

## Business Method Patents: The Road Ahead

Abhimanyu Ghosh†

The WB National University of Juridical Sciences, Dr B R Ambedkar Bhavan, 12 LB Block,  
Sector – III, Salt Lake City, Kolkata 700 098

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Business method patents (BMPs) are patents granted for particular business models, that are unique to a particular organization. United States Patent and Trademark Office (USPTO) have been granting patents for 'business methods' from the early 1990s. From then onwards, there have been a large number of BMPs, which have been consistently awarded in the US. However, there exists a huge debate whether this kind of patent should be granted or not – whether business models at all constitute patentable matter. In this paper, the author discusses evolution of BMPs, and argues that in spite of the criticisms, this form of patents is necessary, particularly, considering the current hi-technology scenario. The paper discusses BMPs not only from the US standpoint, but also the position taken by other countries and the repercussions of having a liberal attitude of US while granting patents to business methods, especially e-commerce transactions, which are usually mere replications of popular methods used in brick-and-mortar businesses.

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The term BMP has not been defined by any statute, but is commonly used to describe patents relating to business methods, which usually fall within the realm of e-commerce transactions. BMPs usually cover aspects of software and Internet communications. There are a number of examples where patents were granted on business models/methods, the most famous of which is Amazon.com's 'one-click' shopping agent patent.<sup>1</sup>

BMPs are essentially part of a larger family of patents known as utility patents, which are given to protect inventions, chemical formulae, processes and other such discoveries, which are allowed under patent law. A 'business method' is classified as a process because unlike a mechanical invention or chemical composition it is not a physical object.<sup>2</sup>

Traditionally, business models have always been considered to be outside the scope of patent protection, and even today, it is only the USPTO, which grants these kinds of patents liberally.<sup>3</sup> However, other countries are steadily progressing towards a liberal BMP regime. In fact, even at present BMPs can be granted in India as long as they do not relate specifically to a business method, a stand that is similar to that of UK.<sup>4</sup> In fact, in as early as 1868, the Patent Commissioner had explained that, 'it is contrary to the spirit of the law...to grant patents for methods of book-keeping.'<sup>5</sup>

The first possible case in US, where a type of business model was patented, was in the case of *Paine, Webber, Jackson & Curtis v Merrill Lynch*.<sup>6</sup> Here, the District Court upheld a patent on data processing methodology for a combined securities brokerage/cash management account. The Court stressed that the patent taught a method of operation on a computer. In spite of the aforementioned case, the USPTO steadfastly continued to refuse patents on business methods. It was only much later in the mid-1990s, that, the USPTO started moving towards a pro-BMP regime. However, the watershed year was in 1998, when in a patent infringement lawsuit over a software-enabled business method, the Federal Circuit Court of Appeals<sup>7</sup> endorsed this policy. This decision was given in the landmark case of *State Street Bank & Trust Co v Signature Financial Group Inc*.<sup>8</sup> In this case, the Court decided that financial service provider's patent on a business method software that operated a hub-and-spoke investment portfolio system was valid and enforceable against a competitor who was using the software-enabled business method. The Court declared that the long-held business method exception to patentability was 'ill-conceived' and should not be used for holding an invention unpatentable. Thus, this was the first significant case where a business model was allowed a patent. After this, there have been a plethora of claims, mostly e-commerce models which have been granted patents,<sup>9</sup> the most famous one being Amazon.com's

†Email: abhimanyu.gh@gmail.com

right to use the 'one-click' method of purchasing online, 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, i.e., by clicking on a link associated with the item.<sup>10</sup>

In spite of the pro-BMP stance taken in the US, there have been a number of cases, where the USPTO has dismissed the patent applications, citing a number of inadequacies in their claim. One of the notable cases was *in re Schrader*,<sup>11</sup> where the Federal Circuit held that a method of conducting a real-estate bidding process was a 'mere manipulation of an abstract idea' and therefore not patentable.<sup>12</sup>

It is important to note that granting of patents on business models, especially business models on the Internet have come under immense criticism, since it is felt that many of the BMPs issued to date are barred by prior art considerations under 35 USC § 102. The USPTO essentially focuses its patentability review on issued patents. As a result, the critics contend, that the examiners very likely do not consider the entire library of white papers, brochures, and other secondary sources that may pre-date consideration of the patent application.

