How to Cite:
Bandyopadhyay, A., & Bikram, K. (2022). Patents vs pandemics. *International Journal of Health Sciences*, *6*(S6), 4791–4802. https://doi.org/10.53730/ijhs.v6nS6.11464

Patents vs pandemics

Miss. Anuradha Bandyopadhyay
Student at Symbiosis Law School, Pune

Miss. Kirti Bikram
Asst. Prof. Symbiosis Law School

***Abstract*---**The COVID-19 pandemic has forced a rethinking of public health and patent systems. It has brought livelihoods to a halt, wreaking havoc on people's lives and national economies. The need to create and deploy additional vaccinations, repurpose pharmaceuticals, and sustain medical infra-structure is jeopardising global health security. At the international and national levels, collabora-tion and collaborative action are essential. In terms of public health, IPR access is critical. Many countries have announced new rules and passed legislation to make it simpler to provide medi-cines to their citizens during the pandemic. Compulsory licensing has been a key tool for opening up IP without the approval of patent holders.There is frequently a conflict between the need to grant monopolies in the form of IP rights as an incentive for pharmaceutical sector advancements on the one hand, and the need to award monopolies in the form of IP rights as a fundamental right on the other. As a result, hurdles exist in decision-making in order to strike a balance between in-novative incentives and assuring access to healthcare. Though the road may appear difficult and demanding, all can aspire to see the light after months of overshadowing darkness if the im-portance of the public interest is recognised to be valued over the relatively tiny advantages that intellectual property right holders want from the goldmine known as COVID-19. Although ad-vancements in science and technology have rendered nothing impossible, the development of a treatment line to combat the lethal virus, as well as laborious research, takes time. Our intellectu-al property laws, on the other hand, have played a significant part in this development, both dur-ing and after it, in terms of free access to information and inserting flexibility into the patent re-gime monopoly to maintain drug affordability and availability. This issue has been the topic of aca-demic and policy debate for decades, but they are particularly pertinent now in the wake of the global crisis.While the concepts of collaborative research, compulsory licensing, patent pools, mul-tilateral cross-licensing, and technology transfer have been widely discussed as necessary for this era, the paper examines the gravity of the current situation and related IP concerns, as well as the issues and challenges of working

the treatment globally and furthering the ideals of the related TRIPS Agreement provisions, the Doha Declaration, and related documents.

***Keywords*---**patents, pandemic, TRIPS, compulsory licensing, patent pools, COVID-19.

Introduction

The entire globe is stuck at a crossroads of a global health emergency, making the best possible attempts to get through. Just as we're starting to come to terms with how the pandemic has influenced every part of our life, we also discover how it has harmed the global economy.We can see that impact of Covid - 19 on practically all fields of intellectual property, particularly patents. Given that one of the main goals of the patent system is to reward innovation by allowing innovators to charge "higher prices" for protected products, it has been suggested that a fully functional patent system would result in an inverse relationship between the cost of such products and access affordability. Some have suggested that the global intellectual property system is experiencing a crisis of public legitimacy, citing concerns about how patents may be preventing ordinary people from accessing medicines and exercising their "right to health".[*]

This contrasts with the pharmaceutical industry's assertion that it is more heavily reliant on the patent system than most other industrial sectors to recuperate previous R&D expenditures, create profits, and fund R&D for future products. Indeed, according to the CIPR, Surveys have indicated that pharmaceutical companies, more than any other sector, believe patent protection is critical in maintaining their R&D spending and technological innovation.[†] The industry, obviously, is interested in how IPRs are applied around the world, and it generally rejects the notion that they are a big barrier to access or a deterrent to development in developing nations.[‡] Moreover, the contention that "*nations cannot simply free-ride on the research and development efforts of multinational pharmaceutical enterprises*"[§] is impossible to ignore.

Need of study

This paper is an attempt to study the dichotomy between the rights patent holders of various drugs and vaccines; and access to drugs for public healthcare during an emergency like the Covid-19 Pandemic, which essentially trickles down to the question of right to health of the general public. There has always been a hassle between the rights of the patent owners in the pharmaceutical sectors and the accessibility of medicines to the general public for public welfare. However the lethal Coronavirus pandemic has made it evident that it is simply impossible to ignore the issue, where thousands of people were losing their lives everyday.

