Texas Intellectual Property Law Journal
Spring 2001

Articles

BUSINESS METHOD PATENTS: UPDATE POST STATE STREET
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When State Street Bank & Trust Co. v. Signature Financial Group, Inc.\(^1\) burst onto the legal stage in 1998, it put the world on notice that “methods of doing business” (MDB) were patentable subject matter in the United States under 35 U.S.C. Section 101.\(^2\) As the business and legal world began to digest the meaning of State Street, the Federal Circuit extended the court’s State Street pronouncements in its AT&T Corp. v. Excel Communications, Inc.\(^3\) decision. The court expanded the understanding of patentable subject matter by erasing any distinction between processes and machines for determining compliance with Section 101. “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.”\(^4\) These decisions, along with the rapid growth of the Internet, caused many to prophesize that MDB patents would become the ultimate gatekeeper of successful Internet business models.\(^5\) Consequently, when Amazon.com received an injunction against Barnesandnoble.com for violating its one-click patent,\(^6\) many directed their anger and shock at the United States Patent and Trademark Office (PTO) for allowing something as “obvious” as U.S. Patent No. 5,960,411 (issued Sept. 28, 1999) to be issued.\(^7\) Critics of the PTO argued that \(^*405\) the PTO was incapable of issuing quality MDB patents because it was overworked and understaffed, while the agency’s searchable databases were antiquated and ill-suited to the task of reviewing MDB patent applications.\(^8\)

Meanwhile, companies outside the United States began wondering whether their countries should revise their patent guidelines to allow software or MDB to be patented. Many argued that the U.S. Internet market was advancing faster than their own because of the PTO’s approach to patentable subject matter.\(^9\) Japanese and European companies, as well as U.S. companies with interests abroad, began to analyze their intellectual property portfolios for pre-State Street patents that applied to MDB on the Internet.\(^10\) Many have since commenced litigation against companies that they believe are violating some of those patents.\(^11\)

This article attempts to step back from the past three years and all that has been written about MDB patents since State Street was decided, to determine where State Street has actually taken us and where MDB patents are likely to take the business world in the future.

**II. Brief Review of State Street**

The First Inventor Defense Act of 1999 defines the word “method” as “a method of doing business.”\(^12\) The historical
examples of such MDB patents put forth by the PTO suggest that a pure MDB patent might require a manner of doing business unrelated to the design of hardware or software. This certainly made sense in the pre-microchip world. However, e-commerce’s reliance on technology and software has changed the manner in which claims are made in MDB patents. Today, patents for Internet business models often overlap significantly with software patents.

The State Street case is itself guilty of such overlap as it relates to a data processing system patented by Signature Financial Group, Inc. The methodology involved pooling assets of individual mutual funds into a common portfolio to provide greater tax relief, lower administrative cost, and operating efficiency. After licensing negotiations with Signature Financial broke down, State Street Bank & Trust Co. filed a declaratory judgment to invalidate the patent. As part of their overall argument, State Street theorized that the patent related to a business method, and therefore, was not patentable subject matter. The district court agreed with State Street and Signature Financial appealed.

The Federal Circuit reversed the district court, holding that the patent was valid. The court looked to whether the patent produced a useful, concrete, and tangible result, not to whether it covered a method of doing business. In doing so, the Federal Circuit quashed the commonly held view that MDB could not be patentable subject matter. The timing of the case caused waves within the emerging e-commerce community looking to erect “barriers of entry” within any particular business model. Quickly, State Street created a stampede to the PTO to “stake out a claim” in the e-commerce landscape.

In the year after the 1998 State Street decision, MDB patents, represented by the newly designated Class 705, doubled. The year later, applications more than doubled again.

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The rush of applications has had an immediate impact upon the PTO. Unlike in the past, when technology shifts were more gradual, MDB inventions have burst onto the scene. Coincidentally, at the same time State Street was decided, the PTO was initiating a new database system that many claimed failed to address any prior art available for MDB patents. Without a proper database of prior art to provide a glimpse into the growing MDB technology, some have suggested that the PTO has struggled unsuccessfully to issue high quality patents in the MDB arena.

III. Brief History of MDB Patents in the United States

According to the PTO, MDB patents are nothing new to the U.S. patent scheme. The PTO provides the following history: The creation of a patent system was one of the acts performed by the First Congress of the United States. The first patent statute was passed on April 5, 1790, by the Congress of the twelve United States and signed into law on April 10 by President Washington. Rhode Island ratified the Constitution and joined the Union 49 days later on May 29, 1790. The “Commissioners for the Promotion of the Useful Arts” granted the first United States patent on July 31, 1790. The Commission consisted of Secretary of State Thomas Jefferson, Secretary of War Henry Knox, and Attorney General Edmund Randolph. This first patent was to a chemical method for making potash and pearl ash.

