



CHALLENGES IN IPR DUE TO DIGITALIZATION

Anchal¹

ABSTRACT

Intellectual property is the product of creativity of human mind. Gradual development of humanity and their need to adapt to the changing problems compelled them to think and evolve new solutions to such problems. Earlier, such solutions as intellectual property was considered as public goods. But after seventeenth century, the evolving of commercial aspect necessitated many States to intervene by granting monopoly rights to the inventor in various forms like, patent, copyright, trademarks etc. Thus, the concept of IPR emerged as a tool to balance the individual interest and the public interest so that after a fixed term such IPR would be available for all. However, during the term of protection no unauthorised person could have appropriate it without permission of the owner of such IPR. Now, since the IT revolution in the 19th century, such misappropriation/infringement of IPR have become easier. So, in the light of these developments, this article discuss the various challenges and solutions to prevent infringements of IPR using the digital techniques itself.

Keywords: IPR, Digitization, Infringement, Digital Signature, CIPAM.

Introduction

The term "intellectual property rights" is used to describe a group of rights attached to a particular product that results from an individual's inventiveness or technical acumen. Due to the fact that many times entire enterprises are founded on one or more intellectual properties (IP), they are now viewed as fundamental business assets. The enterprises heavily rely on this IPs for their business. The primary cause of this is the commercialization of new ideas or useful items that result from a unique expression of a concept that are then packaged and offered for sale. Therefore, it is crucial to keep both the idealistic reasoning of maintaining the integrity of the artist

¹ B.B.A. L.L.B. (Hons.) 2nd Year, Chanakya National Law University, Patna

or creator in terms of literary works and even technological breakthroughs, as well as the financial rights of the original owner of an expressed idea.² Today, due to numerous expansions and advancements, new and developing applications for intellectual property rights are being acknowledged. In these circumstances, the necessity for a complete set of IP Laws at a worldwide level is felt strongly across all of the countries. However, each country has its own perceptions, expectations, and justifications for enforcing laws that unintentionally tend to harm the interests of some other countries. The laws that address these demands are different because the needs and expectations of a developing country are always different from those of a developed country.³ Therefore, international agreements and conventions have been formed to sustain the IPR regime in order to meet the interests of every beneficiary worldwide.

As the years go by and new people come into the picture, beliefs and preconceptions shift, and the availability of fresh ideas shows that society is developing and changing. Every part of life requires new ideas because they challenge the current quo and promote advancement. Ideas can completely erase or reduce an issue by changing presumptions. A concept's owner will be shocked into rethinking or recreating it, leading to a better and enhanced version, if it is rejected. Even if the notion is accepted, if the owner is unable to accept "no" as an answer, he or she will not be able to pursue it all the way to its actualization in reality. Since the beautiful production of ideas that encourage the evolution process and query the very birth of any individual creation sustains the entire human race, the establishment of intellectual property is a very crucial and safe shelter for these ideas. Ideas can therefore challenge what was once just an assumption and now is a reality. By preserving the right of ownership and fostering a favourable environment for the advancement of research and development, the growth and development of intellectual property aids a person in preserving the dignity of ideas.

IPR in digital World

Digital rights and IPR the topic of privacy is crucial in the digital age, where main privacy concerns include unlawful data sharing, data integration, unethical data use, and unauthorised public revelation. The following are the key points to think about:

1. Should digitalization be compared to replication methods like utilising a Xerox machine?
1. Is digitalization a creative endeavour like translating between languages?

² Colas, Bernard. Appendix A: Summary of Barriers to the Transfer of Clean Technologies and Solutions for

³ Aksan, Anna-Maria. "Appropriate Health R&D and Intellectual Property Rights Reform in Developing Countries." *Economica*, vol. 80, no. 319, 2013, pp. 475–495.

2. Can the release of digitised documents through the Internet be regarded as a form of broadcasting or commercial distribution?
3. Can we view a database as a unique collection of works that requires copyright protection?
4. What does "fair usage" mean in the context of the Internet?
5. What issues are the library community's top priorities?
6. How can the public make fair use of those works in the digital setting if access is restricted by the copyright owner?

The aforementioned problems are unique to the library. The libraries have made it possible for patrons to read a document, browse the entire collection, conduct a catalogue search, obtain Xerox copies of articles for research and educational purposes, obtain photocopies of articles from other libraries or clearinghouses, disseminate reprinted copies of documents widely for public awareness, and use the interlibrary loan service. How long will these activities last in the digital era? If digitization is viewed as a sort of reproduction, it is evident that this process essentially transforms the original work into a digital format while being automated and devoid of human creativity. The digitalization is a transition from natural human language to machine language if it is viewed as a translation from one language to another. However, digitization lacks creativity and can be compared to reprography because it is a repetitive process. Only artistic creations are protected by the copyright. The simple conversion of an original document into a digital format cannot be regarded as innovative. Information transmission through the Internet is comparable to broadcasting, hence copyright laws do not apply.

