We live in a world of computing and computer technology. Everything around us is, in one way or another, connected to the use of computer-based resources and it is of no surprise that patentability of inventions based on computer technology is attracting significant attention in India.

So, as a practitioner, one is often asked “are computer implemented inventions patentable in India?” A typical response is the proverbial “it depends”, followed up with “but Section 3(k) of India’s Patents Act excludes computer programs per se from patentability.” But what does that really mean?

The 3(k) giant

Explaining Section 3(k) of the Patents Act, 1970, which precludes from patentability “a mathematical or business method or a computer program per se or algorithms” can puzzle even the most experienced practitioner because ambiguous language in the Act is being misinterpreted and misapplied by Controllers/Examiners to either grant frivolous patents or reject deserving inventions1. Most fundamentally, it is unclear what the term per se in Section 3(k) means. While it apparent that the use of per se implies that there is no blanket exclusion for all computer related inventions, it is uncertain as to what additional elements must be added to computer programs or business methods implemented through computer technology to make them patentable.

A 2004 Patent Amendment Ordinance, with the intention of clarifying the law regarding the patentability of computer implemented inventions, proposed to qualify the bar on computer programs as patentable subject matter by clarifying that “a computer program per se other than its technical application to industry or a combination with hardware…” is not patentable. (emphasis added). However, the Ordinance did not garner enough support and was not enacted - leaving the existing ambiguity unresolved.

Then, in 2008, a Draft Manual of Patent Practice and Procedure sought to clarify patentability under Section 3(k) but had to be withdrawn because it created more controversy than clarification. Apparently, the manual was being used by practitioners to argue against Section 3(k) rejections – a practice that was considered by the Patent Office as an attempt to override the Patents Act. It also did not help that the manual had based its comments heavily on the interpretation of the UK courts which, although persuasive (at best), were being used as precedential arguments in favour of the patentability of method claims for software inventions in India.

Consequently, practitioners are divided on how the exclusions of Section 3(k) are to be applied. The first school of thought believes that, although aborted, the 2004 Ordinance and the 2008 Draft Manual identified the parameters for patentability of computer implemented inventions such that, claims reciting sufficient hardware limitations (physical considerations) and producing a technical effect (as opposed to business effect) are patentable. The other school of thought believes that by rejecting the 2004 Ordinance wording, parliament has clearly shown that “technical application to industry” and “combination with hardware” does not make a computer program patentable subject matter. A point that was underscored by the withdrawal of the 2008 Draft Manual. Therefore, by extension, computer implemented invention would also not pass muster for this group.

The current patent manual

Not helping matters is the fact that the updated patent manual remains silent on the hardware limitation-technical effect parameter, which would clarify the patentability of computer implemented inventions. So, we must now wait for the courts and/or the Intellectual Property Appellate Board (“IPAB”) to clarify the parameters of patentability of computer implemented inventions under Section 3(k). In the meantime, stepping into the shoes of the Controller/Examiner and using the Patent Manual, we should develop a practical understanding of how the Patent Office currently reviews claims (allegedly) falling under Section 3(k).

Section 08.03.05.10 of the Patent Manual analyses the applicability of Section 3(k) under several points, most relevant of which are points ‘b’ through ‘f’ that we present below followed by some practice tips.

Subsection (b) of Section 08.03.05.10 of the Patent Manual cautions that “With the development in computer technology, mathematical methods are used for writing algorithms and computer programs for different applications and the claimed invention is sometimes camouflaged as one relating to technological development rather than the mathematical method itself.” It therefore guides the Examiners to consider mathematical methods, claimed in any form, as non-patentable.

Subsection (c) states that “Business Methods” involve a whole gamut of activities in a commercial or industrial enterprise relating to transaction of goods or services” and cautions that “business activities have grown tremendously through e-commerce and related B2B and B2C business transactions”. It expressly guides Examiners to look for claims that may not be drafted “directly as business methods but apparently with some technical features such as internet, networks, satellites, tele-communications etc.” and teaches them that “if in substance the claims relate to business methods, even with the help of technology, they are not considered to be a patentable subject matter”.

This approach was recently affirmed by the IPAB in Yahoo v Controller of Patents & Rediffcom India Limited, IPAB, OA/22/2010/PT/CH, 8 December 2011. The IPAB held that where technical advances are only a manifestation of a core business method, such advances shall not accord any advantage to the patentee in the allowance of the patent. The IPAB concluded that the technical advance proposed by Yahoo in the case, which was a software tool targeting search terms relevant to their business, was simply a method of doing business, even if it was a technically
smarter way of doing business and, therefore, unpatentable under Section 3(k).

