#### RESEARCH NOTE

## Reinforcing the Role of Intellectual Property in the Battle Against the Pandemic: The Vowel Framework

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The intellectual property (IP) system plays a vital role in public health crises as everyone should have access to medicines and equipment to protect themselves. Thus, the State can utilize the system for the greater good. An IP-centric approach can be summarized using the simple letters of the vowels: Awareness – for the populace to respect IP rights, they must first be educated as to its value; Enforcement – for infringers to be discouraged, IP holders should have an avenue for the easy enforcement of their rights; Incentivize – for businesses to be encouraged to invest in certain forms of IP, the State should grant fiscal/non-fiscal incentives to key industries; Ownership – for researchers and educational institutions to bloom, there must be a well-defined ownership structure for intellectual property; and Utilization – for the public to benefit from the protection granted to private entities, such inventions must be utilized in a fair and reasonable manner. The paper provides a discussion on the challenges and opportunities of the Intellectual Property System in the Philippines and provides suggestions to fine-tune the intellectual property system to serve as an incentive mechanism to align private motives for innovation with the preferences of society.

Keywords: Intellectual Property, Patents, Law

JEL Classifications: O34, K20, K49

#### **Purpose of Intellectual Property Protection**

The intellectual property (IP) system is vital to the development of creative activity, the transfer of technology, the influx of foreign investment, and the access to products (Intellectual Property Code, 2015). The use of IP also bears a social function, and the state shall promote the diffusion of knowledge for national development and progress (Intellectual Property Code, 2015). It should also safeguard the rights of inventors and creators by enhancing the enforcement of IP rights. No less than the Philippine Constitution in Article XIV provides that the state shall protect the exclusive rights of scientists, inventors, artists, and other gifted citizens to their IP, particularly when the same is beneficial to the people (Const. [1987]).

The IP system is meant to be an incentive mechanism that balances both private and public rights (World Intellectual Property Organization n.d.). On the one hand, it allows the creators to benefit from their hard work by giving them the exclusive right to prevent others from manufacturing or selling the invention (Intellectual Property Code, 2015). Thus, creators and inventors are allowed to reap the benefits of their creations and productions (WIPO, n.d.a). On the other hand, after a certain period, the invention or the work becomes part of the public domain, and anyone is free to reproduce or improve the same (WIPO, 2008).

In fine, the IP system is a useful incentive mechanism to align private motives for innovation with society's preferences (WIPO, 2011). Accordingly, an efficient system can also help nations use IPintellectual property as a means for economic development, and social and cultural well-being (WIPO, n.d.b).

## The Importance of the intellectual property system in Safeguarding Innovation

Every person, as a fundamental human right, should have a standard of living adequate for the health and well-being of him- or herself and his or her family, including access to the necessary medical care (Universal Declaration of Human Rights, 1948). The Constitution of the World Health Organization (WHO) provides that the health of all people is fundamental to peace and security (WHO Constitution, 1948). All persons, especially during public health crises, should have access to medicines and equipment to protect themselves. That said, affordability and availability are vital considerations.

In this connection, drug development is both costly and lengthy. According to research by the Pharmaceutical Research and Manufacturers of America (PhRMA), the average time to develop a drug is between 10 to 15 years, with an average cost of around \$2.6 billion per drug. PhRMA member companies collectively invested \$58.8 billion in research and development in 2015 alone (PhRMA, 2016). Taken together, drugs may not be necessarily available and accessible. More so, if these inventions cannot be protected, no entity will be enticed to develop them as there will be no reasonable return of investment.

Another vital industry during a pandemic is the one for personal protective equipment (PPE). These are articles of clothing such as gloves, goggles, hats, and protective clothing worn to minimize exposure to occupational hazards (Eberly, 2007). In February 2020, the WHO issued guidance that the current global stockpile of PPEs is inadequate due to surging global demand (WHO, 2020). As early as March 24, 2020, there have been reports of shortages of PPEs for Filipino health workers, resulting in a surge in COVID-19 cases among them (WHO, 2020).

Finally, another key industry is the supply of testing kits. The Philippines has been ramping up its testing capacity by fast-tracking the accreditation of laboratories from five laboratories in March 2020 to 23 laboratories in May 2020. However, these laboratories' testing capacity was hindered due to a shortage of crucial laboratory supplies such as reagents, primers, probes, extraction kits, and transport media (WHO, 2020).

