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THE CLIMATE CRISIS AND PATENT MONOPOLIES: REASSESSING COMPULSORY LICENSING FOR GREEN TECHNOLOGIES UNDER THE TRIPS FRAMEWORK

~ *Biswarup Saha*

ABSTRACT

The increase in global climate crisis requires rapid distribution and adoption of climate change mitigation technologies which are blocked from being transferred to the growing and developing nations across the world due to patent monopolies established by the World Trade Organisation's Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. This research article offers a clear legal and policy analysis of the conflict between the international patent protections and the Global South's urgent need to access climate technologies through the method of compulsory licensing. This analysis evaluates using provisions under Article 31 of the TRIPS Agreement and Section 92 of the Indian Patents Act, 1970, which allows domestic manufacturers to utilise foreign-owned green patents without the need of express consent. This article also explores the conflict between the transfer goals of the United Nations Framework Convention on Climate Change (UNFCCC) technology and enforcement of TRIPS, the objections regarding undisclosed trade secrets, the concentration of green patent ownership, and the effect of Investor-State Dispute Settlement (ISDS) lawsuits. At the end, this article recommends a binding 'Doha Declaration on Climate Change' to achieve global trade law alignment with the urgent need for mitigating climate change through technology.

INTRODUCTION

Moving towards a global low-carbon economy depends on rapid adoption of green technologies, like the advanced solar panels and carbon capture systems. However, international intellectual property (IP) laws create a major obstruction in sharing these technologies fairly across the nations because while patents encourage research by giving their inventors and owners temporary monopolies, these monopolies let the owners of the patents control prices and licensing. As a result, these green technologies are often priced too high to be afforded by developing and least-developed countries, preventing the society from fully utilising vital climate innovations. This paradox highlights a clash between two major hands of international law.¹ On one hand, the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement create binding obligations on their parties exclusively the developed nations of transferring technology to the Global South to meet global climate targets.² On the other hand, the World Trade Organisation's (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement enforces strict standards for patent protection.³ Therefore, though the developing nations are pressured to reduce carbon emissions, yet they are legally blocked by patent rules from accessing the technologies necessary to decarbonise.

The policymakers in the Global South are looking at compulsory licensing as a method of overcoming this paradox. Compulsory licensing allows a government to authorise someone else to create or sell a patented invention without the owner's express permission, provided that the owner receives fair payment of it. While this method has accomplished providing access to life-saving medicines, its use for green technologies is yet to be tested.

THE INTERNATIONAL FRAMEWORK: TRIPS, CLIMATE LAW, AND COMPULSORY LICENSING

Before the enactment of the TRIPS Agreement, the developing nations could form their own patent laws which frequently excluded essential sectors like medicines. However, the TRIPS Agreement removed this flexibility by introducing Article 27.1, under which member nations are mandatorily allowed patents for any invention in all the fields of technology, provided that

¹ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement].

² United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107 [hereinafter UNFCCC].

³ Carlos M. Correa, Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement (2d ed. 2020).

the invention is absolutely new, novel, and useful for the public.⁴ This flexibility ensures that countries cannot exclude green technologies from being patented. Article 28 of the TRIPS Agreement allows the Global North patent holders to control how green technologies are distributed across the nations, thereby concentrating power among a few multinational corporations. However, the TRIPS Agreement contains public interest safeguards, like Article 7 which states that IP enforcement should help transfer the technology and promote social welfare as objective.⁵ Article 8 also allows member nations to adopt measures for protecting the public interest. Thus, this balance between patented technologies being distributed for adoption as well as protecting the public interest is achieved through the flexibilities introduced by the TRIPS Agreement, the most powerful being the compulsory license.

The UNFCCC held in 1992 and the 2015 Paris Agreement impose binding commitments on member nations to limit rising global temperature^{6,7} by implementing a framework whose goal is "common but differentiated responsibilities", meaning that the developed nations, which have caused historical emissions, also have the resources to fix the problem. So, in accordance with Article 4.5 of the UNFCCC and Article 10 of the Paris Agreement, developed nations are required to share technology with the Global South.⁸ Meeting Paris Agreement's targets requires rapid transfer of the green technologies,⁹ but this is blocked by the privatised IP rights held by the owners of the patents. While Article 66.2 of the TRIPS Agreement requires developed nations to encourage technology transfer to the least-developed countries,¹⁰ compliance with such provisions usually involves reporting restrictive, voluntary licensing agreements that exclude the newest innovations.¹¹ And when voluntary licensing fails due to high fees, developing nations must either abandon the established climate goals or use compulsory licensing.

