



Impact Of Patent Protection On Indian Pharmaceutical Industry

Chahat Sahni Graphic Era Deemed To Be University, Dehradun – 248001, India.

Chirag Singhal Graphic Era Deemed To Be University, Dehradun – 248001, India.

Mitali Jain Student, Graphic Era deemed to be University, Dehradun.

Mayank Nautiyal Assistant Professor, School of Management, Graphic Era Hill University, Dehradun.

ABSTRACT

(TRIPS) The agreement on trade-related intellectual property rights, which being overseen by WTO, enables the protection of hidden information, integrated circuit layout designs, industrial designs, and traditional knowledge, as well as the recognition of patents, copyrights, trademarks, geographical markers, and other intellectual property rights around the world. A brief history of intellectual property rights in connection to the Indian pharmaceutical industry is provided in the current article. It is said that the 1970 patent policy's impact on Indian business was a revolution for the country's economy. There is a brief discussion about compulsory licencing. Finally, the Indian pharmaceutical market is used to discuss trademarks as intellectual property rights.

Keywords: Keywords: Patents, Trade Related Intellectual Property Rights, Compulsory Licensing, Trade Mark, Indian Pharmaceutical Sector.

INTRODUCTION

The Trade Related Intellectual Property Rights Agreement (TRIPS), a WTO agreement, describes the framework of intellectual property laws that are currently accepted on a global level These include industrial designs, trademarks, copyrights, patents, geographic markers, and the protection of confidential information. Another intriguing area of protection for In India, traditional knowledge is defended as intellectual property. All technological advancements that are original, incorporate a novel step, and have the potential for industrial application are eligible for patent protection. the World Trade Organization claims (WTO Agreement), which was developed on 15th April, 1994. There are benefits and drawbacks to agreements regarding features of intellectual property rights that pertain to trade.

A patent is an exclusive right that the government grants to the inventor or to someone who claims to be the true and first creator (or the discoverer of a new process) of an invention, often for a specific amount of time.

(PTO) The Patent and Trademark Office grants the inventor a property right when it grants a patent for an innovation Patents provide legal protection for inventions that, when compared to prior work, are not immediately apparent, neither are in the public domain nor have they been made public anywhere in the world yet. The invention must perform a useful purpose. Patents may be registered at any country 20 years following the date application o patent was submitted, or, According to the patent holder, registration confers the right to prohibit anybody from creating,

using, selling, or importing the invention in extraordinary circumstances after the date an earlier related application was submitted. Court actions being used to enforce patents. Additionally, the Regulation on Supplementary Protection Certificates (SPCs) allows pharmaceutical and plant goods to receive "patent extensions" of up to 5 years, giving originator medicines a maximum patent life of 25 years.

Patents on living things, often known as bio-patents, are defined as covering both plant and animal species as well as associated biological and biotechnology-enabled inventions.

Background information on Indian IPR history

The agenda of India's 1950 patent policy was to promote domestic drug development. In 1950, a foreign multinational produced all of India's medicine supplies. More than 90% of the Indian pharmaceutical market was under the control of foreign multinational corporations, which influenced medicine availability and supply. For a higher price, drugs were produced outside of India and imported. The cost of medicines was among the highest in India. The cost of pharmaceuticals was so expensive that India was noted as one of the countries with the highest drug prices worldwide by a committee of the US Senate chaired by Senator Estes Kefauver in 1961.

In the same time frame, the Indian government created its own five-year development plan. According to statistics, only 6.6 percent of the total national income was derived by industries. Only 8% of all laborers were employed in industrial establishments. 5.1% of all deaths were caused by epidemic diseases. India was noted as having the highest reservoir of epidemic diseases in the first five-year plan. In India, poverty was also at its worst. The cost of pharmaceuticals was out of reach for about 50% of India's people, who were also poor. As a result, both the life expectancy and the incidence of disease-related death were exceedingly low. Since India has domestic manufacture of bulk pharmaceuticals, the central government imported the necessary medications under the 1940 Drugs Act.

