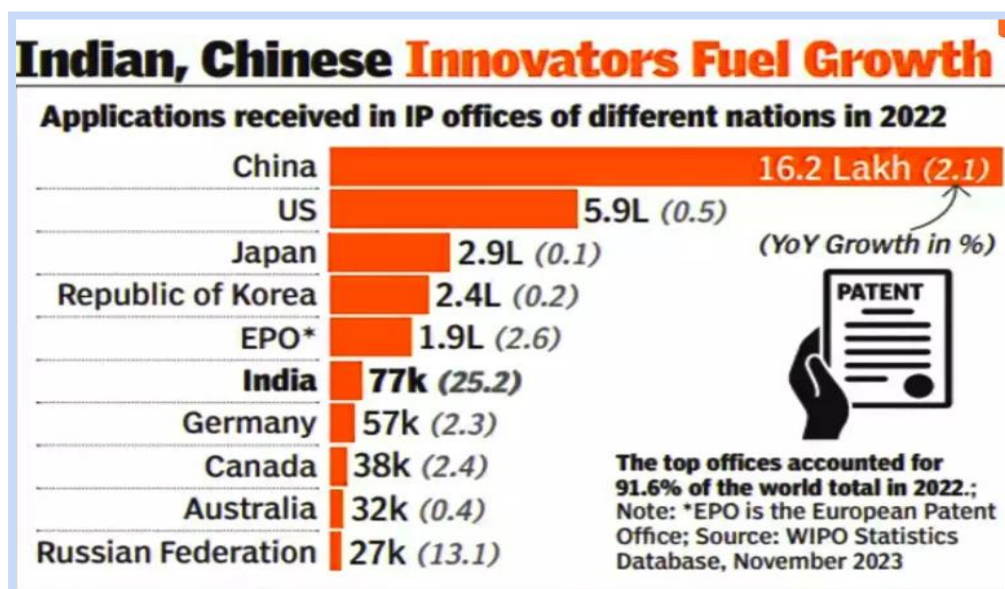


An overview of emerging issues relating to patents in INDIA

1.0 Introduction

India is currently going through a transformational phase from 4,227 patents granted and registered in the fiscal year of [2013-2014](#), Indian patent applications also increased and the growth estimated was 31.6 %; it exceeded and outdid nearly about ten folds in the fiscal year of 2023-2024, with around 41,010 patents granted and registered until the 15th of November 2023, The importance of patents are being recognized amongst Indian inventors, creators, and designers. Nevertheless, the patent laws in India require consistent improvement to supervise such a great number of patents registered in India, with nearly five crore backlog court cases pending, document processing delays and lack of awareness amongst common people and entrepreneurs can have a detrimental effect or slower the growth rate.

The issues within the patent system of India can be divided into two parts Internal issues and external issues, internal issues related to the operative nature of Patent Law in India and the lacunae that need to be filled since laws require reform considering the current government policies, economic and social aspects The article shall also give a overview of external factors related to the enforcement of patent laws in India, the scope of patent protection and factors affecting it, and technological developments such as AI, spatial computing, and digital advancements that have their distinctive problems concerning the patent system in India.



2. Patent Law In India

Definition of Patent - A right that is personally held and granted by the government, which exclusively allows the right holder/inventor to prohibit others from using the product or a process; that is innovative and provides a solution to existing problems, this exclusive right authorizes the inventor of patent to produce, create, and sell the product. A Patent is also granted for improvements to previous inventions. After the grant of a patent, a period of 20 years is provided to the patent holder from the date of application.

2.1 Prior Art - [\(1\)](#)

Any product or process that is already in existence which can be physically or commercially available, anywhere in the world, at any time, and with anyone who has already explained or described such existence which is identical in usage with any created invention of existence is prior art, and as such it proves that such invention already existed.

The Indian Patent Act 1970 is the patent law of India, [Section 2\(1\) \(j\), 3, 13, 29, 30, 32 and 34](#) have to be considered for the determination of whether an invention is patentable or not.

The patentability is tested on three grounds also known as the NUNs test:

1. Novelty- no such existence of the product or process, the product or process has to be novel or new,
2. Utility- Invention has to serve practical utility or provide solutions to the problem, the invention is required to perform according to the claim made however speculative or vague performance is not within the scope of practical application,
3. Non-obvious nature - any invention, that is not a prior art or a product or service already in existence.

