}\) EXAMINER’S HANDBOOK, supra note 114, at Chapter I.
\(^{115}\) MPEP, supra note 55, at § 908.08(e)(3).
\(^{116}\) Id. §903.08(a).
\(^{117}\) Id. § 903.07.
\(^{118}\) Id. Although proper classification is assumed, it is also a valid premise that practitioners will have the acumen and motivation to style and manipulate applications either within or without a classification that may invoke prior user rights. For an example of this kind of artful drafting, see U.S. Patent No. 4,346,442 (issued Oct. 10, 1980) to Musmanno for a “securities brokerage-cash management system.” This patent on a software implemental business method was issued in
The USPTO Manual of U.S. Patent Classification defines Class 705 as "data processing: financial, business practice, management or cost/price determination."\(^{119}\) The Class currently lists about one hundred subclasses, from scheduling to postage metering.\(^{120}\) About thirty related classes are listed thereunder as suggested areas for an examiner to search for prior art. These other classes, for example time measurement, control systems or electrical computers for calculating, may also come to be reasonably understood as encompassing "methods of doing or conducting business."\(^{121}\)

B. The History Of The Business Method Exception

The genesis of the "new" business patent rule is in the line of cases establishing the patentability of software. This line of cases demonstrates the importance of software implementation in execution of business methods.

In 1994 the Federal Circuit criticized earlier rulings that software’s mathematical algorithms were not patentable subject matter, because arithmetic is a subset of the “natural laws” exception to patentability. In re Allappat held that a general purpose computer when programmed by software became a special purpose computer which qualified as a machine and brought it within the scope of the subject matter encompassed by 35 U.S.C. § 101. In order to do so, the court’s opinion rewrote the method claims of the rejected Allappat patent application into apparatus claims. The court ruled that a computing machine that produced a practical, tangible and useful transformation of data was a machine that could properly be patented under Section 101, provided it was also new under Section 102, non-obvious under Section 103 and properly disclosed under § 112.

The USPTO had always resisted patenting of pure software. Traditional industrial applications incorporating computer technology were issued patents pursuant to Diamond v. Diehr.\(^{122}\) In 1996 the USPTO finally capitulated and issued its guidelines for patenting of computer-related inventions.\(^{123}\) They also eliminated from the MPEP the language in Section 706.03(a) indicating that “Business Methods” were not a statutory category for patentability. Nevertheless, patent validity for software executing pure transformations of data was contested by litigants based not only upon its nature as a pure “mathematical algorithm” but also on the basis that it was unpatentable as a business method.

1982, long before either software or business methods per se were deemed to be patentable subject matter by the Courts or USPTO.

119. See supra note 6.

120. Id.

121. Id.


The idea that Business Methods were excluded from patentability under Section 101 was a rule more honored in its avoidance than its application. The exception originated in *Hotel Security Checking, Co. vs. Lorraine, Co.* The court stated that a “system of transacting business, apart from means for carrying it out, is not within the purview of [patent protection] . . . nor is an abstract idea or theory, regardless of its importance, apart from means for carrying such ideas or theories into effect, patentable subject matter.” The Business Method there in question was a system of creating accounts for hotel employees and waiters to suppress pilferage. The accounts were debited for meals taken and credited for payment for those meals. The “rule” against patentability of Business Methods, however, was mere dicta. The court based its holding on the fact that such a business method was not novel.

In the following cases, the Business Method “exception” was deliberately not addressed in favor of holdings based upon novelty and non-obviousness: In re Wait,124 Application of Howard,125 Dann v. Johnson,126 and Paine Webber v. Merrill Lynch.127 Additionally, academic review has failed to find a holding squarely based upon a “business method exception” to statutory patentability.128

i. The State Street Decision

In *State Street Bank* the Federal Circuit considered the validity of a patent covering a computer system for controlling financial operations. The software-implemented business method in question was a partnership of mutual funds created for tax benefits and administrative efficiencies. An investment was made in developing software that could accurately and promptly calculate share prices to each shareholder in each of the participating funds after calculating each day’s fluctuations in share price, number of shares sold, number of shares bought and shareholders entering and leaving funds. This “hub and spoke” method of properly transforming the relevant data was challenged in district court as being outside of statutory subject matter because it was a mathematical algorithm and also because it was a business method.

