

World Intellectual Property Organization

UGAMUNC 30

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Letter from the Chairs

Dear Delegates,

My name is Nikhil Patel, and I have the honor of being your chair for the 2023 UGAMUNC WIPO (World Intellectual Property Organization). I am from Buford, Georgia, and I am a dual major in Computer Science and Finance as a freshman here at the University of Georgia. I love watching soccer and playing board games, as well as going out with friends. Model UN has allowed me to grow my experience as an effective writer and public speaker, and I have made life-long friends through fun experiences. Outside of Model UN, I enjoy playing soccer, swimming, and playing video games with friends. Please feel free to email <u>nikhilppatel2027@gmail.com</u> if you have any questions or need assistance.

My name is Danielle Hackett, and I'll be serving as a co-chair as well. I'm currently a first year at UGA, majoring in Landscape Architecture, but I have been involved in Model UN since middle school. Along with my involvement in MUN, I'm a part of UGA's fencing team, and enjoy drawing, sculpting, and other forms of visual art! This is my first time co-chairing, and I am thrilled to be helping guide this committee. I have many great memories of my own UGAMUNC experience, and I can't wait to see your variety of positions and solutions to these complex issues. **Position papers are due at 11:59 pm on January 19th**, and you can send them to my email address: <u>Danielle.Hackett@uga.edu</u>. If you need help with writing, formating, or have any general questions about MUN or this committee, please feel free to reach out!

Best, Nikhil Patel and Danielle Hackett

Sensitivity Statement

As you conduct research and prepare to attend our conference, please remember to be respectful and mindful of different cultures, traditions, religions, and more. Here at the University of Georgia, we do not tolerate any form of discrimination. As a standard, follow the Western business attire dress code, do not imitate accents when speaking, and do not bring props. Treat your fellow delegates with the utmost respect, regardless of differences in ability, age, culture and ethnicity, gender identity, national origin, race, religion, and sexual orientation. Please keep this in mind, whether it's the ideas discussed during debate or the content of your papers.

Additionally, cheating by pre-writing or other measures such as the use of AI (ChatGPT, Google Bard, Grammarly AI, etc.) will not be allowed, as it not only provides certain delegates with unfair advantages, but also takes away from the passion, personality, and effort that each delegate puts into their ideas and works. The use of AI to write notes, speeches, or papers in committee is strictly forbidden.

In short, please conduct yourself in a respectful and professional manner. If instances of racism, sexism, homophobia, xenophobia, etc. ever arise during committee, please let us know so that we can handle the situation and create a safe and welcoming environment for everyone. Furthermore, if our staff determine that you have violated our code of conduct, or that you have committed any aforementioned forbidden activities such as prewriting, accent imitation, or racism, we reserve the right to disqualify you from UGAMUNC 30.

Background

The World Intellectual Property Organization, commonly referred to as WIPO, is a specialized agency of the United Nations with 193 active member states. WIPO's overall goal is to develop an international intellectual property (IP) system that encourages and protects creativity and innovation while considering the welfare of the public. The primary challenge to this, and another duty of WIPO, is ensuring cooperation and reconciling the potential disparities of the varying intellectual property systems of the organization's member states.

WIPO serves as a general forum to discuss and build international IP law, global standards, and guidelines– especially in the context of new and developing technology. WIPO also manages international services that protect the rights of IP holders, assists in filing international patent applications (specifically, the PCT international patenting system), and resolves disputes (The WIPO Arbitration and Mediation Center). The organization also acts as a reference source and network for exchanging and accessing information about IP, IP policy, and IP systems.

WIPO initially began as the United International Bureaux for the Protection of Intellectual Property, or BIRPI (its French acronym), in 1893 after the conclusion of the Paris Convention for the Protection of Industrial Property and The Berne Convention for the Protection of Artistic and Literary Works. These conferences aimed to give creators more control over the use of their work, greater payment and compensation for their creations, and to ensure that their ideas would be protected from theft or unauthorized replication on an international level. It was renamed and restructured into the World Intellectual Property Organization in 1970. It was formally established as an agency of the United Nations in 1974.

Topic A: The Influence of Intellectual Property on Artificial Intelligence

Introduction

As Artificial Intelligence (AI) technology expands beyond pure theory and into active use and development, as well as into the public consciousness, its application and role in creation seems to raise more questions than answers. Currently, AI is arguably one of the most relevant topics in technology and innovation, and as such, it has also become a hot topic in the world of Intellectual Property Law.