2.2 Impact of TRIPS Agreement On Indian IP Laws [\(2\)](#)

India became a member of the World Trade Organisation with effect from 1st January 1995, and a party to the TRIPS agreement subsequently, after the adoption of the agreement India introduced multiple amendments to the Patents Act of 1970, the major and the most important one being the Patent Law Amendment [Act 2005](#) and [2002](#).

- **Patent Term** - increasing the patent term to 20 years after the date of filing, under [Section 53 of the Patents Act, 1970](#).
- **Product Patent Protection**- introduced protection of patents for pharmaceutical products.
- **Compulsory Licensing**- compulsory licensing is required by third parties and is granted by the government to utilize a patented invention.
- **Pharmaceutical & Biotech Patents**- [under Section 3\(d\) Patents Act](#) patenting of chemicals, biotech, food processing, drugs, and pharmaceuticals is possible.

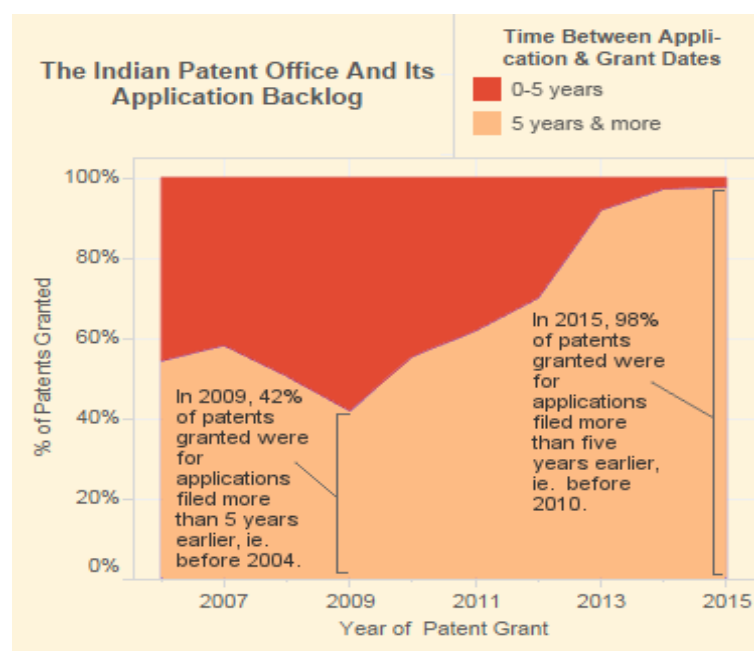
3. Challenges related to patent protection

3.1. Delay of Grant & Procedure:

The lethargic or sluggish nature of the process of a grant, the delay of the patent grant within 2 to 6 years, from the date of the application process, it is a four-step process, initiation of the process begins with application filing and publication which can take up to 18 months as mentioned [u/s 11A of The Patents Act 1970](#). There are many types of applications such as ordinary patent application, PCT national phases patent application, etc. [\(3\)](#)

Then secondly the process of requesting for search and examination mentioned [u/s 11 B of The Patents Act 1970](#), which has to be filed within 48 months of the patent filing date/ date of the priority. The examination of the patent is conducted by an examiner, exercising discretion to issue an examination report containing objections,

The third step is filing a response against the objections raised in the examination report issued by the examiner the filing has to be done within 12 months of the issuance date of the examination report. The process is also termed patent prosecution, after all the objections to the examination report have been replied to and if the examiner is satisfied with the responses, the examiner may put forward the order for the grant of a patent.



3.2 Computer-Related Inventions under Section 3(K) Deep Analysis

Under [Section 3\(k\)](#) of the Patents Act of 1970 (hereinafter called the Patents Act), an invention related to mathematical, business methods or a computer program and algorithm is barred from being patentable. The Section is stringent and intransigent and expressly rejects that there lies no exception towards the patentability mentioned under Section 3(k) of the Patents Act. According to The guidelines for Examination of Computer Related Invention (CRIs). [\(4\)](#)

The guidelines consider these factors crucial for the grant of a patent these are Inventive step, Technical Advancement, innovation, and practical application can be patented the reason for the barred of patentability by section 3(k) is for the same fact that the claims under the section lack either one or whole of the factors of patentability [Section 09.03.05.10 of the Patent Manual](#) explains section 3(k) of the Patents Act 1970, wherein most notably, subsections 1 to 4 provide guidelines in various instances of the claim raised [under section 3\(k\)](#)