Patent owner Signature Financial had originally filed twelve claims, six apparatus claims and six method claims. It withdrew the method claims under the examiner’s threat of Section 101 subject matter rejection of them. In construing the six apparatus claims, the district court read them as actually

124. 73 F.2d 982 (C.C.P.A 1934)
125. 394 F.2d 869 (C.C.P.A 1968),
126. 425 U.S. 219 (1976) (holding that a computer automated check record keeping system was invalid because it was obvious in light of the prior art, not because it was excepted as a business method).
being directed to a process. Since the Alappat case had only authorized apparatus claims as statutory subject matter, the district court held the redrawn “method” claims invalid as not being drawn to statutory subject matter, both in its capacity as a mathematical algorithm process and as a business method.

The Federal Circuit reversed, holding that the claims were properly drawn as apparatus claims and reading in the requisite data structures from the specification under Section 112(6). The State Street Bank court stated in dicta that, for purposes of Section 101 analysis, “it is of little relevance whether claim 1 is directed to a ‘machine’ or a ‘process.’”\(^{129}\) It held that the hub and spoke software was statutory subject matter because it produced a “useful, concrete and tangible result.” The Court stated:

> We hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces a ‘useful, concrete and tangible result’—a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.\(^{130}\)

Finally, the Federal Circuit considered the Business Method exception as grounds for holding the patent invalid as non-statutory subject matter. It stated, “we take this opportunity to lay this ill-conceived exception to rest.”\(^{131}\) The Court reviewed the history of the relevant case law, as above, and concluded that the exception had never actually been invoked by the Court.

The Court’s holding is rightfully understood to authorize patent protection for computer implemented business applications, including not only software but electronic commerce. According to the court, the patent claim in question was “. . .directed to a machine programmed with the hub and spoke software which admittedly produces a ‘useful, concrete and tangible result.’ This renders it statutory subject matter, even if the useful result is expressed in numbers, such as a price, profit, percentage, cost or loss.”\(^{132}\)

ii. AT&T Corp. v. Excel Communications, Inc.

On April 14, 1999 the Federal Circuit ruled in AT&T Corp. vs. Excel Communications, Inc.\(^{133}\) Although validity was not challenged as a business method, but as a mathematical algorithm, the court emphatically reaffirmed the holding in State Street Bank. It also expanded the principles stated in State Street Bank, holding that the form of the claim, as a method or apparatus, does

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129. *State St.*, 149 F.3d at 1375 (emphasis added).
130. *State St.*, 149 F.3d at 1375.
131. *Id*.
132. *Id*.
133. 172 F.3d 1352 (Fed. Cir. 1999).
not matter. “Whether stated implicitly or explicitly, we consider the scope of Section 101 to be the same regardless of the form—machine or process—in which a particular claim is drafted.”

The court also put to rest the “physical transformation” test, another remnant of the court’s quarter century long struggle with software patent validity under Section 101. No physical transformation is required; a transformation of data is adequate. The court stated, “...the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a useful, concrete and tangible result.”

Even more important than the court’s clear holding is the substance of the matter ruled upon. The patent involved the administration of discounts that long distance telephone carriers offered when both the caller and the recipient of the call are customers of the same long-distance company. Each long distance call travels with a data packet which, when displayed, has a number of data fields including the identity of the caller, the identity of the person called and the length of the call. This “message record” is a useful place to display whether or not the caller and recipient qualify for a discount by subscribing to the same long distance carrier. Accordingly, AT&T’s method patent was to first, generate this message record as to whether or not both parties to the call subscribe to the same long distance carrier and second, display that in the record. The patent was declared valid, summary judgment was reversed and AT&T allowed to pursue its damages, including lost profits and injunction, against its telecommunications competitor, Excel, based on a simple two-step method claim.

Interestingly, the AT&T patent is classed under telecommunications, not Business Methods.

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134. Id. at 1374.
135. Id.
136. A separate controversial subject is the validity of the patents that are being issued by the USPTO currently. The director of technology examiners group 2700, responsible for data processing applications, readily admits that he is understaffed. Further, the primary source of prior art examined by the USPTO is, in general, its own database of items already patented, that is, Section 102(e) art. Since the USPTO has not been issuing patents on “pure” software (as distinguished from traditional patent subject matter such as rubber molds or medical diagnostic equipment which are controlled by computer programs), the USPTO consequently does not have a large database of internal prior art to search to determine whether or not the current applications are novel and non-obvious. The USPTO has established relations with outside databases, but is constrained in attempts to ask specific questions about specific technologies by the requirement under Section 122 that the application remain confidential.