Artificial Intelligence is a term that lacks a singular, comprehensive definition. "AI" can refer to both theoretical and existing technology, the latter of which encompasses a wide range of technology with a wide range of functions. Broadly, Artificial Intelligence is defined as technology (currently, primarily computer systems) that are capable of performing human tasks.

History

Before the 20th century, the focus was on algorithms and theoretic concepts rather than Artificial Intelligence. Furthermore, innovators who developed these theoretic concepts and the basics of Artificial Intelligence wanted to foster creativity, so they made all of their work open-source. Therefore, intellectual property did not play a huge role in the early days of AI development. For example, in 1956, a small group of scientists came up with the idea of AI through collaboration with the brightest professors in the Dartmouth Summer Research Project on Artificial Intelligence.¹ The professors did not want to keep their ground-breaking idea private and profit from future patents because their idea was for AI to be shared and improved on by everyone. Open-source works and ideas like the Dartmouth Summer Research Project lets innovators build off of previous developers' works, which allows for open collaboration.

In contrast, the late 20th century saw a drastic increase in the number of AI-based patents. The United States Patent and Trademark Office (USPTO) saw a significant increase in patents filed to their office as AI developers wanted to profit from their algorithms and software by filing patents to protect their work. The upwards trend of AI-based intellectual property is synonymous with the advancement of AI and technology during the Dot-Com Bubble– a stock market bubble in the late 1990s that corresponded with a large increase in Internet adoption. Although intellectual property was not the main force behind the Dot-Com Bubble, intellectual property still created an excitement for innovation in the technology sector. During the Dot-Com Bubble, companies wanted to acquire a robust collection of patents as patents justified high stock

¹"Exploring the Significance of the Dartmouth Workshop." n.d. INDIAai.

https://indiaai.gov.in/article/exploring-the-significance-of-the-dartmouth-workshop.

prices.² Having a respectable number of patents could overshadow a company's poor financial performance to investors, so patents became essential to the technological sector.

In the decades following the Dot-Com Bubble, AI became more advanced, prevalent, and capable. From scrolling through social media on a phone to a self-driving car reaching its destination, AI is utilized in almost every device humans interact with. Despite the potential profit companies can make from receiving a patent from one of their innovations, some companies decide to not get the patent in order to foster more creativity and innovation. For example, Tesla, a leading company in the development of self-driving cars, is starting to open source code for Tesla hackers, security researchers, and potential innovators to build off of.³ Chat GPT, a popular AI model, follows this scheme of not embracing patents to protect their software. Users of Chat GPT, however, are allowed to resell, reprint, and merchandise anything created through AI, but the user will find it difficult to receive a patent for this creation.⁴ This difficulty stems from stringent patent laws requiring an unspecified amount of human involvement in the creation.

Despite AI's potential to benefit society in an unforeseen manner, there are security risks involved with the advancement of AI. Leading technological figures including Elon Musk believe that AI has the potential to disrupt all known frameworks of humanity. Furthermore, people have a limited amount of trust in the experts developing AI because of their unknown and conflicting morals and visions of AI's future.⁵ AI is centered around the unknown, so naturally, there is reason to worry about AI being utilized by people with extremist values. Bionic soldiers and other military equipment implementing AI have the potential to think for themselves and overpower humans. This is one of the many mysteries about AI's futures. Nonetheless, international agreements on AI's development and privacy must be regulated for the world to cohesively develop AI in a safe manner.

Past Action

Committees around the world recognize the importance of intellectual property's role in the future of AI and are therefore taking action to form new acts and laws. One of these acts is the EU AI Act that is predicted to be passed and enforced by the end of 2023 or the beginning of 2024. The world's first rules on AI will ban products considered an "Unacceptable Risk", which

Licenses." Electrek. May 19, 2018. https://electrek.co/2018/05/19/tesla-releases-so ftwar-open-source-licences/. ⁴ Natalie. 2023. "What Is ChatGPT? | OpenAI Help Center." Help.openai.com. 2023.

² "Patent Lessons from the Dot-Com Bust." n.d. Legaltech News. Accessed October 25, 2023. https://www.law.com/legaltechnews/almID/1202425467337/.

³Lambert, Fred. 2018. "Tesla Releases Some of Its Software to Comply with Open Source

https://help.openai.com/en/articles/6783457-what-is-chatgpt.

⁵ joshbersin. 2023. "Why Is the World Afraid of AI? The Fears Are Unfounded, and Here's Why."

