

REVIEWS ON CASE STUDIES RELATED TO THE SECTION 3(K) OF INDIAN PATENT ACT 1970

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Abstract

Many inventions like software programs/algorithms, business and mathematical methods fall under the section 3(k) of the Indian Patent Act and the provisions of the Act for claiming a patent related to these inventions are reviewed. The exact interpretation of this section is along with the specific limitations concerned to India. The objective of the paper is to discuss the inventions which are not patentable under sub-section 3(k) of the Patent Act in detail, a few thoughts and acts followed to properly claim by identifying the actual contribution. Ambiguities arising due to lack of clarity of non-patentable subject matter under the section 3(k) will be resolved.

Keywords: Section 3(k), patent act, mathematical, business, CRI

I. INTRODUCTION

Patent is a type of Intellectual Property Right (IPR) granted by the government to an individual or to a firm for a limited period of time. An invention which is novel, inventive and has technical advancement can be patentable. A patent is an index of country's growth and at the same time it should not become a barrier to technological advancement in the near future. All the patents are inventions but not all the inventions are patents. There are many unclarified doubts arising owing to the vagueness for a patent being rejected. There are sections in the Indian Patent Act which help in the technological advancements, help poor to avail medicines at low prices, contribute towards the economic growth of India. There are sections which even cause confusion between the stakeholders, persons skilled in the art and the general public due to the misconception of the sections by the people. One such section which is causing confusion between the stakeholders and the persons skilled in the art is section 3(k). Section 3(k) [1] carefully concentrates upon the software inventions, mathematical and business methods upon which the economic growth and technological advancements depend. Intellectual property rights awareness triggers the innovation in people improvising the creativity as 'necessity is always the mother of invention'. Section 3(k) is not an obstacle to the progress of an individual/country instead it is a gateway to innovation, creativity and productivity testing the originality and technological advancements of humans [2]. There are many never ending challenges under section 3(k) for the technological giants that indeed causes rift between persons skilled in the art and the stake holders. Section 3(k) [4] draws a line between business ethics and technological advancements in India where a

person skilled in the art decides and distincts whether the invention is purely sticking to business by creating a barrier to technological advancements or not.

A person skilled in the art should carefully take decisions while examining inventions such as Computer Related Inventions (C.R.I) [3], mathematical and business methods so that the advanced technologies are easily available to a common man or a small firm in the near future. Business methods like e-commerce [5] need to be examined carefully so that if the methods bear technical advancements. Any mathematical methods, software/algorithm alone and business methods cannot be patentable and if patentable then the conditions applicable are discussed after carefully studying some inventions which are objected under the section 3(k) of the Indian Patent Act, 1970.

II. DETAILED DISCUSSION

In India, computer software program alone cannot be patentable and as a result computer program is categorized as a Copyright and has a special provision in the Copyright Act of India. Section 2(f f c) of the Copyright Act defines 'Computer program' as a set of instructions comprised of series of steps, procedures, techniques or in any other form, including a computer program product, capable of making a computer program product to perform a particular task or achieve a particular result. Further, section 3(k) of the Indian patent Act describes that the invention related to any mathematical or business method or a computer program or algorithms are not patentable. A claim to a novel method of designing a novel hardware or product which requires the application of an algorithm or a particular computer program may be patentable. Software cannot function independently without an