Recent issued patents have fanned the flames of controversy surrounding the quality of the USPTO’s output. “A building block training system and training method” is directed to a “method of training cleaners of facilities to be used on the job which utilizes a plurality of pictorial displays...,” that is, training janitors with picture books. Patent No. 5,851,117 (issued
Of course, these cases were decided during the Internet explosion and e-commerce patenting informs the debate. Business Method Patents are commonly understood to include e-commerce patents such as Amazon’s “one-click,”138 Doubleclick’s advertising technique,139 Linkserve’s referral commission systems,140 billing methods,141 and Priceline’s reverse auction.142

The understanding of Business Method Patents by technology developers and patent practitioners includes a range of definitions. The most narrow would include only those techniques without novelty beyond their “business” techniques for, say, accounting, shopping or inventory control, such as the e-commerce patents. A slightly broader range encompasses data processing, as is evidenced by the USPTO Class 705 definitions. An even broader understanding includes both the business technique and the software implementing it. Thus, history does not define Business Method Patents, but it is an important backdrop for consideration of what the Court will judge to be an appropriate scope for the new Prior User Defense.

C. Section 102(g) Prior Art Case Law

Before being recognized as patentable, business method technologies (often software implemented) were typically protected as trade secrets. Trade secret prior art is capable of invalidating patents, but the case law defining when and how this may happen is not well developed. Proprietary know how that may help establish prior user rights against an asserted Business Method Patent, may also help invalidate a non-business method patent. In fact, there is no reason why Prior User Rights and 35 U.S.C. § 102(g) cannot both be plead as alternative affirmative defenses to the same patent.

In case law interpreting 35 U.S.C § 102(g) patent validity challenges,143 a distinction has been made between “secret” prior use and “non-informing

Dec. 22, 1998). A “decorative figure assembly from combination of component bags,” is drawn to a trash bag for holding raked leaves, which is decorated with a jack-o-lantern design. Patent No. 5,989,095 (issued Nov. 23, 1999). This utility patent was recently upheld as valid over a claim of obviousness. In re Denbiczak, 50 U.S.P.Q 2d 1614 (Fed. Cir. 1999).

141. U.S. Patent No. 5,905,726 (issued May 18, 1999).
143. § 102 (g) states:

An inventor shall be entitled to a patent unless – (g) before the applicant’s invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.
public” use. The leading cases are Gillman v. Stern and Dunlap Holdings, Ltd. v. Ram Golf, Corp. Secret prior use has been construed to fall outside the body of prior art capable of invalidating a patent. A use that is public, but does not inform the public of how the public product was produced, has been held capable of invalidating prior art in some cases.

i. Gillman v. Stern

In Gillman v. Stern the technology in question manufactured quilts. In assembly, quilts need to be “puffed” before they are sewn shut. The prior user in this case was careful to maintain the secrecy of the pneumatic machine he used to “puff” process his quilts. The technique would not be discernible to a retailer of the quilts, purchaser of the quilts or competing quiltmaker.

The patent was held to be valid over the user’s process. The holding found the process to be “...as strictly secret as possible, consistent with its exploitation,” based upon facts that have since developed into the elements of maintaining a trade secret. The machine was kept behind locked doors, visitors were restricted and the employees were sworn to secrecy.

Since the secret process was not discernible from the product, Judge Learned Hand wrote that “what had not in fact enriched the art should not count” as invalidating prior art. In dicta, Hand considered the distinction that had developed in the law between a “non-informing” public use and a “secret” use. A non-informing public use was nevertheless an invalidating prior use, even though it taught the public nothing. Hand criticized the caselaw’s emphasis on public use of an end product as contrary to the underlying theory of the law encouraging disclosure where the end product did not inform the public of anything about the process.

Although originally drafted as a priority dispute codification, the first sentence has come to embody a separate classification of prior art from Section 102 (a), “A person shall be entitled to a patent unless – (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent . . . . . .” which has been read to mean “public” knowledge or use by others. Section 102(g), then, is distinguished in that “made by others” under Section 102(g) does not necessarily mean used in public.

