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# **PROFIT, PATENTS, AND THE PLANET: CHALLENGING THE IPR RESTRAINTS ON NORTH-SOUTH GREEN TECH TRANSFERS**

**Khushi Pamecha<sup>1</sup>**

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## **ABSTRACT**

An expanding common objective exists to reduce the consequences of climate change, yet a lack of balanced technological availability diminishes this drive. The Global North has the critical green technology required for addressing global carbon emissions, whilst historically, the Global South has been isolated from having the resources and legal framework to introduce and apply these technologies at a large scale. This paper titled "Profit, Patents, and the Planet" will address how the role of Intellectual Property Rights constitute a de facto structural barrier to equitable and efficient transfer of green technology.

This research paper will explore the concept of the IPR Paradox how the incentive theory of Intellectual Property Law calling for strong patent enforcement creates a disincentive to research and create the necessary green technologies by requiring such large investments of resources that only persons and corporations from the North will be able to invest in research and development and file patents on their inventions. Furthermore, while the international treaties governing the environment provide recognition to technology transfer, the enforceability of IPR under the WTO's Trips Agreement creates a patent lock that makes the development of green alternatives economically unfeasible for developing nations.

Further, the research highlights how certain legal obstacles, such as patent thickets, restrictive licensing clauses, and not having a functioning 'Compulsory Licensing' mechanism, all pose challenges to the transfer of climate technology to developing countries. By conducting a comparative analysis between North-South technology transfer agreements, this paper concludes that current international legal frameworks enable 'Green Colonialism' by keeping developing countries dependent on Northern proprietary norms.

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In conclusion, this paper provides a challenge to the status quo, by arguing for a radical re-alignment of the intellectual property rights regime as it relates to climate change. The findings of the paper suggest that without an international legal framework that values 'The Planet over Profit' through modifications to IPR restrictions, that the Paris Agreement's targets will remain geographically-based and unattainable for developed and developing nations alike.

**Keywords** - TRIPS Agreement, Green Technology Transfer, Climate-Responsive Jurisprudence, Compulsory Licensing, North-South Divide.

## **Introduction**

### **A. Background**

As of 2026, the "Green Divide" is no longer a theoretical projection; it is a visible geographic reality. While the Global North accelerates its transition toward decarbonization through heavily subsidized "Green Deals," the Global South remains trapped in a cycle of high carbon dependency and climate vulnerability.

The urgency is underscored by the 2026 Global Climate Risk Index, which shows that the 1.5°C threshold is effectively being breached. Despite the promises of the Paris Agreement, the diffusion of critical mitigation technologies such as ultra-efficient solar PV, green hydrogen electrolyzers, and advanced grid-stabilization software remains concentrated in a handful of high-income jurisdictions.

### **B. Statement of the Problem**

The core problem is that Intellectual Property Rights, once designed as a commercial incentive for innovation, have morphed into a structural blockade. In the context of a global existential threat, the traditional "exclusivity" model of patent law creates what this paper terms a "Patent Lock."

- **Exclusivity vs. Scale:** The 20-year monopoly granted by TRIPS is fundamentally incompatible with the 2030 and 2050 decarbonization timelines.
- **The Cost of Entry:** Southern firms are being priced out of the transition, not because of a lack of technical capacity, but because of the prohibitive costs of licensing fees and the presence of "patent thickets."
- **The North-South Stalemate:** The North uses IPR to maintain competitive industrial advantage, while the South argues that these norms constitute a new form of "Green Colonialism."

### C. Research Questions

1. To what extent do the mandatory patent protections in the TRIPS Agreement legally impede the "technology development and transfer" obligations codified in *Article 10* of the Paris Agreement?
2. Why has Article 66.2 of TRIPS the only mandatory provision for technology transfer failed to catalyze any meaningful manufacturing base in the Global South?
3. Can the "National Emergency" framework be jurisprudentially expanded to include the "Slow-Onset Disaster" of climate change to justify compulsory licensing?