Methods for Digital and Intellectual Property Protection:

By identifying and securing the content, limiting access, preserving the integrity of the work, and ensuring payment for access, digital rights management (DRM) technologies, also referred to as electronic rights management systems, ensure copyright. DRM technology blocks unauthorised users from accessing the content. User identification and passwords, as well as licence agreements, protect access. Technical protection measures are yet another technique to safeguard digital assets (TPM). These technologies assist publishing firms in safeguarding and preventing unauthorised usage of content including music, text, and video. If an author wishes to charge for the usage of their work, DRM technology can be used. TPM and DRM technologies are being used to sell and distribute an increasing amount of content online. Cryptography: Cryptography is the most established technique for ensuring the security and

privacy of data transferred through networks. Only the authorised user is able to decode the information since it has been scrambled (or encrypted) to make it obscure or challenging to interpret (or decrypt). However, encryption only protects the work during transmission or distribution. The job provides no defence once it has been figured out.

Using digital technologies, watermarking

A watermark is a digital signal or pattern inserted into a digital document. It looks similar to the electronic on-screen emblem used by TV broadcasters. A unique identifier is used to identify the work. The message may contain information about ownership, sender, recipient, etc., as well as information concerning copyright licence. The system consists of a watermark generator, embedder, and watermark detector decoder. The authorised user can delete these watermarks using a pre-set technique. Watermarking technology is frequently used to protect multimedia creations.

Using digital signatures

A digital signature includes, among other things, details about the sender, the recipient, the date, the time, and any unique codes. This information may be included in digital items. Digitally bound and marked software is made ready for distribution to a particular customer. Digitally signed fingerprints guarantee a document's validity and prevent unauthorised copying.

Electronic Marking:

With this method, the system creates a special mark that is automatically linked to each copy of the document. In electronic publication, where papers are printed, duplicated, or faxed, this method is employed to preserve copyright.

Challenges due to Infringement of IPR

As a signatory to the Accord on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and a member of the World Trade Organization, India is expected to harmonise its intellectual property laws with the TRIPS agreement. Making laws is difficult, but so is putting them into practise since the Indian government must find a balance between the demands of the populace and the rights of patent holders. Given that foreign companies file the majority of India's patent applications, the subject has grown even more delicate. For instance, the number of applications submitted by foreign applicants was more than double (32,304) those of Indian

nationals, according to data from the Indian IP office's annual report for 2017–2018.

Indian Patent Rights Issuance and Protection Challenges

The Indian Patent Demonstration has explicit arrangements, covered under Segment 3, that make the patentability of an innovation connecting with topic, for example, a) subordinates of a drug; b) patentability of foundational microorganisms; c) symptomatic techniques and packs; d) secluded DNA groupings; e) PC related creations, and so on non-patentable topic. These arrangements are notwithstanding the worldwide patentability necessities for creations to have oddity, imaginative step, and modern appropriateness. These inventions are subject to a higher standard of inspection and scrutiny as a result. Although the Indian Patent Office has released guidelines regarding the patentability of software, biotech, and pharmaceutical inventions, patent holders nevertheless face the actual difficulties listed below:

(a) Inventions relating to computers: Patentability of algorithms or computer programmes as a whole is prohibited by Section 3(k). All computer-related inventions by default face this issue. With several controllers (at the patent office) formulating their own opinions regarding the necessary hardware and whether it must satisfy the patentability requirements, the result in such cases is inconsistent.

(b) The capacity to patent medicinal substance derivatives: The patentability of a pharmaceutical compound's derivatives is constrained by Section 3(d). To get over Section 3's barrier, a derivative must have a materially different level of therapeutic efficacy from the original drug (d). The Section 3(d) objection should, theoretically, only be brought up for derivatives of pharmaceutical substances, according to the justifications and judicial rulings. Even in the case of novel compounds, the issue is generally made for all applications involving pharmaceutical medications.

(c) The ability to patent in the field of life sciences and biotechnology: Because in-vitro diagnostic kits and procedures fall under the category of diagnostic/treatment methods, the life sciences industry faces challenges regarding the patentability of these products. Additionally, isolated DNA sequences are the focus of criticisms for failing to meet the novelty criteria. Therefore, the patentee encounters difficulties persuading the controller of the subject matter's patentability under such circumstances. India's Difficulties in Enforcing Patent Rights

In India, civil courts can be used to enforce patent rights. There aren't any specialised IP courts established up to handle cases, though. Some of the notable difficulties are:

(a) The backlog and the timing of the decision: The primary difficulty in enforcing patent rights is the length of time it takes for the court to reach a judgement. If the opposing

party challenges the validity of the patent, a patent case typically takes between five and seven years to reach a final verdict following a trial. Case management hearings and time-limited trials provided by the Commercial Courts Act aid in accelerating the procedure. The length of time it takes for a case to be decided, however, is influenced by the court's case backlog and the lack of judicial officers.

