



COMPULSORY LICENSING AND THE RIGHT TO HEALTH: LEGAL RESPONSES TO PUBLIC HEALTH EMERGENCIES

Manual Martin* Aleena Elsa Kuriakose*

ABSTRACT

The public health emergency, occasioned by pandemics and by the emergence of outbreaks of infectious disease, has occasioned the compelling need for equitable access to necessary medicines and medical technologies. Compulsory licensing in this regard has been a significant legal instrument in the case of. The international intellectual property law provides a system that allows governments to sanction the use of patented innovations made without the authority of the patent owner, usually in response to pressing social needs health matters. The paper considers the legal, ethical, and practical issues in the compulsory licensing in public health exigencies, highlighting its practical application, constraints and impact on universal health equity. The article considers case examples, including HIV/AIDS treatment approaches in the sub-Saharan region. Africa, and for COVID-19, to consider how nations have employed compulsory licenses within the flexibilities allowed by the TRIPS Agreement. The paper discusses the contradiction between protecting intellectual property rights and ensuring access to basic medicines, especially in low and middle-income nations. Furthermore, the study reviews the role played by international and national. Legal capacity and political will shape the success of the strategies on compulsory licensing. Although the tool is well known within the World Trade Organisation (WTO), the application is now restrained by diplomatic pressures, trade reprisal possibilities, and bureaucratic procedures. The paper suggests changes aimed at streamlining required licensing procedures and enhancing emergency collaboration, highlighting the balance between innovation stimuli and public health demands. Compulsory licensing is a significant measure adopted in controlling access to medicines. During health emergencies, but requires effective legal preparedness and global solidarity to

*LAW GRADUATE.

*BA LLB, THIRD YEAR, GOVERNMENT LAW COLLEGE, TRIVANDRUM.

operate. Its capacity to respond to disparities in access to medicine makes it a cornerstone of international health regulation in emergencies.

Keywords: Compulsory Licensing, Public Health Emergencies, TRIPS Agreement, Access to Medicines, Intellectual Property Rights.

INTRODUCTION

The pandemic prompted by COVID-19 has thrown into relief global healthcare utilisation disparities. While many advanced nations had arranged vaccine supplies well in advance, numerous low- and middle-income nations (LMICs) did not get basic doses even for frontline health workers. Such imbalances reflect the urgent need for legal schemes that reconcile patent protection with fair access to drugs.

Compulsory licensing is one such key mechanism. It enables governments to authorise the use of a patented invention without the consent of the patentee, typically with reasonable remuneration. Although it also has its limitations, this instrument is vital during emergencies when excessive prices or monopolistic behaviour restrict access to patented drugs. Compulsory licensing, grounded on the public interest principle, operates within patent law to check the protection of private intellectual property rights against society's general well-being.

The Indian legal system shows this balance with the Patents Act of 1970, with numerous provisions for compulsory licensing. These provisions have consistency in comparison to provisions offered under the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), particularly Article 31. Actual application in real life indicates a multifaceted array of legal, institutional, and diplomatic considerations.

This article critically analyses the statutory and international regime of compulsory licensing in India, taking into account its utilisation during health emergencies such as the HIV/AIDS epidemic, the H1N1 influenza epidemic, and the current COVID-19 pandemic. It also identifies procedural and structural issues in making compulsory licensing effective and concludes with policy suggestions to enhance its impact.

COMPULSORY LICENSING UNDER INDIAN PATENT LAW

India's Patents Act, 1970, provides a legal framework for compulsory licensing in Chapter XVI. These provisions strive to ensure that patents do not harm public interest, especially in health. The Act outlines four main categories of compulsory licensing:

General Compulsory License (Section 84): Section 84 allows anyone to apply for a compulsory license three years after the patent is granted. This can happen if:

1. The public's reasonable needs regarding the patented invention have not been met;
2. The patented invention is not available at a reasonable price; and
3. The patented invention is not manufactured in India.¹

The process includes submitting Form 17 or 19. The Controller of Patents makes a preliminary determination and gives the patentee a chance to oppose.² A hearing follows. If the Controller is satisfied, they may grant the license under terms that ensure royalty, affordability, and non-exclusivity.