### TRIPS' Stand on BMPs

TRIPS contains specific provisions dealing with patentability and exclusions, rights conferred and exceptions thereto, term of protection, process patents, government use and compulsory licences. Article 27.1 of TRIPS makes patent protection available for 'any invention', whether products or processes, in all fields of technology, provided they satisfy the requirement of being new, involving an inventive step (non-obvious) and are capable of industrial application (useful). Therefore, an interpretation of the Article, would mean that these rights are available and enjoyed without discrimination as to the place of invention, the field of technology and whether the products are imported or locally produced. Hence, it can be inferred that TRIPS takes a pro-BMP and pro-software patent stand, as it does not mention any exception regarding them. It also specifically mentions that processes can be patented. India's laws thus do not fulfil the obligations set out in Article 27 of TRIPS, but as a developing country it can avail itself of the alternate paths laid out in Articles 70.8 and 70.9.

### Business Method Patents – Historical Perspective

From 1998 onwards, there has been a dramatic increase in the number of patents that have been

issued to mainly software, Internet and e-commerce applications that have devised so called novel ways of conducting their business.<sup>2</sup>

Contrary to popular belief, BMPs are not a new concept. The idea that business methods could be given patent protection has been advocated right from the time of the development of patent law itself. Professor Conley of the University of North Carolina has cited examples of a number of cases where patent protection was sought for what can be construed in modern terminology as business methods.<sup>13</sup> There are five cases, which are especially notable in this context, namely:

1. *Perkins* (1789): System of detecting counterfeit banknotes
2. *Hawkes* (1867): Improvement in hotel registers
3. *Graves* (1907): A two-part insurance policy consisting of a paper containing an insurance contract . . . combined with a postal card
4. *Kneas* (1815): Improvement in banknote printing
5. *Hollerith* (1889): Mechanical punch-card system for processing business information—ancestor of IBM.<sup>13</sup>

Though traces of business methods can be found in the aforementioned cases, the case which is most pertinent while discussing the history of patenting business methods is that of *Hotel Security Checking Co v Lorraine Co*.<sup>14</sup> In this case, a novel hotel book-keeping system supposed to help in preventing fraud was sought to be patented. Interestingly, the patent application was ultimately rejected not because it was an improper subject matter for a patent but because it was found that there was a lack of 'novelty' and 'invention'.

### The Next Phase

Though the pioneering judgment to uphold the BMP principle was the landmark *State Street* case,<sup>8</sup> a number of important developments took place after the *Hotel Security* judgement, which paved the way for BMPs. The most significant change that took place was the advent of software. After companies started to see the advantage of computer-generated software in the late 1970s, a significant number of business methods were computerized. There were two very important decisions, which came about in 1978 and 1981 respectively, namely, *Parker v Flook*<sup>15</sup> and *Diamond v Diehr*.<sup>16</sup> However, there was confusion regarding the two decisions, as both seemed to conflict. Thus, patent lawyers started taking

advantage of this loophole – that as long as the software is hidden in a suitable machine or a process, the patent will be allowed. The *Schrader*<sup>11</sup> case further set the stage for *State Street*. In this case, the USPTO upheld that a system of auction bidding is not statutory subject matter. However, it is important to note that while deciding the case, the Federal Circuit relied on mathematical algorithm software rule and not business method exception.

### Requirements for Obtaining a BMP

In order for an Internet application or a business method to get protection under patent law, same requirements need to be fulfilled as with a general patent application.

(i) The method or software, which is sought to be patented, should necessarily fall within the classes of patentable subject matter. (ii) They need to be shown as useful. This is a fairly undemanding requirement to satisfy since any financial purpose will suffice. An applicant only needs to demonstrate that the method or software to be patented provides a concrete tangible result. A good example of this would be that of Amazon.com obtaining a BMP on ‘1-click’. The tangible result in this particular case was that it provided an expedited purchase, thus fulfilling the ‘useful’ requirement. (iii) The next requirement is novelty. Thus, if a particular method in question has already been in public use or described in a published document more than a year before the patent application for the business method was filed, it loses its novelty.<sup>17</sup> Therefore, for this reason, a company that is seeking to acquire a business method patent must research prior art and promptly file its patent application, otherwise risk losing its valuable patent rights. (iv) The ‘non-obviousness requirement’ is also the same that is required for granting of regular patents. This test is based on whether or not the method provides a result that would be new or unanticipated to someone with ordinary skill in the field of that business. A simpler way to perform the non-obviousness test is to differentiate between the business method and the prior art. If this does not amount to an obvious development in the field, then it is non-obvious. However, in this context, it should be remembered that over the last decade or so, US has broadened its practice and granted patents for any application that makes a ‘useful, concrete and tangible contribution’. This essentially means that the mere use of a computer renders all manners of software, including non-technical applications like accountancy

