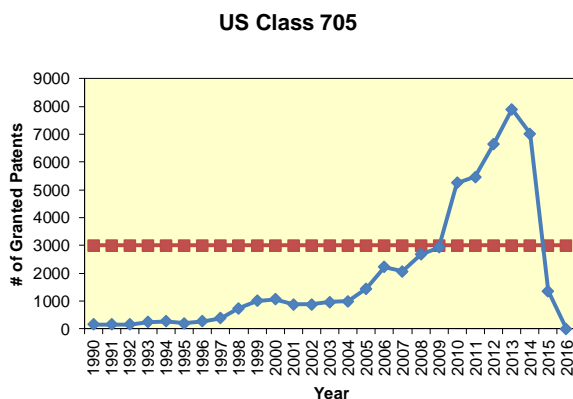


## Post-Bilski Post-Alice Software Patents and IT Services Industry

In 2014, [Alice](#) ruling rejected 4 patents on software implemented business methods. Since then, number of business method patents granted by USPTO has been rapidly decreasing. **In 2016, USPTO granted a total of ZERO business method patents belonging to the US patent class 705.** This is in sharp contrast to the rate of grant in previous years as shown in the chart below.



Given this development we look at the impact on

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software patents and potential Patent strategy for companies in IT Services Industry.

The Patent rights have traditionally been given to industrial and technical fields such as chemical, mechanical and later to electronic fields.

The software field has been a later entrant to the

patent subject matter – started by the US federal courts and to some extent US PTO.

### Software Patents Conundrum in US

Despite being a pioneer in expanding the patent subject

matter to broader and newer areas, US Patents and Trademarks Office (USPTO) has not been able to provide a stable criteria for

*We propose that IT services companies should continue to file software and business method patents, however, the patentability standard should be made more closer to European Patent Convention that has been more stable although more restrictive.*

patentability of software per se as well as business methods patents. Two recent cases in this decade – the **Bilski** and **Alice** cases, have further deepened the confusion on patentability subject matter related to software in USA. From the clarity of Statestreet case in 1998 to the Alice ruling in 2015, US PTO has created a software patent conundrum that has resulted in a “moving standard” of software patentability in US.

### Software patents and the European Patent Convention

In the European Patent Convention (EPC) article 52(2) provides a list of things that "in

particular" shall not be regarded as inventions. The list includes, "schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers", besides discoveries, aesthetic creations and presentation of information.

In the next article 52(3) The scope of this list is reduced by restricting the activities in the list to only "as such". Unfortunately, article 52(3) does not explain what "as such" means. European courts have concluded that to be patentable, an invention must be technical in some way. To prove a technical effect of a computer program when run on a computer be it item displays, accessing a printer, computing from databases or generating some images, requires just a slight change in the narration. In effect, all programs would be technical in the sense that they can cause a technical effect merely by being executed on a computer.

A technical effect can be, for example, a reduced memory access time, a better control of a robotic arm or an improved reception and/or decoding of a radio signal. It doesn't have to be external to the computer on which the program is run; reduced hard disk access time or an enhanced user interface could also be a technical effect. Hence, European Law, even though doesn't allow any software or business method patents per se, do give protection to inventions that can only be qualified as software and Business method patents otherwise. Routinely, software and business method patents are being granted,

and as many lawyers say it's a question of drafting the right claims.

## To P or not to P – Question for IT services companies?

Today, software and business method patents not only exist but continue to be filed in the post-Alice world in US as well as in Europe. This is particularly confusing for companies and organizations that are into Information Technology services (IT services).

*We propose that IT services should continue to file software and business method patents, however, the patentability standard should be made more closer to European Patent Convention that has been more stable although more restrictive.*

In the next sections we look at the impact on Business Method Patents and give examples of Patents that will not be granted post-Alice ruling in US.

## Post-Alice Impact on Business Method Patents (the US Class 705)

One of the most controversial Patent rights granted by United States Patent and Trademark Office (USPTO) in recent past has been the Business Method Patents. These patents rights belong to the US Classification class 705. It is defined in the USPTO schedule as part of data processing field

CLASS 705: DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGE-MENT, OR COST/PRICE DETERMINATION

The controversy is that no other country grants patent rights for the Business Methods that this class describes. The trend that started with granting of software patents has continued with Business Method patents

Two important arguments propagated in favor of software related inventions are –

- All technologies are equal and hence Patent System should treat all fields with same lens
- Although software industry was innovative even without Patents, the patents improve Research and Development (R&D) incentives by increasing Return on Investment (ROI).

The method of doing business patents - classified as US PTO class 705, are not only much more complicated but are much more difficult to in-validate using the novelty and non-obviousness tests of the classical patent system. *These so-called Business Method Patents (BMP) use computers, electronic networks and Internet technologies to create different ways to transact, exchange information, create and display product catalogues, enable secure money exchanges, trading, etc for people across geographies.* The geographical independence of these patents is a totally new dimension that the Patent Laws – which are geography dependent, must take care of. USPTO grants these patents, while rest of the world does not yet. However, the methods of doing business over Internet, mobile data networks, satellite networks, etc, transcend multiple geographies. How and

which laws will be relevant and applicable if the networks on which the BMP operate are based out of multiple geographies? These are not only serious challenges but require a thorough understanding, study, analysis and harmonization of multiple legal systems and Patent Laws to create a fair, just and innovation facilitation IP system in the world.