Financial apparatus and method patents date back to this period. These early financial patents were largely paper-related products and methods. The first financial patent was granted on March 19, 1799, to Jacob Perkins of Massachusetts for an invention for “Detecting Counterfeit Notes.” All details of Mr. Perkins invention, which we presume was a device or process in the printing art, were lost in the great Patent Office fire of 1836. We only know of its existence from other sources. Mr. Perkins was perhaps our young nation’s most prolific early inventor with nearly 1% of all patents from our first quarter century. Upon his death in 1849, his obituary filled three pages of the Commissioner of Patents annual report to Congress. The first financial patent for which any detailed written description survives was to a printing method entitled “A Mode of Preventing Counterfeiting” granted to John Kneass on April 28, 1815. The first fifty years of the U.S. Patent Office saw the granting of forty-one financial patents in the arts of bank notes (2 patents), bills of credit (1), bills of exchange (1), check blanks (4); detecting and preventing counterfeiting (10), coin counting (1), interest calculation tables (5), and lotteries (17). Financial patents in the paper-based technologies have been granted continuously for over two hundred years.

Automated financial/management business data processing method patents cannot trace their origins back to the founding of our nation. However, contrary to popular view, they did not suddenly spring into being in the late 1990’s. On January 8, 1889, the era of automated financial/management business data processing method patents was born. United States patents 395,781; 395,782; and 395,783 were granted to inventor-entrepreneur Herman Hollerith on that date. Mr. Hollerith’s method
and apparatus patents automated the tabulating and compiling of statistical information for businesses and enterprises. They were acclaimed nationally and viewed as revolutionizing business data processing. The protection of his patents allowed his fledgling Tabulating Machine Company to succeed and thrive. In 1924, Thomas J. Watson, Sr. changed the company’s name to International Business Machine Corporation. Hollerith manual punch cards (IBM punch cards) and his methods for processing business data were still being used up until the birth of the personal computer era.

The financial/management business data processing method patents of today are more numerous and more sophisticated than those of 1889. However, this is not a function of the business method ingenuity of our forebears. Rather, this is directly a function of high cost, low speed, and limited availability of automated data processing machines in the 1890’s versus the low cost, high speed, and wide spread use of today’s computers. Put another way, we invented some automated business data processing methods over the last one hundred years, but we spent the bulk of that time perfecting the automated business data processing machines upon which we will run the methods. It is only recently that data processing systems have become sufficiently developed to begin to allow us to fully tap our ingenuity in the business method arts.

Thus, the PTO takes the position that a natural progression toward MDB patents has lead us to today’s relative proliferation of such patents. This view raises a question: Why is the PTO’s database so lacking in quality with regard to MDB patents and prior art? Perhaps in response to this criticism, the PTO has pursued the following initiatives.

A. PTO Initiatives

On March 29, 2000, the PTO announced a new “step” initiative in response to the criticisms that it faced in the wake of the Amazon injunction and other controversial MDB patents. Then acting director Q. Todd Dickinson announced that the PTO would first reach out to industry to establish a formal “Customer Partnership” (Partnership) with the software, Internet and electronic commerce industry similar to that in place with the biotechnology industry. The Partnership would meet quarterly to discuss mutual concerns, share PTO plans and operational efforts in the technology area, and discuss solutions to common problems.

As part of this industry outreach, the PTO announced that it would convene a “Roundtable Forum” to discuss issues and possible solutions surrounding MDB patents, and a greater effort would be made to obtain industry feedback on prior art resources used by the PTO. The PTO would solicit input on other databases and information collections and sources, and expand prior art collections.

The March Initiative also included the PTO announcement that it would concentrate on increasing the quality of issued patents. To meet this goal of higher quality MDB patents, the PTO decided to enhance technical currency for examiners and continue current training efforts and partnerships with industry associations and various individual corporate sponsors. The PTO decided to pursue business practice specialists to serve as a resource for examiners on alleged common or well known industry practices, terminology scope and meaning, and industry standards in four basic areas: banking/finance, general e-commerce, insurance, and Internet infrastructure. The PTO also announced its intention to amend The Examination Guidelines for Computer-Related Inventions and revise the relevant training examples in light of the State Street and Excel Communications decisions.

As a final step, a mandatory search for all applications in Class 705 would be expanded to include a classified U.S. patent document search and a text search of U.S. patent documents, foreign patent documents, and non-patent literature. Non-patent literature searches would include required search areas mapped or correlated to a U.S. classification system for Class 705, thereby providing a more fully developed prior art record. A new second-level review of all allowed applications in Class 705 would be required, with an eye toward ensuring compliance with search requirements, reasons for allowance, and a determination of whether the scope of the claims would be reconsidered. In addition, the sampling size for review by the Office of Patent Quality Review would be substantially expanded, and a new in-process review of office actions would be introduced with an emphasis on the field of search of the prior art and patentability determinations under 35 U.S.C. Section 102 and Section 103.