Licensing of Related Patents (Section 91): Section 91 allows compulsory licensing for related patents. If using one invention requires access to another owned by the same patentee, then the applicant can request licenses for both. This provision ensures that connections between technologies do not limit access.³

Special Compulsory Licenses (Section 92): Section 92 lets the Central Government issue a notification in cases of:

- national emergency;
- extreme urgency; or
- public non-commercial use.⁴

Once a notification is made, anyone can apply for a compulsory license without waiting for three years. The Controller must act quickly and is exempt from standard opposition

¹ The Patents Act, 1970, s. 84

² Ibid; see also Form 17 and 19, The Patents Rules, 2003

³ The Patents Act, 1970, s. 91

⁴ Ibid, s. 92

procedures. This provision was meant to help the government respond swiftly during health crises.

Export-Oriented Licensing (Section 92A): Section 92A, added in the 2005 amendment, allows compulsory licensing for exporting patented pharmaceutical products to countries without manufacturing capacity. This provision requires that:

- The importing country has issued a compulsory license or notification allowing import.
- The Indian license is only for export.
- The product is in the pharmaceutical category.⁵

This section emphasises India's role as a generic drug manufacturer and supports low- and middle-income countries facing public health emergencies.

TRIPS AND INTERNATIONAL LEGAL FRAMEWORK

The TRIPS Agreement, part of the WTO framework, standardises IP protection among member states but allows for flexibility to consider public interest.

Article 31: Use Without Authorisation: Article 31 allows the issue of compulsory licenses under specific conditions. These conditions include attempting to get prior permission from the patent holder, limiting the duration of use, providing fair compensation, and ensuring the license is non-exclusive.⁶ The production must serve the domestic market unless this requirement is formally waived by fair use.

Article 31 and the Paragraph 6 Mechanism: Article 31, adopted through the 2003 General Council Decision, allows the export of pharmaceuticals produced under compulsory licenses to countries that do not have the manufacturing capacity. This mechanism emerged in response to the HIV/AIDS crisis and the limits of Article 31(f).⁷

The Doha Declaration: The 2001 Doha Declaration confirmed that TRIPS do not prevent members from taking steps to protect public health. The declaration established that each

⁵ Ibid, s. 92A; see also The Patents (Amendment) Act, 2005

⁶ TRIPS Agreement, art. 31, Apr. 15, 1994, Marrakesh Agreement Establishing the WTO, Annex 1C

⁷ WTO General Council Decision, Implementation of Paragraph 6 of the Doha Declaration, WT/L/540, 1 September 2003

member can define what a national emergency is and take measures accordingly.⁸ The Declaration was an important step in supporting and promoting the use of compulsory licensing.

CASE STUDIES OF HEALTH EMERGENCIES

HIV/AIDS Crisis: During the late 1990s and early 2000s, several countries used compulsory licensing or threatened to do so to access antiretroviral therapies. Brazil used the threat of compulsory licensing in 2001 and successfully negotiated lower prices with Merck and Roche.⁹ In 2007, it issued a license for afovirsen after price talks failed.

Between 2006 and 2008, Thailand issued compulsory licenses for the medications afovirsen, Kaletra, and clopidogrel. These actions allowed for the domestic production of medicines and the import of generics.¹⁰ South Africa dealt with lawsuits from pharmaceutical companies after passing legislation to enable generic production. The lawsuit was eventually dropped, and the case influenced the Doha Declaration.¹¹ Malaysia issued a compulsory license in 2004 after negotiations with Bristol-Myers Squibb failed. This strategy lowered treatment costs and improved access. However, it faced diplomatic backlash and commercial retaliation.¹²

H1N1: During the 2009 H1N1 pandemic, access to isolative was limited because developed nations stockpiled it.¹³ Although several countries thought about compulsory licensing, most held back due to tensions about diplomatic pressure and unclear procedural timelines.

COVID-19 Pandemic: In 2020, India and South Africa collaborated to call for a temporary suspension of TRIPS requirements related to COVID-19 technologies. This proposal received support from several countries, including the US and the EU, but also faced opposition.¹⁴ Canada passed Bill C-13,¹⁵ allowing the Minister of Health to issue compulsory licenses during public health emergencies. Despite this legal framework, no licenses were issued. Germany

⁸ WTO Ministerial Conference, Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2, 14 November 2001

⁹ Ellen 't Hoen, *The Global Politics of Pharmaceutical Monopoly Power* (Diemen: AMB, 2009) 145

¹⁰ Oxfam International, *Compulsory Licensing: A Tool to Improve Access to Medicines*, Briefing Paper, 2007

¹¹ Médecins Sans Frontières, *South Africa vs Big Pharma: A Victory for Access to Medicines* (2001)

¹² Carlos M Correa, *Public Health and Compulsory Licensing: WTO Rules and Developing Country Realities*, 3 TWN Briefing Papers (2002)

¹³ WHO, *H1N1 and Access to Medicines*, 2010

¹⁴ WTO, *Waiver Proposal by India and South Africa*, IP/C/W/669, 2 October 2020

¹⁵ Government of Canada, *Bill C-13: COVID-19 Emergency Response Act*, 2020

and Chile changed their patent laws to speed up government actions, but most pharmaceutical companies chose voluntary licensing instead.