- “Mathematical Methods” - under sub-section 1 wherein in case of mathematical method any form of the intellectual or abstract method along with, formulation of the equation, finding square roots, cube roots are not patentable., for mathematical methods to be patentable the claim requires to be practically applicable, the mere addition of mathematical formulae not being the primary subject shall not dismiss the patentability
- “Business Methods” - Under sub-section 2 of Section 09.03.05.10 of the Patent Manual, activities related to commercial and industrial enterprises and transaction of goods and services, the claimed subject matter if it specifies a technical process partly or wholly for the invention to be created can be considered for examination, or else a claim for a business method, trade, transaction, commercial activity is not patentable, as shall be treated as business methods. The Intellectual Property Board (Hereinafter referred to IPAB) in [Yahoo v Controller of Patents & Rediffcom India Limited](#), it was held that the application filed was not patentable u/s 3(k) of the Patents Act 1970, The IPAB held that such invention falls under the exclusion of section 3(k) and is not patentable,
- “Algorithms” - [Under sub-section 3 - self-explanatory \(see sub-section 3 of Section 09.03.05.10 of the Patent Manual\)](#)
- “Computer Programme per se” - Under sub-section 4- Invention is not to be treated as rejected for patentability, rest however any computer programmes/set of instructions/routines and/or Sub-Routines and related products, database, etc, according to the section these category is not intended to grant a patent.

In the case of [*Microsoft Technology Licensing, LLC v The Assistant Controller of Patents and Designs, 2023 SCC OnLine Del 2772*](#), wherein Microsoft filed for registration of its invention related to “Methods and Systems for Authentication of a User for Sub-Location of a Network Location” however The Controller rejected the application [under section 15](#) of the Patents Act, 1970, rejecting the patentable claim [under section 3\(k\)](#).

The court, keeping in mind the exclusion of subjects mentioned [under section 3\(k\)](#) and the Patents (Amendments) Acts, 2005, explained that the term “per se” was added to bar the patentability of computer programmes, nevertheless, the Patents (Amendments) Acts, 2005 subjected to the essential factors such as Technical advancement, inventive steps, prior arts, etc, to allow the grant of patents related to Computer Related Inventions (CRIs).

The court opined that the Controller had misinterpreted [section 3\(k\)](#) and hence does not outrightly lead to the rejection of the patent, the possibility of an algorithm used in a computer device can contribute towards the technical solution for a technical problem; the computer programme being just the instrument for the technical solution to be implemented for the technical problem.

Since the claimed invention surpassed the negative factors such as being used only for the user interface of a computing device or just being a mere complimentary addition towards the already known devices and mathematical methods, but it also provided solutions to security issues, a two-tier authentication process similar to encryption of devices, by the utilization of two different cookies for the access of the client computer, which secured computer devices from hackers and possible data breach, hence the court set aside the impugned order passed by the controller and remanded the matter back for the re-examination of the examinations related to inventive step, novelty, and technical advancement, in the purview of the other referred prior arts.

The issue however, lies in the fact that many inventions may be excluded from patentability, as such section 3(k) of the Patents Act 1970, as such section 3(k) exclusions needs to be reconsidered, in view of worldwide technological advancement and innovation, [\(5\)](#)



4. Patentability of AI Innovation: Analysis of AI DABUS [\(6\)](#)

The contemporary age of scientific and technological innovation has pushed the boundaries where the computer or the machine in itself can create and operate autonomously, even though AI still requires minimal control, commands, and direction, AI technology is undeniable and pivotal, like an organ to a body, AI is becoming part of machines, computer devices, cars, drones, robots, etc, but also seems that they are playing important role in creating new inventions.

AI technology has progressed at such a fast pace that it generates novel processes and creates new ideas by itself, in 2019 such an AI tech was created by Stephen Thaler known as The Device for the Autonomous Bootstrapping of Unified Sentience (hereinafter referred to as "DABUS"). South Africa's patent office granted DABUS the AI its first patent for an invention related to a food container product, based on fractal geometry has been granted patent, which has been accepted by the Intellectual Property Commission as well.