---

[*] Sanjay Lall & Albaladejo, Indicators of the Relative Importance of IPRs in Developing Countries, United Nations Conference on Trade and Development, (June 2003), https://unctad.org/system/files/official-document/ictsd2003ipd3_en.pdf.
[†] Integrating Intellectual Property Rights and Development Policy, Commission on Intellectual Property Rights, (Sept. 2002),http://www.iprcommission.org/papers/pdfs/final_report/ciprfullfinal.pdf.
[‡] WIPO Patent Agenda: Options for Development of the International Patent System, WIPO Doc A/37/6 (2002) Annex I, 3 , World Intellectual Property Organisation, (Oct. 2002), https://www.wipo.int/edocs/mdocs/govbody/en/a_37/a_37_6.pdf.
[§] Scherer & Watal, Post-TRIPS Options for Access to Patented Medicines in Developing Countries, Journal of International Economic Law 913, (Nov. 2001), http://www.icrier.org/pdf/jayawatal%20.pdf.

There is a need for international collaboration during such times, and a balance needs to be struck between the patent holders, and the needs and rights of the public during such an emergency.

Research questions

- Why is there a need to relax patent laws during a pandemic?
- What is the role of Compulsory Licenses during a pandemic?
- Can Medicine Patent Pool become a viable option ?

Research objectives

- To discuss the need to relax patent laws during the pandemic.
- To evaluate the role of compulsory licenses during a pandemic.
- To explore the viability of medicine patent pool during a pandemic.

Research Methodology

The research model undertaken consist of qualitative analysis, consisting purely of secondary sources like journals, books and articles that discuss the importance of flexibility of the patent laws during the pandemic; the drawbacks of voluntary licensing, and the significance of compulsory licensing. The promise that patent pools hold in such situations have also been looked into. The paper also attempts to make a comparative analysis of the steps taken by various countries to tackle this struggle between the medical patents and public healthcare.

Literature Review

Introduction

In this paper the author has studies a few research articles and e-books to conduct the study. The purpose of this literature review is to see whether there are any gaps or lacunae in the current literature that relate to the researcher's concerns or issues. The current literature review has been divided into two areas for a better understanding of the study and concerns involved, and comprehensive remarks and gaps will be examined within these headings.

Literature review of impact of the pandemic on patents and role of international bodies

The authors, Akber Ahmad and Maria Fatima[**] in their article have broadly discussed the shortcomings and futility of trying to maintain a strict patent regime during an emergency like the pandemic. The authors have then narrowed down to explore the Indian scenario during the pandemic, focusing on the Covishield and the Indian Covaxin vaccines; and how the production was increased for these vaccines. In the article by Abhayraj Naik[††], the author

[**] Akber Ahmad and Maria Fatima, Ramping up production of Covid-19 vaccine and its interplay with patent law , SCC Online, SCC OnLine Blog OpEd 112, (2021).

[††] Abhayraj Naik , Pharmaceutical Patents and Healthcare , SCC Online, 2 Socio-Legal Rev. 46 , (2006).

holistically discusses the dichotomy between pharmaceutical patenting and access to drugs for the public. He elaborately talks about the importance of TRIPS, and the how it strives to maintain basic balance between these two forces. The author also discussed in details the various articles under the doha declaration that are crucial for compulsory licensing of drugs by various countries during such an emergency. He also sheds light on the healthcare and pharmaceutical industry in India, and how it has changed post TRIPS.

The author, Elizabeth Siew-Kuan NG[‡‡] explores the tassel between the drug patent owners and accessibility to medicines to the general public. She points out the bone of contention between these two forces, and possibly resolutions for the same. She also delves into the various articles under TRIPS that govern compulsory licensing, which is a crucial method adopted by many counters during such emergencies. However she has very importantly pointed out the shortcomings of compulsory licensing, and how it is avoided by various agencies. The author , Rahul Vardhan[§§], in his article has discussed the fundamental relationship between patent right and Human rights. He firstly addresses the intellectual property perspective, focusing on the current position in the context of the TRIPS Agreement. He then goes on to discuss human rights, with a special focus on the evolution of human rights-intellectual property relationships; and then finally, delves into some of the potential solutions to the problem of medication access in underdeveloped countries, emphasising on the role that human rights can play in the debate if intellectual property and human rights are incompatible.

Literature review of compulsory licensing and patent pool

In the article by Anuja Misra[***] , the author briefly looks into the impact of pandemic on the various types of intellectual properties . She then goes onto the discuss the importance of compulsory licences during the pandemic, and the various articles under TRIPS which has made compulsory licensing such and effective tool to increase access of the public, especially those in underdeveloped and developing nation to life saving vaccines and rugs. The article provides an in detailed account of the potential of medical patent pools and how it is being encouraged by the United Nations in order to deal with such healthcare emergencies.