Thus, I am of the opinion that in order to take into account shortages in the global supply on PPEs, testing kits, and other vital equipment, it is necessary to develop the capacity to manufacture these domestically on a large scale. Without a doubt, IP protection is a critical player in stimulating and promoting these industries. A five-point approach to meet these inadequacies is the vowel approach, as will be discussed hereunder.

#### The Objective of the Paper

The purpose of this paper is to provide a briefing for creators as to their rights and remedies under the current law. Also, this paper will also provide a recommendation for policy makers to improve the law on IP and provide steps on what more can be done to utilize these assets efficiently.

## **CURRENT MECHANISMS IN PLACE**

#### **Role of Patent Protection in Innovation**

Any technical solution, unless excluded by law, of a problem in any field of human activity is patentable. Under the IP Code, it must satisfy the requirements of novelty, nonobviousness, and industrial applicability (Intellectual Property Code, § 21, 2015).

It bears mentioning that there are inventions that are excluded from patent protection, such as, among others, discoveries, scientific theories, methods for treatment of the human body by surgery or therapy, and diagnostic methods (Intellectual Property Code, § 22, 2015).

An invention is novel if it does not form part of the prior art. Prior art is everything made available to the public anywhere in the world before the invention's filing date or priority date (Intellectual Property Code, § 24, 2015). An exception to this is the nonprejudicial

disclosure clause, which provides that the invention will not be denied due to lack of novelty if the inventor or a patent office made the disclosure during the immediately preceding 12 months before the date of filing or priority date (Intellectual Property Code, § 25, 2015).

An invention satisfies the requirement of inventive step if, regarding the prior art, such is not obvious to a person skilled in the art (Intellectual Property Code, § 26, 2015). Finally, an invention is industrially applicable if it can be produced and used in any industry (Intellectual Property Code, § 27, 2015).

The avenue for the diffusion of technology comes in the form of the patent application's enablement requirement and the publication thereof. Here, the application must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Intellectual Property Code, § 35, 2015). Additionally, the patent application shall be published after 18 months from the date of filing (Intellectual Property Code, § 44, 2015). Indubitably, the technology brought about by the patent becomes available to the public, although the patent holder may legally preclude them from exploiting the same within a limited period.

The term of protection of a patent is 20 years from the time of filing of the application. In effect, this gives the patent holder a quasi-monopoly over the invention for a limited period. Like every monopoly, there is a potential for abuse and deadweight loss to society. Nevertheless, the legislative deemed this as a necessary risk to stimulate innovation. Besides, there are mechanisms to counteract anticompetitive and abusive practices. After the expiration of the term, the public is free to improve and use the invention. These improvements, if new and industrially applicable, can qualify for protection as a utility model (Intellectual Property Code, § 109, 2015). Unlike patents, a utility model does not need to satisfy the requirement of inventive step as the technological progress required is much smaller (WIPO, 2008). These make utility models suitable to protect inventions that make small improvements or adaptations of existing technology (WIPO, n.d.a).

# The Flexibilities Under the TRIPS and the Doha Declaration

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides that member-nations may but shall not be obliged to implement more extensive protection than what is required by the said agreement. It is a minimum standard agreement providing for the baseline IP protection that signatory nations must implement within their domestic framework. The TRIPS agreement also recognizes the needs of least-developed countries. It provides flexibility in the implementation of its provisions to enable members to create a sound and viable technological base. It also allows members to adopt measures necessary to protect public health and promote the public interest in vital sectors (TRIPS, 1995).

Indeed, the TRIPS provides that patents shall be available for any invention, in all fields of technology, without discrimination provided it is new, involves an inventive step, and is capable of industrial application. Still, it allows the exclusion from patentability of those that are necessary to protect human life or health (Article 27, TRIPS, 1995). Further, Article 31 thereof allows the patent's use without the holder's consent in situations of national emergency or other circumstances of extreme urgency upon payment of adequate remuneration, taking into account the economic value of the authorization (TRIPS, 1995).

Subsequently, the Doha Declaration elaborated on the role of the TRIPS Agreement in public health. The members recognized the gravity of public health problems in developing and least-developed countries and the role of IP in addressing these concerns (Doha Declaration, 2001). As such, high prices of medicines were stated as a grave problem affecting developing countries and least-developed countries (Correa, 2002).