software, patentable in the US. In Europe, in contrast, it is ‘technical contribution’ of the inventions, which determines patentability. As such, general business software is not patentable, as it is not considered technical. Thus, the mere use of a computer does not confer patentability on an application.<sup>18</sup>

### Protection of BMPs: Advantages and Disadvantages

#### The Controversy

In the recent years, it is evident that there has been a mammoth increase in the number of Internet BMPs that have been applied for and received.<sup>19</sup> This has resulted in strong criticism against this system of patent protection. Criticism is based on arguments on the notion that granting BMPs acts more as a discouragement for innovation since it makes it more difficult diffusion of ideas and entrepreneurial activity, normally associated with the Internet.<sup>2</sup> It has also been contended that Internet or e-commerce BMPs are granted easily and are thus, weaker than other patents because of inadequate reference to prior art in the patent applications. Another major critique of this policy lies in the fact that BMPs are granted in such huge numbers only in the US and no where else in the world, which creates a huge disparity as the US firms end up getting an unfair advantage in patenting in this area. On the other hand, Japan, Europe, information-technology superpowers like India and China have been slower to adopt a pro-patent stance to business methods.

A business method has been described as ‘peculiar, idiosyncratic way of conducting a business. Economic institutions till date have not set up a market for transactions in business methods. A particular business method is believed to be organically linked to the body of the business organization. Therefore, whenever a transaction was needed, the organization was swapped through markets of mergers and acquisitions. This abstraction of the method from the body has thus resulted into a very large number of applications for patent rights whose market remains undeveloped.’<sup>20</sup>

#### Present System not Feasible...

It has also been argued that right granting authorities such as the USPTO do not have appropriate organizational structure, which can examine and verify the non-existence of prior art, a condition *sine qua non*. The USPTO is also unable to cope up with the large number of patent applications, which has been growingly steadily over the past few

years. Further, absence of a market for business methods implies that business remained intangible and also outside the public knowledge. Therefore, an examiner in the existing system of examination of prior art and in examining the monopoly implications of the grant of a patent cannot verify either the existence of prior art or measure the monopoly implications.<sup>21</sup>

#### **Other Disadvantages**

##### **20 Year Term**

One of the major criticisms of the present BMP system is that the USPTO grants a 20-year protection to corporations, which are awarded patent protection for their business methods. It is argued that this actually stifles innovation as it prevents other competitors from using necessary technologies to make new inventions. This becomes especially relevant in the rapidly developing environment of Internet, where innovations and technology change drastically in a matter of a few months. In the patent free environment, inventors enter into a cycle of making small incremental improvements of already existing technologies. The present system, therefore marks a drastic change from this – now, as soon as one small invention in the cycle becomes protected, the cycle of innovation comes to a grinding halt. Therefore, it is suggested that even if patents are awarded to business methods like e-commerce transactions, the protection should not be awarded for an outright twenty years. It is also pertinent to note that the USPTO is seriously considering a change of term in the future.

The change is more necessary, since, when the rewards, such as a twenty-year monopoly, for patents are so high, inventors are likely to shift their priority from creating substantial inventions to accumulating as many patents as possible, even if it means obtaining patents for minor innovations. Inventors and corporations are acutely aware that in today's age, analysts value companies largely based on their ability to exclude their competitors from practising their successful business models. Thus, by possessing a large number of patent portfolios, inventors are more likely to gain the prestige and legitimacy, which is integral to obtain venture capital, which is fundamental to the growth of all Internet ventures. Evidence clearly shows that most of the biggest patent holders do not enjoy reputations for significant innovation, but quite simply for efficient filing of patent applications.<sup>22</sup>