The author, Ankit Singh[†††] in his article provides an in depth analysis of the compulsory licensing , the various articles under TRIPS and Doha that govern it, and the various provisions under Indian Patent law as well. The author also looks into the various strategies other than compulsory licensing that can be adopted by countries during pandemics and epidemics; such as patent pool and patent pledge, and their potential for the future.
The author Sreenivasulu N S[‡‡‡], in his book has discussed compulsory licenses in

‡‡ Elizabeth Siew-Kuan NG, Balancing Patents and Access To Medicine, SCC Online, 21 SAcLJ 457, (2009).
§§ Rahul Vardhan , Relationship Between Patent Right and Human Right , SSC Online, CNLU LJ (1) [2010] 62.
*** Anuja Misra, The Corona Menace and Impact on IP Rights: Analyzing the Need for Better Decisions , SCC Online, 5 UPES LR (2020) 187 .
††† Ankit Singh, Pharmaceutical Patenting During Covid-19 Pandemic : Reigniting the Public Health Debate , SCC Online, 6 UPES LR (2021) 127 .
‡‡‡ Sreenivasulu N S, Law relating to Intellectual Property, (2nd ed.), (2018).

detail. He discusses provisions and nuances of compulsory licenses under TRIPS. He also provides a comparative analysis of the governance and the related law for compulsory licenses in the USA, Europe and India. He then goes on to explain the topic with the help of various judicial pronouncements passed in India with regards to compulsory licensing. The author in her paper will also look into the various steps taken by countries to ensure enforcement of compulsory licensing, as well as better accessibility of drugs other than compulsory licensing.

Patents and pandemics
Patent Rights and Human Rights

A patent right is a limited-time exclusive right granted by the state to an inventor or his assignee in exchange for the disclosure of his invention. The purpose of introducing patent rights is twofold: first, to acknowledge and value the inventor's efforts in bringing his invention to market, and second, to provide incentives for private sector industries to engage in more R&D programmes, and to provide them with the assurance that their product will not be exploited by others without their permission.[§§§] The World Trade Organization's (WTO) Agreement on Trade Related Aspects of Intellectual Property Rights has recognised and codified the patent right (TRIPS).[****] Human Rights are the rights that all human beings have simply because they are human.[††††] They ensure that all human beings have the essential needs that are necessary for their existence, survival, and development. It also provides a basic framework or guideline for the State to ensure that domestic or international norms are applied in a way that respects the public's basic rights. The "International Covenant on Economic, Social, and Cultural Rights" (ICSECR) and the "Universal Declaration of Human Rights" (UDHR) have both recognised and codified human rights at the international level.

The "Right to Health" is the most fundamental aspect of Human Rights that has been impacted by the establishment of patents. The establishment of patents in the pharmaceutical sector has jeopardised the public's right to health, resulting in the inaccessibility of vital drugs. Intellectual property rights are monopoly rights awarded to the right holder as a return for his intellectual ingenuity and service to society, or, as they say, "the inventor's prize." There are numerous arguments that support intellectual property rights as a means of protecting such creation. That being said, provisions encouraging the use of these assets in the public interest and ensuring that the needs of the public are addressed as well, are equally important. If intellectual property protection is simply viewed from the perspective of stimulating creativity by the market exclusivity it provides, it will defeat the entire reason of the property's existence, which is to meet the needs of the public. [‡‡‡‡]

In order to maintain their monopoly, renowned pharmaceutical corporations are usually reluctant to collaborate in the production of critical pharmaceuticals. The

[§§§] Pradeep Agrawal and P. Saibaba, TRIPS and India's Pharmaceutical Industries, 36 EPW, (2001) https://www.epw.in/journal/2001/39/special-articles/trips-and-indias-pharmaceuticals-industry.html, *(Accessed on 10th April 2022),*
[****] Harvey E. Bale Jr, The Conflict between Parallel Trade and Product Access and Innovation : The Case of Pharmaceuticals, The Journal of International Economic Law 1, (1998), https://heinonline.org/HOL/LandingPage?handle=hein.journals/jiel1&div=44&id=&page=.
[††††] Martha C. Nussbaum, Capabilities, Human Right and Universal Declaration, Fordham Law Review (Vol. 66), (1997), https://www.palermo.edu/Archivos_content/2015/derecho/pobreza_multidimensional/bibliografia/Sesion3_doc1.pdf.
[‡‡‡‡] Abhayraj Naik , Pharmaceutical Patents and Healthcare , SCC Online, 2 Socio-Legal Rev. 46 , (2006).

