



Office of the Controller General of Patents, Designs and Trade Marks, S M Road, Antop Hills, Mumbai – 400037

## Subject: Red Hat's comments on the Draft Patent Manual

Dear Sir/Madam,

This is with reference to the Draft Patent Manual, on which your office has invited comments. On behalf of Red Hat, the world's leading open source software company, I hereby submit our comments on the software patents section of the Draft. Our comments are divided into two parts:

- 1. Software patents in India as per Clause 3(k) of the Indian Patent Act
- 2. Open Source Software and software patents from a national perspective

## Software patents in India as per Clause 3(k) of the Indian Patent Act

We find that the Draft Patent Manual seeks to introduce software patents and we believe that this is not in consonance with the current legal situation India where Clause 3(k) of the Indian Patent Act clearly says,

"A mathematical or business method or a computer programme per se or algorithms are not patentable".

You may recall that the Patent Amendment Act 2005 sought to introduce software patents. The amendment proposed in the Patent Amendment Act 2005 for Clause 3(k) was,

"a computer programme per se other than its technical application to industry or a combination with hardware; a mathematical method or a business method or algorithms."

However, this amendment was rejected by the Indian Parliament, which chose to retain Clause 3(k) as it is. On reviewing the Draft Patent Manual, we find that it seeks to make technical applications of software patentable. As you can see from the above, this approach was explicitly rejected by the Indian Parliament. The relevant section of the Draft says:

## Draft Manual 4.11

4. A mathematical method is one which is carried out on numbers and provides a result in numerical form (the mathematical method or algorithm therefore being merely an abstract concept prescribing how to operate on the numbers) and not patentable. However, its application may well be patentable, for example, in Vicom/Computer-related invention [1987] 1 OJEPO 14 (T203/84) the invention concerned a mathematical method for manipulating data representing an image, leading to an enhanced digital image. Claims to a method of digitally filtering data performed on a conventional





general purpose computer were rejected, since those claims were held to define an abstract concept not distinguished from a mathematical method. However, claims to a method of image processing which used the mathematical method to operate on numbers representing an image can be allowed. The reasoning was that the image processing performed was a technical (i.e. non-excluded) process which related to technical quality of the image and that a claim directed to a technical process in which the method used does not seek protection for the mathematical method as such. Therefore the allowable claims as such went beyond a mathematical method.

## Open Source Software and software patents from a national perspective

We would also like to add that the Government of India has identified open source software as a strategic tool for e-governance and for bridging the digital divide in India. The Department of IT's 11<sup>th</sup> Five Year Plan (2007-2012) says,

"If computer adoption has to reach from current 1% of population to say 5% in next five years, we have to seriously pursue some other route, viz., that of Free/Open Source Software (FOSS)."

The National Knowledge Commission, in a report submitted to the Prime Minister of India, says,

"Because of the enormous size and scope of the E-governance effort in India and because of the availability of globally recognized software talent of Indians, we must actively encourage open source software implementations and open standards wherever possible."

Open Source Software is built in a collaborative manner by developers spread across the world who share source code and build upon each other's works. In his book, "The Success of Open Source," the noted political scientist, Prof. Steven Weber, Director of the Institute of International Studies, University of California, Berkeley, says,

"The conventional notion of property is the right to exclude. Property in open source is configured fundamentally around the right to distribute, not to exclude."

The GNU General Public License, which is used by almost 60 percent of open source software explicitly states that if you modify and redistribute source code licensed under the GPL, you have to share the resultant changes with others. This legal framework has lead to enormous innovation and technology collaboration on a scale that's never been witnessed before. For example, the Linux operating system, which began life in September 1991 has now grown into more than 100 million lines of code.

The freedom to modify the source code and share the changes has benefited India immensely. Many linguistic groups have localized the Graphical User Interface of Linux into more than 11 Indian languages so that non-English speakers can also benefit from the power of digital technology. Open Source Software like Orca help the visually handicapped use computers with ease and skill. Many national mission-mode projects in e-governance make extensive use of open source software. In almost all fields of IT, open source software has emerged as a powerful alternative to expensive, proprietary software, which have restrictive licensing schemes. Developing countries, across the world have therefore embraced open source software with open arms in light of its strategic long-term benefits.



It is for these reasons that the respected technologist and past president of India, Dr. APJ Abdul Kalam, said,

"In India, open source code software will have to come and stay in a big way for the benefit of our billion people."

Open source software is one of the most dynamic, innovative sectors of the global economy, but the patent system is a costly hindrance to open source innovation. We believe that although the patent system was created to foster innovation, it's simply not an engine for innovation for open source. Software patents were barely recognized when open source began, and so the hope of obtaining a patent did not motivate the first developers. Those pioneers were generally opposed to software patents. The open, collaborative activity at the heart of open source is at odds with the patent system, which excludes the public from making, using or selling a patented invention. Open source developers seek to contribute code to the community – not to exclude others from using the code.

Today the patent system is, if anything, a hindrance to open source. Developers face the risk that the original code they have written in good faith could be deemed to infringe an existing software patent. It's impossible to rule out this possibility, because patents cannot be efficiently searched. Software patents are difficult to interpret, even for experts in computer science and software engineering. Experts often disagree as to whether a particular patent claim covers a particular program. Thus, a risk of litigation exist for every open source project, and the potential cost of patent litigation can be ruinous, especially for startup companies.

Given the litigation risk, some open source companies, including Red Hat, acquire patents for the sole purpose of asserting them defensively in the event they are faced with a future lawsuit. Despite the phindrances of the global patent system, open source continues to expand at an exponential rate. One can only imagine how that expansion would accelerate if the braking reflect of the patent system were lifted.

Given the fact that (a) that Indian legislators have clearly chosen to exclude software from the list of patentable inventions (b) that open source software is important to India's long-term strategic interests, and (c) there is a growing global outcry against software patents, we hereby submit that the Draft Patent Manual should be amended to reflect the will and intent of the Indian Parliament.

I will be happy to discuss this issue further and elaborate upon the open source community's viewpoint on software patents, if necessary.

Yours sincerely,

Venkatesh Hafiharan,

Head – Open Source Affairs, Red Hat India Pvt. Ltd.

Mobile: 093242-23263 E-mail: yenky@redhat.com