*410 B. Class 705
Class 705 for MDB patents was created in 1997 from the business and cost/price sections of computer Classes 395 and 364.\textsuperscript{45} These two sections originally evolved from Class 235--Registers, beginning in the late 1960’s.\textsuperscript{44} The evolution of the technologies in Class 705 is apparent when reviewing the assignees of MDB patents in the three periods 1977-1989, 1990-1994, and 1995-1999.\textsuperscript{49} The PTO compiled the chart below to demonstrate how Class 705-type patents have developed over the past 23 years, with the ranking of the ten companies that were issued the most business method patents during various periods.\textsuperscript{46}

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*411 Class 705’s growth in 1998 and 1999 has increased steadily.\textsuperscript{52} Nevertheless, according to the PTO, Class 705 represented only about 1% of the total patent applications filed at the PTO in 1999.\textsuperscript{53} The 2658 applications filed in Class 705 in 1999 did not even place it among the top five communications and information processing technologies.\textsuperscript{54}

As a comparison, the digital and multiplex communication technologies of Classes 370 and 375, which form the backbone of all modern communication systems, saw 7131 patent applications in 1999.\textsuperscript{55} Additionally, the PTO received 3898 applications for Class 345 (display data processing, e.g., graphical user interfaces, web browsers), 3480 applications for Class 455 (telecommunications, e.g., radio, cellular telephones), 3190 applications for Class 709 (networked computer data processing), 3068 applications for Class 707 (databases and word processors), and 2905 applications for Classes 360 and 369 (dynamic information storage, e.g., disk drives). Collectively, the communications and information technologies saw 57,000 applications in 1999.\textsuperscript{56} Class 705 received less than 5% of that total.

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D. The Market Place Responds

Recently, one of the major voices of both criticism and praise for the MDB patents, Jeff Bezos, teamed with one of the Amazon patents’ loudest critics, Tim O’Reilly, and others to create a business out of providing prior art to invalidate patents.\textsuperscript{57} The business, which tends to focus on MDB patents and is located at the web site http://www.BountyQuest.com, provides a forum for parties interested in using the strength of the Internet to have others search for prior art.\textsuperscript{58} The business
model allows interested parties to post a “bounty,” usually around $10,000, for prior art that may be used at a later time by the bounty posters to invalidate those patents. To date, BountyQuest.com has awarded five different bounties to participants who have provided the necessary prior art to satisfy the terms of the bounty. One of the patents possibly invalidated is a “double click” patent that was recently at issue in a suit against 24/7 Media.

With the recent success of BountyQuest, an additional check is brought to bear against poor patents quality. Previously, if faced with an infringement suit, companies had the choice of defending the action by going through the time and expense of litigation, which many times included hiring a search company to conduct an invalidity search against the patent in question. Now, as a first resort and for a relatively minor cost, a company can post a bounty to seek prior art and possibly invalidate the patent. However, while BountyQuest has not released calculated statistics, it appears that only one tenth of the posted bounties have been successful to date; over 30 bounties have been offered on its site so far while only six have received a reward. While BountyQuest has only been in operation for a few months, one might argue that this apparently low recovery rate suggests that MDB patents issued by the PTO may have slightly higher quality than previously thought. What remains to be seen is whether the MDB patents issued by the PTO will withstand the intense scrutiny facilitated by BountyQuest over time.

IV. MDB Litigation Issues to Consider

A. Infringement Investigations

What happens if you believe that another is infringing on a MDB patent or are charged with infringing another’s MDB patent? Conducting an effective pre-suit investigation can be very challenging. Often, the patent may deal with sophisticated software applications or methodologies used by businesses that are not public knowledge or easily accessible. Additionally, a potentially infringing system may be difficult to decipher if it is incorporated in software because of source coding obstacles or encryption methodologies. While alternative methods of discovery may present themselves, such as reverse engineering, those methods bring their own legal problems of license violations. Therefore, the ability to determine whether a potential infringer exists is the first obstacle that the owner must overcome. While this may also be true for many other classes of patents, because of the characteristics of the MDB patents, the task is especially difficult.

B. Claim Construction and Infringement Analysis

Claim construction and infringement analysis for MDB patent infringement cases appears to be no different than for other patent infringement cases. Presently, courts look towards the claims, specification, and prosecution history to analyze the meaning and limitations of the claims. While recent case law on MDB patent infringement is too few to provide direction, most commentators believe that the courts will most likely narrow the breadth of MDB claims.

Likewise, courts will continue to consider literal infringement, the doctrine of equivalents in light of Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. and equivalence under means plus functions claims. However, like claim construction, it is unclear whether courts will narrow claims to nearly prevent their literal infringement.

C. Novelty and Non-Obviousness

Perhaps the greatest threat that a patentee of a MDB must consider is the threat of having the patent invalidated because of prior art. There are four statutory requirements that an invention must meet in order for it to be patentable. These are: permissible subject matter, usefulness, novelty and non-obviousness. As far as MDB patents are concerned, State Street has answered the first two questions. Typically, these are not serious issues once the patent has been issued.