The declaration reaffirmed that the TRIPS Agreement should not prevent member-nations from taking measures to protect public health. In maintaining their commitments to the TRIPS Agreement, the member-nations recognized that the flexibilities include the following: (1) each member has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted; (2) each member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, and it is understood that public health crises are included; and (3) each member is free to establish its own regime for exhaustion (Doha Declaration, 2001).

All the same, members agreed that public-healthrelated patents (for example, medicines, medical equipment, or diagnostic kits) could be treated differently from other inventions. In such a manner, they are free to adopt an international exhaustion regime—allowing parallel importation to cater to public needs. In resolving ambiguity, due consideration must be had for the members' commitment to protect public health (Correa, 2002).

#### The Cheaper Medicines Act

The Cheaper Medicines Act (RA 9502) was signed into law in 2009. It reaffirms the policy of the state to protect public health and ensure access to affordable quality drugs (Cheaper Medicines Act, 2008). It raised the standard for patentability of drugs and medicines because there is no inventive step if the drug or medicine results from the mere discovery of a new form, use, or property of a known substance or process unless such results in the efficacy of that substance. The law also adopted an international exhaustion regime for drugs and medicines, authorizing its parallel importation, curtailing the traditional rights granted to a patent holder to prevent the invention's importation (Cheaper Medicines Act, 2008).

The law introduces one significant limitation to a patent holder's rights in the case of drugs and medicines. Verily, testing, using, making, or selling the patented article solely for the development and submission of information and issuance of approvals by government regulatory agencies is allowed. Further, it mandated that every drug manufacturing company operating in the Philippines shall be required to produce, distribute, and make widely available to the general public an unbranded generic counterpart of their branded product (Cheaper Medicines Act, 2008).

#### **Compulsory Licensing**

The state grants a compulsory license to any person who can exploit the invention even without the patent owner's agreement in certain circumstances. These include cases (1) of national emergency or extreme urgency, (2) in whichif it is required by public interest or for the development of vital sectors of the economy, (3) in whichif a body has determined that the patentee is engaged in anticompetitive practices, (4) of public noncommercial use, (5) in which If the invention is not being worked in the Philippines on a commercial scale without satisfactory reason, and (6) in which If the demand for patented drugs or medicines is not being met in an adequate extent (Intellectual Property Code, 2015).

The existence of a pandemic satisfies both the first and last grounds to grant a compulsory license. Generally, it may be applied immediately after the grant of the patent. A compulsory license would be granted to the applicant if he or she made efforts to obtain authorization from the patentee on reasonable commercial terms within a reasonable time, save in certain instances such as when there is a national emergency or when the demand for drugs is not being met to an adequate extent (Intellectual Property Code, 2015).

The petition for a compulsory license shall be filed at the Intellectual Property Office (IPOPHL) and shall be heard by the director of legal affairs. In any case, the notice of filing shall be published in a newspaper of general circulation. The director of legal affairs shall fix the general terms and conditions, but the license shall be nonexclusive, be nonassignable, and be limited to the purpose for which it was granted. Further, the use shall be devoted predominantly to supply the Philippine market. The patentee will then be paid adequate remuneration taking into account the economic value of the grant (Intellectual Property Code, 2015).

The Cheaper Medicines Act also introduced a special compulsory license (SCL), an additional special alternative procedure to ensure affordable medicines. Under this mode, the Director-General of the IPOPHL, upon recommendation of the Secretary of Health, shall grant a petition to import patented drugs and medicines. Adequate remuneration shall be paid to the patent owner by the exporting or importing country. This license shall also contain a provision directing the patentee to exercise reasonable measures to prevent the products' re-exportation. Finally, due to its unique nature, no court, except the Supreme Court of the Philippines, can issue a temporary restraining order or an injunction against an SCL (Cheaper Medicines Act, 2008). An SCL shall also be available for the manufacture and export of drugs to any country lacking the manufacturing capacity in the pharmaceutical sector to address public health problems (Cheaper Medicines Act, 2008).

Compulsory licenses contemplate a situation where a petitioner applies for a license. On another note, if the government is the one to use the patented invention, then Section 74 of the IP Code on the use of the invention by the government shall apply. Here, the government agency or an authorized person may exploit the invention under circumstances similar to compulsory licensing. In the case of drugs and medicines, when there is a national emergency, circumstances of extreme urgency, or public noncommercial use or when demand is not being met to an adequate extent. Such use shall be subject to the payment of adequate remuneration, taking into account the circumstances of each case, taking into account the economic value of the authorization (Intellectual Property Code, 2015).

