India is well known for its software industry, which has grown exponentially in a short space of time. According to estimates of the National Association of Software and Services Companies (NASSCOM) – the main trade body and chamber of commerce of India’s IT and business process outsourcing industries – the domestic software industry generates annual revenues of around US$60 billion, the bulk of which is exported. Further, many top multinational companies either do business in India or have research centres there, thus promoting knowledge exchange and bringing in valuable foreign know-how.

India has a balanced political outlook and an independent judiciary, and in the last decade or so has done well in harmonising its patent law with that of other major jurisdictions. However, software protection is weak and the need to provide stronger protection for software inventions has been the subject of debate both domestically and around the world.

**Background**

Prior to May 20, 2003, the Indian Patents Act 1970 defined an “invention” as any new and useful article, process, method or manner of manufacture; machine, apparatus or other article; or substance produced by manufacture; including any new and useful improvement thereto. While there was no specific provision excluding the patentability of software per se or business methods from the interpretation of this definition, it could be clearly ascertained that only methods for the manufacture of a vendible or tangible product were patentable. Therefore, methods implemented by software inventions and software per se and business methods were not patentable.

Some protection was provided under the Copyright Act 1957, which included computer programs and computer databases within the definition of “literary works”.

With the arrival of multinational companies following liberalisation in 1991, India’s IT industry expanded and fast became a crucial plank of the national economy. A wide range of computer and business method inventions – including automation methods, testing methodologies and web-enabled applications – assumed critical importance to the burgeoning industry, giving rise to support for software patents within this group. The issue of whether to grant patents to software-related inventions was reignited as stakeholders, especially multinational companies, considered the protection available under the Copyright Act to be inadequate. Stronger protection was both expected and required.

Consequently, in 2002 the Patents Act was amended, redefining an “invention” as “a new product or process involving an inventive step and capable of industrial application”, in line with Article 27 of the TRIPs Agreement. More importantly, a new Section 3(k) was introduced, providing that mathematical and business methods,
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Practice
Pursuant to Section 3(k) of the Patents Act, mathematical and business methods, computer programs per se and algorithms are not patentable. Accordingly, business methods have been categorically excluded from patentability. The Patent Office considers a particular method to be a business method if it involves a monetary transaction or mere marketing or sale-purchase methodology.

The interpretation of “computer programme per se” has been a contentious issue and has been viewed in different ways. The wording undoubtedly implies that the legislature’s intention was that mere computer programs should not be patentable, but that software inventions – in other words, inventions implemented by software which are more than mere computer programs – could be patented.

The Indian Patent Office released a Draft Manual of Patent Practice and Procedure in 2005 providing guidelines on the types of claim allowed in respect of software-related inventions. As per the guidelines, claims to computer programs per se, computer-readable media with programs recorded thereon, methods implemented by software that lack technical effect and methods with a technical effect but lacking hardware support in the specification are not patentable. The guidelines state that in respect of a method, “the method claim should clearly define the steps involved in carrying out the invention. It should have a technical effect. In other words, it should solve a technical problem...The claim orienting towards a ‘process/method’ should contain a hardware or machine limitation.”

In India, for administrative convenience, four patent offices are located in metropolitan cities. However, the offices are inconsistent in their practice with regard to software inventions, mainly due to the lack of clear guidelines. While the Indian Patent Office largely relies on the practice of the European and UK patent offices, there have been instances where inventions claiming software methods with a technical effect that have been allowed by the European or UK patent office have nonetheless been rejected by Indian Patent Office officials on the following grounds:

- The term “technical effect” is not defined in the Indian Patents Act.
- The Draft Manual is not binding on the examiners, as it is only in draft form.
- There are no Indian precedents in respect of software inventions.

One step further
There have been no real developments since the release of the Draft Manual in 2005. The government issued another version of the manual in 2008. The guidelines on software inventions are more elaborate, but similar in content.

In response to pressure from different sectors, the government invited comments from interested parties, including legal practitioners and industry, and organised stakeholder meetings across the country to develop a consensual approach. These meetings generated intense debate, with the open source industry opposing the guidelines set out in the manual and arguing that the manual tries to introduce software patent protection. This narrow interpretation has been vehemently contested by others, who contend that the guidelines cannot be a determining factor for interpreting the law, but are used only to describe practice and procedure.

The hardware limitation for processes or methods having a technical effect was also contested. It was contended that these may be novel independent of hardware features which may be known, and that the protection is intended for novel or non-obvious processes and methods themselves, without reference to the physical medium through which they are implemented. Moreover, if a hardware limitation was required, it could allow many users to avoid infringement of a patent simply by choosing alternative hardware.

Opinions were also voiced in favour of the allowance of claims relating to computer-readable media storing novel inventive programs. Supporters argued that
since damages are determined based on the number of copies of the product sold, method claims do not provide adequate protection because they base damages on the number of times the software manufacturer runs the infringing software for test purposes.

The intense debate on software-related inventions compelled the government to provide assurance that it will convene a meeting with the software industry to discuss related issues. However, so far no developments have taken place in this regard.

The Draft Manual, when finalised, will not have the force and effect of law, but will act as a guideline for the Patent Office. In fact, the preface of the Draft Manual states that: “The manual does not constitute rule making and hence does not have the force and effect of law. Statements made in the manual are not in themselves an authority in any action by an officer of the Patent Office. While the manual may be regarded as a handbook, it does not impose any particular line of action and may not be quoted to that end.”

**Conclusion**

While stronger protection is needed for software inventions in India, the patentability of such inventions remains ambiguous. There is an urgent need to make the patent system transparent on an equitable basis and to provide technology-specific training to Patent Office officials, in order to cultivate a broad and positive outlook.

It is hoped that the government will accelerate its efforts to achieve a consensus within the software industry – and further, that the patent regime will be reshaped for the benefit of the software industry as a whole.

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