The limited use of compulsory licensing during COVID-19 shows the procedural and political challenges that come with it, even though the legal foundation is strong.

LEGAL AND INSTITUTIONAL CHALLENGES

Procedural Delays: The statutory procedures under Section 84 take a lot of time and involve applications, opposition, and hearings.¹⁶ During emergencies, these steps can make the process inefficient.

Diplomatic and Commercial Pressure: Countries that try to use compulsory licensing often deal with international trade pressures.¹⁷ The US Trade Representative has a history of placing countries like Thailand on watch lists for such actions, hence imposing a toll on their proper functioning.

Infrastructure Requirements: Compulsory licensing assumes that a country has the infrastructure and technical potential to produce or obtain the necessary medication. This is often not true for many developing regions. Many countries lack such abilities, making mechanisms like Section 92A necessary.

Ambiguities in TRIPS Provisions: Terms like “reasonable remuneration” and “adequate compensation” are not clearly defined. This ambiguity can prevent some countries from issuing licenses due to concerns about WTO disputes.

POLITICAL AND DIPLOMATIC PRESSURE IN IMPLEMENTING COMPULSORY LICENSING

While the legal framework for compulsory licensing is firmly grounded in the TRIPS Agreement (Trade-Related Aspects of Intellectual Property Rights), its implementation is fraught with political and diplomatic challenges. These challenges often originate from developed nations and multinational pharmaceutical corporations that seek to protect their commercial interests, even at the cost of restricting access to affordable medicines in

¹⁶ Natco Pharma Ltd. v. Bayer Corporation, (2012) Compulsory License Application No. 1 of 2011, Controller of Patents (India)

¹⁷ Office of the United States Trade Representative, *Special 301 Report*, 2008

developing countries. As a result, compulsory licensing—though legally permissible—is frequently stymied by geopolitical realities that undermine state sovereignty and public health goals.

PRESSURE FROM DEVELOPED NATIONS AND TRADE THREATS

Developed nations, particularly the United States, Germany, Switzerland, and the United Kingdom, often act as protectors of their domestic pharmaceutical industries. When developing countries issue or consider issuing a compulsory license, these nations have retaliated through economic and trade measures, including:

Inclusion in the USTR Special 301 Report: The United States Trade Representative (USTR) annually publishes a list of countries that it perceives as inadequately protecting intellectual property rights. Nations issuing or threatening compulsory licenses are often labelled as violators. This labelling acts as a diplomatic tool to name-and-shame countries and signal possible trade consequences.¹⁸

Threat of Withdrawal of Trade Privileges: Developing countries that rely on preferential market access under schemes like the Generalised System of Preferences (GSP) face the threat of withdrawal or suspension of such benefits¹⁸.

FREE TRADE AGREEMENTS AND “TRIPS-PLUS” OBLIGATIONS

Developed countries often use bilateral or regional free trade agreements (FTAs) to impose “TRIPS-plus” conditions—provisions that exceed TRIPS requirements and limit the use of compulsory licensing. These FTAs contain clauses that:

Narrow the grounds under which compulsory licenses can be issued (e.g., only in national emergencies). Require longer negotiation periods with patent holders before issuing licenses. Impose higher royalty standards, deterring cost-effective use.¹⁹ Such provisions directly conflict with the Doha Declaration on the TRIPS Agreement and Public Health (2001), which

¹⁸ Office of the U.S. Trade Representative, *2023 Special 301 Report*, at 40–45 (2023), available at: <https://ustr.gov/sites/default/files/2023-Special-301-Report.pdf>.