A problem shared by compulsory licensing, SCL, and government use is that under Philippine law and jurisprudence, there is no set standard for "adequate remuneration." This may be a potential source of dispute between the patentee and the grantee, which can prolong the process of the grant. On this note, the WHO provided remuneration guidelines for nonvoluntary use precisely because "reasonable commercial terms" and "adequate remuneration" are not defined in the TRIPS Agreement, and there is no single approach among nations (WHO-UNDP, 2005).

In a study, the WHO ghhighlights two paramount considerations to establish an effective royalty system: (1) the system of setting royalties should not be overly complex or difficult, and (2) the amount of royalty should not be a barrier to the access of medicines (WHO-UNDP, 2005). Thus, five various approaches are recommended. The first is the proposal of the United Nations Development Program (UNDP) Human Development Report providing for a base royalty rate of 4%, which can be adjusted by 2% depending on certain factors (UNDP, 2001). The second is the guidelines promulgated by the Japanese Patent Office setting royalties for government-owned patents at the amount of 2% to 4% of the product's price, which can be decreased or increased by another 2% (Japan Patent Office, 1998). The third approach is the Canadian export guidelines of 2005, which set a royalty rate on a sliding scale of 0.02% to 4% of the price of the generic based on the country's rank in the UNDP Human Development Index. The fourth approach is the tiered royalty method, wherein the royalty is based on the patented product's price but is adjusted depending on the level of income of the country. Finally, the Medical Innovation Prize Fund method rewards the inventor not with royalty but with a prize awarded by the government (WHO-UNDP, 2005).

#### Territoriality of Patent Rights

Finally, it bears mentioning that under the principle of territoriality, IP rights are protected only within the jurisdiction where such has been granted (Mühlendahl, 2009). Thus, patent protection granted in a foreign country will not extend to the Philippines. Absent a grant by Philippine authorities, an invention disclosed and patented abroad can be freely worked in the country.

## RECOMMENDATION

From the foregoing discussion, IP can be used as an effective weapon in the battle against an invisible enemy. For this reason, there is a need to strengthen the protection of IPintellectual property and promote its commercialization. The author recommends a fivepoint framework as guidance for short- and long-run response through an IP-centric approach, which can aptly be summarized from the letters of the vowels: A, E, I, O, and U.

## Awareness—Increase Awareness and Research Concerning Intellectual Property Rights

The state can increase IP education and awareness to promote respect for IP rights. One of the goals of the IPOPHL under its "BRIGHT" agenda includes, among others, initiatives to build partnerships with stakeholders and the integration of IP awareness in education (International Trademark Association, 2020).

Table 1. Framework Overview

Α	E	Ι	0	U
Awareness	Enforcement	Incentivize	Ownership	Utilization
Key Areas				
Education	Regional cooperation	Financial incentives	Intellectual property policy	Commercialization
Research	Alternative dispute resolution	Accelaration	Standard of fairness	Technology transfer

In this connection, the Intellectual Property Academy (IPA) side-by-side with the Documentation, Information, Technology Transfer Bureau (DITTB) are both bodies of the IPOPHL. The IPA serves as a center for IP education and research (IPOPHLa, 2020). On the other hand, the DITTB is charged with educating the public and building awareness (Intellectual Property Code, 2015). All the same, there is a need to develop joint programs to inform the public of their rights and respect the rights of intellectual creators. and, Bby extension, to integrate IPintellectual property in the curriculum of both public and private institutions. Recently. The IPOPHL inked an agreement with the Commission on Higher Education to improve the education ecosystem by making it more responsive to creative and innovative students. One of the objectives is to integrate the study of IPintellectual property in various courses and even as a pre-thesis course to help develop research in the field (IPOPHL, 2020c).

In the same breadth, research in IP must be further strengthened to guide businesses and policy makers. A significant leap in IP research was taken when the IPOPHL partnered with the Philippine Institute for Development Studies to strengthen research in IP and align both IP and economic policies (IPOPHL, 2020d). In furtherance thereof, it is highly recommended that the IPOPHL establish an economic unit to monitor the value of inventions and to recommend policy changes.

The author likewise recommends the support of studies to examine the economic impact of IP-intensive industries and dissect the various factors influencing consumer behavior toward pirated and counterfeit goods. Necessarily, a centralized database containing IP-related information must be maintained to facilitate further studies.