JOSH BERSIN. April 2, 2023. https://joshbersin.com/2023/04/why-is-the-world-afraid

⁻of-ai-the-fears-are-unfounded-and-heres-why/#:~:text=People%20worry%20that%20AI %20systems.

include cognitive behavioral manipulation of people, assigning people social scores, and remote biometric identification systems like facial recognition.⁶ This act will have significant influences on the role of intellectual property on AI because it will be more difficult for inventors to patent their software. Higher security measures will make the patent application process longer, and inventors may become more fearful of the patent application process because of the risk of their product being banned. However, the overall influences of intellectual property on AI after this act gets passed is unknown and is largely contingent on how inventors change their approach to AI development.

WIPO held a conversation on September 27, 2019 to discuss the unique intersection between intellectual property and artificial intelligence. Experts discussed the most pressing concerns of this intersection, and some of the points raised in this discussion included the necessity of establishing a precise boundary between AI-generated and AI-assisted outputs, the transparency of AI algorithms required to distinguish them from other algorithms, and scenarios involving a product created by multiple AI models.⁷ This discussion did not lead to any laws being passed, but it raised important points concerning what aspects of AI need to be considered in future intellectual property laws.

Questions to Consider

- 1. Should creations made from AI be patentable?
- 2. If an inventor uses AI to create a distinguished product, how much human interaction must be involved for the product to be patentable?
- 3. How should intellectual property laws be revised to increase international security?
- 4. Should the EU AI Act be modified or outlawed?

Suggested Readings

- Why Is The World Afraid Of AI? The Fears Are Unfounded, And Here's Why: <u>https://joshbersin.com/2023/04/why-is-the-world-afraid-of-ai-the-fears-are-unfounded-an</u> <u>d-heres-why/</u>
- The Future of Intellectual Property in the Era of AI: https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/#:~:text=%E2%80%9CThe%20relationship%20between%20artificial%20intelligence,%2C%20copyrights%2C%20and%20trade%20secrets

⁶ European Parliament. 2023. "EU AI Act: First Regulation on Artificial Intelligence | News | European Parliament." Www.europarl.europa.eu. August 6, 2023. https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act

⁻first-regulation-on-artificial-intelligence.

⁷ Review of WIPO CONVERSATION on INTELLECTUAL PROPERTY (IP) and ARTIFICIAL INTELLIGENCE (AI). 2021. In Summary of Second and Third Sessions. World Intellectual Property Organization.

Topic B: The Impact of Intellectual Property on Medicine and Public Health

Introduction

The concept of intellectual property in medicine dates back to the late 17th century, when inventors patented revolutionary medicines to keep their remedies a secret. Intellectual property has since expanded its outreach and influence on public health. For instance, patents in vaccines and medicine play a significant role in companies' potential profit from selling their patented products and countries' abilities to effectively distribute these necessary health products to the public. The vast power of intellectual property in medicine and countries' desire to protect their people can lead to disputes between countries. Therefore, the United Nations established an agency called the World Intellectual Property Organization (WIPO), so no country or organization can abuse their power to inhibit economic and social development.

History

Despite treatments and unlimited access to biological research, approximately 39 million people still suffered from HIV in 2022.⁸ Many people are simply unable to access affordable treatment, but the inability to access HIV treatment has occurred since the treatment's development. In 1994, a year before the release of HIV's most popular treatment, Antiretroviral Treatment (ART), global trade rules requiring patents for medicine were enacted and enforced.⁹ Although patents stimulate innovation for developing medicine, it decreases the supply of this medicine because companies are not allowed to replicate the formulas and processes required to produce new ART medicines. Therefore, when an effective and safe ART with three drug combinations was finally developed and released in 1995, prices skyrocketed to approximately \$15,000 for a patient per year.¹⁰ These steep prices prevented patients in low and middle income countries from purchasing these treatments, and HIV continued to spread across these regions. To decrease these prices and allow developing countries to obtain life-saving HIV treatment, various organizations established charities, distribution centers, and licensing agreements to encourage corporations to expand their outreach. One of the most popular and effective organizations that accomplished this task is the Medicines Patent Pool (MPP). The MPP allows companies to give licenses for access to HIV treatment to the MPP, and then, the MPP gives sublicenses to qualified medicine manufacturers.¹¹ These manufacturers could produce a large quantity of treatments, sell them to patients in developing countries at an affordable price, and pay royalties from sales to the companies who granted the MPP with licenses to produce their

¹⁰ Id.