(b) Subject-matter authorities: The Indian Patent Act, Section 115, allows for the appointment of a scientific advisor to assist the courts in rendering judgments on technical issues. The courts have not regularly utilised the provision. The hiring of a technical specialist in patent infringement lawsuits will not only speed up the final decision process and aid to improve the quality of the result.

Favorable Developments

The Indian Patent Office's 2017–2018 Annual Report includes the following highlights:

- (a) 5.3% rise in filings from the previous year;
- (b) 108.2% rise in the examination rate;
- (c) 32.5% rise in the number of awarded patents;
- (d) The percentage of domestic patent applications filed increased to 32.5% from 29.2% in 2016-17.

Moreover, the recent changes in judicial doctrine imply that courts have begun issuing temporary restraining orders in patent cases. In the past, courts did not frequently do this because they believed that patent disputes were complex and so required a full trial. In the May 31 decision *Sterlite Technologies v. ZTT India Private*,⁴ the court deemed injunctions in patent infringement cases to be the "need of the hour" and granted the injunction in this case. The court stated: "The life of a patent is limited, and further considering the time taken to determine whether there is patent infringement, non-grant of interim injunction often result in, the defendant, even if ultimately found to have infringed the patent, continuing to reap fruitsof infringement until the said determination."

Further, in some of the cases before the defendant could release the product, the plaintiff has been granted temporary injunction. In *Bristol-Myers Squibb & Ors v. Mr. JD Joshi & Anr.*⁵ the Delhi High Court specifically made note of this in June 2015. The court stated: "The defendants have not released the product onto the market, and if they are prohibited from engaging in activities they have not yet started, no loss or irreparable harm will be caused to BDR

⁴ (CS [COMM] 314/2019, IA No. 8386/2019, IA No. 8389/2019 & IA No. 8390/2019)

⁵ IA No. 15720/2009 in CS[OS] No. 2303/2009 and IA No. 5910/2013 in CS[OS] No. 679/2013)

Lifesciences Private Limited.

Therefore, it can be said that innovations will be important as India works to become a USD 5 trillion economy by 2024–2025. The Indian government must make an effort to overcome the substantive and procedural difficulties faced by IP holders.

Conclusion

The use of digital information raises a number of problems, including the publication of individual articles rather than complete issues of electronic journals, user-friendliness, incompatibility of hardware and software, formatting, graphics, scholarly acceptance, and obsolescence. In addition to safeguarding publishers' copyright, it's critical to safeguard users' and libraries' interests as well. It might be challenging to define what is acceptable, to what extent, and what constitutes violation in a digital context. Fair use may allow for minor infractions as long as they don't interfere with the owner's rights. It can be challenging to judge, understand fair use, access, and manage copyright law violations in the context of digital material. An owner of copyrights can hardly ever tell who has utilised their creation. It is vital to change the copyright legislation in this situation. In a digital setting, librarians have a duty to gather information and make it available to readers, even if it is in an electronic version. The purpose of copyright protection should be to promote creativity rather than to obstruct the use of knowledge. The librarians ought to act as a hub for the free exchange of information between the holders of copyright and the information's consumers.

Way Forward

The overwhelming variety of alternatives for product distribution in today's digital world presents fresh, constantly evolving obstacles. Owners of physical objects and digital contents are consistently and adaptably protecting their products within the worldwide IP legal system. However, neither judicial procedures nor regulatory action will ever be able to keep up with the rate of technical development or the pirates who try to defeat it. It's important to keep in mind that IP protection is necessary to promote innovation and maintain the diversity of creativity when planning your digital transformation and to incorporate such protective measures into your strategy. However, given that the fundamental idea of intellectual property protection has been challenged in the sharing economy, politicians and business leaders alike should consider novel and creative ways to compensate creators in a way that deters the infringement of rights.

Additionally, the Government of India has taken action to improve the IPR regime in the nation as a result of IPR's impact there. The National Intellectual Property Rights (IPR) Policy, which

will serve as India's future road map for intellectual property, was approved in 2016. Among other things, it strives to raise awareness, encourage the development of IPRs, provide robust and effective IPR legislation, and modernise IPR administration.

In accordance with this strategy, the Cell for IPR Promotion and Management (CIPAM) has been established to streamline and simplify IP procedures as well as take action to increase IPR enforcement, commercialization, and awareness.

In India, where enforcement is lax and awareness is limited, protecting IPRs can be difficult. However, preserving copyrights, trademarks, and patents is essential for innovation and advancement. Even so, we still lag behind nations like China despite our remarkable advancement in the industrial, scientific, and economic fronts. A culture of invention and innovation will be fostered by effective IPR protection, which might help us quickly narrow that gap.