#### ***Business Methods are not Inventions***

One of the integral aspects of the old school method of granting patents was that the method or process should be novel and new, i.e. they should be inventions. However, critics of BMP aver that Internet business method 'inventions' are merely real-world abstract ideas that are being reworked and tweaked upon to suit e-commerce transactions. Thus, Amazon.com's patent is claimed to merely capitalise on the idea of impulse buying. As Kinari Patel in her research thesis<sup>22</sup> points out, business model is essentially Web analogue of the real-world strategy of placing items near the supermarket register thus effectively reducing the amount of time between choosing and buying. Various other companies have also obtained patents for such varied business methods like placing calendars on the World Wide Web, and also for 'real-time shopping'. Therefore, the question asked by the critics is that, just because a business method is applied in the context of Internet, should it automatically qualify as a patentable material? Hence, the bone of contention remains that these methods or models are definitely not unique, then why should patent protection, that too for 20 years be given to them?

#### ***Can Electronic Models Embedded in Software be Considered Unique/Novel?***

Those advocating patents on business models argue that a business model becomes patentable as soon as programmers simply embed idea in software since it has a novel implementation and also a functional utility, unlike the so called parent-method from which it is derived. However, a closer look at this theory would make it abundantly clear that this is untenable in all respects. Every method of doing business in cyberspace, by its very definition is substantiated in the code. Thus, this would imply that there is no limit to the patent. Implementation through code can make almost any concept unpatentable, which makes the entire theory unfeasible and impractical.

#### **Advantages of Business Method Patenting**

##### ***Inadequacy of Copyright***

Earlier, software was not granted patent protection, but was instead accorded protection under copyright law. However, soon it was found that this protection was inadequate, chiefly for two reasons: firstly, copyright provides a much weaker protection than a patent and secondly, a lower degree of novelty is required. Further, copyright only protects the

expression and not the idea imbibed in the software, which can be used to manufacture newer software.<sup>23</sup> Hence, patents present a far more attractive option by giving broader scope of monopoly, which is what software manufacturers ultimately resorted to. The position is similar with BMPs, since corporations usually spend billions of dollars to build up a successful method of conducting their business involving enormous research and development, various trial and error methods, as well as substantial investment. Therefore, corporations demand a far more stringent and effective protection than can possibly be provided under copyright law. This becomes particularly relevant in case of e-commerce business methods, as copying these methods are far easier on the Internet as compared to conventional brick-and-mortar workplace. In the old regime, much more effort was required in order to analyse a competitor's new business techniques. However, for Internet inventions, rivals can easily emulate the business methods by making a few simple modifications.

#### *Encourages 'Start-up' Companies*

The speciality about most of the e-commerce models, including the leading ones, such as Yahoo!, Amazon, eBay, Google, etc., are that all these companies started off with no prior business experience. It is only their innovativeness and their unique business model, which have made them business leaders in e-commerce today. Therefore, in order to encourage further new start-ups, it is important that adequate protection is given to more such novel ideas and models. Small Internet start-up companies have more difficulty obtaining venture capital funding without some sort of protection to their new technology. Without BMPs, there would be no opportunity for start-ups to either make short-term investments or create brand loyalty. BMPs create the artificial scarcity, which is required to preserve market power and restore the incentive to innovate.<sup>24</sup>

#### *BMPs hold Key to the Future*

With the advent of new technology on the World Wide Web almost every other day, it is vital that stringent protection is given to entrepreneurs, so that further improvements are made to the various e-commerce models. This can only take place if it is ensured that their models have adequate protection and they themselves have a suitable defence against infringement by competing parties.

#### **The State Street Case: A Study**

The *State Street* judgement is considered to be the watershed decision, which has changed the way BMPs will be looked at forever.<sup>19</sup>

#### **Background**

'Signature', the defendant/applicant was the assignee of a patent entitled 'Data processing system for hub & spoke financial services configuration'. The primary purpose of the said patent was directed to a data-processing system for implementing an investment structure and was developed by Signature in its business as an administrator and accounting agent for mutual funds based in countries using a variety of foreign currencies. This 'hub & spoke' method facilitated a structure through which international mutual funds would pool their assets in an investment portfolio organized to form a partnership. Thus, this investment configuration provided the administrator of a mutual fund with the advantageous combination of economies of scale in administering investments coupled with the tax advantages of a partnership.