“Lack of novelty” appears to be the main issue that critics focus upon when considering MDB patents. An invention lacks novelty if it was known by others in this country or patented or described in a printed publication in the U.S. or a foreign country. While most critics have claimed that patents such as Priceline’s reverse auction or Amazon’s one-click patents lack novelty, as defenders in suits against those patents are finding, it is much more difficult to find the necessary prior art to invalidate a patent on this basis. Of course, once prior art is found, then the issue of determining whether the art encompasses each claim limitation begins. Moreover, if a court insists on narrowing the interpretation or construction of a
claim for a MDB patent, then the corresponding ability to invalidate the patent based on prior art becomes less likely because more “space” is left for the patentee to distinguish his invention from the prior art.

“Non-obviousness,” understandably, is tied to the establishment of “novelty.” To be patentable, the invention must contain an improvement over the existing technology or method that would not have been obvious at the time the inventor conceived of the invention. Many critics currently feel that even if a patentee of MDB is able to overcome the novelty requirement, most if not all MDB patents probably should be subsumed by the non-obviousness requirement, especially when the patent is based on traditional business practices that have been carried over to the Internet. Nevertheless, obviousness can be a matter of degree. The key to finding a patent invalid for obviousness is that the invention is obvious at the time the invention was made. This requirement will also depend on the prior art available, which when MDB inventions are modified to take advantage of the Internet, may be scarce, if not non-existent.

D. Statutory Defenses

Following State Street, concerns developed that companies that were the first to be using a MDB “quietly,” but had not filed a patent for the MDB, could be named as a defendant by a patentee who subsequently developed the same MDB, but filed first. In addition, companies that had relied on trade secret laws might be liable for infringement actions by later developers who became the first to file. In response to these concerns, Congress passed the First Inventor Defense Act of 1999. Those seeking to utilize the defense should realize that the defense is claim specific and the person or entity using the defense must prove by clear and convincing evidence that he used the method commercially before the filing in question.

V. Recent Business Method Patent Litigation

A. Interactive Gift Express, Inc. v. Compuserve Inc.

This is one of the most recent cases since State Street to discuss the issue of applying a pre-e-commerce patent to the post State Street world. United States Patent No. 4,528,643 (issued July 9, 1985) teaches a system that reproduces and disseminates stored electronic information in response to specific consumer demands. It was designed to allow retailers, such as record and video stores, to reduce costs by dramatically decreasing their inventories. Interactive Gift Express, Inc. filed an infringement action against a group of defendants alleging that their e-commerce activities practiced on the claims of its patent. The district court narrowed the construction of the claims and held that the ‘643 patent could not be expanded to cover the Internet usages. However, on November 3, 2000, the Federal Circuit reversed the district court’s actions. The Federal Circuit broadened the reading of the claims to include Internet applications and ordered the district court to review the case again under its broader interpretation of the patent. Therefore, this case appears to answer the question of whether pre-e-commerce patents can be expanded to cover e-commerce activities. The case is now pending before the district court.

B. British Telecommunications PLC v. Prodigy Communications Corp.

On Dec. 13, 2000 British Telecommunications PLC initiated an infringement action against Prodigy Communications Corp. to seek royalty payments for infringement of a British Telecom patent, U.S. Patent No. 4,873,662 (issued Oct. 10, 1989), entitled “Information Handling System and Terminal Apparatus Therefor” that British Telecom asserts covers hyperlinking technology. This case threatens to cast a wide shadow over the entire Internet. Unlike the factual scenario of the Interactive Gift case, the technology in question, hyperlinking, did not exist at the time the patent was issued in 1989. The case arose after British Telecom, while examining its patent portfolio, identified the hyperlinking patent as a potential source of licensing revenue. British Telecom asserts in its complaint that the ‘662 patent is directed to an information handling system including, e.g. a digital information storage, retrieval and display system, such as used for the interconnection between the Internet, the World Wide Web and user terminals. The ‘662 patent also relates to a system wherein blocks of information comprise a first portion, for display, and a second portion, not for display, such as seen today with the use of hidden page technology, or “hyperlinks.”

The complaint further states that Prodigy’s Internet services infringe the technology covered by the ‘662 patent, because its
Internet services include a web server which stores plural blocks of information, i.e. web pages, at locations of a storage medium, such as a disk. These web pages contain both a displayed *418 portion (what is seen on the screen) and an undisplayed portion with hidden information that is not seen by the user. The hidden information includes, e.g. addresses associated with the displayed portion. Users of Prodigy’s internet services select certain displayed data, e.g. a hyperlink, and the hidden information containing the address corresponding to the selected hyperlink causes the web page indicated by that address to be displayed to the user.100

The complaint does not make readily apparent that the ‘662 patent anticipates hyperlinking to the extent necessary for the infringement action to be successful. Nevertheless, assuming the action is successful, the ‘662 patent can claim a priority date of 1976, thus making Prodigy’s efforts to locate prior art extremely difficult. This is still pending before the court.