### D. Methodology

This research paper utilizes a Doctrinal Research Methodology, the "nerve center" of legal scholarship. This involves a rigorous examination of the TRIPS Agreement (1994), the Doha Declaration (2001), and the UNFCCC/Paris Agreement (2015). Applying the Vienna Convention on the Law of Treaties to resolve the "normative conflict" between trade law and environmental law. Analyzing the divergent experiences of India and Brazil in navigating IPR barriers to extract lessons for other developing nations.

## The Jurisprudential Conflict

### A. The Incentive Theory

The foundation upon which the Global North's Intellectual Property System rests is the Incentive Theory, an economic principle which suggests that technologies will be developed when their developers are able to promise exclusive rights to sell their products on the marketplace. For the industrialized World and Multinational Corporations to develop green technologies, customers will need to invest significant amounts of money into developing new technologies through years of high-risk R&D expenditures.

Without a legal "monopoly" provided by a patent, the companies would experience a "Free Rider Problem". Competitors could take the finished product and make or produce it without incurring the initial R&D expenses associated with developing the original product. Therefore, if there is no patent, it is economically irrational for the company to make an investment in R&D.<sup>3</sup>

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<sup>3</sup> *The Nature and Function of the Patent System.* Journal of Law and Economics.

This legal model is referred to as the "Quid Pro Quo" system of patenting. A patent can be viewed as a social contract and operates under the assumption that:

- An inventor will give full disclosure of their invention, and thus, add to the global data bank of inventions.
- The Government will allow the inventor to sell this invention for a period of time equal to 20 years so that the inventor can recover their costs and gain profit.

Many proponents of this legal theory, notably the World Intellectual Property Organization (WIPO) and the United States Trade Representative (USTR), believe that reducing patent and/or trademark protection in the name of the "climate emergency" would actually reduce innovation levels.<sup>4</sup> They believe if private sector funding is to be provided for the "Green Revolution," there must be legal protections in place to ensure that "Green" remains "Profit."

### **B. The Global Public Good Doctrine**

The Green Technology Incentive Theory (GTIT) and the GPGD are two competing views about what constitutes 'green technology'. As we face an existential climate crisis, we have to decide whether the new technologies developed and produced through innovative processes should be considered private property or should be treated as global public goods that all countries share as the common heritage of mankind.<sup>5</sup>

The "Common Heritage of Mankind" (CHM) Analogy

The principle of "Common Heritage of Mankind" informs this argument in its conception of global atmosphere as "Common Heritage". Under this model, when one sees the atmosphere as belonging to all people, the idea of technologies required to save the atmosphere also being "owned" exclusively will create a legal bridge for how these technologies will be shared with all.<sup>6</sup> The Lockean view will therefore be challenged by the argument that property rights are not absolute but instead exist under a "Social Mortgage", or a belief that private property has an obligation to promote the common good.

### **C. The IPR Paradox**

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<sup>4</sup> *Invention, Growth, and Welfare: A Theoretical Treatment of Technological Change.*

<sup>5</sup> "Knowledge as a Global Public Good." In *Global Public Goods: International Cooperation in the 21st Century.*

<sup>6</sup> Principle 9 Rio Declaration on Environment and Development (1992).

IPR Paradox describes how patents can spur creating new technologies but are also limiting as they are basically barriers to improving these technologies. Particularly in the context of green technologies, such as solar cells, the sustainability aspects of patents are extremely problematic. While northern countries may have initial patent incentives (e.g., creating a solar cell), the high costs and complexity to license those patents will prevent southern innovators from making improvements, adapting, or localizing the solar cell technology.

### The Tragedy of the Anticommons

The Tragedy of the Anticommons is the focus of this critique. This theory originated from Michael Heller's research on the traditional concept of the Tragedy of the Commons; however, instead of having overexploitation because no one has access to or owns something, in an anticommons, too many people own overlapping pieces of a single source. For example, when a single green technology is protected by hundreds of overlapping patents, commonly known as a Patent Thicket, a Southern firm trying to create or manufacture this product locally will face navigating through a minefield of potential lawsuits, as well as the prohibitive cost of doing so due to continuing costs to multiple parties to obtain necessary licenses to patent thicketed items creates a chilling effect on innovations, as the financial and legal risks associated with innovating far exceed the potential rewards.