The Indian government, unable to regulate the cost of medications, took two important actions to fix the problem. First, the government established a plant to produce penicillin and other medicines by signing a contract with UNICEF. As a result, Hindustan Antibiotic Limited was founded in 1957 to produce medications at a lower cost for the general populace. Next, in 1957, the government established the Judge Rajagopala-Ayyangar Committee to make recommendations for changes about copyright rule to accommodate business interests. Main objective The committee's goal was to make sure that India established domestic viable pharmaceutical market. In 1959, Committee submitted their report..

The study concluded about copyright codification needs a distinct mandate. The Ayyanger committee had to follow the Indian constitution's guidelines when making its recommendations. Every person has the right to life, which includes the right to health, as stated in Article 21 of the constitution. Social and economic rights must be balanced in legislation, according to the preamble of the Constitution. Therefore, while changing the patent laws, economic interests must be evaluated against public health considerations. The Ayyanger report claims that a patent system that grants unfettered monopoly will deny access to medicines to a sizeable division of India's population.

This analysis came in the conclusion which is the preamble of the Indian Constitution would be broken by a policy granting unrestricted monopoly powers. The investigation contrasted the patent regimes in the US, the UK, and Germany and came to the conclusion that Germany's lenient enforcement of patents encouraged the growth of the chemical industry. As a result, the paper advocated for drug process patenting and a compulsory licensing scheme. In 1972, the guidelines and the statute based on the Ayyanger report went into effect.

In 1970, the Drug Price Control Order was also adopted because health care was a top priority. The

judgment strengthened the mandatory license rules in Indian law by giving the government control over medicine pricing. The Indian government put the majority of pharmaceuticals under price restriction after passing the Drug Price Control Order.

India continues to bear the financial burden of the 1970 patent policy. Now reluctant to sell in India are once-dominant global firms. By 1997, less than 30% of bulk products and 20% of locally created formulations were being used. . were generated by international corporations. The bulk of international businesses consolidate in a very less demand required for continue existence in the Indian market as they awaited greater patent protection. ((For instance, creating simple formulations from imported bulks) . In response, the government gradually loosened its grip on medicine price regulation. Most medications were under price control in 1970; by 1984, this number had dropped to 347 medications; by 1987, it had dropped to 163 medications. Only 73 medications were still subject to price controls in 1994. In 1978, the drug policy was formed.

The discussion centered on the Indian Drug Manufacturers Association at Paris Convention in 1986 when India was considering ratification before India eventually caved to tremendous international pressure, illustrating the risks of doing so. It was said that the courts gave the IDMA a lot of support at the time, as well as guidance from retired justices.

India vehemently opposed the GATT agreement's TRIPs component, particularly the provision for product patents on medicinal inventions. Indira Gandhi said, Speaking to the Society Health Assembly in 1982, he stated, "The vision of a better-ordered world is one in which medical discoveries would be free from patents and in which there would be no profiteering from life and death." India needs to evaluate the value or cost-benefit of this decision because, while reluctantly, it agreed to implement pharmaceutical product patents in 2004 after signing the pact.

The transformation of the Indian pharmaceutical industry

India's patent policies helped it grow become a significant global player in the generic pharmaceuticals sector. India's situation was drastically altered by the 1970 patent policy. The Indian pharmaceutical sector is now worth USD 70 billion, although it was only worth USD 2.1 million in 1970. In India, there are currently 24000 licenced pharmaceutical businesses. Approximately 425 of the 465 bulk medications used in India are produced there. In the manufacture of various mass pharmaceuticals, Indian business is become a world power in its field. When it comes to manufacturing bulk medications like sulphamethoxazole and ethambutol, Indian industry has taken the lead. Almost half of all production in the globe comes from India. Within the next few years, a number of businesses, including Lupin, Dr. Reddy's, and Sun, have a chance to be worth a billion dollars.

In addition to creating its own pharmaceuticals market, India became a significant contender of the global market for generic medications. During the Anthrax crisis, the United States contemplated importing low-cost generic medications from India. In the South African AIDS crisis, India appear as a dependable international trader of generic AIDS medications.

Other instances include the price of ciprofloxacin in India eight years ago, which was Rs. 27 (60 cents) a tablet. Ciprofloxacin is now priced at Rs. 1.50. Domestic pharmaceutical companies sell the Ciprofloxacin's generic version at very low prices in Southeast Asia, the Middle East, Brazil, Russia, and Brazil.