At the time of the case coming to Court, both State Street and Signature were in the business of acting as custodians and accounting agents for multi-tiered partnership fund financial services, some discussions were carried on by State Street with the Signature Group. However, negotiations soon broke down and State Street brought a declaratory judgement asserting invalidity, unenforceability and non-infringement and subsequently filed a motion for partial summary judgement of patent invalidity for failure to claim statutory subject matter under § 101. The motion was granted and, subsequently, Signature appealed.<sup>25</sup>

#### **Observations of the District Court**

The District Court unequivocally declared that when independent claim 1 was properly understood in accordance with § 112, paragraph 6, it was directed to a 'machine' (i.e. a computer system), which is proper statutory subject matter under § 101. However, the Court averred that the claimed subject matter fell into one of two alternative judicially-created exceptions to statutory subject matter namely, the 'mathematical algorithm' and the 'business method' exception.

The District Court, while granting summary judgment in favour of the *State Street* had applied the Freeman-Walter-Abele Test, which stated:

'At bottom, the invention is an accounting system for a certain type of financial investment vehicle claimed as means for performing a series of

mathematical functions. Quite simply, it involves no further physical transformation or reduction than inputting numbers, calculating numbers, outputting numbers and storing numbers. The same functions could be performed, albeit less efficiently by an accountant armed with pencil, paper, calculator and a filing system.'

The Court thus underscored its holding by turning to the 'long established principle that business 'plans' and 'systems' are not patentable.' The Court judged that 'patenting an accounting system necessary to carry on a certain type of business is tantamount to a patent on the business itself. Because such abstract ideas are not patentable, either as methods of doing business or as mathematical algorithms,' the patent was held to be invalid.<sup>26</sup>

#### **Federal Circuit Decision**

When the decision of the District Court was further appealed before the Federal Court, the Federal Circuit held that the declaratory judgement plaintiff, i.e. State Street was not entitled to the grant of summary judgement of the invalidity if the patent under § 101 as matter of law because the patent claims are directed to statutory subject matter. It decided according to the plain and unambiguous meaning of § 101, any invention falling within the four stated categories of statutory subject matter, namely:

'...any new and useful (1) process, (2) machine, (3) manufacture, or (4) composition of matter...maybe patented, provided it meets the other requirements for patentability set out in Title 35 found in § 102, 103 and 112, paragraph 2(2).'

<sup>26</sup>

Thus, the Federal Court categorically refuted the claims of State Street and awarded the business method to be patented.

#### **Consequence: The AT&T Case**

The decision of the *State Street* case was again reaffirmed for a system, and applied to a business method in the case of *AT&T Corp Excel Communications Inc*<sup>27</sup> where the Federal Circuit declared,

'In our recent decision in *State Street*, this Court discarded the so-called business method exception and reassessed the mathematical algorithm exception...In *State Street*, we held that in the processing system there was a

patentable subject matter because the system takes data representing discrete dollar amounts through a series of mathematical calculations to determine a final share price – an useful, concrete and tangible result.'

The Federal Circuit, in fact, then went on to state that it found the method of patenting business provided under the statute, and therefore, logically, the inquiry required for a business method would also necessarily be the same.

Thus, as a result of the above decisions, both the USPTO and the industry viewed them as clear indication that the test of patentability was not hardware but a 'practical application' evidenced by 'useful, concrete and tangible result'. As a consequence of this decision, the USPTO has implemented a host of new training materials for business method inventions and revisions to its formal guidelines for examination of computer-based inventions, including business method inventions.

Additionally, the US Congress has now also acknowledged the enhanced scope of business method inventions and chosen not to restrict or otherwise limit them. Instead a new § 273 has been added to the American Inventors Protection Act 1999, to establish a limited 'prior user defence' for those who can demonstrate a prior use of a 'business method invention' in the US.