144. 114 F.2d 28 (2nd Cir. 1940), cert denied, 311 U.S. 718 (1941).
145. 524 F.2d 33 (7th Cir. 1975), cert. denied, 424 U.S. 955 (1976).
147. Gillman, 114 F.2d at 30.
148. Id. at 31.
149. Id.
ii. *Dunlap Holdings, Ltd. v. Ram Golf, Corp.*

In *Dunlap*, the technology in question was a special cut-resistant material used for the surface of golf balls.150 In that case, a prior user did not suppress or conceal the material in his early sale of the golf balls in question. A later asserted patent was held to be invalid because it was not novel; that is, it was “anticipated” by the prior public release of the golf ball covers by another. The Seventh Circuit held that although the public use did not inform the public of the technology, the prior use still invalidated the patent held by the second developer of the golf ball covers because the public had already received the benefit of the golf balls themselves and also because it was “fair to presume that the secret [composition of the golf ball cover] would be uncovered by potential competitors long before the time when a patent would have expired if the inventor had made a timely application and disclosure to the patent office.”151

Finally, the Seventh Circuit articulated the equity argument of the Prior User Rights advocates. It held that the first inventor is under no duty to patent and is free to contribute his idea to the public voluntarily, or involuntarily through a non-informing public use. “In either case, although he may forfeit his entitlement to monopoly protection, it would be unjust to hold that such an election should impair his right to continue diligent efforts to market the product of his own invention.”152

It is important to note the distinction made by the court between the facts before it and those of *Gillman*, and also *Palmer v. Dudzik*.153 Those cases involved prior art trade secret machines where “the benefits of using the machine were not made available to anyone besides the inventor.”154 In *Dunlap* the later patented article in issue was the publicly distributed golf ball cover, which was susceptible to reverse engineering.

iii. Section 102(b) Cases

This distinction made evident by the *Dunlap* court is further developed in cases construing Section 102(b).155 The Section 102(b) line of cases, which

151. *Dunlap*, 524 F.2d at 36.
152. *Id.*
154. *Dunlap*, 524 F.2d at 484.
155. Section 102 (b) states, “A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this country or in a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States . . .” “Since 102(b) does not require public use or sale by another an inventor’s own use of the invention may invalidate it, if he fails to file his patent application
often touch on the subject of whether or nor a prior use was “public,” shed light on the holdings of the Section 102(g) cases. It must be born in mind that Section 102(g) analysis goes strictly to novelty, while Section 102(b) caselaw is more often concerned with preventing an inventor from maintaining a monopoly for longer that the patent term; first a practical monopoly through secrecy and then a legal monopoly through patenting.156

A leading case in construing public use under Section 102(b) is W.L. Gore & Associates v. Garlock, Inc.157 In that case, the technology in question was a process for stretching Teflon industrial tape. Purchasers of the tape would be unable to discern if it had been stretched or not, although it performed better after stretching. In holding the patent valid and unanticipated by the prior use, the court found that there was no evidence that the public could learn the claimed process by examining the tape. The court held:

    Early public disclosure is a linchpin of the patent system. As between a prior inventor who would benefit from a process by selling its product but suppresses, conceals or otherwise keeps the process from the public, and a later inventor who promptly files a patent application from which the public will gain a disclosure of the process, the law favors the latter.158

It has consistently been held that “promoting the progress of the useful arts” under the Constitution is best served by providing an incentive (a patent monopoly) to those developing technology and to confer that benefit in exchange for public disclosure, in order to enrich the public body of technical knowledge. The refinement that these cases bring to the public policy encouraging disclosure is this: if a use of a technology that produces a public product from which competitors may be able to discern the trade secret process, the product and the secret process that produced it will be held to be a public use, which may invalidate a patent issued to one who comes later to the technology. Such a non-informing public use is, in effect, still held to be informing enough, because it will be reverse engineered and thereby enrich the public knowledge. Such disclosure, albeit incomplete, justifies qualifying the prior use as anticipating public use capable of invalidating a later patent. If the process technology cannot be discerned by competitors from the public use of the products of that technology, however, it is deemed to be “secret,” that is, “suppressed or concealed” under Section 102(g). Accordingly, such a use is

within a year after his first public use or sale. The case law is well developed on what constitutes “public use.”