### **Blocking "Follow-on" Innovation**

Innovation isn't usually a single moment of inspiration, but rather an ongoing process of accumulation of ideas and development of successful products through trial and error; therefore, innovation occurs over an extended period of time. Secondary innovation is of greatest significance to developing countries because it enables them to take an invention developed by an<sup>7</sup> industrialized country and produce it at a lower cost, make it resistant to installation or use in a tropical climate, or make it compatible with existing local infrastructure.

The current IPR system creates long, rigid monopolies for products and services, thus "locking" into the northern-based technological solution.

### **The Clash of International Regimes**

Currently, the global legal system suffers from a conflict of regimes. On the one hand, the World Trade Organization has the force of sanctions and a solid enforcement mechanism to address

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<sup>7</sup> *"The Tragedy of the Anticommons: Property in the Transition from Marx to Markets."* Harvard Law Review. Heller, Michael A. (1998).

disputes relying on established monetary principles; whereas, on the other hand, the UN Framework Convention on Climate Change has resolution procedures primarily based on consensus among nations to promote voluntary compliance with commitments made in good faith.

This chapter will identify how the rigid application of intellectual property rights under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) effectively negate any expectation for technology transfer under environmental law. After demonstrating that while the international community has consensus around the urgency to assist in diffusion of "green" technologies in terms of global climate change, it imposes the opposite in terms of global trade disputes.

### **A. The WTO Framework**

The TRIPS Agreement is often criticized for being a "one-size-fits-all" mandate, but a close reading of its text reveals that it was originally intended to be balanced. The "tragedy" of TRIPS is that its foundational, constitutional articles 7 and 8 have been relegated to the status of decorative preambles rather than actionable legal mandates.<sup>8</sup>

Article 7: The "Objectives" Clause

*Article 7* explicitly states that the protection and enforcement of IPR should contribute to the:

*"...promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users... and in a manner conducive to social and economic welfare, and to a balance of rights and obligations."*

- The Legal Reality: In real-world implementation, the WTO DSB has not made extensive use of Article 7 to restrict a patent owner's rights. The "balance" is heavily skewed towards "producers" (i.e., the North) while there is only minimal acknowledgement that the "transfer" to "users" (i.e., the South) will occur as an indirect/non-mandatory outcome of market forces.

Article 8: The "Principles" Clause

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<sup>8</sup> "The Integrated Read" of TRIPS, which argues for using Articles 7 and 8 as interpretive tools for all IPR disputes.

*Article 8* allows members to adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development.

- The Critique: If climate change mitigation is not considered to be of "critical importance/essentiality," what would be? However, Article 8 penalizes measures designed for climate change mitigation with a "chokehold" provision: those measures must be "consistent with the provisions of this Agreement." As a result, there is a circularity to the law, such that any measure protecting the public interest would be permitted only if it does not violate the rights to patent protection created by the other provisions within the Agreement.

### **B. The Failed Promise of Article 66.2**

*Article 66.2* of the TRIPS Agreement is the treaty's primary "moral concession" to the Global South. It explicitly mandates that:

*"Developed country Members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members..."<sup>9</sup>*

On its face, this is a binding obligation. However, in the thirty years since the WTO's inception, this article has been widely dismissed by legal scholars and developing nations as a "paper tiger" a provision that exists in print but lacks any real-world teeth.

#### The Problem of "Incentive" Definition

The primary legal loophole of Article 66.2 is the lack of clear definition for what qualifies as an "incentive." This ambiguity has been exploited by Northern nations through the use of self-reporting of all types of generic activity that does not involve any transfer of proprietary green technology. When submitting reports to the Council for TRIPS, developed nations make a number of references to:

- General education scholarships,
- Trade missions,

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<sup>9</sup> Article 66.2 of the TRIPS Agreement

- Technical assistance for the filing of "administrative" patents (which actually allow the North to claim additional patent rights over the South) and
- Publicly funded research that is never commercialized in the South.