¹⁹ Deborah Gleeson et al., *How the Trans-Pacific Partnership Could Affect Access to Medicines*, 10 *J. Pub. Health Pol’y* 1, 3–5 (2016)

reaffirmed the right of WTO member states to issue compulsory licenses for public health purposes.²⁰

CORPORATE LOBBYING AND PHARMACEUTICAL INFLUENCE

The pharmaceutical industry, especially in the United States and Europe, wields enormous lobbying power. Through organisations like Pharmaceutical Research and Manufacturers of America (PhRMA) and European Federation of Pharmaceutical Industries and Associations (EFPIA), companies push their governments to adopt aggressive diplomatic postures when their patents are threatened.²¹

These lobbying groups often argue that compulsory licensing violates international IP norms and destroys incentives for innovation.²² They influence legislative bodies and foreign ministries, effectively ensuring that even lawful uses of TRIPS flexibilities are painted as violations.²³

DIPLOMATIC RETALIATION AND SOFT POWER TACTICS

In addition to trade threats, developed countries use soft diplomacy and behind-the-scenes negotiations to dissuade developing nations from issuing compulsory licenses. This may include:

Delays in aid disbursement, including health aid or technical support. Stalling investment treaties or FTAs. Offering “voluntary licensing deals” under pressure, which are less favourable but politically palatable. These tactics often operate outside formal mechanisms, making them less visible but highly coercive.²⁴

²⁰World Trade Organization, *Ministerial Declaration on the TRIPS Agreement and Public Health*, WT/MIN(01)/DEC/2 (Nov. 14, 2001), available at:

https://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.htm

²¹ Carlos M. Correa, *Implications of the Doha Declaration on the TRIPS Agreement and Public Health* 24–26 (World Health Org. 2002), available at: <https://apps.who.int/iris/handle/10665/68367>

²² Ellen ‘t Hoen, *Private Patents and Public Health: Changing Intellectual Property Rules for Access to Medicines* (Health Action Int’l, 2016), available at: <https://haiweb.org/publication/private-patents-and-public-health>

²³ Suerie Moon, *Powerful Ideas, Modest Gains: Developing Countries’ Influence in Global Intellectual Property Norm-Setting*, 7 *J. Int’l Econ. L.* 221, 236 (2004)

²⁴ Frederick M. Abbott, *The Cycle of Action and Reaction: Developments and Trends in Intellectual Property and Health*, 10 *S. Afr. J. Int’l Aff.* 41, 46 (2003)

THE “CHILLING EFFECT” ON PUBLIC HEALTH POLICY

The cumulative impact of these pressures creates a chilling effect on developing countries. Governments become reluctant to use compulsory licensing, fearing diplomatic fallout, economic sanctions, or litigation at international dispute forums. This often results in:

Underuse of a legitimate public health tool²⁵. Dependence on high-cost patented drugs, despite domestic public health crises²⁵. Delay in access to essential medicines, especially for diseases like cancer, hepatitis, or diabetes, which do not always qualify as “emergencies” under stricter interpretations.²⁶

Implementing compulsory licensing—a legal mechanism allowing governments to authorise the use of patented inventions without the consent of the patent holder, usually in the public interest—poses several legal, economic, and practical challenges. Here’s a breakdown of the key challenges:

LEGAL AND PROCEDURAL COMPLEXITY

TRIPS Compliance: Countries must align their laws with the WTO's TRIPS Agreement (Art. 31), which imposes conditions like prior negotiations and adequate remuneration to the patent holder.

Bureaucratic Delays: Granting a compulsory license involves multiple procedural steps and approvals, which may hinder timely access, especially in emergencies.

Judicial Review: The patent holder can challenge the grant in court, leading to further delays.

INTERNATIONAL PRESSURE AND TRADE RETALIATION

Among the greatest obstacles to the successful implementation of compulsory licensing is the extraordinary political and economic pressure from developed nations and multinational pharmaceutical firms. Governments that try issuing compulsory licenses have their countries threatened with trade sanctions, investment divestment, or tariff imposition. For example, after India had granted a compulsory license in the Natco-Bayer case (2012) for the cancer

²⁵ World Health Organization & United Nations Development Programme, *Using Law to Accelerate Treatment Access in South-East Asia: Compulsory Licensing and Public Health Exceptions* (2017), available at: <https://www.undp.org/publications/using-law-accelerate-treatment-access-south-east-asia>

²⁶ Chan Park et al., *Practical Guide to Implementing Compulsory Licensing in Developing Countries* (UNDP 2013), available at: <https://hivlawcommission.org/practical-guide-implementing-compulsory-licensing>

medication sorafenib, it was roundly criticised by the United States and the European pharmaceutical industry. Such criticism acts as a chilling effect, deterring other developing nations from utilising the mechanism even when there is a desperate need for public health. The unequal distribution of power between rich countries and vulnerable economies, therefore, erodes the legitimacy of compulsory licensing as an international health protection.