development of new medications necessitates a significant financial expenditure. Medical resources to combat COVID-19 and other medical supplies during the pandemic were decreasing rapidly, and patent rights were then becoming a barrier to public health protection.§§§§ Pharmaceutical businesses seek patents in order to maximise their return on investment. These corporations have a tendency to demand high prices for crucial pharmaceuticals during pandemics. Therefore ,the relationship between intellectual property protection and public interest must rely on a delicate balance between the two, which needs to be maintained. *****It needs to be acknowledged that vaccines and drugs for a pandemic like coronaviruses cant be compared to any other life threatening disease like cancer or HIV. During the pandemic there are thousands of people dying everyday, therefore it is necessary that patent rights take a backseat during such a situation, and public health is given utmost priority. †††††

Compulsory licensing

An efficient option for ramping up vaccine production is to use "compulsory licensing" of the Covid-19 vaccine, this allow the Central Government to override a patent and grant a licence to a local manufacturer to produce a global vaccine for "domestic use" without the permission of the patent holder. Many countries, including Israel, Canada, Germany, and Chile, have passed legislation or adopted resolutions requiring compulsory licensing of Covid-related drugs. ‡‡‡‡‡

TRIPS and Doha Declaration

The TRIPS Agreement, to which India is also a signatory, expressly states that in the event of a national emergency, a signatory country can use compulsory licensing. Article 31 of the TRIPS Agreement has an explicit provision for compulsory licensing, which allows a member countries to allow the use of a patent's subject matter without the patent holder's permission. Article 31(b) of the TRIPS Agreement states that in normal circumstances, any third party may approach the patent holder and make reasonable efforts to obtain permission to use the patented subject matter on reasonable commercial terms from the patent holder; however, if such efforts are not successful within a reasonable period of time, the member nation will permit the use of the patented subject matter by the interested third party upon application of the interested third party.§§§§§ However, there is an exception to the above-mentioned normal procedure for granting compulsory licences, in which the process is shortened and the member nation can directly grant licences to third parties for use of the patented subject-matter without requiring the third party to approach the patent holder and wait a reasonable amount of time for negotiations to fail. A member nation can employ this mechanism in the event of a national emergency or other exceptional situations, as well as in cases of public non-commercial use. ******

§§§§ Ankit Singh, Pharmaceutical Patenting During Covid-19 Pandemic : Reigniting the Public Health Debate , SCC Online, 6 UPES LR (2021) 127 .

***** Elizabeth Siew-Kuan NG, Balancing Patents and Access To Medicine, SCC Online, 21 SAcLJ 457, (2009).

††††† Akber Ahmad and Maria Fatima, Ramping up production of Covid-19 vaccine and its interplay with patent law , SCC Online, SCC OnLine Blog OpEd 112, (2021).

‡‡‡‡‡ Sreenivasulu N S, Law relating to Intellectual Property, (2nd ed.), (2018).

§§§§§ Rahul Vardhan , Relationship Between Patent Right and Human Right , SSC Online, CNLU LJ (1) [2010] 62.

****** Anuja Misra, The Corona Menace and Impact on IP Rights: Analyzing the Need for Better Decisions , SCC Online, 5 UPES LR (2020) 187 .

Now the question is whether a pandemic like Covid-19 would meet the criteria for using the rules allowing compulsory licences to be granted. The Doha Declaration on the TRIPS Agreement and Public Health, published in November 2001, clarifies a fundamental flexibility granted to governments under Article 31 of the TRIPS Agreement, namely the authority to give compulsory licences. "*Public health crises, including those linked to HIV/AIDS, TB, malaria, and other epidemics*," according to clause 5(c), might be considered "*a national emergency or other circumstances of exceptional urgency.*" As a result, there is no doubt that the Central Government has the authority to issue a statement granting a compulsory licence for Covid-19 vaccination to other pharmaceutical companies that are ready and able to comply.