⁸ Jul 26, Published:, and 2023. 2023. "The Global HIV/AIDS Epidemic." KFF. July 26, 2023. https://www.kff.org/global-health-policy/fact-sheet/the-global-hiv-aids-epidemic/#:~:tex t=Approximately%2086%20million%20people%20have.

⁹ Hoen, Ellen 't, Jonathan Berger, Alexandra Calmy, and Suerie Moon. 2011. "Driving a Decade of Change: HIV/AIDS, Patents and Access to Medicines for All." *Journal of the International AIDS Society* 14 (1): 15. https://doi.org/10.1186/1758-2652-14-15.

¹¹ "Review of Intellectual Property and Access to Health Technologies." 2016. UNAIDS. 2016. <u>https://www.unaids.org/sites/default/files/media_asset/JC2820_en.pdf</u>.

treatment. The MPP's licensing agreements have saved more than 100,000 lives, and they have generated \$2.6 billion in cost savings.¹² The MPP's plan was ingenious because manufacturers were able to earn a profit and patients in developing countries received necessary treatment. Despite this ingenuity, volunteer licensing often leads to the exclusion of middle-income countries as most corporations and manufacturers target developing countries, which are the largest and most impacted regions. In fact, data analytics conclude that more than 80% of HIV patients live in low- and middle- income countries, with middle-income countries making up a substantial portion of this percentage.¹³ This exclusivity leads to an increasing burden on middle income countries because they must figure out other ways to pay for expensive treatment.

In addition to high prices, rigid international and intellectual property laws are making it difficult for countries to develop and import medicine. For example, Brazil and Thailand developed generic antiretroviral medicines at 25% of the cost of other HIV treatments, but they were unable to mass produce and sell these treatments because of patent challenges and trade pressures.¹⁴ Certain patent laws and licensing agreements are leading to less innovation because medicines from different companies often have overlapping formulas or design elements, leading to legal problems with the countries whose companies have the patents. As of today, HIV treatment is still expensive but has gradually become more affordable to patients and countries around the world. The decrease in price is partly down to a stunning advancement in ART by Cipla, an Indian manufacturer, coupled with India's 2005 Patent Act¹⁵. Cipla's development led to affordable and effective HIV treatment. India's Patent Act was made to abide by Trade-Related Aspects of Intellectual Property Rights' (TRIPS) regulations while preserving a healthy balance between public health interests and intellectual property rights. One of the ways the Patent Act sustains this balance and keeps treatment affordable is by permitting compulsory licensing. Compulsory licensing significantly increases production and therefore permits lower costs for treatment. While there has been appreciable progress in expanding ART's outreach, newly modified treatments are more effective but remain costly, and there continues to be ongoing debates concerning patent law's influence on the balance between patent protection and public health.

The spread and ongoing resolution of HIV is a blueprint for vaccine distribution during the COVID-19 pandemic. The COVID-19 pandemic highlighted the benefits and problems of current intellectual property regulations in the medical industry. The main benefit was the

¹² Id.

¹³ Allel, Kasim, Gerard Joseph Abou Jaoude, Charles Birungi, Tom Palmer, Jolene Skordis, and Hassan Haghparast-Bidgoli. 2022. "Technical Efficiency of National HIV/AIDS Spending in 78 Countries between 2010 and 2018: A Data Envelopment Analysis." Edited by Yubraj Acharya. *PLOS Global Public Health* 2 (8): e0000463. https://doi.org/10.1371/journal.pgph.0000463.

¹⁴ "Review of Intellectual Property and Access to Health Technologies." 2016. UNAIDS. 2016. https://www.unaids.org/sites/default/files/media_asset/JC2820_en.pdf.

financial motive patents brought to pharmaceutical companies for them to innovate and develop a COVID-19 vaccine. This motive coupled with newly implemented biomedical technology quickly brought an effective and thoroughly tested vaccine to the market. However, after the vaccine was eligible to enter the market, the flaws of intellectual property began to show. One of these flaws is intellectual property creating barriers that prevent people in low-income countries from accessing these vaccines. In fact, in May 2022, a mere 16% of people in low-income countries received a single vaccine while 80% of people in high-income countries received them.¹⁶ While people considered low-risk in high-income countries are receiving vaccines, the people considered high-risk in low-income countries, such as the elderly and people with underlying medical conditions, do not have access to these vaccines. Certain intellectual property laws in TRIPS allow corporations to limit their production of vaccines and choose which countries can receive them. To resolve this issue, all 164 members of the World Trade Organization agreed to a TRIPs waiver, which would allow domestic producers in high-income countries to produce and export vaccines without the patent owner's permission.¹⁷ However, this was supposed to be a short-term solution, and the WTO spent two years trying to reach a consensus with every member. Intellectual property laws such as TRIPS need to be reformed along with licensing agreements to ensure that the world is ready to protect financial interests and global health in the next health crisis.