157. 721 F.2d 1540 (Fed. Cir. 1983).
158. Gore, 721 F.2d at 1550.
not a public use that can invalidate by anticipation a patent issued to a second
developer of the technology.159

Thus a first developer of a process technology is free to choose trade secret
protection over patent protection,160 but by maintaining the technology’s use as
secret, its developer risks having that same technology developed later by a
competitor who patents and who will then be entitled to enjoin the first
developer’s use of that technology. It is accurately noted by advocates of Prior
User Rights that the results of this legal framework are harsh. That is, one or
the other of the parties will lose all their rights. If suppressed or concealed, as
by a trade secret, the first developer who does not patent risks losing its trade
secret, and losing its right to practice the technology. If the technology use is
deemed a “non-informing” public use, the second developer-patentee risks
invalidation of the patent.161

159. See generally E.I. du Pont de Nemours & Co. v. Phillips Petroleum, Co., 849 F.2d 1430,
1436 (Fed. Cir. 1988); Thompson S.A. v. Quixote, Corp. 166 F.3d 1172 (Fed. Cir. 1999);
Chugai Pharm. Co., 927 F.2d 1200 (Fed. Cir. 1991); New Idea Farm Equip. Corp. v. Sperry
Corp., 916 F.2d 1561 (Fed. Cir. 1990).


161. Notably, in both Gillman and Dunlap, the defendants challenged patent validity with the
prior use of a third party. This will not arise with the new defense because it is personal under §
273(b)(6). In other words, patentees remain at least as vulnerable to the still available § 102(g)
invalidation as they were before and, to the extent that the new defense encourages trade secret
protection and those secrets are discoverable, the new defense may generate even more third party
prior art with which to challenge patents.

At least one commentator, F. Andrew Ubel, Who’s on First—The Trade Secret Prior
User or a Subsequent Patentee, 76 J. PAT. & TRADEMARK OFF. SOC’Y 401 (1994), has argued
that the distinction is less an end in itself than it is a means to the end of balancing equities as the
court sees fit, in light of the harsh winner take all nature of § 102(g) and the Gore holding.

In Friction Division Products Inc. v. E.I. Du Pont de Nemours & Co., 658 F. Supp. 998,
3 USPQ.2d 1775 (Del. 1987), the defendant used its own prior trade secret use, not a third
party’s, as its defense. The product was Kevlar and the secret use was production process
development. In denying the defendant’s Motion for Summary Judgment of Invalidity for
Suppression and Concealment of the prior use, the Court held that “the process itself does not
have to be disclosed to the public in order to avoid a finding of abandonment, suppression or
concealment of the invention. Only the benefits of the inventors work need reach the public.” Id.
at 1787 (citing Dunlap, 524 F.2d at 36).

It is argued, then, that the “non-informing” public use versus the “secret” prior use
distinction is a malleable standard. The courts are more likely to find suppression and
concealment where an “ordinary infringer” defends upon the work of a third party, and more
likely to find the prior work is unconcealed, unsuppressed, invalidating § 102(g) art where the
defendant is relying on its own work. While this argument overlooks the fact that the winning
defense in Dunlap was based on the prior use of a third party (“Butch Wagner”), as was the losing
and criticized defense in Gillman (“Haas”), the point is well taken. The equities are palpable, and
the courts have been cognizant of them in ruling upon whether or not a prior use qualifies as §
102(g) invalidating art.
Prior User Rights advocates point out that this Draconian result is avoided with Prior User Rights, which allow the first developer to continue to use its trade secret technology should it elect to not patent it, and also allows the second developer who elects patenting to continue to hold a valid patent good against the rest of the world. However, the harsh results of Section 102(g) are also often understood as promoting settlement by licensing, since the risk of losing all their rights is a powerful motivator to both parties. Presumably, Prior User Rights will remove this incentive to settle.

In any case this line of case law may prove to be useful in defining the scope of the “First Inventor Defense.” Prior uses that produce a public product may be distinguished as worthy of the defense or not based upon whether the product motivates those who would be interested in developing a similar technology by suggesting to them how they might go about it.

V. ARE BUSINESS METHODS NON-INFORMING PUBLIC USES?

A variety of criteria can be used to define Business Method Patents, and with them the scope of the new defense. Definitional criteria should be selected to harmonize the new defense with existing patent law, to support time honored public policies of disclosure and to promote certainty among intellectual property practitioners, developers and investors. One criterion deserving consideration is whether the prior use would qualify as a “non-informing” public use under pre-existing Section 102(g) case law. Dunlap recognized some equities on behalf of a prior user, and sought to justify holding in accordance with them by reasoning that the disclosure of a prior user was sufficient even if incomplete. The characteristics of Business Methods lend themselves well to such an approach.

Moreover, nothing in the “First Inventor Defense” statute makes assertion of the defense mandatory. Should a defendant care to brave the risk of losing trade secret protection, the defense of invalidating the asserted patent on Section 102(g) grounds is still available, and indeed may be pled as an alternative affirmative defense.