## Enforcement—Strengthen Local and Cross-Border Enforcement

IP rights are negative rights. Otherwise stated, a grant of protection gives the holder not the right to exclusively produce the invention but rather the exclusive right to exclude anyone from making, using, or selling it. Without a proper enforcement framework or an inexpensive method, IP protection will be rendered a nullity.

To strengthen enforcement measures, the IPOPHL created the Intellectual Property Rights Enforcement Office (IEO). In addition to the Bureau of Legal Affairs, the IEO has the power to receive complaints, evaluate such, take appropriate action to ensure enforcement, coordinate with stakeholders, and assist in the enforcement of orders, writs, and processes (IPOPHL, 2013).

Efforts to boost cross-border enforcement is essential to safeguard the rights of creators. In 1995, Association of Southeast Asian Nations (ASEAN) member-nations entered into an agreement providing for cooperation in IP rights. Likewise, members agreed to strengthen their cooperation to promote and grow regional and global trade liberalization. They also agreed to explore appropriate arrangements for promoting technological innovation and the transfer and dissemination of technology. Members further committed to exploring the possibility of setting up an ASEAN patent and trademark system (ASEAN, 1995).

The numerous initiatives under this agreement is lead by the ASEAN Working Group on Intellectual Property Cooperation (AWGIPC). The group oversees the facilitation of IP asset creation, commercialization, and protection. In line with this, the ASEAN Intellectual Property Rights Action Plan 2025 was developed. The plan consists of four strategic goals including the strengthening of IP offices, creation of regional IP platforms, expansion of the ASEAN IP ecosystem, and the establishment of regional mechanisms to promote commercialization (ASEAN, n.d.).

It bears noting that the ASEAN IP enforcement plan provides for a unified and holistic approach to reduce the movement of pirated and counterfeit goods between member-states, increase data- sharing, and establish national guidelines based on best practices of member-states (ASEAN n.d.).

Still, there is an avenue to strengthen crossborder enforcement by entering into treaties to streamline enforcement procedures, dispute resolution mechanisms, and cross-country cooperation of administrative and judicial authorities.

The author also recommends that ASEAN membernations explore the possibility of streamlining a regional IPintellectual property arbitration system. A unique feature of arbitral awards is that winning parties can take advantage of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Under the said Convention, each contracting state shall recognize arbitral awards as binding and are obliged to enforce such, subject only to limited grounds for refusal (New York Convention on the Recognition and Enforcement of Foreign Arbitral AwardsNew York Convention, 1958).

## Incentivize—Use the Intellectual Property System and Other Tools to Strengthen and Develop Key Industries

A patent landscape report is a tool that provides a snapshot of the situation of a specific technology within a given country or region (WIPO, 2018). Regular preparation of these reports by the IPOPHL will provide much-needed insight to develop a particular area of technology. Further, a patent landscape report can summarize essential inventions that may be subjected to a compulsory license. Strategic use of such mechanisms promotes competition and grants information to critical technologies across the industry.

A landscape report will also point out the underdeveloped areas of a specific industry. Senate Bill 1357 or the Corporate Recovery and Tax Incentives for Enterprises Act (CREATE) can be used to develop these areas. Under the CREATE, the president can approve a set of incentives to attract highly desirable investments. In fine, a combination of the patent landscape reports, compulsory licensing mechanism, and incentive schemes can hasten the growth of vital industries necessary to combat public health crises (Department of Finance, 2020).

The legislature can also give priority status for inventions concerning public interest. Similar proposed legislation can be found in the Patents for Humanity Act in the United States, whereby game-changing technology applications are granted acceleration certificates and are given public recognition (United States Patent and Trademark Office (USPTO), 2020). In the Philippines, the IPOPHL, the Department of Science and Technology (DOST), and the Department of Trade and Industry entered into a memorandum of agreement establishing the Science and Technology Superhighway pProgram. The program aims to fasttrack the application and registration process of IP assets, which will benefit DOST-supported innovation and research as well as micro, small, and medium enterprises (Philippine News Agency (PNA), 2020).

In its 2018 Annual Report, the IPOPHL reported that the average pendency time from "filing to grant" is 48.37 months. It is worth to mention that this period includes the 18-month rule. Generally, the application shall be published after the expiration of eighteen (18) months from the filing date or priority date. Nevertheless, the applicant may request that the application may be published after the lapse of six (6) months from the filing date (Implementing Rules and Regulations, 2011).

