

**BUSINESS METHOD PATENTS —  
A STRATEGIC RESPONSE**

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*Computer Law Section Annual Meeting  
September 4, 2003  
Walled Lake, Michigan*

## **I. Introduction**

In recent years, the United States Patent and Trademark Office (USPTO) has granted a large number of patents for business method inventions. By some counts, business method patents now number in the thousands, and as many as 10,000 applications for such patents may be pending. At the same time, such technology has continued to advance, using combinations of previous advances in order to help create new goods, services, and production processes. These advances have caused uncertainty and controversy about ownership and transfer of the rights to use hybrid business methods.

One recent case serves to illustrate and reinforce the importance of these issues. This case is *Merc Exchange LLC v. eBay Inc.*, wherein in May of 2003 a jury ruled that the popular online auction website, eBay, must pay \$35 million in a patent infringement action involving an e-commerce patent. The jury in the Eastern District of Virginia found that eBay had directly and willfully infringed the patent.

Because most business methods have traditionally been held as a trade secret or published in non-patent publications, patent examiners do not have ready access to such technology in trying to evaluate the patentability of a business method invention disclosed in a patent application. In light of this controversy, on November 29, 1999, President Clinton signed legislation allowing a “first inventor defense” to be asserted, but only where the patented subject matter relates to “a method of doing or conducting business.” (An in-depth discussion of what this phrase might mean is provided in Appendix A hereto.)

Also, in response to being criticized for granting business method patents, in the year 2000, the Patent Office overhauled its approach to examining patent applications falling

within Class 705, which is entitled “Data Processing: Financial, Business Practice, Management, or Cost/Price Determination.” For example, the Patent Office has instituted a new second-level review for all allowed applications in Class 705 where most business method patents are classified.

By contrast, the American Intellectual Property Law Association has recommended that business methods resulting in useful, concrete, or tangible results, including Internet and software-implemented business methods, should receive the same treatment under the patent laws as other technologies.

This report initially discusses the increasing use of patent protection for business methods. This report then outlines a strategy of how to deal with the reality of business method patents.

## **II. Business Method Patents**

Some types of business methods that have been patented include electronic commerce innovations, business models and Internet innovations. In his book entitled “Business Method Patents,” Gregory A. Stubbs provided examples of electronic commerce patents in the following fields: accounting, agent technology, auction, business-to-business, cryptography, electronic negotiation, finance, inventory management, marketing, new money, resource allocation, electronic shopping, and supply chain management.

Consider an early example of a business method patent. Merrill-Lynch, Pierce, Fenner and Smith, Inc. was issued now expired U.S. Patent No. 4,376,978 (“the '978 patent”) titled “Securities Brokerage-Cash Management System.” The '978 patent relates to the Merrill

Lynch Cash Management Account program (“CMA”) and, more specifically, to the data processing methodology and programs for effecting the CMA. Claim 1 (the first numbered paragraph) of the '978 patent reads as follows:

In combination in a system for processing and supervising a plurality of composite subscriber accounts each comprising a margin brokerage account,

subscriber implemented funds withdrawal means administered by institution means, and participation in at least one short term investment,

manual entry means being employed for entering short term investment orders,

brokerage account data file magnetic storage means for storing current information characterizing each subscriber margin brokerage account,

means for receiving and verifying subscriber funds withdrawal transactions from said institution means and short term investment orders from said manual entry means, generating an updated credit limit for each account operating upon said brokerage account data file and said received and verified information, said updated credit limits for said plural subscriber accounts being communicated to said first institution,

means for selectively generating short term investment transactions as required to generate and invest proceeds from said subscriber's accounts, said system further including:

plural such sort term investments, and

means for allocating said short term investment transactions to at least a predetermined one of said plural short term investments.

(Paragraphing supplied.)

Business method developers traditionally ignored patent protection for their software. Until 1996, the U.S. Patent and Trademark Office (USPTO) routinely fought the

issuance of such patents. Consequently, the public and most patent attorneys held the view that “business methods aren’t patentable.” Trade secret protection was generally recognized as a “tried and true” form for protecting one’s business methods. Business method inventors typically were not willing to spend thousands of dollars prosecuting a patent application that might not hold up in court. As a result, there is a large number of non-patented business methods.

### **The Tide Changes**

The U.S. Court of Appeals for the Federal Circuit’s 1998 opinion, *State Street Bank v. Signature Financial Group*, opened the way for patent protection for certain business methods. There the court held that the electronic representation of a share price, momentarily fixed, in a data processing system is “a useful, concrete and tangible result;” also, the business method exception to patentable subject matter was officially put “to rest.”

Also, the Federal Circuit’s 1999 opinion, *AT&T Corp. v. Excel Communications, Inc.*, held that a method of generating electronic messages in a telecommunication system constituted eligible subject matter.