EFFECT ON INNOVATION AND INVESTMENT

Opponents claim that extensive use of compulsory licensing may detract from innovation incentives in the pharmaceutical sector. As the pharmaceutical sector depends so much on recouping research and development (R&D) expenditure through patent monopoly, compulsory licenses can be seen to undercut the profitability of investing in new medicines. This, further, can dissuade foreign direct investment (FDI) in nations dependent on compulsory licensing. But its advocates reply that occasional resort to compulsory licensing, particularly in times of public health crisis, neither kills off innovation incentives nor guarantees that innovation benefits mankind and not just private gain. Sustaining the requirement for innovation while meeting the demand for low-cost access is a core challenge.

SHORTAGE OF DOMESTIC MANUFACTURING CAPABILITY

Even where compulsory licenses are issued, most developing nations do not have the technological capability, trained personnel, or pharmaceutical infrastructure to produce generic versions of patented medications. This structural deficit is such that, in effect, compulsory licensing only works if nations can import generics or produce them locally. Article 31bis of the TRIPS Agreement makes a step in this direction by permitting exports to those nations that lack sufficient manufacturing capacity, but it is bureaucratically cumbersome and typically too slow for emergency health crises. The future of this barrier will depend on strengthening regional alliances and funding domestic pharmaceutical industries.

DETERMINATION OF "REASONABLE REMUNERATION"

One of the consistent barriers to using compulsory licensing is establishing what exactly constitutes "reasonable remuneration" or "adequate compensation" for the patent owner. TRIPS demands equitable remuneration, but omits to clarify what is meant by this, creating conflicts and delays. Patent owners repeatedly assert that remuneration is insufficient, while governments counter that unreasonable expectations render the idea of affordable access

nonsensical. The absence of a standard formula that is agreed upon everywhere not only extends negotiations but also leaves the door open for WTO disputes, which further adds to the already time-critical nature of public health action.

NARROW SCOPE IN NON-EMERGENCIES

Forced licensing is politically more acceptable to do during the use of mass-scale health emergencies like HIV/AIDS or COVID-19. Its application for the purpose of curing non-communicable or chronic illnesses—such as cancer, diabetes, or hepatitis—is met with stronger resistance both nationally and globally. This leaves the troublesome gap in which millions of individuals from developing nations are still suffering from costly treatments for non-emergency diseases. The restrictive reading of when compulsory licensing is "apt" constrains its power as a general instrument of health equity, reinforcing disparities in international access to life-saving medicines.

CONFLICTS WITH BILATERAL TRADE AGREEMENTS (FTAS)

In addition to TRIPS, most developing countries are under pressure from Free Trade Agreements (FTAs), which impose "TRIPS-plus" obligations. These agreements tend to include provisions that limit the capacity to grant compulsory licenses, such as requiring longer periods of negotiation with patent owners, limiting grounds for issuance, or imposing higher rates of royalties. These provisions are direct contraventions of the Doha Declaration of 2001, which reaffirmed that nations should maintain the freedom to protect public health. By entering into FTAs with advanced countries, most states inadvertently restrict their autonomy in the making of independent health policy.

POLITICAL AND PUBLIC WILL

The effective utilisation of compulsory licensing is largely a function of whether governments are willing to put public health ahead of diplomatic relations or the interests of big business. In most instances, leaders are reluctant to use this tool lest they face economic recrimination or strained diplomatic ties with influential trade partners. Domestic political commitment is also determined by the power of civil society organisations and advocacy movements, which have in the past been instrumental in compelling governments to move, such as in the HIV/AIDS treatment wars in sub-Saharan Africa. In the absence of firm political commitment, compulsory licensing may remain a theoretical measure and not an implementable solution.

ETHICAL AND MORAL DEBATE

At its essence, the compulsory licensing debate hinges on a more fundamental moral question: whether access to life-saving drugs is to be viewed as a human right or a commercial privilege. On one hand, the argument is made that public health should always take precedence over private gains, particularly when human lives are involved. On the contrary, patent owners emphasise the role that intellectual property plays in maintaining innovation and contend that its erosion could jeopardise medical progress. The moral dilemma is a matter of seeking a balance that is equitable in nature, in which innovation is incentivised but not at the cost of human suffering. This discussion creates an imperative for global agreement on giving priority to health equity in intellectual property frameworks.

