PATENT PROTECTION IN SOFTWARE RELATED INVENTION

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INTRODUCTION

The fast pace of advancement of technology is making it more crucial for software inventions to get Intellectual property protection. Software are intangible in nature and falls outside the basic category of traditional goods as when software is sold, license is handed over to buyers with specified rights indicating the dos and don'ts for the same. Further it has been noticed that Supreme Court considered software to be good in the case of *Tata Consultancy Services vs State of Andhra Pradesh*[1] where irrespective of IP of a software, software computer can be considered as 'goods' and are also liable for taxes. IP Protection of software is crucial as due to fierce competition they can be outdated very easily by other competing product.

It is has been seen through a survey of RBI in 2017-18 that India's software services increases by 11.6% to $ 108.4 billion and therefore seeing this growing expansion IP laws has been amended several times. Technical functionality is seen progressively shifting from hardware to software as implementing in latter is more rapid and fast cost-effective way to get a product to market. Companies need effective IP protection to gain a reasonable return on their R&D investments. Software is protected under patent, copyright and trade secrets and even though there laws regarding IP protection, country does not have a develop jurisprudence and therefore American approach is applied in such cases.

WHAT IS THE DIFFERENCE BETWEEN PATENT AND COPYRIGHT? IS PATENT USED IN SOFTWARE INVENTIONS?

It is seen that in India Software works are generally protected by copyright. Section 2 (ffc) of Copyright Act 1957 defines 'computer programme' and according to Section 2(o) of Copyright Act, 1957, computer program falls under the work of literary but it does not distinguish between source code or object code so both falls under this of computer program. For such protection it

[1] (271 ITR 401)

is essential that the work is original. As copyright law in India protect creativity and original work therefore it protect code functions copyright in software. If work done is substantially copied by copying the expression of others then this falls under copyright infringement. Though patent protection helps better in protecting the idea and economic exploitation of work, but the standard to follow the same is very strict and somewhat difficult to achieve.[2]

For the process of protection of software under Indian laws we had to file for copyright application along with source and object code in machine readable format. In Rule 70(5) Copyright Rules 2013 it has been stated the importance of source and object code for filing application for registration of computer programme. Further where a work is modified by third party with some basic adjustment in it and lack of creativity it falls under the radar of infringement of copyright on the absence of 'flavour of minimum requirement of creativity'.[3] Patent in general is important because it safeguard our invention and protect any product, design or process meeting criteria of originality, practicality, utility and suitability. Now looking at the Software Patent Protection, they are *per se* not patentable but they can be under exceptional circumstances and following important factors such as-

- Invention must consist of patentable subject-matter
- Invention should consist of industrial application which means that any invention seeking patent must have an industrial application which can be utilized for industrial purpose.
- Must be novel(new) which is the crucial requirement for gauging the patentability for the invention. Any subject-matter or information regarding the same if disclosed before the filing date it will not be considered as novel therefore not patentable.
- Must involve an inventive step(should not be obvious) and this inventive steps can be determined further by following parameters-
    a) Identifying concept of invention in the said patent
    b) Recognising general knowledge in state of art on date of priority
    c) Pointing out the difference in the claimed invention and inventions that are cited,
    d) To decide whether or not the difference constituting the steps require invention or

[2]' S.SRana', '*Ip protection of software in India-patent or copyright*?', MONDAQ, (July 26, 2019) https://www.mondaq.com/india/patent/830332/ip-protection-of-software-in-india-8208-patent-or-copyright
[3] Eastern Book Company & Ors vs D.B. Modak & Anr, (2008) 1 SCC 1

is obvious with existing state of art.[4]

- Disclosure of the invention in the patent application must compete with certain formal and substantive standards.[5]

As Patent Act 1970 consist of computer programmes under non-patentable list therefore for software patent invention related to computer software is important giving technical effect and also something more than technical effort that is making software a tangible element. It is observed in *Section 2(1)(I) of Patents Act 1970* which states the meaning of 'new invention' that the subject matter of any invention should not fall in public domain or form part of the state of art. Under *Section 3(k) of Patent Act 1970* states that mathematical or business method or a computer programme per se does not fall under inventions and therefore not patentable. The intention of 'per se' was stated via Report of Joint Committee (presented to the Rajya Sabha on 19th December, 2001) to separate computer programme from certain other things thereto or developed. There is no intention to reject the protection of patent from inventions. Irrespective of this explanation by the Parliament, there are cases which can fall under the criteria for patentability. Therefore, computer-related inventions can be granted patent protection if it falls under 'technical effect" or 'technical contribution' as stated in *Ferid Allani vs Union of India*[6]. In this case court adopted liberal approach and reiterated the determining factors of patent eligibility and focuses that word per se denotes genuine inventions not known computer application. The court stated technical effect or contribution should be seen in light of guidelines, legislative material, judicial precedent and international practices. In India, software cannot be directly be allowed patent but can be if it falls under the above mentioned criteria and most important capable of industrial use. It is pertinent to scrutinize the interaction of software and hardware and thus if there is a combination of both novelty and known computer programmes it is important to pass the triple test of inventive step, industrial usage and novelty explained above.