### **The "LDC" Trap**

One significant structural challenge for the Article 66.2 on the Transfer of Technology to the Least-Developed Countries (LDC) is that it applies only to the LDC. As such, a large proportion of the global south is not covered by Article 66.2. For example, many middle-income countries such as Brazil, and South Africa are considered as developing nations. Indeed, many of these middle-income nations are the countries that may have the capacity to actually produce green technology, and yet this ability to produce green technology is for the purpose of Article 66.2 of the WTO. Thus, Article 66.2 restricts the transfer of technology to only LDCs and excludes many others that could produce green technology.<sup>10</sup>

### **Lack of Enforcement Mechanisms and Monitoring**

There are no penalties faced by a developed nation that does not provide incentive to a developing nation, unlike when a developed nation fails to provide protection of a patent right. The TRIPS Council "review process" is nothing but a ceremonial process that is used to "name and shame"; and thus, there is no legal consequence for a developed nation for not providing incentives to a developing nation.

### **C. The Environmental Framework**

The TRIPS Agreement represents the 'hard law' that governs international trade, while the UN Framework Convention on Climate Change (UNFCCC) and Paris Agreement are examples of 'soft law' that govern the global community's efforts to survive on Earth.

From the outset of the UNFCCC developed nations have had an obligation to support, facilitate and fund the provision of environmentally sound technology to developing countries. Article 10 of the 2015 Paris Agreement reaffirms this commitment made by developed nations in the UNFCCC.

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<sup>10</sup> UNCTAD (2022). *Least Developed Countries Report*

## Article 10 of the Paris Agreement

*Article 10, paragraph 1*, explicitly states:

*"Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions."<sup>11</sup>*

To operationalize this, the UNFCCC relies on the Technology Mechanism. However, from a critical legal perspective, Article 10 is fundamentally flawed because it exists in a vacuum separate from the international trade regime. It tells nations *what* to do, but it provides no legal mechanism to override the IPR barriers codified in TRIPS that prevent them from doing it.

### The Enforcement Asymmetry

The Jurisprudential Conflict Between the Two Regimes Is Their "Teeth".

1. **NATO's Teeth:** WTO has a binding DSB. If A Southern (Developing) nation violates the patent rights of a Northern (Developed) corporation by creating lower-priced solar panels, the Northern nation could sue the Southern nation at the WTO. If the Northern nation wins the lawsuit, they could seek up to 100% retaliation (Cross-Retaliation) through tariffs against the Southern (Developing) country, creating an economic catastrophe for the Southern (Developing) country.
2. **The Paris Agreement's Lack of Teeth:** The Paris Agreement has a "bottom-up" structure for its NDCs, which includes an associated transparency framework. According to Article 15 says the compliance mechanism is specifically designed to be facilitative in nature and operation, transparent, non-adversarial, and non-punitive. Therefore, if a developed nation does not transfer Green Technology as required under the Paris Agreement, it cannot be subject to sanctions/penalties or fines. The only "punishment" for failing to transfer Green Technology may be the exposure and embarrassment of the country.

These two different enforcement structures create a normative hierarchical relationship between trade and environmental law. Therefore, the enforcement of trade law will always utilize trade

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<sup>11</sup> Article 10 of the Paris Agreement

sanctions against violating TRIPS and therefore, will have a higher enforcement priority than the enforcement of environmental laws to promote/require the transfer of technology.

### **Deconstructing the Legal Barriers**

The international treaty system's failure to impose any normative standards that could act as a barrier will thereby allow for a technological gap to be created at the time of signing those treaties; however, that technological exclude mechanism will be created and enforced through the corporation. A Southern nation may have both the political commitment and the requisite infrastructure to adopt green technologies, but there will be local businesses that will be impeded from doing so by a plethora of complex private IP-based mechanisms.

A major theme of this chapter is the "Patent Lock," which is a strategic use of the IP systems by right holders in the North for the creation of firm impenetrable barriers to entry. The analysis of patent thickets, anti-competitive licensing restrictions, and the procedural bottlenecks in relation to the compulsory licensing processes, will be shown to transform law from climate-critical technology to highly exclusionary private property.