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efficient hardware to support its functionality even though it is novel. For an instance a desktop/laptop embedded with a novel operating system on a known hardware is not patentable. In US, any novel and inventive method/process, system/apparatus/product may have a patent granted to it, provided it is a subject matter of patentability. There is no restriction on computer program products or software programs/algorithms in US Patent Act. In India, an invention means a product or process satisfying novelty, inventive step and thereby making it non-obvious to a person skilled in the art. It should also have technological advancement and/or has economic significance. Additionally, the new product or process should have industrial applicability for it to qualify as an invention. Patent laws of some countries like US favour patent protection for software inventions. However, few countries, which include India and European nations, have more strict laws concerning patent protection to software inventions. In India, almost all patent applications which include algorithm, computer program product *per se* are objected under the section 3(k). Algorithms are considered as a type of mathematical methods where each and every step of an algorithm is a mere mathematical method. Mathematical methods and algorithms/ computer programs in some way or the other related to each other. If the government allows mathematical methods as a patentable subject matter then stakeholders strongly urge government to make computer programs/algorithms as patentable subject matters as well. As a result section 3(k) will be overlooked. If a system/device/apparatus claims are drafted in such a way that the system/device/ apparatus is novel and inventive under the sections 2(1) (j) and 2(1) (j) (a) then the invention fulfils the eligibility criteria of patentability even though the system/device/apparatus is based on a computer program/mathematical method. The person skilled in the art has to judge whether the invention falls under the section 3(k) or not based on the scope of invention but not on the form in which it is claimed. If the alleged invention is related to a computer program then a thorough examination is carried out under section 12 of the Patent Act in order to check whether the computer program is claimed along with a novel hardware and proceed formally to determine patentability with respect to the invention. If the invention is solely about the computer program then the claim is denied. If the invention is novel and inventive in both the computer program as well as hardware then proceed legally for patentability. Many Patent Attorneys started drafting the claims in such a way that the dependent claims teach about the apparatus and the principle claims teach about the algorithm/computer program which means that the inventor has not invented any new hardware but instead

claims a new computer program when embedded inside any hardware becomes novel and inventive and hence patentable. Moreover, there is no clarity on the Latin phrase "*per se*" and hence facing criticism on the subject of patentability when used in alliance with software inventions in the Indian Patent Act. Moreover, "*per se*" is still not defined in Indian statute, but the amended Patent Act now directs to interpret the word *per se* as per its dictionary meaning. Many surveys have demonstrated that software patents not only increase the monopolization but also affect the research and developments in India and thereby enhancing the costs with the increase in the software patents. Huge amount of funds are spent towards suing many innovative individuals/ firms based on the spurious claims instead of investing funds in the productive R&D. Many programmers/inventors have very less knowledge about the intellectual property rights and typically lack of resources to defend themselves against the patentees, this basically slumps technological progress and innovation. Many companies are facing legal issues for unknowingly breaching the patentee rights. Even some business methods like e-commerce, one click shopping which are solely based on the software are not patentable. Each and every company has its own schemes and goals and they have their own ideas to achieve them. Business methods of modern companies mainly comprise of marketing of their products, initiating financial transactions and customer satisfaction. Companies invest huge amounts of their resources to innovate and develop new and unique systems. Many Companies are coming out with new marketing methods everyday and thereby investing huge funds in the R&D sections. Ultimately, these companies expect their business methods to be protected. Protection of business methods severely affects the economy of India by dwarfing the small firms. As a result, business methods are regarded as non patentability subject matter under the section 3(k) of Indian Patent Act. A brief discussion of some cases where the section 3(k) plays a pivotal role is presented in the further sections.

III. CASE STUDIES

A). *Yahoo vs. Controller of Patents*

Yahoo filed a patent in 2007 for an invention based on 'method of scheduling the appearance of users' which teaches about the online presence in an Instant Messaging. The claim is "when a person logs in to his instant messaging account, other viewers are intimated of his online presence. Similarly, when the person logs out, other users view him as being offline".

B). *Decision of the Controller*

The question arose whether the invention is a computer program or the algorithm *per se*. Algorithm is a series of steps penned by a programmer before running a

computer program. The controller analyzed the invention and concluded that the user's appearance and online status in a chat window is a mere algorithm which clearly falls under the section 3(k) of the Act. A mere presence of hardware cannot put the invention cannot bypass the provisions of section 3(k). The Act states that the examiner is required to identify the novel and inventive part of the invention. If the invention in the principle claim teaches about the novel hardware then section 3(k) is not applicable.