C. Priceline.com’s “Reverse Auction” Patent

On October 13, 1999, Priceline.com, Inc. sued Microsoft Corp. and its subsidiary, Expedia, Inc., for infringement of Priceline’s patent,”U.S. Patent No. 5,794,207 (issued Aug. 11, 1998), entitled “Method and Apparatus for a Cryptographically Assisted Commercial Network System Designed to Facilitate Buyer-Driven Conditional Purchase Offers.”102 Priceline claimed that Microsoft’s travel web site, Expedia.com, launched a “copycat hotel service” that violated the ‘207 patent.103 In Microsoft’s system, the consumer is allowed to choose a price he or she is willing to pay for a hotel room in a particular area.104 Hotel proprietors then bid for the consumer’s business.105 Priceline.com sought an injunction against Microsfot, as well as actual and punitive damages.106 Microsoft subsequently filed a motion to dismiss the case, citing that two other companies also owned the same patent.107 In January 2001, after the court rejected a suit by Marketel International, Inc., which asserted that it had invented the subject matter of the ‘207 patent 10 years ago, Priceline and Microsoft agreed to settle the case for an undisclosed amount.108

*419 D. Sightsound Technology’s Patent for Downloading of Digital Music

The PTO issued U.S. Patent No. 5,191,573 (issued Mar. 2, 1993), entitled “Method for Transmitting a Desired Digital Video or Audio Signal,” to Sightsound Technologies. The patent is directed to a method for the sale of any digital audio or video recording over the Internet and stems from an idea for selling movies and music through telephone lines and computer networks instead of on records and compact discs.109 In September 1999, Sightsound sued AOL Time Warner’s CDNow Online, Inc. for infringement of the ‘573 patent.110 In addition, Sightsound has demanded that digital music sites such as MP3.com pay a 1% royalty on every sale involving the downloading of music.111 Sightsound can claim a priority date of 1988, long before anyone was downloading movies and music online.

This case is currently pending before the court112 and if successfully defended and enforced, the ‘573 patent could grant Sightsound a lock on markets and licensing fees that may some day be worth billions of dollars.

E. DoubleClick’s “Ad-Serving” Patent

The United States Patent Office issued a patent to DoubleClick, Inc. for “Method of Delivery, Targeting, and Measuring Advertising Over Networks.” U.S. Patent No. 5,948,061 (issued Sept. 7, 1999), known as “Dynamic Advertising Reporting and Targeting” (DART), is directed to the use of “ad-serving” technology to collect statistics on the use of online advertisements by individual users, thereby enabling targeted advertising over the Internet.113

In December 1999, DoubleClick filed suit against Sabela Media in the United States District Court for the Southern District of New York for infringement of its DART patent.114 Sabela uses ad-serving technology to attract Internet users to advertisement banners and to measure the “click-through” responses to online advertising.115 However, DoubleClick’s main competitor, 24/7 Media, recently acquired Sabela Media and in turn filed suit against DoubleClick, claiming that *420 DoubleClick’s DART technology patent infringes 24/7 Media’s patent entitled “Online Interactive System and Method for Providing Content and Advertising Information to a Targeted Set of Viewers.”116

Both DoubleClick’s and 24/7 Media’s patents cover delivery of targeted advertising to Internet users.117 Although
DoubleClick’s DART patent issued before 24/7 Media’s patent, 24/7 Media’s patent application can claim a priority date earlier than DoubleClick’s due to an earlier filed patent application. Thus, a primary issue in both lawsuits was which party was the first to invent the ad-serving technology. In November 2000, DoubleClick and 24/7 Media settled their patent dispute under undisclosed terms. As part of the settlement, 24/7 Media and DoubleClick granted each other certain rights in certain of their respective patents. No other terms of the settlement were disclosed.

**F. Amazon.com’s “One-Click” Patent**

The Patent Office issued U.S. Patent No. 5,960,411 (the ‘411 patent) to Amazon.com entitled “Method and System for Placing a Purchase Order via Communications Network,” commonly referred to as the “one-click” patent. The claims in the ‘411 patent describe a business method that facilitates online ordering by allowing customers to enter their credit card information once, then assigning a client identifier by a server which eliminates the need for the customer to reenter his or her information upon a revisit.

On October 21, 1999, Amazon sued Bn.com (formerly known as Barnesandnoble.com), for infringement of the ‘411 patent. Amazon alleged that Bn.com used a similar feature in its “Express Lane” shopping process. On December 1, 1999, the United States District Court in Seattle, Washington agreed with Amazon and granted it a preliminary injunction enjoining Bn.com from using *421 “one-click” technology on its web site. As a result of the court’s decision, Bn.com replaced its “Express Lane” technology with the non-infringing “Express Checkout” technology, and subsequently filed an appeal.

