



Business Method Patents: A Primer

Pol S, Janodia MD¹, Jagadeesh PC, Bhat KM, Udupa N¹

Department of Pharmaceutical Quality Assurance, ¹Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal-576 104, Karnataka, India

Address for correspondence: Dr. Manthan D. Janodia; E-mail: mdjanodia1978@yahoo.co.in

ABSTRACT

Business method patent grants to its holder exclusive rights to a particular way of doing business. Business method patents are a relatively new species of patent and there have been several reviews investigating the appropriateness of patenting business methods. The U.S. Patent and Trademark Office (USPTO) reports that, in 1998, 1300 patent applications pertained to business methods and 420 such patents were issued. In 2000, 7500 applications for business method patents were filed, and 1000 such patents were issued. In India The Patents (Amendment) Act, 2002, with effect from May 20, 2003 declared a mathematical or business method or a computer program per se or algorithms, as not being an invention within the meaning of the patent statute.

Key words: Business method, India, patents

DOI: 10.4103/0975-1483.59332

INTRODUCTION

Business method patent grants to its holder exclusive rights to a particular way of doing business. Until recently, it was widely assumed that business methods were not patentable. As a result, firms enjoyed only limited intellectual-property protection against imitation of their strategies by competitors. Some innovations could be kept secret, and innovators could prevent competitors from learning of those innovations by “improper means.” However, most innovations could not practicably be concealed, and competitors were thus free to mimic them. The U.S. Patent and Trademark Office (USPTO) reports that, in 1998, 1300 patent applications pertained to business methods and 420 such patents were issued. In 2000, 7500 applications for business method patents were filed, and 1000 such patents were issued. Because a large percentage of those patents involve methods of doing business online, they merit attention.

Business method patents are a relatively new species of patent and there have been several reviews investigating the appropriateness of patenting business methods. Nonetheless, they have become important assets for both independent inventors and major corporations.

Inventions are eligible for patent protection if they pass the tests of patentability: patentable subject matter, novelty, inventive step or non-obviousness, and industrial applicability (or utility).

A business method may be defined as “a method of operating any aspect of an economic enterprise.”

HISTORY OF BUSINESS METHOD PATENT

On June 20, 1893, John T. Hicks was awarded U.S. Patent Number 500,071, entitled “Method of and Means for Cash Registering and Account Checking.” The patent described

a method of preventing theft committed by restaurant waiters but was later declared invalid by a court for the lack of “patentability,” one of the earliest examples of a business method patent – that is, a patent that protects a method of doing business.

In 1998, the public and the patent bar were somewhat surprised when the Federal Circuit declared that business methods could be patented. That court’s decision in *State Street Bank and Trust Co. v. Signature Financial Group, Inc.* seemed to usher in a new era of patenting methods of conducting commercial transactions, such as those conducted over the Internet. Its 1999 decision in *AT and T Corp. versus Excel Communications, Inc.* broadened the contours of *State Street Bank*, apparently doing away with the requirement that a method claim must involve any sort of physical transformation in order to render it patentable and focusing instead on the “useful, concrete and tangible result” aspect of the test.

The creation of a patent system was one of the acts performed by the First Congress of the United States. On April 5, 1790, the first patent statute was passed by the Congress of the 12 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 that 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,” but all details of Mr. Perkins invention were lost in the great Patent Office fire of 1836. 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 50 years of the U.S. Patent Office saw the granting of 41 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 200 years.

On January 8, 1889, the era of 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 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 management business data processing method patents of today are more numerous and more sophisticated than those of 1889. It is 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. The development of today’s business data processing systems follows an unbroken evolutionary path back to simple manually operated mechanical registering devices that predate electrically controlled Hollerith type machines. Purely mechanical business data processing reached its zenith in the early 20th century. For about \$100 (\$2000 today), a 1909 merchant could purchase a cash register system that even now is one of the most sophisticated mechanical devices ever.