Past Action

The World Trade Organization (WTO) created the Trade-Related Aspects of Intellectual Property Rights (TRIPS) in January of 1995. This agreement is significant because it is the first international agreement that deals with intellectual property protection in trade-related areas.¹⁸ TRIPS allowed countries to enforce intellectual property protection and thereby prevent the production and distribution of counterfeit goods. However, TRIPS receives criticism for providing too much protection for intellectual property in a public health setting. Therefore, there are ongoing debates to determine how to modify TRIPS to create a sustainable balance between financial incentive and public health.

To allow members of the WTO to abide by the TRIPS agreement and have access to sufficient medicine, the WTO adopted the Doha Declaration. The purpose of the Doha Declaration is to help developing countries by obtaining and distributing enough medicine, vaccines, and treatments to their citizens.¹⁹ To achieve this goal, the Doha Declaration reinstated

nnovation/trips-waivers-and-pharmaceutical-innovation#:~:text=On%20June%2022%2C%202022%2C%20the. ¹⁸ "Review of Introduction to TRIPs Agreement." n.d. Japan Patent Office Asia-Pacific Industrial Property Center, JIII. <u>https://www.jpo.go.jp/e/news/kokusai/developing/tr aining/textbook/document/index/TRIPs_Agreement.pdf</u>. ¹⁹ "Review of PARAGRAPH 6 of the DOHA DECLARATION on the TRIPS AGREEMENT and PUBLIC

HEALTH." 1AD. World Trade Organization. September 1AD. <u>https://ustr.gov/archi</u> ve/assets/Trade Sectors/Intellectual Property/Public Health/asset upload file511 4113.pdf.

¹⁶ "COVAX Calls for Urgent Action to Close Vaccine Equity Gap." n.d. CEPI. Accessed October 20, 2023. <u>https://cepi.net/news_cepi/covax-calls-for-urgent-action-to-close -vaccine-equity-gap/.</u>

¹⁷ "TRIPS Waivers and Pharmaceutical Innovation | Perspectives on Innovation | CSIS." n.d. Www.csis.org. Accessed October 20, 2023. <u>https://www.csis.org/blogs/perspectives-i</u>

and encouraged compulsory licensing and solidarity. The declaration's plan has been successful as more than 60 low- and middle- income countries have mass produced variations of patented medicines.²⁰

WIPO has also taken action to resolve potential intellectual property issues relating to public health. One important action that they have taken is providing all intellectual property information for free.²¹ This free information allows researchers and manufacturers to carefully plan their next steps of development to avoid legal issues. However, the patent system enacted by WIPO has drawbacks that raise ongoing debates for possible improvements to the patent system.

Important Vocabulary

- 1. **Patent Linkage**: Prevents a country's drug authority from approving a medicine if there is already a patent for it
- 2. Patent Extension Provisions: Allows companies to extend their 20-year patent term
- 3. **Voluntary Licensing**: When the patent holder allows someone to use the patent rights under certain restraints, often, but not always, in exchange for royalties from sales
- 4. **Compulsory Licensing**: When the government allows someone to produce a patented product without the patent owner's permission, in exchange for royalties

Questions To Consider

- 1. Should patent protections be waived for all vaccines?
- 2. How should countries with limited public health resources be represented in WIPO to ensure they have sufficient access to medicines and vaccines?
- 3. Do any modifications need to be made to TRIPS to protect public health?

Suggested Reading

- Intellectual Property and Access to Health Technologies: https://www.unaids.org/sites/default/files/media_asset/JC2820_en.pdf
- TRIPS Waivers and Pharmaceutical Innovation: <u>https://www.csis.org/blogs/perspectives-innovation/trips-waivers-and-pharmaceutical-inn</u> <u>ovation#:~:text=On%20June%2022%2C%202022%2C%20the</u>

²¹ "Public Health and Patents." n.d. Www.wipo.int.

https://www.wipo.int/patent-law/en/developments/publichealth.html.

²⁰ Hoen, Ellen 't, Jonathan Berger, Alexandra Calmy, and Suerie Moon. 2011. "Driving a Decade of Change: HIV/AIDS, Patents and Access to Medicines for All." *Journal of the International AIDS Society* 14 (1): 15. https://doi.org/10.1186/1758-2652-14-15.