Inference: Authors conclude that the preamble of principle claim of the above alleged invention teaches about the method to schedule online appearance of users. In the current scenario, it is quite obvious that the principle claim does not teach anything about the hardware. In the dependent claims, Yahoo referred to a server which is hardware and thus cannot work without a computer programme or an algorithm. This is obvious to a person skilled in the art because a server, consisting of a processor and memory are known devices. By embedding a novel software program/algorithm *per se* inside an already known hardware doesn't make the invention novel and inventive under the sections 2 (1) (j) and 2 (1) (j) (a) respectively. A computer related invention (CRI) may be granted patent if and only if the hardware novel and inventive system is embedded with a known or a new software program. In this case it is quite clear that the scope of invention lies in the "instant messaging" which is a mere computer program and moreover, by claiming a computer program along with a known hardware cannot bypass the provisions of section 3(k) of the Act.

C). Electronic Navigation Research Institute (ENRI) vs. Controller General of Patents

This case study is about the patenting of mathematical methods in India where the Electronic Navigation Research Institute filed an application for "A Chaos theoretical exponent value calculation system". The principle claim of the invention teaches about "the cutting of a given speech signal and calculating the chaos theoretical exponent value with respect to the sampling time as the microscopic chaos theoretical exponent value". The Controller General of Patents has decided to deny a patent to the applicant on the grounds of non-patentability subject matter under Section 3(k) of The Patent Act on the date of hearing. ENRI had approached Intellectual Property Appellate Board to challenge against the Controller's decision. On July 5th, 2013, the Intellectual Property Appellate Board (IPAB) passed judgement denying a patent to Electronic Navigation Research Institute stating that the invention is a mere mathematical method falling under the non-patentability subject matter of section 3(k) of the Indian Patent Act.

D). Decision of IPAB

In the petition, ENRI, conducting research on air traffic communications, navigation and surveillance technologies, claimed that it had invented 'a system for calculating the chaos theoretical exponent value' and filed response to the first examination report (FER) in 2005. The controller general of patents and design, Trademark and Geographical Indications (CGPDTM), Mumbai, from the *prima facie* observed that the functions were based on mathematical methods for solving mathematical equations. The official stated that the provisions of section 3(k) do not allow mathematical methods to be patented as they will have technical effect. Hence, ENRI preferred the appeal. The petitioner contended that the invention teaches about a system which analyses the signal in the time domain using a method based on the Chaos Theory and calculating a chaos theoretical exponent value thereof. The jury, comprising Justice Prabha Sridevan and technical member D.P.S Parmer, dismissed the appeal and the verdict was given in the favour of CGPDTM stating that the invention was nothing more than "a mathematical method for solving mathematical claims which are further based on various algorithms".

Inference: Authors conclude that the claim(s) as claimed by ENRI essentially describes about a method and system for the cutting of a given speech signal and calculating the chaos theoretical exponent value with respect to the sampling time as the microscopic chaos theoretical exponent value. The calculation of chaos theoretical exponent value requires a set of instructions/mathematical formulae initially and the same get executed as computer program which indeed embedded inside the hardware. The principle claim of the invention teaches about a system for calculating the chaos theoretical exponential value. In the dependent claims, the inventor claimed only the method and did not teach anything about the system. The term "system" is unclear in the invention. The case not only falls under the section 3(k) but also under the section 10(4) (c) due to the lack of clarity in the principle claim. Moreover, title is inconsistent with the claims.

IV. CONCLUSION

In the near future, if the mathematical /business methods, computer program/ algorithms *per se* are patentable then there would be more patent wars than technical advancements. Only those who are rich enough to pay royalties, or those who benefited from government subsidies, or those who are powerful, richer and have capability to buy novel ideas for a huge will get access to the novel technologies. Section 3(k) of the act helps an individual/firm to develop new ideas which could be available to the common man/small IT firms and boost the research. Section 3(k) is not an obstacle to claim a patent or innovation instead it is a streamline to innovation, creativity and productivity

testing the originality and technological advancements of humans.

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