The term of protection is 20 years from the date of filing (IPOPHL, 2018). Thus, an accelerated status for applications will greatly benefit the applicant by shortening the time for the granting of a patent.

#### **Ownership**—Clarify Issues on Ownership

Finally, there is a need for the legislature to clarify the ownership of IP created in a university setting. The IP Code provides for the following rules of ownership:

- A. Copyright
- 1. The work generally belongs to the author thereof.
- 2. In cases of joint ownership, the coauthors shall be the original owners and shall be governed by the rules on co-ownership. If the work, however, can be used separately, then the author of each part shall be the original owner of the copyright.
- 3. The copyright belongs to the employer if the work is the result of the performance of the employee's regularly assigned duties unless there is a contrary agreement. Otherwise, it belongs to the employee, even if he uses the employer's time, facilities, and materials.
- 4. In commissioned works, the person who so commissioned the work shall have ownership of the work, but the copyright thereto shall remain with the creator.
- B. Patent
- 1. The right to a patent belongs to the inventor, his or her heirs, or assigns.
- 2. If two or more persons jointly made an invention, it belongs to them jointly.
- 3. The patent shall belong to the employer if the invention is a result of the performance of his regularly assigned duties. Otherwise, it belongs to the employee.
- 4. In cases of commissioned works, the person who commissioned it shall own the patent (Intellectual Property Code, 2015).

Clearly, the law fails to provide situations addressing the ownership of IP for private educational institutions. For public institutions, the Technology Transfer Act of 2009 is the governing law. Under the said law, the ownership of IP rights derived and generated from research funded by the government is generally vested to the Research and Development Institute (RDI) that conducted the research. In the case of collaborative research, where two (2) or more RDIs conducted the research funded by the government, the RDIs shall own the Intellectual Property Rights jointly (Technology Transfer Act of 2009, 2010).

To stress, the IP Code mandates schools and universities to adopt IP policies that would govern the use and creation of IP for learning institutions (Intellectual Property Code, 2015). Such agreements, however, shall be governed under contract law. Thus, questions on whether it is a contract of adhesion may surface, including disputes regarding the fairness and reasonableness of its terms.

One way to resolve this problem is to educate learning institutions and assist them in drafting their IP policies. As to its terms, it is recommended that the concerned regulatory agencies such as the IPOPHL and the Department of Education create guidelines as to the fairness and reasonableness of its terms.

With the rise of the digital age, the author further recommends that guidelines should be established to govern the ownership of the following works:

- 1. Works created by artificial intelligencesShould the work belong to the creator of the machine? The person who arranged the input data? Or should it be given to the public domain?
- 2. User-generated content-—Is the owner of the platform be considered the owner of all IPs derived thereform? Or should the ownership be granted to the user, notwithstanding a contrary stipulation in the terms of use?

These two fields require further study especially in light of recent developments in technology as the world was suddenly ushered to the digital age in the age of the plague.

## Utilization—Commercialization of Intellectual Property

Another aspect of the effective use of IP that should be considered is its utilization. On this point, the IPOPHL, in its former seven-point agenda, included utilization and commercialization as part of its core programs (IPOPHL, n.d.). The program encourages Innovation and Technology Support Offices to file patent applications and encourage them to commercialize these technologies (IPOPHL, n.d.).

It is essential to highlight the notable programs of the IPOPHL. The office launched the Inventors Assistance Program in partnership with WIPO. The program matches under-resourced inventors with qualified lawyers to receive free legal advice. Additionally, it matches inventors to the DOST-Technology Application and Promotion Institute for the latter to provide a full assistance package covering patent drafting and financial assistance in filing. To qualify for the program, the entity must have an asset value of less than 15 million pesos or a natural person who has an annual income of five hundred thousand pesos or less. Further, the program must have commercial potential and not belong to the category of nonpatentable inventions under Section 22 of the code (IPOPHL, 2020b). The IPOPHL also launched a program dubbed as "Juana Make a Mark," which waives the payment of the filing fees of a trademark application. To qualify, the applicant must be a micro-small-medium enterprise that is women led, belongs to priority sectors (i.e., health, chemics, agribusiness, etc.), located in areas prone to natural disasters, or engaged in business for at least one year with limited financial resources (IPOPHL, 2020e). All in all, these programs, among others, help promote the commercialization of IP.