Classes of business method patent

The business method patent can be classified into various type Automated electrical financial or business practice or management arrangement:

- Health care management (e.g., record management, ICDA billing)
- Insurance (e.g. computer implemented system or method for writing insurance policy, processing insurance claim, etc.)
- Coordination of plural reservations (e.g. plural trip segments, transportation and accommodation, etc.)
- Allocating resources or scheduling for an administrative function
- Transportation facility access (e.g. fare, toll, parking)
- Reservation, check-in, or booking display for reserved space.
- Market analysis, demand forecasting or surveying
- Having security or user identification provision (password entry, etc.)
- Having interface for record bearing medium or carrier for electronic funds transfer or payment credit
- Tax processing

Business method patents

- Inventory monitoring
- Interconnection or interaction of plural electronic cash registers (ECRs) or to host computer (e.g., network detail, transfer of information from host to ECR or from ECR to ECR, etc.)
- Specified transaction journal output feature (e.g. printed receipt, voice output, etc.)
- Presentation of image or description of sales item (e.g. electronic catalog browsing)
- Checkbook balancing, updating or printing arrangement

Sections under which it falls

In United States of America

The business method patent in the USA comes under Class 705. It mainly involves data processing, financial business practice, and management or cost/price determination. Class 705 is the generic class for apparatus and corresponding methods for performing data processing operations, in which there is a significant change in the data or for performing calculation operations wherein the apparatus or method is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data. This class also provides for apparatus and corresponding methods for performing data processing or calculating operations in which a charge for goods or services is determined. This class additionally provides for subject matter described in the two paragraphs above in combination with cryptographic apparatus or method.

Scope of class 705

1. The arrangements in this class are generally used for problems relating to administration of an organization, commodities, or financial transactions.
2. Mere designation of an arrangement as a “business machine” or a document as a “business form” or “business chart” without any particular business function will not cause classification in this class or its subclasses.
3. For classification herein, there must be significant claim recitation of the data processing system or calculating computer and only nominal claim recitation of any external art environment. Significantly claimed apparatus external to this class, claimed in combination with apparatus under the class definition, which perform data processing or calculation operations, is classified in the class appropriate to the external device unless specifically excluded there from.
4. Nominally claimed apparatus external to this class in combination with apparatus under the class definition is classified in this class unless provided for in the

appropriate external class.

5. In view of the nature of the subject matter included herein, consideration of the classification schedule for the diverse art or environment is necessary for proper search.^[5]

In Europe

According to the European Patent Convention (EPC), an invention is patentable if:

- It is not excluded by Article 52(2) and (3) EPC
- It is novel (Article 54 EPC)
- Involves an inventive step, i.e. is not obvious (Article 56 EPC)
- Is capable of industrial application (Article 57 EPC)
- The exclusion of Article 52(2) and (3) EPC

The technical character of inventions

An invention is excluded under Articles 52(2) and (3) EPC if it has no technical character. The requirement that an invention must be technical in some way is not present in the EPC. However, Rules 27(1) and 29(1) EPC seem to imply that there must be technical aspects to an invention.

The Board of Appeals has consistently held that for an invention to be patentable, it must be technical in some way, based on the reasoning that the activities listed in Article 52(2) have in common that they imply something non-technical and that, therefore, an invention that is technical is patentable. In 2000, the EPC has been amended so as to include the requirement that the invention must be in a field of technology. This amended version has not yet entered into force.

An invention has a technical character if there are technical considerations involved (T 769/92). The contribution approach (i.e. is the contribution made by the invention technical) is to be used only for the assessing inventive step (T 931/95). Technical considerations may lie either in the underlying problem solved by the claimed invention, in the means constituting the solution of the underlying problem, or in the (technical) effects achieved in the solution of the underlying problem. The very need for such technical considerations implies the occurrence of a (at least implicit) technical problem to be solved and (at least implicit) technical features solving that technical problem.

The technical character of an invention cannot be affected by the presence of an additional feature, which as such would itself be excluded from patentability under Article

52(2) and (3) EPC. So, a mixture of (known) technical features and apparently non-technical features may still be patentable as long as the latter features contribute to an overall technical effect.

CASE STUDIES

Amazon. com's "1-click" Patent

Amazon. com's famous "1-click" patent, U.S. Patent No. 5,960,411, issued on September 28, 1999, is directed to a system and method for placing an order to purchase an item via the Internet. The patent is essentially directed to a methodology whereby information associated with a user is pre-stored by a web site, and the user may thereafter order items from the web site with only one click of the mouse (clicking on a link associated with the item).

In December 1999 (shortly before the busy online holiday shopping season!), Amazon.com successfully obtained an injunction against its online competitor, Barnesandnoble.com (bn.com), forcing Barnesandnoble.com to replace its own one-click system with a slightly more complicated ordering system. While this injunction has since been lifted, the underlying litigation is still pending.

