



Confederation of Indian Industry

CII views on “Guidelines for examination of Computer Related Inventions”

The Confederation of Indian Industry (CII) has examined the CRI guidelines issued on February 19, 2016 by the Office of the Controller General of Patents, Designs and Trade Marks. CII conducted a meeting with its members as many members expressed their reservations about the guidelines. We present below the salient points as identified by CII based on discussion with the members held on March 9, 2016, which sets up a ground for revisiting the guidelines in the overall interest of industries of all types. CII does appreciate that while revising the guidelines the Controller General would have taken all aspects related to law and technology into account and have prepared them keeping the provisions of the Patent Act in mind. However, the need for issuing new guidelines is not understood, that too in such a short interval of time of few months. At the same time it is not understood why the two guidelines issued now and the one issued in 2015 are so different in concept and approach.

1. The terms algorithm and per se should be defined clearly rather than indicating unclear meanings from time to time.

The law says that computer program per se is not patentable without defining the term per se. This still remains an unexplained term. There is a need to distinguish between a software programme written in an academic environment which may not be aimed at solving any practical problem for which the market or industry is looking for a solution. Such academic effort may relate to solving an equation or a problem like inversion of a large sized matrix which may remain a mathematical solution without any practical application. A computer program may not be per se if the software finds a solution to a real life problem through exploitation of some kind of hardware. It is also essential to define the term technical effect often used in literature and the guidelines.

2. The requirement of a novel hardware to be integrated a novel software to allow patenting of CRI is highly restrictive and goes against the intent of law consolidated over a period of time.

In the industrial context, computer programmes (software) are aimed at solving some specific problem(s) which are essential to be solved for meeting the immediate or prospective needs of the market. Let us take an example of optimizing the performance of a car engine. In order to do that multi-parameters analysis is called for which can help in controlling engine working like fuel flow or engine speed. There can be a microprocessor which uses signals received from different types of sensors mounted in the engine measuring temperature, air pressure, air humidity, impurity levels in air and fuel on real time basis and then controls rpm and torque and fuel supply to engine. These kinds of microprocessors are commonly used. Suppose there is a new piece of knowledge which suggests that some more sensors sensing other parameters and more number of sensors already being used should be deployed for more efficiently controlling the engine performance. In that scenario, software will have to be written with new features and utilized accordingly which would render the software novel and inventive. Every time a new knowledge is discovered, new software will be developed. It may be noted that the engine and sensors are known but a combination of sensors and software has become an essential tool for optimizing the performance of the same

engine. In other words, there is no new hardware. It is something similar to devising a new formulation with a known molecule.

The situation becomes more complex and relevant in case of networking technology such as the smart phone. Without efficient and complex software it may be difficult to achieve what these technologies are achieving-global connectivity, fast connectivity (within 150 milliseconds) and reliable connectivity. There is an impression that writing software is easy, quick and straight forward. On the contrary, software imbedded in modern technologies takes few years to develop and test before putting into use. They are very complex and entail understanding of hardware architecture and functions it performs.

Hardware and software are like warp and weft of the modern technology fabric; in the absence of one, the technology will fail to deliver the desired technology fabric i.e., the product. For generating a new fabric one may have a new weft without changing the warp. It is not essential to have a new hardware for coming up with a new technology and product. Thus denying patents to an invention having new software but old or known hardware will be a retrograde step in adopting and innovating new technologies. The benefits of modern technology cannot be enjoyed with an incomplete package.

All effects of these guidelines need to be looked at from the perspective that Indian IT industry usually do not work at 'Core technology' but 'Operating technology'. Usual innovations do not lead to invention of novel hardware. Almost never! This will lead to significant fall in number of patent applications being filed by IT industry.

3. This requirement would seriously hamper the interest of the Indian start-ups which are heavily dependent on developing competitive software and not hardware.

It is being observed that the most Indian start-ups and also the SME have been focusing on developing software for different applications in the e commerce space. This has not given rise to any IP for them to attract stage funding from VC and financial institutions. By codifying that software without residing in a novel hardware is not patentable will worsen the situation of start-ups seriously affecting the GOI's programmes on Start-up India and Make in India. A large portion of tax concessions announced recently for start-ups would go unutilized.

4. It may also negatively affect the R&D efforts in the country if enough patent protection for software is not available.

The Indian software companies are concerned as they have invested heavily in software development through investment in human resources and infrastructure. This kind of restrictive interpretation of the Act may render the investments by industries non-productive as the inventions made by them are not necessarily around novel hardware. Industries are seriously concerned on this issue.

5. The guidelines should speak of positive examples rather than only negative examples

It may be recalled that the first draft of the CRI guidelines released in 2015 also suffered with this shortcoming but it was rectified in the final guidelines. We have come to the same situation where

we are only talking of negative examples i.e., what cannot be patented. On one hand it may bias the thoughts of an examiner and on the other hand it sends negative message to inventors.

6. The frequent change in the guidelines signals uncertainty and instability in the interpretation of the Act.

7. FER issued by the Patent Office are not elaborate enough to guide the applicant understanding the objections. A statement that the invention is not in accordance with Section 3(k) is most commonly used by examiners. The fundamental points of novelty, inventiveness and applicability are seldom mentioned in FER.

It is most essential for patent examiners to determine whether the invention proposed to be patented is really novel, inventive and useful. In order to achieve this goal, application knowledge residing with examiners, patent databases and technical journals would be called for. The most important thing is to recognize the invention. The rate at which the technology in various sectors is changing and new tools are emerging for efficient application of the technology forces us to be updated on a regular basis. They should be equipped to carry out a cause and effect analysis for understanding the novelty and particularly inventiveness. It is not advisable to have a tool (a blanket rejection of CRI deploying an old and known hardware) which can be used without discretion for an easy disposal of cases coming for examination. Examiners should write their objections explicitly in FER rather than briefly stating that the invention is not patentable according to Section 3(k).

8. The guidelines seem to undo some of the decisions of courts and IPAB.

An attempt seems to be made to step into judiciary shoes because interpreting an Act is the responsibility of judiciary. Therefore, earlier decisions of courts should be utilized while preparing the guidelines. This would certainly add to the process of evolving jurisprudence.

9. Many innovations may become ineligible for patenting

Following innovations, which are otherwise very useful for IT industry, will arguably become patent ineligible

- Method for detection of network security threats
- Method of integration testing in cloud environment
- Methods for creating a virtual environment
- Method for improving network traffic analysis
- Method for log or data obfuscation
- Method of rationalizing and transforming data
- Method of predicting event in an IT environment