#### **A. Patent Thickets**

The vast majority of modern technological innovations are neither isolated nor discrete; they are multifaceted and highly cumulative. Wind turbines and highly efficient photovoltaic arrays typically do not fall within the scope of one patent they are covered by many hundreds or thousands of overlapping patents.

#### **The Chilling Effect on the Global South**

While well-capitalized corporations located in Northern countries view "Patent Thickets" as nuisances to either be managed through expensive legal departments or handled by entering into cross-licensing, a Southern company will experience a "Litigation Minefield" when faced with this similar situation.

To attain "Freedom to Operate", a company in the Global South must do three things—

- (1) identify all patents that may be connected to their product the company wants to sell,
- (2) find out who owns the rights to each of those patents, and
- (3) negotiate with each of these right holders for an individual licensing agreement covering each patent for products they want to manufacture, the cost associated with doing all of this legal due

diligence can easily exceed the costs of doing the R&D associated with creating the manufacturer's product line.<sup>12</sup>

Therefore, the patent thicket has created a "Chilling Effect" on Southern firms' ability to establish themselves as manufacturers of green technology these firms opt not to encumber themselves with the devastating threat of litigation from large Northern companies and thus will not enter into the manufacturing industry related to green technology, which forces their countries to remain dependent on finished goods imported from Northern manufacturers.

### **B. Restrictive Licensing Practices**

According to the literature, technology transfer through licensing arrangements is generally the primary method. In addition, however, licensing agreements in the "North-South" situation frequently include restrictive business practices (RBPs), which often diminish the developmental value of the technology to the end-user. Such clauses are not merely business preferences, but rather serve as legal instruments to maintain "Technological Dependency."

#### **The "Grant-Back" Clause: Innovation Theft**

The most exploitative aspect of green technology licenses is the "Exclusive Grant-Back Clause". This clause provides that any improvements or modifications a Southern company makes to a piece of licensed technology must be granted back to the Northern licensor, usually with no financial compensation.

- **The Stifling Effect:** If a Brazilian company modifies a German wind turbine to function more efficiently in a humid coastal environment, the grant-back clause will provide that the modification must revert to the ownership of the original German company. This creates a disincentive for the Southern company to innovate because they will not be able to establish an intellectual property (IP) portfolio, or share in the benefits of their country's expertise.<sup>13</sup>

#### **Export Restrictions: Market Cordoning**

Northern licensing agreements often restrict the Southern entity from exporting the green products they produce from their home country due to geographic export restrictions.

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<sup>12</sup> Heller, Michael A. (2008). *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*.

<sup>13</sup> Article 40 of the TRIPS Agreement.

- **The legal argument:** While Northern licensors is to preserve their position in other markets around the world. For the Southern entity producing the green products, the restriction of such product to their home country prevents them from reaching "economies of scale" that would allow them to achieve profitability in manufacturing the green products. Therefore, it will keep Southern manufacturers small and operating only in their domestic market and not allowing for Southern manufacturers to become competitors to North American manufacturers in global trade networks.

### C. The Compulsory Licensing Bottleneck

A Compulsory License (CL), which is a means through which patents may be used by a 3rd party without permission from the owner, is at present the only way to legally "Break the Patent Lock" created by a patent. With the implementation of Article 31 of the TRIPS Agreement, countries can issue these licenses, but due to the insubstantial procedural provisions necessary to be able to obtain such licenses, it acts as an insurmountable (de facto) barrier to attempts by nations of the Global South to use compulsory licenses.

#### The "National Emergency" Trap

*Article 31(b)* of the TRIPS agreement states that a country can waive the requirement to first negotiate with the patent owner where there is a "national emergency," or "other circumstances of extreme urgency." \*\* Jurisprudentially, through precedent, "emergencies" have typically been interpreted to include acute events that occur suddenly, e.g. pandemics (HIV/AIDS, COVID-19), or wars.