Only 30% of Indians have access to contemporary pharmaceuticals, despite the vigorous the growth of the country's pharmaceutical sector. Our country must continue to adhere to the pre-TRIPS patent regime till the entire population gets access to medications.

Developing nations are required by TRIPS patent policy to exclusively grant product patents. Since developing nations do not use process by product claims, novel processes will not be able to obtain patent protection in these nations. As a result, inventions that use a method by product claim and

are patentable in developed countries will not be covered by developing country patent laws that comply with TRIPS. In developing countries, several generic medications that are patentable in industrialized countries employing a process by product claim are not protected.

The Uruguay Round of the GATT Treaty's intellectual property component, or TRIPS, has sparked a contentious discussion between industrialized and developing nations (LDCs). In the developed world, business interests reported severe losses as a result of their technologies being copied and used in LDCs. Additionally, they claimed that IPRs will help developing nations like India by promoting international investment, facilitating technology transfer, and fostering more in-country (R&D). On the other side, the LDC governments were concerned about the rising costs that more robust IPRs would entail as well as the potential harm that their introduction may cause to emerging high tech businesses.

Exclusive marketing rights (EMR), according to Indian pharmaceutical makers, are much more restrictive than the regime governing product patents and will ultimately destroy the domestic pharmaceutical industry. They argued that multinational pharmaceutical firms will be granted exclusive rights to commercialize in our country before having to take an Indian test. Domestic producers believed that Exclusive marketing rights prevented global multinational corporations from capturing the market. The largest barrier to the EMR legislation's implementation,

meanwhile, was concern over a significant rise in drug prices. Additionally, it was believed that Indian pharmaceutical firms might go out of business.

Indian IPR's current status

The 1970 patent policy gave consideration to the underprivileged in India. India currently has among of the lowest drug prices in the world, making them accessible to the general public. The cost of pharmaceuticals produced in India is typically 100% less than that of the identical drug produced in the United States. By establishing a more sale cost where as yet dropping a respectable marginThe Indian government has achieved the social and economic balance required by the constitution.

TRIPS makes an effort to reconcile the enduring social goal to offering payout to potential upcoming ideas and creations with the express purpose of enabling people to utilise inventions and creations already made.

The Paris Convention's main provisions are highlighted by TRIPS, and its members are obligated to abide by them in the event of patents. Both national and most-favored-nation treatment must be used. which is crucial for the pharmaceutical and biotechnology industries because many member states did not allow for the patentability of their products.

The 2001 Doha Declaration on TRIPS and Public Health, which was amended and clarified, increased the freedom for pharmaceutical patents. The improvement was implemented in 2003 with a decision allowing nations unable to manufacture their own medications to import pharmaceuticals developed under mandatory licencing. Members of the TRIPS Agreement decided to permanently modify this choice in 2005.

A procedure or a product may be the subject of a patent. A product or a process could be covered by a patent. Whenever a process is involved, the patent solely pertains to the method of production and not the final product. To create relevant to chemical processes, food, medication, and medication, statute solely grants process patents. The implication is that for inventions falling under the above-mentioned group, Patents can only be issued for production techniques or procedures. The same product might be covered by a new method patent by altering the process.

Patenting: While allowing for some exclusions, WTO members are required to grant Any invention

is protected by a patent, regardless whether be finished good (like a medication) or method (like as process for making the chemical elements of a drug).

In addition to outlining the rights that Members are obliged to protect, the TRIPS consensus is significant for providing a thorough description of the national civil and criminal processes that would be used to uphold those rights.

The capacity to patent inventions

Under TRIPS, a wide range of subject matter is

patentable. All inventions in all technological fields, including pharmaceuticals, whether they be products or processes, "must be available" for patenting. Member nations are now required to grant items and innovative processes patent protection. In order to comply with the rules of industrialized nations, this development will generally impose stricter definitions of what qualifies as a patent on less developed countries.