As previously mentioned, Class 705 is generally acknowledged to be the class in which the USPTO classifies most business method patents. “Classes” form the basis by which the subject matter of patents and printed publications are classified by the USPTO. It is difficult to determine how many of the patents granted in this class cover business method inventions because the class includes other types of inventions as well. However, the following tables illustrate the number of patents sought and issued in Class 705 in the last few years.

**PATENTS SOUGHT**  
(i.e.: published patent applications since 2001)

<b>Year</b>	<b>Class 705</b>
2001 (since 9/15/01)	1326
2002	6134
2003 (up to 8/21/03)	4112

**PATENTS ISSUED**  
(since *State Street*)

<b>Year</b>	<b>Class 705</b>
1999	1004
2000	1062
2001	879
2002	883
2003 (up to 8/26/03)	658

This committee presented a report entitled “Survey of United States Business Software Patents: Post-Diehr Through December 1990” to the State Bar of Michigan Annual Meeting, September 25, 1991. This committee identified only 57 “pure business software patents,” including the above-mentioned '978 patent, issued from 1982 through 1990 and originally classified or cross-classified into USPTO Class 364. Given the above data, clearly the number of business patents granted by the USPTO has increased drastically, raising the concerns of many in business. A recent patent search in Class 705 by this committee indicates that not

only are businesses obtaining business method patents but also U.S. universities are also obtaining an increasing number of such patents.

### **III. A STRATEGY IN RESPONSE**

An organization should consider whether it should modify its intellectual property strategy in view of the patentability of certain business methods. In general, the strategy should include an effective patent program that provides a framework for information management and for assessment of offensive and defensive patent enforcement considerations. In this way, the economic benefits of such patents can best be realized.

Initially, it is important to identify business method inventors and their inventions within an organization to make sure such inventors: a) keep an adequate record of their inventions; b) stay abreast of recently published business method patent applications and patents; c) sign the appropriate employee invention agreements; and d) be involved with their managers in the decision whether to maintain a business method invention as a trade secret or to prepare and file a patent application protecting same. With business method patents it is likely that marketing executives, accountants, sales representatives, or other “business” oriented people in the company have contributed to the “conception” of the business method invention. At the same time, the “technical” people within the company (or consultants) who may have designed a computer system/software to implement the business method should also be considered “inventors,” to the extent the computer system/software is claimed in the patent application.

#### **Framework For Information Management**

Intellectual property programs, previously effective to centralize information from ongoing engineering projects, should also include business projects. For example, most technology-oriented companies require their engineers to maintain engineering notebooks to provide a log of their work activities. Business method researchers and developers should also keep such a log.

Assignment of inventions made during these activities is often a condition of employment. Consequently, all employees, consultants and agents (not just engineers and technical consultants) should sign agreements at the time of employment binding them to assign any inventions to the company.

Sometimes inventions are made jointly with an employee of another company. Consequently, independent contractor agreements should be modified to specifically include business methods, as well as the traditional classes of patentable subject matter.

Periodic meetings should be conducted with business people from sales, marketing, accounting, etc. to review this information and its ownership to assess how, when, where and to whom the information is to be disclosed such as by a secrecy agreement so that the potential for economic benefits may be protected.

State-of-the-art searches in Class 705 as well as other classes in the U.S. Patent and Trademark Office can be performed from time-to-time to help identify products or processes that address current problems faced in a business or other organization.

Relevant new technology including business methods also can be brought to the attention of engineers, computer scientists and business people by monitoring the Official Gazette of the U.S. Patent and Trademark Office. The Official Gazette is published weekly and

contains abstracts of all U.S. patents issued that week. The Official Gazette is organized by technical subject matter. Selected sub-classes of interest in Class 705 can be reviewed each week, and pertinent patent copies ordered and circulated.

Patent activity in most patent offices throughout the world can be monitored in much the same manner, usually through computerized databases.

### **Patent Filing Considerations**

A patentable invention may occur any time an inventor solves a problem and the solution is useful and was not known or obvious from what was known. It does not matter whether the invention represents only a small step ahead in a technical or business art or a pioneering advance opening new fields of technology — both can be important and patentable. An inventor should not decide alone whether an invention is patentable — that should be done jointly with a patent attorney.

Before applying for a patent on an invention, consider whether the invention is likely to be used in a product or business process — is it of commercial importance? If so, patent protection is initially warranted. If it is not scheduled for use, yet holds significant commercial potential for licensing or defensive purposes, patent protection may still be justified. Use of “provisional” patent applications provides a lower cost method to maintain inventive rights while commercial applications of the invention are developed.

If commercial considerations warrant patent protection, the next question is whether the invention meets statutory criteria of patentability. Business methods typically

involve a process having one or more steps. In combination, the steps must be novel, non-obvious, and produce a useful, concrete and tangible result.

To determine whether the business method is novel and non-obvious, a novelty search may be conducted. This is strongly recommended before filing a patent application. Novelty searches are conducted by trained individuals and provide an inventor (and his or her patent attorney) with a better understanding of what is already known about the invention — before making a substantial investment in procuring a patent. There is no point in submitting a patent application if the “invention” is already known.