The Doha deceleration provided further clarity to the objective stated under TRIPS, First, it emphasised that the TRIPS Agreement does not and should not preclude WTO member states from taking actions to protect public health, and it reiterated the members' rights to fully utilise the TRIPS Agreement's flexibilities in this regard. The weight of such declarations from all WTO members supports the conclusion that the Doha Declaration establishes that WTO members will not try to prevent one another from exercising these provisions. Second, the declaration emphasises that the TRIPS Agreement should be interpreted and implemented in a way that protects public health and, in particular, promotes universal access to medicines. Third, the declaration offers a number of critical clarifications about the TRIPS Agreement's flexibilities, which are made while underlining members' TRIPS Agreement commitments. As a result, there is no doubt that the Central Government has the authority to issue a declaration granting a compulsory licence for Covid-19 vaccine to other pharmaceutical companies that are willing and have the technological capability to manufacture the vaccine in order to ramp up production.

Indian Provision

Chapter XVI (Sections 84-92) of the Patents Act, 1970 enumerates the provisions relating to compulsory licensing. Section 84 of the Patents Act of 1970 states that "*any person interested*" may apply to the controller of patents for a compulsory licence after three years have passed from the date of the patent's grant on any of the following grounds:

- that the public's reasonable requirements for the patented invention have not been met; or
- that the patented invention is not available to the public at a reasonably affordable price.

Aside from the aforementioned, Section 92 of the Patents Act of 1970[††††††] is a special provision that allows the Central Government to give compulsory licences to local pharma firms to make generic copies of patented pharmaceuticals suo moto in the event of a national public health emergency. In such circumstances, the Central Government can use the provisions of Section 92 to declare a national emergency due to the Covid-19 pandemic and notify the patents in question, after

[††††††] Sec 92 of the Patents Act of 1970.

which anyone interested in manufacturing the patented commodity can make an application to the controller of patents, who can then issue a compulsory licence without having to go through the lengthy regular procedure.After a national emergency has been declared and the relevant patents have been notified, anyone interested in manufacturing the medicine can apply to the Controller General of Patents, who can then award a compulsory licence. Section 92 of the Act is similar to article 31 of the TRIPS agreement.

Adoption by various countries

Israel has been the first jurisdiction to issue a required licence for COVID-19. The Minister of Health and Attorney General approved the import of a generic version of Kaletra (a medicine made by Abbvie) from India to treat COVID-19 patients on March 20, 2020. This licence was granted under Section 104 of the Israeli Patent Law. In the interests of national security and other national defence needs, the clause authorises the government to disregard the law. Furthermore, such circumvention does not necessitate consulting the patent owners. In this case, the patent holder does not have the right to judicial review. The Prevention and Control of Infectious Diseases in Humans Act was passed by Germany on March 28, 2020. In the event of a national epidemic, it gives the Federal Ministry of Health additional authority. It authorises the Ministry to issue a compulsory licence under Section 13(1) of the current Patent Act, which allows compulsory licences to be granted in the public interest and security.

Several South American countries have also joined the fight against COVID-19. The Chilean Chamber of Deputies passed a resolution on March 17, 2020, requesting that the government express its support for issuing obligatory licences for patented medicines and devices in order to treat COVID-19 sufferers.‡‡‡‡‡‡ We understand the dilemma: there are some drugs that are too expensive to make available to all of the patients who require them; nonetheless, broad compulsory licensing might substantially damage the pharmaceutical industry's ability for research and development. As a result, a careful balance would need to be found to ensure that compulsory licensing is only used when the existence of a monopoly creates an undesirable and unfair situation. The guiding idea here would be that the protection provided by the patent system should be proportional to the inventor's contribution.

Patent pool

Aside from obligatory licensing of COVID-19-related patented items, the global community is increasingly embracing patent pools, in which two or more firms join forces (via a consortium) to cross-license their patents in a certain technology. A patent pool is a contract between two or more patent owners to licence one or more of their patents to one another or to other parties. Patent pools are frequently associated with complex technologies that necessitate the use of complementary patents in order to provide successful technological

‡‡‡‡‡ Dianne Nicol, Jane Nielsen, Humanity cannot afford a COVID-19 patent battle, International Science Council, https://council.science/current/blog/covid-patents/.

solutions.§§§§§§

The World Health Organization's Director-General recently approved the notion of forming a voluntary patent pool. The major goal is to gather patent rights, regulatory test data, and other relevant data. The major goal is to absorb patent rights, regulatory test data, and other key information in order to produce COVID-19 related medications, vaccines, and diagnostics. The international pharmaceutical industry was challenged by this. This concept was praised all across the world. However, its effectiveness is primarily dependent on Big Pharma's cooperation, as this pandemic represents a fantastic opportunity for them to expand their business and make massive profits. *******