Claim 1 of the Amazon.com 1-click patent reads as follows:

A method of placing an order for an item comprising:

- under control of a client system,
 - displaying information identifying the item; and
 - in response to only a single action being performed, sending a request to order the item along with an identifier of a purchaser of the item to a server system;
- under control of a single-action ordering component of the server system,
 - receiving the request;
 - retrieving additional information previously stored for the purchaser identified by the identifier in the received request; and
- generating an order to purchase the requested item for the purchaser identified by the identifier in the received request using the retrieved additional information; and
- fulfilling the generated order to complete purchase of the item
- whereby the item is ordered without using a shopping cart ordering model.

As can be seen, it is a bit more complicated than just "1-click." The claim (which defines what is protected by the patent) goes into a fair amount of detail as to what is

displayed to the user, what actions are taken by the user of a client computer, what actions are taken by the server, and the results of all those actions. Like any patent, to infringe this claim, another person or business must perform *all* of the steps recited in the claim.

The Amazon.com 1-click patent is often cited as a classic example of a "business-method patent." While the validity of this patent may be argued one way or another, it is classified as a business-method patent because it includes concepts for conducting a business transaction (allowing a person to purchase goods online, in a specific way). Beyond this explanation, there is no explicit definition of "business method," and business-method patents are treated for patentability purposes just like any other patent.

Other notable examples of business method patents include:

- Priceline "Reverse Auction" Patent (U.S. No. 5,794,207), for a "method and apparatus for a cryptographically assisted commercial network system designed to facilitate buyer-driven conditional purchase offers."
- Double Click Banner Ad Patent (U.S. No. 5,948,061) for a "method of delivery, targeting, and measuring advertising over networks."
- Open Market Electronic Shopping Cart Patent (U.S. No. 5,715,314) for a "network sales system."

STATE STREET BANK VERSUS SIGNATURE FINANCIAL GROUP, INC

In the present case, the District Court had rejected application for Business Method Patent on the said process of "hub and space." But later, the Federal Circuit confirmed that there is no rule that prohibits the patentability of "business methods." The Court stated "The judicially-created business method exception to patentability is . . . an unwarranted encumbrance to the definition of statutory subject matter in section 101 that should be discarded as error-prone, redundant, and obsolete." It merits retirement from the glossary of section 101. Patentability does not turn on whether the claimed method does "business" instead of something else, but on whether the method, viewed as a whole, meets the requirements of patentability as set forth in Sections 102, 103, and 112 of the Patent Act.

Federal Court further clarified that it was never intended that business methods should be kept out of the subject matter. Rather in earlier few cases claim was rejected due to incapability of those methods to be taken as inventions. Thus, State Street confirmed that business methods can be

patented if they meet the statutory requirements of utility, novelty, and non-obviousness.

BUSINESS METHOD PATENTS IN INDIA

Business methods were historically unpatentable until the late 1990's and then that position changed rather dramatically, most famously with the 1998 US Court of Appeals for the Federal Circuit decision in *State Street Bank and Trust Co. versus Signature Financial Group, Inc.* In India, the 1970 Act, as amended up to 1999, had not provided one way or the other, which means that business method patents were, at least in theory, available to be granted. But the amendment of 2002 changed all that. Act 38 of 2002, viz. The Patents (Amendment) Act, 2002, with effect from May 20, 2003 declared "a mathematical or business method or a computer program *per se* or algorithms, as not being an "invention" within the meaning of the patent statute." Since inventiveness, along with novelty and usefulness are the three basic requirements of patentability, this amendment was to be considered seriously as it ruled out filing of business method patents or even judicially recognizes a business method patent.

Had it not been for this newly inserted clause (k) of Section 3, the matter would have been really up for grabs. The statutory definitions of "invention" and "inventive step" are pretty general and would, but for Section 3 (k), have covered a suitable business method. Section 2 (j), even as amended by the same amending Act of 2002, defines an invention as meaning a new product or process involving an inventive step and capable of industrial application. Section 2 (ja) also, defines an inventive step as meaning a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art.

A large number of business method patents are, in the meanwhile, being filed in India. Most are by way of national phase of PCT applications. Unsurprisingly, they are mostly framed as patents for this or that "architecture." All over the world, much of the debate on the subject critically turns on the resources and talent of Patent Office's who have to scrutinize novelty claims over what exists as a part of the state of the art. It is interesting to know as to how these business method patents being filed in India will actually eventually be decided. But one important point to consider is that the gamut of business method patents are assuming critical importance to the country's burgeoning computer software industry.