A patent issued allows the owner to exclude others from making, using, selling or offering an invention on patent claimed. If we see the US law regarding this, patent cannot specifically claim to software but may claim to a computer system and processes performed by it. For

[4] ' S.SRana', '*Ip protection of software in India-patent or copyright*?', MONDAQ, (July 26, 2019)https://www.mondaq.com/india/patent/830332/ip-protection-of-software-in-india-8208-patent-or-copyright

[5] ibid

[6] (W.P>(C) 7/2014)

example following could come under patent-

1. A computer configured to perform action X, Y,Z etc
2. Method including steps for X,Y,Z etc
3. Configuration of computer to perform actions X, Y,Z by a computer readable medium[7]

Similarly, it cannot be said that software itself is patentable but it is effectively patentable by drafting of patent application in correct way. There are several Indian cases related to software patent such as, *Electronic Navigation Research Institute vs Controller General of Patents*[8] in this case patent was denied on the ground that it falls under mathematical formulae even though it falls under technical effects. Further in case of *Yahoo vs Controller of Patent and Rediff com India Limited*[9] Section 3(k) was discussed in detail and patent application was rejected stating that business model is embedded via technology and not met the required criteria in India. In case of *Accenture Global service GMBH vs the assistant controller of Patents and Designs*[10] after patent application get refused it was appeal before IPAB, and was held that claimed instant invention is not software per se but improvement in software and web service. In May 2017, Patent office in Kolkata granted patent to Apple on 'method for browsing data items associated electronic and computing devices'.[11]It was stated that invention include 'technical effect'. Lastly in the case of *Enercon India Limited vs Aloys Wobben, Germany*[12] patent was granted by the court where invention had the automated steps for controlling wind turbine depending on external conditions by using computer system. It was decided that it was not just a computer software per se or set of algorithms and thus patentability on it cannot be denied.

WHICH IS MORE PREFERABLE FOR IP PROTECTION, PATENT OR COPYRIGHT? WHAT ARE THE ADVANTAGES FOR THE SAME?

The most efficient and strongest way to IP is patent especially in matters pertaining to idea and functional aspect of software as copyright can only prevent copying of a particular expression of an idea i.e. copying of source code or a portion of it, and not the copying of the

[7] 'Dylan O.', 'Is Software Patentable?', DAVIS WRIGHT TREMAINE, (November 11, 2020) https://www.dwt.com/blogs/startup-law-blog/2020/11/how-to-patent-software
[8] IPAB, OA/26/2009/PT/DEL, 5th July, 2013
[9] IPAB, OA/22/2010/PT/CH, 8th December 2011
[10] IPAB, OA/22/2009/PT/DEL, 28th December, 2012
[11]'Devika A.', *Software Patent: Prohibited Under Indian Law But Granted In Spirit'*, TECH2, (November 9, 2021) https://www.firstpost.com/tech/news-analysis/software-patents-prohibited-under-indian-law-but-granted-in-spirit-3702725.html
[12] Appellate Board DELHI BENCH 12 June 2013 ORA/08/2009/PT/CH

idea/functionality. Hence, patents offer much broader protection. There are many advantages of patent over copyright in such matters. Software patents are often an important point of emphasis for some investors and large corporate buyers. Similar to copyright, patent allows patent owner to give license or assign his patent work to any individual or third party giving certain rights over parental work. Further, copyright infringement and piracy of software is not something new in this digital era, rather with such advanced technology it is even possible to copy the entire program code. Adding to that, copyright protection does not protect the process, procedure or discovery.

Generally, Patent protection has benefits such as ensuring inventors getting a reasonable return on their commercial successful innovations, for effective business collaborations for innovation-based startups, promoting systematic sharing of knowledge and attracting investment partners for business expansion. In general, novelty, non-obviousness and industrial usage are the criteria for granting patent to any invention, however, computer software and algorithms fall in a different category. As stated that copyright protects expression of an idea and not the idea itself. Hence, in the case of software programs, it is the software program that is protected, and not the functionality of the software programs. Hence, it may not be a good idea to rely solely on copyright law to protect *software related invention.* The reason being, protection offered by patents as compared to copyright is much broader and stronger. Experienced programmers can easily circumvent the copyright protection of the software by copying its functionality but not directly copying the code.

Indian software and industry providing services has become an crucial segment of country's economy. But in order to maintain growth and competitive edge more concentration should be on development of software products along with services. India is still lagging behind many other countries when it comes to providing innovative software packages. One possible reason is the absence of effective patenting regime for software and hence strong patenting system should be encouraged. In a nutshell USA post 2014 recognizes the patentability on software but India only recognizes if it is somehow linked to hardware or computer network.

CONCLUSION

It was argued that CRI guidelines were violative of Section 3(k) of the said Act which let to 2016 guidelines which focuses on the concept of and requirement of 'novel' for patent in software and business methods continued to remain non-patentable under this guidelines. We

have seen that software or computer programmes are mainly copyrights subject-matter but if the conditions of patentability are satisfied then computer programmes can be allowed for patent. Though Patent gives stronger protection but copyright is considered as the first right of the software automatically once the work is created. It is upon the owner to satisfy the conditions of patent until then original creation would be protected under Copyright laws. The constant amendment of practices adapted for patent law in Indian courts with regard to interpreting the language in Section 3(k) are indicative to make Indian patent law regime consistent with global standards and practices.