The concept of a global patent pool to combat the epidemic is unquestionably ambitious. Governments, international organisations, and inventors all over the world would have to work together. It is necessary to have a strong desire to put the idea of a worldwide patent pool into action. The delay in the availability of anti-COVID medicines/vaccines is one of the key reasons for the creation of this proposal of a global patent pool. An effective medication or vaccine would take at least 6-10 months to develop, according to a ballpark estimate. Considerably after that, due to regulatory procedures in each jurisdiction, the global distribution of such a drug/medicine will take even longer.††††††† This is due to the fact that every country requires prior authorisation for commercial manufacture of any product. It is necessary to take measures linked to the immediate manufacturing and marketing of medications and vaccines. To have a discourse, innovators, manufacturers, and the supply chain must all come together on a single platform. The international community, including governments, international organisations, and the corporate sector, must make significant efforts.

There is conflict among innovators from various countries because they are all working on a COVID-19 treatment in the form of a drug or vaccination. They'd all be filing patents in order to get monopoly and exclusivity. However, there are some areas of the world where innovators are working together to discover solutions. 20 As a result, the argument that patents would obstruct the rapid diffusion of COVID-19 drugs/vaccines continues to hold water. Constructive initiatives and worldwide agreement have become urgently required.‡‡‡‡‡‡‡ Patent pools are recommended to ensure effective aggregation, administration, and dissemination of anti-COVID goods. The following are the major benefits of a patent pool:

- it is managed by a central agency for efficient operation;
- it balances the interests of participating innovators; and
- it is easily accessible for licences.

§§§§§§ Patent Pools and Antitrust — A Comparative Analysis, WIPO Secretariat, (March 2014), http://www.wipo.int/export/sites/www/ip-competition/en/studies/patent_pools_report.pdf.

******* Joseph E. Stiglitz, Arjun Jayadev, and Achal Prabhala, Patents vs. the Pandemic, Columbia Business School, (2020), https://www8.gsb.columbia.edu/articles/chazen-global-insights/patents-vs-pandemic.

††††††† Brink Lindsey, Why intellectual property and pandemics don't mix, Brooking, (June 2021), https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/.

‡‡‡‡‡‡‡ Ylva Skoglösa, Denmark: Pharma Patents In The Pandemic, Mondaq, (Oct 2021), https://www.mondaq.com/patent/1109366/pharma-patents-in-the-pandemic.

Patent pools have been popular in a variety of fields, including biotechnology, digital technologies, and pharmaceuticals. However, the necessity is urgent this time, and the scenario is quite demanding. Certain research institutions have created their own patent pools, but the most effective option, as previously noted, is to create a global patent pool to combat this horrifying pandemic.

Conclusion

Public interest and corporate monopoly have always been at odds when it comes to intellectual property rights, particularly patents linked to drugs. The topic has always been divisive, owing to the fact that no pharmaceutical corporation wants to jeopardise its monopoly. Pharmaceutical businesses all across the world are vehemently opposed to the government or any other group having unwitting access to their patented medication. These businesses have outstanding R&D and financial capabilities. It's never easy to challenge their monopoly, which is legally protected. There have been times in the past when this fact has been exaggerated.In India, the very famous "*Bayer* v. *Union of India"* [§§§§§§§] has been the prime example of the struggle between the interests of pharmaceutical companies and public health. Indian Patent Law, in consonance with TRIPS, holds a strong stance in favour of public health and Indian courts are always inclined towards making life-saving widely available at affordable prices.

For governments all throughout the world, balancing these two criteria has always been a difficult issue. This is precisely why safeguards such as compulsory licensing were included in the TRIPS Agreement and the Doha Declaration was signed. During the COVID-19 pandemic, we've found ourselves in the same situation. Fortunately, the pharmaceutical sector has begun to contribute to the fight this time. During the pandemic, governments, the pharmaceutical sector, innovators, as well as researchers and academicians, were all actively mobilising. Governments all across the world used a variety of strategies to make useful and effective drugs and devices available to combat COVID-19. Pharmaceutical patenting has long had a complex landscape, and its ongoing battle with the general public's interest has always been a difficult topic. It is up to policymakers, however, to adopt the most efficient steps in light of the situation. In India, the patent law gives the government a wide range of alternatives for exercising its rights in connection to a patented pharmaceutical product and making it widely and inexpensively available in the public interest.