On February 14, 2001, the Federal Circuit ruled on appeal that the district court “committed clear error” when it ordered Bn.com to stop using its “Express Lane” feature in the middle of the 1999 Christmas shopping season. The court panel agreed that Bn.com likely infringed the Amazon patent, but also found that Bn.com raised enough doubt about the patent’s validity to avoid an injunction.

**G. Juno Online Services Inc. v. NetZero, Inc. and Qualcomm Inc.**

In a Complaint filed on December 26, 2000, NetZero, Inc. alleged that Juno Online Services Inc. infringed upon its patent entitled “Communication System Capable of Providing User with Picture Meeting Characteristics of User and Terminal Equipment and Information Providing Device Used for the Same.” NetZero alleged that Juno infringed U.S. Patent No. 6,157,946 (issued Dec. 5, 2000) by providing subscribers with a method that supports the delivery of banner ads prior to and during its customer’s Internet usage. The trial court issued a temporary restraining order (TRO) to prevent Juno from displaying third-party online advertisements in a separate window.

On June 1, 2000, Juno filed a complaint against NetZero asserting that NetZero and Qualcomm Inc., the maker of the “EUDORA” email software, infringe its patent entitled “Electronic Mail System for Displaying Advertisement at Local Computer Received From Remote System While the Local Computer is Off-line the Remote System.” The latest version of “EUDORA” email software developed by Qualcomm includes a “sponsor mode” setting that enables a display of advertising while the user reads and writes email in an off-line environment. NetZero has been distributing the new version of “EUDORA” software to its on-line service subscribers. Juno alleges that both Qualcomm and NetZero are infringing the patent by producing, distributing, and encouraging use of the “EUDORA” email software having the “sponsor mode.” Juno is seeking a permanent injunction to preclude future infringement and monetary damages from both defendants. On January 5, 2001, the district court issued a TRO against Juno. The court concluded that NetZero had demonstrated a likelihood of success on the merits. The TRO took effect on Friday, January 12, 2001 and remains in effect for 65 days. A preliminary injunction hearing is set for March 15, 2001. Trial is set for July 2001.

**H. Pitney Bowes, Inc. v. Stamps.com Inc.**

On September 18, 2000, Pitney Bowes, Inc. filed suit against online postage retailer Stamps.com Inc. accusing it of infringing several of its patents that relate to data processing in the parcel shipping business. Pitney Bowes alleges that Stamps.com has infringed four of Pitney Bowes’ patents. The complaint does not specify which of Stamps.com’s activities infringe the patents. Pitney Bowes seeks compensatory damages, prejudgment interest and a permanent injunction. This case remains pending before the court.
VI. Across the Waters

While MDB patents have received great attention in the United States, they have received perhaps even greater attention abroad. Japan, the European Union, and Britain independently have either commenced or completed separate reviews as to whether they should reverse their prior stance on software and MDB patents. In both Japan and Europe, neither software nor MDB have traditionally been patentable. In Europe, Article 52 of the European Patent Convention expressly prohibits the patenting of software. However, because of pressure from the United States through the World Trade Organization’s (WTO’s) Trade-Related Aspects of Intellectual Property Rights, more commonly known as TRIPs, many countries, including those in Europe and Japan, may find it difficult to resist conforming to U.S. patent standards. In fact, it appears as though the members of the European Patent Convention have conceded to the principle of replacing Article 52 with wording that would essentially approve the patenting of software in Europe.

However, this does not mean that Europe or Japan will soon permit MDB patents. While in the United States, State Street provided that a patent had to have a technical implementation, the European and Japanese patent systems will still require a “technical effect” or contribution. It is unlikely that MDB will meet this higher standard absent case law or legislation expanding the European and Japanese definition.

Britain is following this reasoning. Recently, the patent office in Britain announced that they would review, along with Europe, the status of software patents. However, Britain has concluded that MDB patents would fail to increase innovation, but would act instead to increase monopolies, and thus reduce innovation and consumer choices. In short, it appears that despite greater attention, MDB will remain unpatentable in Europe.

VII. Conclusion

MDB patents have received much criticism in the United States and abroad because of a perceived threat to the continued innovation and development of the Internet as well as of other business models. The PTO has begun to implement new policies to ensure that the quality of issued patents under Class 705 meet consistently high standards. Members of Congress have proposed legislation to deal with some of the critics’ complaints against the PTO and MDB patents in general. Moreover, it appears that the market place may provide great assistance to invalidating poor quality patents. While litigation over MDB patents remains in its infancy, courts seem willing to implement the same requirements previously applied in traditional patent infringement cases. Nevertheless, while State Street has settled the question of whether MDB are patentable subject matter in the United States, other countries have failed to follow the this lead and remain steadfastly opposed to including MDB as patentable subject matter.
### Appendix F: Summary of Pending Patent Applications