For more intangible or “pure” business methods — i.e. business methods that do not involve computer processing steps or other forms of technology — the “concrete and tangible” requirement may be difficult to satisfy. Indeed, the Patent Office often rejects business method patent applications for failing to meet this requirement. For example, if the business method can be carried out completely in one’s mind, or simply with pencil and paper, the Patent Office will probably reject the application. Even where an invention produces a “concrete and tangible result,” the Patent Office may reject the application if the invention is not within the “technological arts.” Notably, the case law endorsing protection for “business methods” involved computer processing or other physical technology.

If the invention meets statutory requirements of patentability, the advantages of patent protection must be balanced against the challenges of obtaining and enforcing the patent before deciding to proceed. Advantages of patent protection (defensive and offensive) are discussed in detail below. Challenges of obtaining and enforcing a patent include the cost of preparing and filing the patent application, the time before the patent issues, the ability to

“police” the patent (detect that it is being infringed), and the cost of enforcing the patent against a suspected infringer.

Patent applications for business methods typically cost more to prepare than those for conventional technology. This is simply because they take a little longer to prepare and prosecute at the Patent Office. Due to the substantial increase in the number of patent applications in this area that have been submitted to the Patent Office, it typically takes between 2 and 3 years before business method patents issue.

Inventors should carefully consider their ability to “police” their business method inventions before disclosing them in patent applications. A patent application discloses the invention in detail and is usually published within 18 months of its filing date. If nature of the invention makes detecting infringement difficult, it might be more prudent to keep the idea as a trade secret, as opposed to disclosing it to the public in a patent application.

Another decision to make when pursuing patent protection is whether protection is desired in the U.S. only, or internationally as well. Although patent protection may be procured in most developed countries, the costs of international patent protection can be substantial. Policing and enforceability overseas may also present a challenge.

### **Patent Portfolio Administration (i.e., Uses of Patents) And Their Value**

A patent portfolio has both defensive and offensive value.

Patents obtained for defensive purposes can be used in at least three ways. First, the patent is evidence of independent activities, and this tends to demonstrate a lack of copying or derivation. Second, patents have value as trading stock in negotiating a cross-license to settle

patent conflicts with others who may allege infringement of their patents. Third, a patent is a publication that will bar others from patents on the subject matter disclosed, as well as obvious variations of that subject matter.

Patents may be asserted against infringers such as competitors. A patent infringement suit is usually brought with the twin objectives of recovering money damages for past infringement and obtaining an injunction prohibiting the infringer from further practice of the patented invention. An injunction forces the infringer to either design around the patent or drop the product line. For example, a patent can be obtained on a manufacturing, distribution or business method, important to making, marketing or selling a product. Moreover, the threat of a patent infringement suit against an infringer or potential infringer can be used to protect the market for the product, and in a licensing program to collect royalties. The royalties collected from licensing, in turn, can be used to offset the cost of research and development or other business activities.

Patents may also play important roles in other activities — hybrid offensive/defensive uses. Domestically, patents are barriers to market entry — often fending off potential competition. Internationally, the governing manufacturing agreement for a joint venture may include a license to use intellectual property, including patents and trade secrets or proprietary know-how. This is particularly significant in some third world countries where there is a reluctance to recognize long term obligations to pay manufacturing royalties in respect of know-how — the governments of such countries normally require that royalty obligations for know-how terminate after a few years. On the other hand, local patent rights may provide a

royalty basis for their entire statutory term. A license based on patents may also discourage a joint venture partner from pulling out of the venture in view of the risk of an infringement suit.

## *Trade Secrets*

There are cases where intellectual property protection is desirable but the invention or development is not suited for patent protection. In that case, the invention or development should be held as a trade secret. One example would be where the invention or development simply does not qualify for patent protection, but nevertheless represents valuable new technology. Alternatively, the invention or development could be one which the company may prefer to withhold from publication. A patent, though it provides its owner time limited exclusionary rights, informs the public about the underlying technology and forfeits trade secret protection. In such instances, trade secret protection may be preferred to protect the technology.

But before deciding to hold technology as a trade secret, consider how secret it really is. Is the technology known by persons other than the owner — a supplier or subcontractor outside the company? Is the technology known generally by all of the owner's employees? And are the employees under specific orders to guard the secrecy? Is the secret away from the common area of the owner's plant or other facility so as not to be observable by visitors? Lastly, consider the ease with which one can "reverse engineer" the trade secret — that is, discover the trade secret by close examination of a product.

A decision to keep a development a trade secret may present other risks as well. For example, if a third party independently develops the same technology and patents it, the original inventor could be excluded from using the trade secret. Moreover, using the trade secret to make a commercial product may forfeit one's right to file for a patent at some later date.

#### **IV. CONCLUSION**

Since the Patent Office is busy issuing business method patents, it is important to businesses and other organizations to factor this into their intellectual property strategy.