The line of software patentability cases leading up to State Street Bank suggests a range of boundaries by which Business Method Patents could be selectively defined. Most narrow is that they are those patents whose novelty resides in the conduct of business, not in the software that implements it.

162. Opponents of Prior User Rights point out that this has the effect of removing the technology from the marketplace for a period of time longer than the statutorily endorsed twenty-year patent term.
163. This is the reason for . . . the paucity of 102(g) caselaw.
For e-commerce patents such as the Amazon “One-Click” patent, the novel aspect is quite clear and easily reverse engineered. Certainly, if previously used, such displayed functionality would qualify as an informing public use available to invalidate under Section 102(b) a patent issued to a later developer. It is difficult to conceive of such e-commerce patents as “suppressed or concealed” under Section 102(g).

USPTO Class 705 is defined, however, as “data processing.” Business Methods are also agreed to include such methods as the Signature Financial mutual fund reconciling program. Clearly the “hub and spoke” patent at issue in State Street Bank took in data and processed it to output different useful, concrete and tangible data sets. Although this may be a “backroom” process vis-à-vis the public at large, if the relevant public is taken to be the competitors of the patent holder, then the awareness of the patented program’s functional capabilities may also prove to be as informing as the Dunlap golf ball cover. Accordingly the patent may still be vulnerable to invalidation by a qualifying and anticipating prior use. Under Section 102(g), to the extent that these services can be offered while suppressing and concealing the software implementing them, the functionality of the program will still be known to competitors, and would motivate them to engineer competing products.

Even if the definition of Business Method Patents is taken to be broad enough in scope to include implementing software, Section 102(g) defenses may still be an option worth considering for an accused first user. It is widely accepted that software development over the last quarter century has been highly incremental in nature. Many patented processes are thought to be obvious in that the problems they address could have been solved by an ordinarily skilled practitioner of the programming arts simply by applying any of a variety of preexisting programming techniques. In other words, most software is so easily reverse engineered that putting a method to use while suppressing and concealing its implementing software from a relevant audience of competitors will still serve to be a substantially informing use.

If the foregoing is accepted to be true, then many Business Method Patents are highly susceptible to reverse engineering once the functions the software performs are used in public. Hence, it appears that a great bulk of products and services implemented by software would properly be considered “non-informing” public uses under the Section 102(g) case law. Accordingly, if Prior User Rights under the new act are construed to cover business method subject matter which would qualify as a “non-informing” public use under Section 102(g), even though optimal techniques (the best mode) are suppressed

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and concealed as trade secrets, the new defense would seem to do the least violence to the traditional patent system. Finally, given the short life cycle of software, such a rule would do little practical harm either.

In sum, the new defense is tailored for application under the “suppressed and concealed” language of Section 102(g). The case law construing that statute has sought to ameliorate the harsh results of Section 102(g) for those who inform the public to some extent beyond absolute secrecy, in order to preserve the public policy favoring disclosure. In so doing, these cases point to a useful element worthy of inclusion in whatever definition of “methods of doing or conducting business” the courts devise. The defense should not apply beyond those methods that do not inform the public enough to motivate competitors to build on the disclosed functionality. Such a holding would afford technology developers as much predictability in this area as they had before the advent of the “First Inventor Defense.”

VI. CONCLUSION

Major recent decisions in patent law\footnote{Shoketsu Kinzoku Kogyo Kobashiki Co. v. Festo Corp., 234 F.3d 558; (Fed. Cir. 2001); Markman v. Westview Instruments, 517 U.S. 370 (1996); Warner-Jenkinson Co., Inc. v. Hilton-Davis Chem. Co., 520 U.S. 1153 (1997).} have sought to promote predictability in the application of patent rights and certainty of the boundaries of those rights for the relevant community of technology generators and their investors. The undefined scope of the “First Inventor Defense” runs counter to that policy. The courts have been left the task of applying the defense in a manner that preserves as much as possible public policy in favor of certainty and disclosure while affording relief to earlier users according to the Act. One approach is to allow the defense insofar as the prior use provides some information to the public, as Business Methods inherently do anyway, in view of Section 102(g) case law on “non-informing” public use. To the extent that such an approach limits the controversial new defense, and to the extent it would expand the range of Section 103 art available to invalidate controversial business method patents, it would also serve to return the patent system to its traditional status. To the extent that the courts are persuaded by the facts presented to them that the equities served by the new defense can be consistent with the public policy favoring disclosure, the new defense has an opportunity to grow into a broader regime from a narrow exception, as it should now properly be construed.