### Trends of Business Method Patents Granted by USPTO (1990-2016)

Since 1990 USPTO has been granting business method patents. In fact, the number of patents

US Class 705	
Period	Patents Granted
1990	161
1991	161
1992	157
1993	250
1994	268
1995	206
1996	274
1997	383
1998	745
1999	1005
2000	1062
2001	880
2002	887
2003	969
2004	997
2005	1453
2006	2224
2007	2065
2008	2673
2009	2936
2010	5256
2011	5470
2012	6657
2013	7903
2014	7024
2015	1365
2016	0

being granted in business methods has been steadily increasing in USPTO. It can be seen in the Table below. In 2010, the [Bilski](#) case was considered as a benchmark for elimination of weak patents granted as business method patents. Even though Bilski et al, did not get their patent, the business method patents survived the Bilski case. It is with the [Alice](#) case, a decision in 2014, a better test and understanding has emerged on business method patents. Let us look at some of the US class 705 patents that were filed and in fact

were granted in pre-Bilski and pre-Alice world.

Digging deeper into this class (US Class 705) reveals more such patents were filed in areas such as *Outsourcing patents applications*. Some examples below may help.

### **IBM applications**

#### *Outsourcing of Services*

Abstract (US Patent application: 20070162321)

A method for identifying human-resource work content to outsource offshore of an organization. The method is provided on a computer readable medium and includes the steps of identifying at least one task being performed by an organization; associating each identified task with a functional group within a plurality of functional groups related to the organization; determining information about individual human resources spent on each task; determining task information about human resources spent on the plurality of tasks, the task information based on the determined information about individual human resources spent on each task; using the determined task information to determine a value of each task; and outsourcing tasks having a value lower than a predefined limit to at least one of offshore and to a low cost supplier.

*Electronic marketplace for identifying, assessing, reserving and engaging knowledge-workers for an assignment using trade-off analysis*

Abstract (US patent application: 20070043603)

A method and system for matching a knowledge worker to a selecting entity's needs according to a system of codes corresponding to pre-defined rules of engagement. The rules of engagement include, but are not limited to, experience levels, salary, geographic location, job starting date and duration, and industry sector. If a search of knowledge workers fails to match an available worker with a job need of the selecting entity, the selecting entity posts a job posting on a website maintained by a third-party administrator who maintains webpages that are accessible only to screened job applicants.

#### *Efficient Frontier and Attainment Rate for Business Transformation Outsourcing*

Abstract

A method and system for establishing an Efficient Frontier (EF) and Attainment Rate (AR) for Business Transformation Outsourcing (BTO) is presented. EF is the maximum service level achievable at a point in time for a specific business process or business process area. AR is the pace at which the EF can be reached from an initial value. Clients, outsourcers, and third-parties determine whether proposals are infeasible (above EF) or inefficient (below AR). Fact-based discussions of the merits and limitations of various implementation initiatives are supported. A determination is made as to whether there are any business segments to which different EF and AR apply. Any underlying factors for the EF and AR of each business segment are determined, and any

change (rise or fall) of EF over time is predicted to maintain an optimally accurate EF and/or AR for each business segment.

Now let us look at **Microsoft**

### *Outsourcing of instant messaging hosting services*

Abstract (US patent Application: 20070067396)

A system, a method and computer-readable media for initiating the hosting of instant messaging services for an Internet domain name. A request is received from an entity requesting initiation of instant message hosting services for a domain name, and a secure communication channel is established with this entity. After verifying that the requesting entity is authorized to control the domain name, information describing user accounts having the domain name is received, and instant messaging services are provided for the user accounts.

### *Outsourcing of email hosting services*

Abstract

A system, a method and computer-readable media for initiating the hosting of email for an Internet domain name. A secure communication channel is established with an entity requesting email hosting services. After verifying that the requesting entity is authorized to control the domain name, information describing email accounts with the domain name is received, and email services are provided for the email accounts.

One can see that these applications don't conform to the regular established definitions of inventions. The reader can get more information at author's blog entry at [innovationcrafting](#)

### **What are the implications**

The Business method patents, although granted – either overtly in US or covertly in India/Europe, have been plagued with major controversies regarding prior art, non-obviousness and usefulness – the three criteria of classical patent frameworks.

Software and business method inventions are radically different than the classical inventions in chemical, mechanical or hardware fields. These differences are clearly visible as software and business method inventions deals with concepts, data, information, knowledge, decision-making, calculations, computations and abstract models whereas the tangible traditional products are more about physical manifestations of the ideas.

Key implication of Alice and Bilski cases are that Patent applications such as described in this article – Outsourcing of email hosting services, for example, will not be granted. This results in elimination of large number of applications and granted patents that was creating a confusion on the strength and spuriousness of software patents.

The key guideline that has emerged is to put in effort to invent strong rather than positioning whatever has been developed, as an invention for software patents.

### IT Services Companies and Software Patents

The recent Bilski and Alice cases highlights the situation on Software patents as thousands of these patents suddenly seem to have been evaporated. We suggest a European approach for evaluating the in-house ideas for Software patents – including business method patents - will be better de-risking mechanism. Instead of not filing patent disclosures, a higher level of scrutiny and a potential focus on inventing strong and then drafting as per European standard, even if you are filing in US, may be a better strategy for getting the patents granted as well as creating more robust intellectual property and value for your organization.

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