For example, Pharmaceuticals were not given product patents by India.. Only process-related patents were permitted. Due to the rules in India, virtually every foreign drug was reverse-engineered without concern for legal repercussions, resulting in a robust generic drug sector. This practice influenced the pharmaceutical industry significantly sector, US made it a major priority during the TRIPS negotiations to have poorer countries stop this habit. However, because they lacked the necessary infrastructure to put this standard into effect, poorer nations resisted its stringent imposition. As a result of their efforts to reach a compromise, According to Article 27:1, "Subject to the provisions of Paragraphs 2 and 3, All technological innovations, including items and processes, are eligible for patent protection as long as they are novel, include a creative move, have potential for commercial use. Patents shall be granted and patent rights shall be enforced without regard to the location of the invention, the field of technology, or whether a product is imported or produced locally, subject to paragraphs 4 of Article 65, 8 of Article 70, and paragraph 3 of this Article.

US would finally receive the level of protection it demanded, but it would happen gradually.

Both emerging and less developed countries benefited from compromise. India and other developing nations has till 1 January, 2005, and the least developed nations have until January 1, 2015, to completely put into action all of TRIPS rules. Developing nations received a five-year grace time to put the agreement into effect and an additional five-year window to grant product patents to technologies for which they had not previously been granted. However, they were required to offer EMR to pharmaceutical companies. This essentially grants a drug five years of national marketing exclusivity, or until the product patent is authorized or revoked, whichever happens first. As a result, businesses that create such technologies are able to submit patent applications in developing nations before those nations fully apply the TRIPS regulations. The filing date may also be used by applicants to establish priority. The innovation must be protected by a patent under TRIPS even though a patent cannot be issued until the end of the grace period, for the balance of the patent term, calculated from the filing date.

As long as certain requirements are met, governments are permitted to restrict the use of patent rights under the TRIPS Agreement. The exclusions, for instance, must not "unreasonably" contradict with how the invention is typically used.

Members might also not be subject to patent protection.

- (a) Techniques for diagnosing, treating, and operating on either humans being or beast;
- (b) Plants and animals other than microorganisms, and primarily biological processes other than

non-biological and microbiological processes for the development of plants or animals. Members must, however, make provisions to the preservation of types of plants, whether for the use of inventions, a robust sui generis system, or any two of them. Four years following the WTO Agreement's entry into force, the clauses of this subparagraph must be reviewed.

This clause is employed by several nations to improve research and development. They permit the utilize of a copyright the creation of analysis purposes to be able to better comprehend analysis. Additionally, some countries let manufacturers of generic medications to make use of proprietary technology to obtain selling authorization—for example, from public health authorities—without the owner's consent and prior to the patent's expiration. when the patent expires, the manufacturers of the generic equivalents can start selling them. This clause is also known as the "Bolar" clause or the "regulatory exception."

In a WTO dispute decision, this was confirm to complying by virtue of the TRIPS consensus. A World trade organization wrangle settlement panel found that by permitting manufacturers to do this, Canadian law complies with the TRIPS Agreement, according to its report adopted on April 7, 2000. "Canada- Pharmaceutical Products are Protected by copyright " was case's title.

The act of a government granting another party a licence to use a copyrighted good or method without the patent holder's consent is known as compulsory licencing. This is frequently related to medicines in the media right now, but it could also be said of patents in any industry.

In an effort to find a balance between promoting the development of new pharmaceuticals and facilitating access to those that are already on the market, the agreement permits compulsory licencing. The TRIPS consensus does not, however, refer to "compulsory licensing." Instead, the title of Article 31 contains the phrase "other use not expressly authorised by the right holder." Mandatory licencing is merely a portion of this, given that "other use" includes use by governments for internal purposes.

WTO member nations emphasized the need to execute and apply a reading of the TRIPS consensus that improves promotes public health by promoting access to already available medications or development about novel medications in the major Doha Ministerial Declaration of November 14, 2001. As a result, they decided to adopt a separate TRIPS and public health declaration. They agreed that the TRIPS Agreement shouldn't restrict governments' power to intervene to protect the public's health. It focused on the ways that countries could leverage the TRIPS Agreement's built-in flexibility, such as parallel importing and compulsory licensing. And they concurred to extend until 2016 the exceptions for least-developed nations from the application of pharmaceutical patent protection.

Products created by forced licensing must be "primarily as a means of supplying the local market," according to According to TRIPS Agreement Section 31(f),. When a medicine is produced with a compulsory license, this restriction only applies to nations that are allowed to manufacture it. Additionally, it affects nations who are unable to manufacture drugs and wish to import generic versions. It would be challenging for them to locate nations that might provide them with medicines produced under mandatory licensing.