Subsection (d) of Section 08.03.05.10 states that “Algorithms in all forms including but not limited to, a set of rules or procedures or any sequence of steps or any method expressed by way of a finite list of defined instructions, whether for solving a problem or otherwise, and whether employing a logical, arithmetical or computational method, recursive or otherwise, are excluded from patentability.”

Subsection (e) notes that “Claims directed at ‘computer program products’ are computer programmes per se stored in a computer readable medium and as such are not allowable.”

**Tips for getting beyond per se**

Understanding the patentability of computer implemented inventions in India is a herculean task, but getting a good start can prove to be very valuable. Having highlighted the guidelines that the Patent Office expects its Examiners to follow, we present some tips that, in our experience, should be kept in mind while drafting and claiming computer implemented inventions.

First and foremost, the specification should be all encompassing with respect to all claimed features. The Indian Patent Office is very rigid in not accepting “implied” or “inherent” disclosure of subject matter. To suggest that a particular feature/element is inherent or implied in the specification is a losing battle and in most cases will not result in acceptance by the Examiner. Particularly, in computer implemented inventions where the claims recte hardware limitations (constructional features), there should be sufficient disclosure of the subject matter in the specification and drawings and elements of the system should form an essential part of the invention. Therefore:

- The specification for all inventions related to computer implementations should be drafted to describe all the enabling hardware features;
- Drawings of a complete specification should also be made such that the hardware features are reflected therein;
- The specification must clearly define the amalgamation of software and hardware and how the software or computer program is able to enhance the efficiency of the hardware;
- The claims will also have to be drafted in a manner wherein the enabling hardware features are sufficiently described along with their reference numerals;
- The Indian Patent Office’s position is that innovation in business methods, irrespective of how that innovation is implemented, is not an expected feature of competition (ie, doing business) and is not patentable. Business methods hidden under the veil of computer implemented inventions presumptively attract the provision of Section 3(k) and will not be allowed;
- For non business method claims in computer implemented inventions, many Controllers/Examiners believe that the novelty and inventive step resides in the computer program. By incorporating the enabling hardware features in method claims, one can argue that what is claimed is not mere software but an amalgamation of hardware and software;
- When an apparatus or system is claimed, emphasis should be more on incorporating the constructional features of the system and software/computer program part should only be kept as though it is working in the background to increase the efficiency of the system;
- Claims directed to functionality of the system are generally objected to by the Controllers/Examiners who believe that no novelty or inventive step lies in the functionality;
- Mathematical formulae recited as part of a claim should be avoided because examiners are now wary of permitting such claims, raising an objection under the “mathematical method” exclusion;
- Use of certain words like algorithm, module, instructions, program etc, in the claims will require additional explanation to substantiate that their recitation (and use) does not imply a computer program per se; and
- Beauregard Claims are unpatentable irrespective of whether they are described and claimed as non-transitory or transitory but may be drafted as system claims within the scope of the disclosure (assuming a system is not already claimed).

From a business perspective, if India is considered to be an important jurisdiction for patent protection, drafting the right specification and claims is very important to ensure that computer implemented inventions can get beyond the per se limitation of Section 3(k). Hence, at the time of first filing, be it the US, Europe or India, it is prudent to draft the application keeping in mind the teachings of the Manual and the practice tips described previously.

**Footnotes**

2. See eg, Patentability of Computer Software Programs in India, Arman Mohanty, 23 July 2012 at bit.ly/OQpaWP.
4. On a separate note, subsection (e) appears counterintuitive because it lays down that applications with a computer program as a subject matter are first examined with respect to the existence of a mathematical method, business method and algorithm and “if the subject matter of an application does not fall under these categories, then, the subject matter is examined with a view to decide whether it is a computer programme per se.” It appears that the Patent Manual is taking the sequence of the exclusions under Section 3(k) literally and wants examiners to preserve take on additional, and perhaps unnecessary, analysis. As a matter of efficiency shouldn’t we rule out the per se existence of a computer program before going any further?
5. The opinions presented herein are those of the authors and does not necessarily reflect the opinion of the firm, Remfry & Sagar. Further, due to the variance in the application of Section 3(k) by individual Controllers/Examiners and even across Patent Offices, the practice tips are not indented to be exhaustive or a guarantee of success.

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