However, it is critical to strike a balance between the government's interference and the patentee's rights; otherwise, litigation would ensue, and the objective benefit will be postponed unduly, which is the last thing anyone wants in these trying circumstances. As a result, it is critical that morality and prudence are brought to the forefront of this ongoing debate, and that the pharmaceutical sector and governments, not only in India but in other countries affected by COVID-19, come up with a feasible solution that will serve as a model for the future. Although the pandemic will eventually cease, it is also critical that patent rights and public health coexist peacefully in the wider interest of humanity.

[§§§§§§§] Bayer Corporation v. Union of India & Ors., Writ Petition No.1323 of 2013.

References

1. Abhayraj Naik , Pharmaceutical Patents and Healthcare , SCC Online, 2 Socio-Legal Rev. 46 , (2006).
2. Akber Ahmad and Maria Fatima, Ramping up production of Covid-19 vaccine and its interplay with patent law , SCC Online, SCC OnLine Blog OpEd 112, (2021).
3. Ankit Singh, Pharmaceutical Patenting During Covid-19 Pandemic : Reigniting the Public Health Debate , SCC Online, 6 UPES LR (2021) 127 .
4. Anuja Misra, The Corona Menace and Impact on IP Rights: Analyzing the Need for Better Decisions , SCC Online, 5 UPES LR (2020) 187 .
5. Bayer Corporation v. Union of India & Ors., Writ Petition No.1323 of 2013
6. Brink Lindsey, Why intellectual property and pandemics don't mix, Brooking, (June 2021), https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/.
7. Dianne Nicol, Jane Nielsen, Humanity cannot afford a COVID-19 patent battle, International Science Council, https://council.science/current/blog/covid-patents/.
8. Elizabeth Siew-Kuan NG, Balancing Patents and Access To Medicine, SCC Online, 21 SAcLJ 457, (2009).
9. Harvey E. Bale Jr, The Conflict between Parallel Trade and Product Access and Innovation : The Case of Pharmaceuticals, The Journal of International Economic Law 1, (1998), https://heinonline.org/HOL/LandingPage?handle=hein.journals/jiel1&div=44&id=&page=.
10. Joseph E. Stiglitz, Arjun Jayadev, and Achal Prabhala, Patents vs. the Pandemic, Columbia Business School, (2020), https://www8.gsb.columbia.edu/articles/chazen-global-insights/patents-vs-pandemic.
11. Khidoyatova, M. R., Kayumov, U. K., Inoyatova, F. K., Fozilov, K. G., Khamidullaeva, G. A., & Eshpulatov, A. S. (2022). Clinical status of patients with coronary artery disease post COVID-19. International Journal of Health & Medical Sciences, 5(1), 137-144. https://doi.org/10.21744/ijhms.v5n1.1858
12. Martha C. Nussbaum, Capabilities, Human Right and Universal Declaration, Fordham Law Review (Vol. 66), (1997), https://www.palermo.edu/Archivos_content/2015/derecho/pobreza_multidimensional/bibliografia/Sesion3_doc1.pdf.
13. Patent Pools and Antitrust — A Comparative Analysis, WIPO Secretariat, (March 2014), http://www.wipo.int/export/sites/www/ip-competition/en/studies/patent_pools_report.pdf.
14. Pradeep Agrawal and P. Saibaba, TRIPS and India's Pharmaceutical Industries, 36 EPW, (2001) https://www.epw.in/journal/2001/39/special-articles/trips-and-indias-pharmaceuticals-industry.html, *(Accessed on 10th April 2022),*
15. Rahul Vardhan , Relationship Between Patent Right and Human Right , SSC Online, CNLU LJ (1) [2010] 62.
16. Sec 92 of the Patents Act of 1970.
17. Sreenivasulu N S, Law relating to Intellectual Property, (2nd ed.), (2018).

18. Widana, I.K., Sumetri, N.W., Sutapa, I.K., Suryasa, W. (2021). Anthropometric measures for better cardiovascular and musculoskeletal health. *Computer Applications in Engineering Education*, *29*(3), 550–561. https://doi.org/10.1002/cae.22202
19. Ylva Skoglösa, Denmark: Pharma Patents In The Pandemic, Mondaq, (Oct 2021), https://www.mondaq.com/patent/1109366/pharma-patents-in-the-pandemic.