If business method patents were to be granted and brought to courts for enforcement, it will radically alter the structure of the industry. An increasingly large number of Internet tools and web-enabled and web-based business method patents being filed in the USA are by businesses that are controlled by or back ended by Indians. They know only too well the ease back in India of duplication and replication. For them, patent protection must include India as a designated country and the application be pursued in India for whatever it is worth.

On March 23, 2005, the Indian Parliament at the last moment cleared the third post TRIPS amendment to its patent statute. This, the Patents (Amendment) Act, 2005, had generated some talk of a possible amendment to create some kind of a window for business method patents – possibly just algorithms or methods having technical applications. Open Source fans had vented much opposition to such a move but, and strikingly, the leading national software industry association, NASSCOM, was reported to have supported it. As it happens, this fell through and only time will tell how it goes in the future. Given the enormous flux in almost all aspects of India's Patent Laws, it would be unwise to assume that there is no possibility of business method patents being granted, even from amongst current filings.

CONCLUSION

Granting a business method patent is a debatable issue as it depends on the country where it is filed. Allowing a business method to be patented, say, in developed countries will protect the business method more than any other method as in case of copyright. The business method patent will surely be a boon for a startup companies so that new companies could benefit from such kind. It will surely help the new companies to stand in front of the powerful companies.

As in case of developing nations including India, it will better to take one step at a time and it can be well understood that if patent is granted for a business method then it would obstruct new technological research for the next 20 years to come. Also granting a patent on a business method would create a monopolistic situation that would hinder growth. It would mean an unhealthy competition. India would require some changes in the Patent Act to bring in granting of business method patents in the system very judiciously. The government should also ensure that it does not hinder the growth of the nation due to unhealthy competition.

REFERENCES

1. Fisher W, Olliar D, Cyrill P, Rigamonti, Smith A, Zollinger G, Davis E. Business Method Patents Online, 2001. Available from: <http://cyber.law.harvard.edu/ilaw/BMP/> [last accessed on 2009 Aug 26].
2. Business method patent Available from: http://en.wikipedia.org/wiki/Business_method_patent [last accessed on 2009 Aug 26].
3. Automated financial or management data processing methods (business methods) Available from: <http://www.uspto.gov/web/menu/busmethp/index.html> [last accessed on 2009 Aug 26].
4. Classification definitions, July 2006 Available from: <http://www.uspto.gov/go/classification/uspc705/defs705.pdf> [last accessed on 2009 Aug 27].
5. Class definition for class 705 - data processing: financial, business. Available from: <http://www.uspto.gov/go/classification/uspc705/defs705.htm#C705S400000> [last accessed on 2009 Aug 25].
6. Bradley.C.Wright, business method patents: are there any limits? Available from: <http://www.bannervitcoff.com/docs/publications/articles/wright.pdf> [last accessed on 2009 Aug 25].
7. Stephen R. Buckingham and Stuart D. Sender, October 2000, Proposed Business Method Patent Improvement Act - The Battle Begins.
8. Apoorva Yadav, Is India Geared Up For Business Method Patent? Available from: <http://www.legalserviceindia.com/article/114-Is-India-Geared-Up-For-Business-Method-Patent.html> [last accessed on 2009 Aug 26].
9. Rakesh Prasad, Business Method Patents in India– Or is that a contradiction in terms? Available from: <http://www.algindia.com/publication/article3500.pdf> [last accessed on 2009 Aug 25].
10. The Prior art, Available from: http://thepriorart.typepad.com/the_prior_art/business_method_patents/index.html [last accessed on 2009 Aug 26].
11. Smith NA. Business method patents and their limits: justifications, history, and the emergence of a claim construction jurisprudence. Available from: <http://www.mtlr.org/volnine/smith.pdf> [last accessed on 2009 Aug 26].
12. Jeffrey R. Kuester, Are Business Method Patents Any Good? Available from: <http://www.kuesterlaw.com/anygood.htm> [last accessed on 2009 Aug 26].
13. Quimbo R.N.S., Legal and Regulatory Issues in the Information Economy, e-ASEAN Task Force, UNDP-APIDP, Available from: <http://www.apdip.net/publications/iespprimers/eprimer-legal.pdf> [last accessed on 2003 May 15].
14. Gyax AF, Lamba A, Teo EJ, Hinchcliffe S. The Effects of Business Method Patents on Grantees and Their Industry Rival, Available from: <http://www.fma.org/texas/papers/extendedabstract.pdf> [last cited on 2008 Jan].

Source of Support: Nil, Conflict of Interest: None declared.

**Discover what makes InPharm
unique compared to everyone else !!!**



www.inpharm.org