- **The Argument:** Climate Change is a "Slow Onset Disaster," for that reason the Northern nations, and the WTO, have been hesitant to identify the fact that Climate Change represents an "Emergency" sufficient to allow for bypassing of patents. In your argument, you should assert that the definition of "urgency" needs to be expanded to include global systemic ecological collapse.

#### The "Predominantly for the Domestic Market" Barrier

Under *Article 31(f)*<sup>14</sup>, products made under a compulsory license must be used "predominantly for the supply of the domestic market."

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<sup>14</sup> Article 31 of the TRIPS Agreement

- **The Impact:** This is a major blow to Southern nations with small domestic markets. If a country like Bangladesh wants to issue a CL for high-efficiency wind turbines, it might not be economically viable unless they can export them to neighboring countries like Bhutan or Nepal. The current TRIPS law makes this "regional scaling" illegal, effectively killing the economic incentive to use CL at all.

## **From Dependency to "Green Colonialism"**

### **A. Comparative Case Studies**

#### **The Indian Experience: Wind Success vs. Solar Bottlenecks**

The two narratives regarding India's experience with IPR and its technology transfer experience provides a compelling account of how a developing country could experience reputable transfer due to the technology type itself and the surrounding aspects surrounding the patent monopoly. For example, the difference between India's wind energy supply and solar energy supply shows that the technology type is what facilitates developing countries to succeed.<sup>15</sup>

- **The Wind Energy Success Story:** For example, wind technology was established in the 1990s and early 2000s and because it was a mature technology with few patent thickets, companies (such as Suzlon Energy) located Northern technologies through partnership joint ventures (such as partnering with RE Power) or through acquisitions. Moreover, due to the majority of the base patents having an extensive patent history, many of the Indian wind energy firms have developed into global companies from previously being only licensees of the primary patent firm. As a result, many developing countries have successfully localized their supply chains and reduced their supply costs for wind energy.
- **The Solar PV Challenge:** Conversely, the case of solar demonstrates what is referred to as the "patent lock" effect. Due to rapid deployment of solar energy systems in India, many companies have had to rely on imported PV cells for providing high efficiency PV electricity. To the contrary, many forms of high-efficiency solar technology (specifically, thin film and crystalline silicon) have currently been "patent locked" with patent thickets to a limited number of Northern firms.

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<sup>15</sup> Barton, John H. (2007). *"Intellectual Property and Access to Clean Energy Technologies in Developing Countries."* ICTSD.

## **The Brazilian Context: The Pharmaceutical "Playbook" Applied to Green Tech**

Brazil's Contribution to this Issue is Primarily Procedural and Tactical: Due to Brazil's well-known "Health takes precedence over Profit" approach during the HIV/AIDS pandemic, Brazil will now attempt to apply that same jurisprudential logic to the current climate change crisis.

- **The "Brazilian Model" of Negotiation:** In the early 2000's Brazil used the threat of Compulsory Licensing to effectively force large multinational pharmaceutical companies (such as Abbott Laboratories and Merck) to lower their prices for antiretroviral medications. This was legally based on the Doha Declaration which stated that the TRIPs Agreement should not prevent countries from providing adequate protection to the public health.
- **Application to Green Tech:** Brazil is currently one of the most outspoken advocates for the Climate Equity movement, in that it believes that the same "human rights-based interpretation" of the TRIPs agreement that has been applied to the pharmaceuticals sector must also be applied to the green technology sector. Brazil also believes that if a holder of patent rights refuses to license the technology that is critical to addressing climate change, on "fair and reasonable" commercial terms, then Brazil will be able to seek a remedy under the same TRIPs agreement.

### **B. Structural Dependency**

The concept of green technology being structurally dependent upon the production process cannot be simply considered a coincidence; rather, it is a consequence of global manufacturing procedures that rely on Proprietary Norms. Even if developing nations have access to both the materials and labor required for green transformation, they are legally unable to progress along the value chain.

### **The "Smiling Curve" of Value Distribution**

The "Smiling Curve" of Value Distribution illustrates this legal dependency in relation to intellectual property law. This visual representation indicates that the greatest value created through a given product (i.e., electric vehicle battery, high-efficiency turbine) exists within the pre-production and post-production (branding and service) phases:

- **The Northern Monopoly:** The North has ownership over the IPRs associated with the R&D and branding of Northern products.