WTO members agreed to legislative changes on August 30, 2003 that would make it easier for countries to import less expensive generic drugs created under compulsory licensing if they are unable to produce the medications themselves. This fixed the legal issue for exporting nations. A statement summarizing members' common perceptions on how the judgment will be viewed was also read by the General Council chair carried out after the members had reached agreement on it. Governments need assurances from this that the choice won't be misused. Three waivers are really included in the judgment:

- To meet the demands of importing nations, any member state may export generic

pharmaceutical items created under licences that are mandatory. Duties imposed by Article 31(f) on exporting nations are not applied.

- In order to prevent double payment, the importer waives its payment obligations under compulsory licencing to the patent holder. Only the export side is required to pay back.
- Export limitations for developing and least-developed nations are lifted so that they can export inside a regional trade agreement when at least half of the members were classified as least-developed countries at the time of the decision. One way that economies of scale can help emerging nations is in this situation.

The importation of pharmaceutical products is subject to carefully negotiated conditions. These requirements are meant to prevent patent systems, particularly in wealthy nations, from being undermined while beneficiary countries import the generic medications. They contain safeguards against the drugs being redirected to unsuitable markets. Furthermore, although WTO permission is not necessary, they demand that nations utilizing the structure inform all other participants whenever they do so. Included are wording like To keep the criteria from becoming onerous and impractical for the importing nations, they must "take suitable steps within their means" and "proportionate to their administrative capacities."

TRADE MARKS

The symbol, cognate, forms, famous personality identity, or slogan are examples of symbols that can be utilized to give a good or service a distinctive name and set this apart to rival offerings. Pharmaceutical brands, among others, have their own marketing identities protected by trademarks. They are eligible for use of the symbol if they are registered on a national or worldwide level. Through legal actions with the possibility of injunctions and/or damages, trademark rights are enforced. Authorities like Customs, the police, or consumer protection may be able to help in cases of counterfeiting. The initials TM are placed after a trade mark that is not registered. If a rival uses the same name or one that is similar to conduct business in the same or a related industry, this is enforced in court.

The only difference between a service mark and a trademark is that a service mark is used to identify and distinguish the supplier of a service rather than a product. The phrases "trademark" and "mark" are typically used to refer to both trademarks and service marks. While trademark copyrights can be used to stop others from using a mark that is confusingly similar to one's own, they cannot be used to stop someone from producing or making the same products or services available for sale under a mark that is distinctly different. For instance, before making a decision in the pharmaceutical sector, judicial takes into account variety of drug, the buyer, or other factors. Diclomol was utilised by the plaintiff When Win-Medicare Ltd. against DUA Pharmaceuticals Pvt. Ltd. and Dicamol which is the accused. Judiciary determined about the two goods were comparable and took into account fact which is medications will available over-the-counter. As a result, the use of the trademark has been restricted because these medications can be purchased over the counter by customers who lack literacy.

Similar to this, the Delhi High Court ordered Apar Pharma of Hyderabad and Cyper Pharma of Delhi not to use the word "CrocineX," ex-prate injunction granted to SmithKline Beecham Ltd, the registered owner of the mark Crocin. It was hoped to use both marks about tablet of paracetamol. According to the judicial, wording was to close so there were an intentional attempt to deceive the public.

On the other hand, Calida claimed about **Zexate** were misleadingly same as **Mexate** to regard to specific Cancer-treating injection in Calida Lab v. Dabur Pharma Ltd. The Court's rulings were solely based on the ground that the pharmaceuticals was specialty medications that perhaps only obtained with a prescript from a an expert in cancer. The court decided about trademarks can be

used because this is believed that the recommendations were written through specialized physicians that were informed and able to differentiate the identity.

The same reasoning was used in the legal dispute between Biofarma and Sanjay Medical Store; issue concerned two drugs prescribed for heart disease, **Flavedon** and **Trivedon**. The Drugs and Cosmetics Act's designation of the drug as a Schedule H substance, which prevents over-the-counter purchases, was given weight by the court. According to the same reasoning used in the aforementioned instance, the court decided that the two medications did not necessarily need to be judged to be deceptively similar.