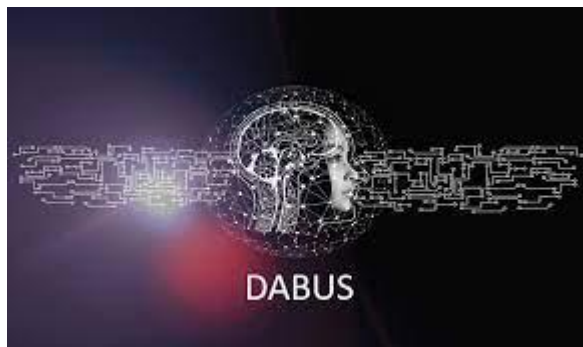
4.1 Court proceedings concerning "DABUS" patent application filing in various countries.

The Patent Cooperation Treaty application(hereinafter referred to as PCT application), the application was filed in various countries such as Australia, the US, The UK, South Africa, New Zealand, Brazil, Canada, Germany, the European Patent Office, and The Republic of Korea.

Common ground of rejection are:

1. **Inventor-** almost all of the country's Patent Laws define an inventor as a Natural Person and the definition of an inventor according to the country's patent laws does not apply to an AI to be considered as an inventor,

2. **No Specific Definition-** all the patent laws of the countries did not recognize AI as an inventor.
3. **Patent Incentive-** One of the most important aspects of granting patents is to provide usage incentives to the inventor, granting the same to the AI as an inventor would nullify the same.
4. **Legal Capacity-** A non-human entity or a machine does not have the legal capacity to raise objections or file suit if there is any form of infringement of the patent rights or copyright, an AI can not represent itself in Court and provide evidence if required.
5. **Legal Complication-** No legislation to provide transfer of patent rights from an AI to a natural person, an AI does not have any fundamental rights nor does it enjoy any rights provided by the constitution



4.2 TRADE SECRETS AN ALTERNATIVE SOLUTION TO PATENT FOR AI-GENERATED and INVENTION. [\(7\)](#)

Since AI Inventorship requires the support of the policymakers, through legislation and amendments inclusive of the concept of Artificial Intelligence as discussed earlier, AI-driven innovations are not recognized currently by the various patent laws of the countries, resolving the same requires time and the issue has been lingering since 2019 till date.

However, there is an alternative approach to preserve the exclusivity of the innovation created which is through trademark secrets, the advantages of trademark secrets are that the invention need not be disclosed in the public domain, has an unlimited time, a registration fee is not required and most importantly the uncertainty of patentability of AI invention is avoided.

What is a Trade Secret? [\(8\)](#)

It is one of the IP rights available to rightful holders that keeps the information confidential and is not disclosed in the public domain or published, that may be sold or licensed are called trade secrets. Trade secrets have to be commercially valuable, the confidential information may be only known to a certain group of people. The protection of information is both for technical information such as design and pharmaceutical test data. Commercial information such as a list of suppliers and

clients, etc, it can also be a combination of information and by keeping the same provides a competitive edge.

The protection that trade secrets offer against unfair competition, espionage, breach of contract, breach of confidence, etc. Trade Secrets are a go-to option for Non-human innovation, the DABUS case in many courts of different countries, whether it is original, special, or appellate courts all were of the view that the definition of inventor shall only cover a human being or a natural person that has applied its mind to create an invention, for time being it is settled position of law that filing of a patent for non-human innovation with the use of generative AI shall not be covered under the definition of an inventor or declared as an inventor, South Africa is an exception, however for trade secrets to be granted there is no mandatory requirement for an innovation to be recognized in the ambit of being created by a natural person. [\(9\)](#)

5. Conclusion

The TRIPS agreement, policies, and laws all were formulated for the sake of innovation and advancement, despite the positive growth of invention and technological flourishment, the contemporary age moving at a very fast pace as such one must consider the new ways an invention is created whether it be from a computer device by the algorithm and programming or through Generative AI. The time is such that laws are required to be amended for the sake of growth and a wider scope of opportunities for inventors perhaps an amendment to the definition of what constitutes an inventor is required to be re-examined once again considering the overall development of technology.

Backlogs of cases, delays in the proceeding, or infringement of protection provided by the patent rights are abandoned if the concept of novelty is undervalued; although the Indian Patents Act of 1970 is the law that regulates it, the spirit of the concept of novelty is yet to be imbibed in the Act itself, the policymakers and the patent law experts need to consider the enhancement of the patent laws not only in India but all over the world.

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