#### **Position of BMPs in other Nations: EU, UK, Japan & India**

##### **Europe's Stand**

In June 2000, the European Patent Office (EPO) for the first time noted that there was some controversy regarding patentability of business and administrative methods.<sup>28</sup> The European Patent system is often considered to be a far more stringent system, where most of the conventional systems are still upheld and does not allow business methods to be patented *per se*. However, in spite of EPO's disinclination towards allowing a BMP regime, studies have noted that almost as many as 30,000 patents have been given in recent times by it in similar categories, without categorizing them as BMPs.<sup>29</sup> In the European context, it is important to note that the European Patent Convention's (EPC) does not define the term 'invention'. Instead, it lays down a list of subject matter and activities that are deemed not to be inventions, which is listed under Article 52(2) (ref. 30). The EPC Article 52, Clause 2 states:

The following in particular shall not be regarded as inventions within the meaning of paragraph 1:

- (a) discoveries, scientific theories, and mathematical methods,
- (b) aesthetic creations,
- (c) schemes, rules, and methods for performing mental acts, playing games or doing business, and programs for computers,
- (d) presentations of information.

However, Article 52(3) of the EPC goes on to state that this provision excludes patentability of the subject matter or activities referred to only to the extent to which a European patent application relates to such subject matter or activities 'as such'.<sup>26</sup> It is pertinent to note that a vast majority of the applications do not merely claim abstract business methods, but also describe the technical means for carrying out these very specific methods. Thus, they can 'technically' be differentiated from methods of doing business and can be examined in exactly the same way as any other application. Therefore, contrary to public perception, business methods may be patentable in Europe (albeit, they are not classified as BMPs) if they fulfil the normal requirements for patentability, including novelty, inventive step and also industrial applicability.

#### UK's Stand

Unlike the US's highly liberal attitude, UK's stand with regard to BMPs has been quite conservative till date. In fact in 2001, when the EU was considering incorporating changes to their patent law in order to expand software patenting to cover business methods, the UK government vehemently opposed such a move<sup>31</sup> in spite of the fact that the EU Patent Office had voted in January 2001 to allow business methods to be patented.<sup>32</sup> UK's opposition to this system was primarily based on two grounds: firstly, the EU members were themselves unclear on which types of software could possibly be patentable, and secondly, giving out such patents would be 'anti-competitive and disadvantageous to small and independent software developers.'<sup>32</sup> However, critics of the UK position contended that this policy would be commercially unwise considering the US policy in this regard. Conversely, it is interesting to note that in 2000, UK's E-Commerce Minister, was in fact one of the chief proponent of BMP in the EU.<sup>33</sup>

The primary problem of incorporating the BMP regime is EU's traditional approach in granting

patents by which a software can be patented only if it gives rise to a 'technical effect'. This implies that in most cases, business methods cannot be patented at all. A good example of this can be a situation when a new and non-obvious program which gave a computer more efficient memory usage and so enabled it to run faster would be patentable because of the technical effect it has on the operation of the computer. However, in Europe, a new program for a computer game would not currently be patentable since it has no technical effect.<sup>34</sup>

The UK software and computer services market is the second-largest in Europe, worth £ 21 billion (pounds sterling). There are over 105,000 companies operating in this sector in UK, including all the major global players.<sup>35</sup> Thus, when such kind of patents are made available for a wider range of software inventions or for business methods, it could have a fundamental effect on innovation, enterprise and competition, on small and medium enterprises and larger companies as well as on suppliers and consumers. It has also been argued that augmenting a BMP regime could have a critical impact on the UK's ability to lead in the e-commerce revolution. It was in relation to this growing interest being shown towards BMPs, that the UK Patent Office conducted a study in order to ascertain the feasibility of having such a policy in their country. However, after the study, it concluded,

'While there is not a direct fit between the requirement that software must involve technological innovation to be patentable, and larger scale activity of this sort, it is true that much of this effort is directed to inventions which will meet the requirement. Moreover the investment is predicated upon the availability of patents. It is an area of high investment and rapid innovation, in which patents appear to be playing their intended part. The Government does not want to change the rules in a way which participants would regard as substantially weakening their incentive to innovate.'

Thus, the current position is that the UK government believes that software should not be patentable where there is no technological innovation, and also that technological innovations should not cease to be patentable merely because the innovation lies in software. There is still a dilemma about how to differentiate between or to define the boundary determining whether software is, or is not, part of a

technological innovation.<sup>38</sup> In fact as recently, as on 6 July 2005, the EU voted 648 to 15 to reject the Computer Implemented Inventions Directive, which was seeking to provide legislation to patent business methods.<sup>36</sup> It is clear, that both the EU and the UK are still not keen to enforce a policy which will open the doors for business methods to be patented. The advantage of the EU and UK's stand is that it advocates a far more stringent test thereby not allowing a plethora of BMPs to be registered as is done in the US, which dilutes the very essence of awarding a patent.