Both businesses the parties in the case of Biochem Pharmaceutical Industries v. Biochem Synergy Ltd pharmaceutical and medical goods sales sector. Biochem Pharma, however sold prescription drugs in strips of ten that are available at chemist or druggist, Biochem Synergy dealt in bulk medications. In this instance, it was stated that the word Biochem was not distinctive because it was a combination of BIO and CHEM. The court found that Biochem Pharma had registered the word Biochem and that the business had 28 trademarks that started with that name. Additionally, Biochem Pharma earned a reputation due to its 35 years in the industry. The court ruled that Biochem Synergy must stop using the phrase "Biochem" in order to prevent consumers from being unnecessarily turned away.

The Indian Supreme Court of recently examined topic about international standing in Allergen Inc. v. Milment Optho. Ocuflux was a trademark of Allergen Inc, which has filed registrations for it in more than nine other nations. In India, Allergen had submitted a trademark registration application. It claimed that Milment Optho, a company that also produces The same trademark was being used for related goods in India for eye care items. A temporary order forbidding Milment from using the brand had been issued by the Single Judge of the Calcutta High Court; however, it was overturned after hearing from the Indian Company. The Supreme Court heard the appeal for the case. The Division Bench of the Calcutta High Court made certain comments that the Court took into consideration. The Calcutta High Court stated that because of increased travel and advertising in India, these international brand names were no longer foreign to Indians. In the end, Milment made a name change request to the Supreme Court.

However, the idea of non-use will still apply if the owner does not use the trade mark for the amount of time stipulated by the Act, and the applicant may, on this basis, seek to have the registration stricken from the register. However, if the trademark registration is a defence registration, this idea cannot be used. Even very well known trademarks are subject to this rule.

The Registrar shall consider a trademark's recognition or knowledge to a comparable segment, incorporating information obtained in India as a result of the use of the trade mark, when deciding whether or not it is widely recognized. The Registrar will also take into account the length of time, scope, and region in which the trademark has been used, promoted, and published, additionally the history of successfully enforcing trademark rights. Additionally, the modification for recognizable brands has global repercussions.

CONCLUSION

To evaluate the effects of the establishment of pharmaceutical patents in India, it is important to consider the following facts: 1) Consistent rate of economic growth in India, 2) an increase in income, 3) growing insurance usage across the board, mostly later enabling private players to participate, 4) Price increases and demand sensitivity brought on by the adoption of patents are meaningless for India's 60% of "poor," who do not already have access to medications. Thus, the new regime will only have a little impact on a portion of the market. 5) The administration in charge of India is more reliant on populist tactics to stay in power, which would guarantee that the population's best interests are kept in mind without yielding too much to external influences.

Overall, with the inherent costs being minimized by a number of reasons, Under the new patent system, India stands to gain more.

REFERENCES

1. G.S. Srividhya, Introduction to IPR and Patent, Module-2.
2. Adams plucks Patent & Trademark Attorneys, <http://www.adampluck.com.au>
3. G.S. Srividhya, Introduction to IPR and Patent, Module-1.
4. History of Indian Patent System; <http://www.patentoffice.nic.in/ipr/patent/history.htm>
5. A. Kumar, Legal Service India.com
6. European Generic Medicines Association, Data Exclusivity <http://www.egagenerics.com/gen.research>
7. European Generic Medicines Association, Evergreening and Pharma Research Costs, <http://www.egagenerics.com/gen.research>
8. S. Jayaswal, Extension in Term of Pharmaceutical Patents, Findlaw Australia.
9. Business Line, Financial Daily from THE HINDU, 2005 October 18.
10. R. Krishna, Unctad: the financial Express, April 8, 2005.
11. Patent Act 1970, supra note 3, section 135
12. A. Shamsi, Indian Pharmaceutical Industry, Issues and strategies in the Post-GATT/WTO Era, <http://www.pharmalliance.net/seminardetails.html> (April 10, 2003).
13. H. Redwood, New Horizons in India: The consequences of Pharmaceutical Patent Protection (Suffolk, UK: Oldwicks Press, Ltd., 1994).
14. B. Subramanian, K; Access to medicines and Public Policy Safeguards under TRIPS; Multi stakeholder dialogue on Trade, Intellectual Property and Biological Resources in Asia, Bangladesh, April 19- 20, 2002