The legal mechanism to bypass patent monopoly is Article 31 of the TRIPS Agreement, which makes compulsory licensing legal and includes rules to protect the patent owners.¹² Under

⁴ Daniel Gervais, *The TRIPS Agreement: Drafting History and Analysis* (2d ed. 2003).

⁵ TRIPS Agreement, *supra* note 1, at art. 7.

⁶ UNFCCC, *supra* note 2.

⁷ Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

⁸ UNFCCC, *supra* note 2, at art. 4.5; Paris Agreement, *supra* note 8, at art. 10.

⁹ Intergovernmental Panel on Climate Change [IPCC], *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (2022).

¹⁰ TRIPS Agreement, *supra* note 1, at art. 66.2.

¹¹ Brook K. Baker, *Arthritic Flexibilities for Accessing Medicines: Analysis of WTO Action Regarding Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, 14 Ind. Int'l & Comp. L. Rev. 613 (2004).

¹² TRIPS Agreement, *supra* note 1, at art. 31.

Article 31(b) of the TRIPS Agreement:

1. The applicants must try to negotiate a license on reasonable terms.
2. Any license granted cannot be exclusive.
3. Under Article 31(f), the technology has to be produced for the domestic market to prevent export exploitations by such nations.
4. Finally, under Article 31(h), the patent owner must receive adequate payment.

While these conditions make the process of standard compulsory licensing slow, Article 31(b) includes a crucial exception which states that the requirement to negotiate first can be waived "in the case of a national emergency or other circumstances of extreme urgency".¹³ However, the TRIPS Agreement leaves "extreme urgency" undefined, leading to the argument by the developing nations that the catastrophic impacts of climate change meet this definition, which allows governments to waive the negotiation period and immediately issue compulsory licenses for the patents.

During the HIV/AIDS epidemic, the developing nations relied upon the *Doha Declaration on the TRIPS Agreement and Public Health*, enacted in 2001, to lower the cost of patented life-saving medicines.¹⁴ This declaration clarified that the TRIPS Agreement should not prevent members from protecting public health.¹⁵ In relation to that, Paragraph 5(c) confirmed that every WTO member nation can decide what counts as an extreme urgency. Therefore, legal experts argue that this reasoning applies perfectly to the climate crisis, because if a deadly disease justifies suspending patent monopolies to save lives, then climate change, which threatens planetary habitability, must also qualify for the same treatment under international trade law.

INDIAN STATUTORY CONTEXT AND OPERATIONAL BARRIERS

The Indian intellectual property system features robust compulsory licensing laws under the Patents Act, 1970, where under Section 83, a clear anti-monopoly philosophy has been established by which patents "are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article".¹⁶ It demands that the patent rights must assist in transferring technology and make the inventions available at "reasonably affordable prices to the public." This places a legal obligation on the foreign patent owners to contribute to the local economy. Section 84(1) of the Patents Act allows any person to apply for a compulsory license

¹³ *Id.* at art. 31(b).

¹⁴ Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2, 41 I.L.M. 746 (2002) [hereinafter Doha Declaration].

¹⁵ *Id.* at para. 4.

¹⁶ The Patents Act, 1970, No. 39, Acts of Parliament, 1970, § 83 (India).

only three years after a patent's grant expires, based on three specific grounds:¹⁷

- a. the public's reasonable needs are not met;
- b. the invention is not priced with respect to affordability; or
- c. the invention is not being worked on in India.

In *Bayer Corporation v. Union of India*, 2014, the Bombay High Court decided for India's first compulsory license, ruling that an affordable price meant what the public can pay instead of the patent owner's research costs, after Bayer charged an extremely high price for a cancer drug and refused to manufacture it in India. The court also confirmed that importing a product does not satisfy the requirement to work the patent locally.¹⁸ This precedent indicated that foreign companies that import expensive green technology into India have to comply with compulsory licensing.