<table>
<thead>
<tr>
<th>Stage of processing</th>
<th>Utility, plant, and reissue applications</th>
<th>Design applications</th>
<th>Total patent applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending patent applications, total</td>
<td>491,824</td>
<td>23,744</td>
<td>515,568</td>
</tr>
<tr>
<td>In preexamination processing, total</td>
<td>24,542</td>
<td>3,920</td>
<td>28,462</td>
</tr>
<tr>
<td>Under examination, total</td>
<td>376,448</td>
<td>9,927</td>
<td>386,375</td>
</tr>
<tr>
<td>Undocketed</td>
<td>38,008</td>
<td>772</td>
<td>38,780</td>
</tr>
<tr>
<td>Awaiting first action by examiner</td>
<td>170,305</td>
<td>5,660</td>
<td>175,965</td>
</tr>
<tr>
<td>Rejected, awaiting response by applicant</td>
<td>119,496</td>
<td>2,857</td>
<td>122,353</td>
</tr>
<tr>
<td>Amended, awaiting action by examiner</td>
<td>29,671</td>
<td>495</td>
<td>30,166</td>
</tr>
<tr>
<td>In interference</td>
<td>1,829</td>
<td>17</td>
<td>1,846</td>
</tr>
<tr>
<td>On appeal, and other</td>
<td>17,139</td>
<td>126</td>
<td>17,265</td>
</tr>
<tr>
<td>In postexamination processing, total</td>
<td>90,834</td>
<td>9,897</td>
<td>100,731</td>
</tr>
<tr>
<td>Awaiting issue fee</td>
<td>43,364</td>
<td>4,568</td>
<td>47,932</td>
</tr>
<tr>
<td>Awaiting printing</td>
<td>44,109</td>
<td>5,329</td>
<td>49,438</td>
</tr>
<tr>
<td>D-10s (secret cases in condition for allowance)</td>
<td>3,361</td>
<td>0</td>
<td>3,361</td>
</tr>
</tbody>
</table>

### Appendix G: Patents Issued (FYs 1980 to 1999)

<table>
<thead>
<tr>
<th>Year</th>
<th>Utility</th>
<th>Design</th>
<th>Plant</th>
<th>Reissue</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>56,618</td>
<td>4,167</td>
<td>137</td>
<td>305</td>
<td>61,227</td>
</tr>
<tr>
<td>1981</td>
<td>66,617</td>
<td>3,882</td>
<td>168</td>
<td>343</td>
<td>71,010</td>
</tr>
<tr>
<td>1982</td>
<td>59,449</td>
<td>5,299</td>
<td>120</td>
<td>284</td>
<td>65,152</td>
</tr>
<tr>
<td>1983</td>
<td>54,744</td>
<td>4,401</td>
<td>219</td>
<td>351</td>
<td>59,715</td>
</tr>
<tr>
<td>1984</td>
<td>66,753</td>
<td>4,935</td>
<td>174</td>
<td>287</td>
<td>72,149</td>
</tr>
<tr>
<td>1985</td>
<td>69,667</td>
<td>5,058</td>
<td>277</td>
<td>300</td>
<td>75,302</td>
</tr>
</tbody>
</table>
### Footnotes

1. The author is an attorney in the Outsourcing Technology Solution Section with Hughes & Luce, LLP and would like to thank Doug Cawley for his thoughtful insights and assistance in preparing this paper.

2. 149 F.3d 1368, 47 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1998).

3. Id. at 1377, 47 U.S.P.Q.2d at 1604.


5. Id. at 1357, 50 U.S.P.Q.2d at 1451.


See, e.g., British Telecom’s suit against Prodigy, infra. notes 96-100 and accompanying text.


to the criticism).


27 Id.

28 Id.


30 Id.


32 Id.

33 Id.

34 Id. See a list of databases at http://www.uspto.gov/web/menu/busmethp/figurenpl.htm.


36 Id.

37 Id.

38 Id.

39 Id.

40 37 C.F.R. §1.105, while not part of the March initiative, provides examiners and other office employees with explicit authority to ask for information that may be reasonably necessary to properly examine an application or treat a matter with regard to the examination of a patent application filed under 35 U.S.C.§111; 25 U.S.C. §371; or reexamination proceeding. The PTO hopes that this helps to ensure high quality patents.

41 Stanton, supra note 35.

42 Id.


Id.

H.R. 5364, §3 Ch. 32 §321(b)(3), 106th Congress (2000).
Id. §324(a).


Id.

Id.

After the date of this paper, BountyQuest awarded a sixth bounty. Id.

See generally id.

See U.S. Patent No. 5,948,061. See also Patent Café, Bounty Quest Awards Silver Bullet, March 12, 2001, http://www.cafezine.com/news_template.asp?id=492&deptid=8. The DoubleClick patent was invalidated by Brian Shuster, an Internet entrepreneur more commonly associated with his pornography ventures. Shuster, whose Xpics empire was the 19th most trafficked site on the Web in May 1998, submitted material from his own earlier work in developing an online ad serving system. Without a trace of irony, Shuster stated that he “felt wronged when the DoubleClick patent came out.” Id.