- **The Southern Trap:** The South is relegated to the "manufacture and assembly" stage, producing a product at the lowest point of value distribution.

### **Standards-Essential Patents (SEPs) and "Technological Lock-in"**

The emergence of Standards-Essential Patents (SEPs) is an extremely concerning barrier out there. To be able to operate as a green power grid, any and all components of that grid must be "speaking" the same language.

- **The Legal Trap:** The "legal trap" with SEPs is that if a Northern Company has a patent on the "standard" for how a solar inverter communicates with a smart grid, all manufacturers around the globe must abide by that patent in order to be compatible
- **The Result:** Therefore, Southern Companies are left without an opportunity to create a "local" solution, and therefore can't develop a solution that would be incompatible with the "global" grid. The result is a situation where the Southern Companies must pay the Northern Companies "rent" (royalties) to simply provide them with the opportunity to participate in the new world energy market.<sup>16</sup>

### **The "Know-How" Gap: Beyond the Patent Document**

*Article 29* under TRIPS states that a patent applicant must sufficiently disclose their invention to enable another to reproduce said invention. For instance, while TRIPS may state that, under Article 29 patent applicants are required to provide an applicant with sufficient information for them to reproduce the inventor's claims, the reality in the complex world of green technology is that there exists "Tacit Knowledge" or "Trade Secrets" that will never be included as part of the patent application.

- **Structural Barrier:** Structurally, Northern Companies will typically refuse to provide Tacit Knowledge to Southern Companies unless the Southern Company agrees to a joint venture where the Northern Company retains a controlling interest. This means that Southern Companies will never possess sufficient "Technological Autonomy" to establish an independent manufacturing base.

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<sup>16</sup> Mashelkar, R. A. (2001). *"Intellectual Property Rights and the Third World."*

## Toward Climate-Responsive Jurisprudence

### A. Expanding the Doha Declaration

In 2001, the World Trade Organization experienced a crisis of legitimacy as a result of the HIV/AIDS epidemic. The Doha Declaration on the TRIPS Agreement and Public Health emerged as a result of this crisis. It provided affirmation that the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health. This paper proposes a similar Ministerial Declaration on TRIPS and Climate Action. A "Green Doha" would provide the necessary legal "cover" for the Global South to bypass patent restrictions without potential trade sanctions or retaliatory action under the Special 301 provisions.

The Legal Mechanics of a "Green Doha"

A "Doha for the Planet" would introduce three critical interpretive shifts:

1. **The "Permanent Emergency" Status:** The declaration would specify that climate change is a "circumstance of extreme urgency," thereby allowing countries to circumvent the lengthy "peelable negotiation" phase with patent owners concerning all technologies listed in the UNFCCC Technology Mechanism.
2. **The Waiver of Article 31(f)**<sup>17</sup>: Similar to paragraph 6 of the Doha Declaration, the waiver would eliminate the requirement for products manufactured under compulsory licenses to be sold "predominantly" within the country that issued the compulsory license. This would allow "Green Hubs" (e.g., India and Brazil) to manufacture and export wind turbines and/or solar panels to smaller least-developed countries (LDCs) that lack the necessary resources.
3. **Sustainability-First Interpretation:** It would require the WTO to interpret TRIPS in accordance with the goals set out in the Paris Agreement whenever a dispute arises between intellectual property rights (IPR) and climate targets.

### From "Health" to "Habitat"

The legal reasoning is undeniably straightforward: the global community must logically accept that the "right to health" can impose limits on patent rights; therefore, it must further accept that the "right to a habitable planet," as a precondition for health everywhere, must have at least equal force

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<sup>17</sup> Article 31(f) paragraph 6 of the Doha Declaration.

of law. A Green Doha would serve to reposition TRIPS as a "shield" for countries attempting to establish their own ecological long-term solutions.

## **B. Green Open Access & Patent Pools**

It is critical that we find new paths to accelerate the transition to clean energy as the bilateral negotiations that take too long for companies and countries to agree are too slow to address the climate crisis.