While Section 84 of the Patents Act necessitates all private companies to extraneous legal compliance procedures, Section 92 of the Patents Act gives India's Central Government a faster administrative tool,¹⁹ where under Section 92(1), if the government decides that it is necessary to grant compulsory licenses during an "extreme urgency," it can issue an official notification. This allows the Controller of Patents to grant licenses immediately by skipping the mandatory negotiation period and standard hearing procedures.²⁰ Because India already has binding commitments to massive renewable energy targets, the climate crisis meets the requirements of Section 92, and provides authority to the government to call it an "extreme urgency".

In spite of having valid legal provisions to enforce the compulsory licensing of green technology in India, the data obtained from the Indian Patent Office shows a huge ownership of green technology patents by foreign multinational companies. Furthermore, even if a compulsory license is granted, there is the problem of dealing with operating complex technologies, which rely heavily on tacit knowledge and precise manufacturing steps protected as "trade secrets". Under Article 39 of the TRIPS Agreement, the member nations must protect its trade secrets.²¹ Thus, a compulsory license transfers only the patent rights not its trade secrets.

Compulsory licensing also invokes international investment law, because it exposes developing nations to Bilateral Investment Treaties (BITs) which treat intellectual property as

¹⁷ *Id.* at § 84(1).

¹⁸ *Bayer Corp. v. Union of India*, (2014) 60 PTC 277 (Bom) (India).

¹⁹ The Patents Act, 1970, *supra* note 17, at § 92.

²⁰ *Id.* at § 92(3).

²¹ TRIPS Agreement, *supra* note 1, at art. 39.

foreign investments, thereby giving foreign corporations access to the Investor-State Dispute Settlement (ISDS) systems. If the Indian government issued a Section 92 compulsory license under the Patents Act, then the foreign corporation would most likely file an ISDS lawsuit claiming "Indirect Expropriation" of the patents, arguing that the government ruined the patent's economic value without fair compensation. Therefore, there is a threat of invoking expensive ISDS lawsuits which impacts the developing nations from obtaining the patents and adopting the green technologies.

RECOMMENDATIONS

A 'Doha Declaration on Climate Change' as WTO's formal adoption of a binding multilateral declaration amongst the nations will help in disrupting the green technology patent obstructions while aligning international trade law with climate change, stating that mitigation of climate change's adverse effects qualifies as a "circumstance of extreme urgency" under Article 31(b) of the TRIPS Agreement. It would act as a shield from trade sanctions and weaken lawsuits in the ISDS tribunals by confirming that these actions are legitimate public interest measures.

Domestically, the Indian government should look forward to amending Section 92 of the Patents Act by listing mitigation of climate change as a valid reason for urgent compulsory licensing. Also, a special rule should state that any formal target set by India under the UNFCCC Paris Agreement automatically counts as an extreme urgency.

Beyond changing existing laws, the global IP system needs to shift towards adopting a compensatory liability regime for essential green technologies, where developing countries are allowed to automatically use patented green technologies and access necessary trade secrets without asking the patent holder for permission. In return, the user of the green technology patent would pay a fixed royalty fee. This system balances the need to financially reward Global North's research and development with the need to distribute and adopt green technology throughout the Global South.

CONCLUSION

The climate crisis is an unprecedented global emergency that needs to address strict global patent monopolies and limitation of unapproved technology use, which directly conflicts with the technology-sharing goals of the UNFCCC Paris Agreement. So, for the Global South countries, being blocked from access to advanced green technologies due to patent obstructions threatens the planet's ecological stability.

Fortunately, the legal mechanism to bypass these patent monopolies can be enforced, like

Article 31(b) of the TRIPS Agreement and Section 92 of the Indian Patents Act, 1970, offering a clear framework to issue fast-tracked obtaining of compulsory licenses during extreme urgency. Precedents in the public health sector have already proven that governments can successfully put the public interest ahead of patent exclusivity. To ensure planetary ecological stability, developing nations must utilise their domestic administrative laws to demand that technology transfer includes essential trade secrets, not just patent rights, and push for a 'Doha Declaration on Climate Change' to mitigate the climate crisis.