#### **Position in Japan**

After the USA's change of policy regarding BMPs, Japan has also re-modeled its stand on BMPs. Business methods are now examined in Japan under 'computer-software related patents'. The subject matter is deemed to be 'a creation of technical ideas using a law of nature, ...concretely realized by using hardware'. Some examples are: 'a storing method of articles distributed via network', 'a computer program for predicting daily sales of commodities', etc. However, inventive step is the biggest hurdle in Japan since it is based on, 'whether a person skilled in the art could easily have arrived at a claimed invention based on cited inventions.'<sup>13</sup> Therefore, among nations other than the US, probably Japan's position is the most pro-BMP, though it has a strict criterion for allowing the same.

#### **Indian Standpoint**

Section 3(k) of the Indian Patent Act of 1970 specifically slots business methods as non patentable subject matter and it is interesting to note that in spite of the recent amendments made to the Patent Act, this Section still remains very much in place. However, as in the case of EU and UK, BMPs may also be awarded in India, as long as it satisfies the 'technical effect' criterion, though as in the case of other nations, the patent office would still run shy of classifying such a patent as a BMP.<sup>37</sup> In spite of the fact that no BMP has been awarded by the Indian Patent Office (IPO) till date,<sup>38</sup> it is opined that there are indications that as the other countries start changing their stand on BMP, India may also move towards a middle ground, where, patents will be provided to software as well as business methods. If India has to go on to become an information technology powerhouse, it has to ensure that the software companies operating here can gain the benefits of a patent regime, whereby they can compete equally with the biggest companies in the world.

#### **Conclusion**

There is no doubt that US has taken the lead in issuing patents to business methods and software, which has added a fillip to Internet businesses in particular. That BMPs are the order of the day can be seen by the efforts being made by the other countries to slowly allow BMPs in their regions. However, a number of grave concerns have also cropped up regarding BMP being granted to such a large number of applicants. A number of other such shortcomings have also come about which need to be rectified immediately if BMPs are to remain viable. This is why most of the countries, which are now opting to go for BMP, want to take the middle path – whereby, adequate protection is provided to these new innovations, but not over-protection. The following could be possible changes, which can be made to the present BMP regime in order to make it more effective.

The very first change that needs to be made regarding BMPs is that the time-span for which protection is provided should be substantially reduced. This is required as a twenty-year legal monopoly period is not justified within the context of the Internet and e-commerce companies. However, this in no way indicates the lesser importance of these patents since it should be remembered that business models are vastly different from scientific products on which patents are usually granted – business methods are developed in an era of competition and not in a laboratory. Thus, competitors not only concentrate on developing entirely new concepts, but they also analyse existing patents and attempt to tweak or improve upon them. It is a fact that emulation, more than innovation, drives business method changes. Therefore, instead of hindering access to new technologies in the name of private rights, the law should help sustain a collaborative effort.

One of the most common criticisms of awarding BMPs is that most e-commerce models are frivolous and insubstantial and probably, the best example in this case is that of Amazon.com's patenting of the 'one-click' method. Their twenty-year old exclusive use for single-action ordering is definitely not the proper reward for such an insubstantial invention as their one-click business method. A curtailed term of protection, perhaps of the order of three to five years, would achieve the same desirable effect of encouraging investment and innovation without the negative effects of stifling innovation for a prolonged amount of time in the context of an environment whose growth is more exponential than linear in nature.<sup>25</sup>



A number of smaller changes can also be easily brought within the patent system in order to prevent granting of patents with overbroad scopes. The first step towards a better system would be to completely eliminate the one-sentence rule in order to facilitate a clearer language. Enhancing the clarity of the patent applications would not only help examiners understand the application, but would also leave lesser room for manipulation by the patent lawyers, as is extensively done today. The USPTO could also require applicants to disclose the computer code used to implement the claimed business method. Patent examiners, trained in computer science (this does not happen frequently in the US considering the growing number of applications every year),<sup>39</sup> could then analyse the code to see which particular functionalities merit patent protection. This approach would thus avoid the monopolies on ideas that result from the current one-size-fits-all process.<sup>25</sup>

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