### The Concept of the "Green Patent Pool"

Unlike the current model where a company in the South must negotiate directly with 50 separate Northern firms to license the patents for the technology needed to build, for example, a highly efficient smart grid or modular solar unit, through a formalized Green Patent Pool a company in the South could obtain a single license "bundle" granting access to all the patents necessary to complete that project.

- **Standard Essential Patents (SEPs) for the Planet:** Just as there are SEPs in the telecommunications industry that allow every telephone to connect to the Internet without having to negotiate for their use with each manufacturer of telephones, there should be SEPs categorized as "environmental standards" for various types of green technology that must be licensed on Fair, Reasonable and Non-Discriminatory terms (FRAND) when they become part of a global standard for climate change.
- **Green Open Access (GOA):** This copyright model promotes a notion of open-source hardware and companies entering into 'non-assertion pledges', like those made by Tesla or Toyota regarding their hydrogen and electric vehicle technology (EVs), so that they will not sue anyone that has a patent for the strictly green use of that patent.

## **C. Liability Rules**

This represents the most significant shift in terms of jurisprudence, according to Calabresi and Melamed in their well-known theory 'One View of the Cathedral,' in which they make a distinction between 'property rules' and 'liability rules' with respect to patents.

### The Problem with Property Rules

At the present time, a patent is protected by a property rule; therefore, if an infringement of a patent occurs at a plant located in the South, the court will issue an injunction against that plant

closing the plant, seizing the goods and stopping the project. The result of this is that the patent holder has 'veto power' over global climate change initiatives.

#### The Solution: Liability Rules

A "Climate-Responsive" system would shift ECPs from a Property Rule to a Liability Rule.

- **The Mechanism:** A Southern company would have the legal right to use a Northern firm's green patent without having to obtain prior permission from that Northern firm.
  - As a result of this legal change, the Northern patent-holder would no longer have the right to an injunction.
  - In exchange for this legal right to use the Northern patent without permission, the Southern company would be required to pay the Northern company a Court-determined amount of "Fair Royalty".
- **The Compensation:** The Justification for this approach is that it solves the "hold-up" problem that has existed with respect to licensing and the use of this technology by Southern companies, because Northern companies would no longer be able to withhold their green patents from Southern companies, nor would they be able to demand an extortionate price. The result would be immediate diffusion of the technology, with Northern companies still compensated for their R&D at a reasonable rate.

### Conclusion

This research has demonstrated that the current Intellectual Property Rights (IPR) regime, as governed by the TRIPS Agreement, has evolved into a structural barrier that prioritizes private profit over planetary survival. The findings of this paper can be summarized through three core legal tensions:

- **The Incentive Fallacy:** While patents are intended to spur innovation, in the context of the Global South, they function as a "Patent Lock" that prevents the localized adaptation and manufacturing of green technology.
- **Normative Asymmetry:** There exists a profound imbalance between the "Hard Law" of the WTO which carries the threat of economic sanctions and the "Soft Law" of the Paris Agreement, which lacks any enforceable mechanism to compel technology transfer.

- **Green Colonialism:** The persistence of "Patent Thickets" and restrictive licensing ensures that the Global South remains technologically dependent on Northern proprietary norms, effectively "kicking away the ladder" of industrial development.

In conclusion, "Business as Usual" in IP law is mathematically and legally incompatible with the targets set by the Paris Agreement. If the law continues to protect the exclusivity of green tech at the expense of its diffusion, the climate transition will remain a geographically isolated phenomenon, leaving the most vulnerable regions of the Global South behind.

### **Final Reflections: Planet over Profit**

The legal architecture of the 21st century must reflect its greatest challenge. If the "Right to Life" and a "Healthy Environment" are to be recognized as fundamental human rights, then the laws governing the tools of our survival must be sub-servient to those rights. We must move from a jurisprudence of exclusion to a jurisprudence of cooperation. The choice is clear: we can protect the sanctity of the patent, or we can protect the habitability of the planet. We cannot do both.