Bloomberg News, DoubleClick Settles Patent Suit in 11th Hour, Nov. 6, 2000, http://yahoo.cnet.com/news/0-1005-200-3412998.html. It is interesting to note that no one has been able to provide the necessary prior art to invalidate one of the most famous and controversial patents issued by the PTO, one critics have used as the epitome of a poor quality patent, and the basis for the formation of BountyQuest: the Amazon one-click patent. A bounty for the Amazon patent has been offered for at least five months. Tim O'Reilly, one of the patent's harsher critics and the one who posted the bounty, admitted that, because of the detail of the claims, it was unlikely that the entire patent will be invalidated. See BountyQuest, 1-Click Patent: No Exact Match but Runners Up Will Split $10,000 Cash Prize, http://www.bountyquest.com/infocenter/1click.htm (explaining who split the money even though the exact requirements weren’t met. While the scope of the patent may be narrowed by the prior art that had been submitted by the bounty hunters, the failure of the posted bounty seems to strengthen the arguments of supporters of the PTO who claim that it is able to properly review MoDB patents.).

Bounties are placed on the site for a definite time. If a bounty for the patent has not been found, then the bounty is removed. See BountyQuest, Bounty Directory, at http://www.bountyquest.com/bountylist/bountylist.htm; Hunter Hall of Fame, supra note 66.


See supra notes 7-9.


As mentioned above, in the past, companies that wanted to invalidate a patent often had to spend large amounts of time scouring various sources for prior art. However, with the formation of such Internet sites as BountyQuest, perhaps a more efficient means for the company to locate such prior art may be at hand.


See supra notes 7-9, 59.

Certainly, this is one of the criticisms of the Priceline reverse auction patent, U.S. Patent No. 5,794,207 (the ‘207 patent). Critics state that the ‘207 patent claims business practices that have been around for years and were used regularly by the U.S. Treasury Department to sell government bonds. Thus, the critics state, shifting that business method to the Internet is nothing more than an obvious modification of the patent. However, to date, no one has been able to provide the necessary prior art to invalidate the patent.

35 U.S.C. §273 (stating in part “[i]t shall be a defense to an action for infringement under section 271 of this title with respect to any subject matter that would otherwise infringe one or more claims of a method in the patent being asserted against a person, if such person had, acting in good faith, actually reduced the subject matter to practice at least one year before the effective filing date of such patent, and commercially used the subject matter before the effective filing date of such patent.”).

Id.


Id.

U.S. Patent No. 4,528,643.

Id.


Id. at 864, 56 U.S.P.Q.2d at 1651.

Id. at 878, 56 U.S.P.Q.2d at 1662.
Many critics used the ‘207 patent as an example of why MoDB patents should not be allowed for public policy reasons, because it gave a long term monopoly to a Priceline for an Internet MoDB. The critics have argued that the Internet moves too fast to grant a company such a long-term monopoly. The critics are half correct. The Internet does move quickly. However, to date, no one has a patent that has prevented others from pursuing a successful MoDB. Priceline’s stock was valued near $100 at the time the suit against Microsoft was initiated. However, at the time of settlement, like many other dot-com’s, Priceline’s stock had plunged to around $2, an indication that a patent itself does not grant a company the right to make money off of the patented invention.


Id.

U.S. Patent No. 6,026,368 (February 15, 2000).


Compare the priority dates of U.S. Patent No. 5,948,061 with U.S. Patent No. 6,026,368.


It is interesting to note that the most recent winner of a bounty from BountyQuest, as mentioned above, was Brian Shuster for providing prior art that potentially invalidates the ’061 patent. This occurred after the suit between DoubleClick and 24/7 was settled by the parties.


Id. at 1231, 53 U.S.P.Q.2d at 1117.

Id. at 1249, 53 U.S.P.Q.2d at 1131-32.


Id. at 1357, 57 U.S.P.Q2d at 1757.

Id. at 1357-58, 57 U.S.P.Q.2d at 1757-58. Again, it is interesting to note that a bounty offered on BountyQuest failed to identify prior art which would invalidate the ’411, although, one of BountyQuest’s founders, Time O’Reilly, claims that enough prior art has been provided to significantly limit the claims.

See NetZero v. Juno, No. 00-13378 JSL (RNBx) (C.D. Cal. filed December 26, 2000), at
NetZero and Juno are providers of free Internet service access whose business model uses its customer’s viewing of advertisements as a way to generate revenue for the ISP.

See NetZero.


European Patent Convention, art. 52, 1 B.D.I.E.L. 983.


Supra, note 150.


A technical effect is, for example, a results that speeds something up, provides a bridge, or manipulates data with less steps than were previously necessary."

See The Patent Office, supra note 151

Id.

Id.

Id.

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“Pendency from original filing date” and “pendency from most recent filing date” differ in that the former is composed of continuing applications descending from the original, or parent invention. Pendency is calculated based on the most recent filing date, while cycle time is based on the original filing date.