CONCLUSION

Compulsory licensing is still a valuable tool in balancing the conflict between intellectual property rights and the right to health, particularly in the midst of global public health crises. Through the empowerment of governments to license access to necessary drugs without the permission of patent owners, it balances inequalities, often depriving low- and middle-income nations of affordable treatment. The HIV/AIDS pandemic, the H1N1 influenza pandemic, and the COVID-19 pandemic exemplify both the promise and limitations of this legal tool. Compulsory licensing has reduced the cost of treatment and opened up access to life-saving medicines on one hand; slow bureaucratic processes, ambiguous TRIPS provisions, retaliation by trade, and diplomatic pressure from influential states and pharmaceutical lobbies on the other limit its effective application.

For compulsory licensing to realise its potential, institutional reforms must be undertaken to rationalise application processes, improve the domestic manufacturing base, and provide more clarity in international law. Above all, however, its success is reliant upon political will and international solidarity, for fair access to medicines cannot be secured in isolation. Rather than threatening innovation, compulsory licensing guarantees that patent law is used for its greater good—the advancement of human life and public health. On this basis, it continues to be not only a constitutional protection but also an ethical necessity on the path towards universal health equality.

REFERENCE

1. WHO, *Global Vaccine Market Report 2021*, available at <https://www.who.int/publications/m/item/global-vaccine-market-report-2021> (last visited Jun. 14, 2025).
2. Thiru Balasubramaniam, *Analysis of the TRIPS Waiver Proposal* (KEI Research Note, 2021).
3. Medicines Patent Pool, *Voluntary Licenses for COVID-19 Technologies*, available at <https://medicinespatentpool.org/licensing-overview/covid-19> (last visited Jun. 14, 2025).
4. F.M. Abbott, *Innovation and Technology Transfer to Address Climate Change: Lessons from the Global Debate on Intellectual Property and Public Health*, ICTSD Issue Paper No. 24 (2009).
5. WHO, WIPO & WTO, *Promoting Access to Medical Technologies and Innovation: Intersections Between Public Health, Intellectual Property and Trade* (2nd ed., 2020).
6. Sudip Chaudhuri, *The WTO and India's Pharmaceuticals Industry: Patent Protection, TRIPS, and Developing Countries* (Oxford University Press, 2005).
7. UNDP, *Patent Information and Capacity Assessment for Pharmaceutical Production in Developing Countries*, UNDP Working Paper (2012), available at <https://www.undp.org/publications/patent-information-and-capacity-assessment> (last visited Jun. 14, 2025)
8. Office of the U.S. Trade Representative, *2023 Special 301 Report*, at 40–45 (2023), available at: <https://ustr.gov/sites/default/files/2023-Special-301-Report.pdf>.
9. Deborah Gleeson et al., *How the Trans-Pacific Partnership Could Affect Access to Medicines*, 10 *J. Pub. Health Pol'y* 1, 3–5 (2016).
10. World Trade Organisation, *Ministerial Declaration on the TRIPS Agreement and Public Health*, WT/MIN(01)/DEC/2 (Nov. 14, 2001), available at: https://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.htm.
11. Carlos M. Correa, *Implications of the Doha Declaration on the TRIPS Agreement and Public Health* 24–26 (World Health Org. 2002), available at: <https://apps.who.int/iris/handle/10665/68367>.
12. Ellen 't Hoen, *Private Patents and Public Health: Changing Intellectual Property Rules for Access to Medicines* (Health Action Int'l, 2016), available at: <https://haiweb.org/publication/private-patents-and-public-health>.

13. Suerie Moon, *Powerful Ideas, Modest Gains: Developing Countries' Influence in Global Intellectual Property Norm-Setting*, 7 *J. Int'l Econ. L.* 221, 236 (2004).
14. Frederick M. Abbott, *The Cycle of Action and Reaction: Developments and Trends in Intellectual Property and Health*, 10 *S. Afr. J. Int' l Aff.* 41, 46 (2003).
15. World Health Organisation & United Nations Development Programme, *Using Law to Accelerate Treatment Access in South-East Asia: Compulsory Licensing and Public Health Exceptions* (2017), available at: <https://www.undp.org/publications/using-law-accelerate-treatment-access-south-east-asia>.
16. Chan Park et al., *Practical Guide to Implementing Compulsory Licensing in Developing Countries* (UNDP 2013), available at: <https://hivlawcommission.org/practical-guide-implementing-compulsory-licensing>.