Finally, to facilitate the transfer of technology, the legislature provided for mandatory provisions in voluntary license contracts, such as a guarantee that the licensee shall have continued access to improvements in techniques and processes. Further, the code prohibited the inclusion of anticompetitive clauses in voluntary licensing contracts. Among these, unless exempted by the IPOPHL, are restrictions on the use of technology after the agreement's expiration, use of competitive technologies in a nonexclusive agreement, and imposition upon the licensee the obligation to acquire goods from a specific source.

Under the law, technology transfer agreements that conform with the requirements of the IP Code need not be registered. Nonconformance with any of the provisions of Sections 87 and 88, however, shall automatically render the technology transfer arrangement unenforceable (Intellectual Property Code, 2015). Nevertheless, under jurisprudence, an unenforceable contract's partial performance is tantamount to its ratification—making it valid and enforceable. In effect, this takes away the teeth of Section 92 of the IP Code. Thus, it is recommended that this provision be amended to make the registration of voluntary licensing contracts to the DITTB and its compliance with Sections 87 and 88 as mandatory requirements for its validity. Alternatively, nonregistration with the DITTB should make the contract voidable at the option of the disadvantaged party. Further, the provisions that are noncompliant with Sections 87 and 88 should be declared as void.

### CONCLUSION

An IP system is a tool by which the state balances private and public interests. Thus, the state can utilize the system for the greater good. An IP-centric approach can be summarized using the simple letters of the vowels A, E, I, O, and U:

- 1. Awareness—for the populace to respect IP rights, they must first be educated as to their value.
- 2. Enforcement—for infringers to be discouraged, IP holders should have an avenue for the easy enforcement of their rights.
- 3. Incentivize—for businesses to be encouraged to invest in certain forms of IP, the state should grant fiscal/nonfiscal incentives to key industries.
- 4. Ownership—for researchers and educational institutions to bloom, there must be a well-defined ownership structure for IP.
- 5. Utilization—for the public to benefit from the protection granted to private entities, such inventions must be utilized in a fair and reasonable manner.

As an underutilized policy tool, IP has the potential to play a vital role in preventing and minimizing the impact of public health crises.

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## REFERENCES

- Alfred Bell & Co. Ltd. v. Catalda Fine Arts, Inc. et al. (191 F.2d 99 2d Cir. 1951).
- Association of South Eeast Asian Nations. (n.d.). *Intellectual Pproperty*. Retrieved from: https://asean.org/aseaneconomic-community/sectoral-bodies-under-thepurview-of-aem/intellectual-property/
- Association of Southeast Asian Nations. (1995). ASEAN Framework Agreement on Intellectual Property Cooperation. Retreived from: https://asean. org/?static\_post=asean-framework-agreement-onintellectual-property-cooperation-bangkok-thailand-15december-1995
- Association of Southe East Asian Nations on Intellectual Property. (2020). ASEAN Enforcement Action Plan. Retrieved from: https://www.aseanip.org/Portals/0/ ASEAN%20IPR%20Enforcement%20Action%20Plan. pdf?ver=2018-01-04-150134-093
- Berne Convention, 1971.
- Cheaper Medicines Act, Rep. Act No. 9502 (2008).
- Const. (1987) (Phil.).
- Copyright, Designs, and Patents Act 1988, c. 48 (Eng.).
- Correa, C. M. (2002). Implications of the Doha Declaration on the TRIPS Agreement and public health.
- David Blackburn, J. A. (2019). *Impacts of digital video piracy on the U.S. economy*. United States Chamber of Commerces.
- Department of Finance. (2020). Package 2: Corporate Recovery and Tax Incentives for Enterprises Act (CREATE). Retrieved from https://taxreform.dof.gov. ph/tax-reform-packages/p2-corporate-recovery-and-taxincentives-for-enterprises-act/
- Doha Declaration. (2001). Declaration on the TRIPS Agreement and public health.
- Eberly, A. E. (2007). An evaluation of personal protective equipment used with local public health employees (Master's thesis). UCHC Graduate School. Retreived from: https://opencommons.uconn.edu/cgi/ viewcontent.cgi?article=1129&context=uchcgs\_ masters
- Hetcher, S. (2012). User-generated content and the future of copyright: Part two—Agreements between users and mega-sites. *Santa Clara High Technology Law Journal*. Volume 24, Issue 4, Article 3.

Intellectual Property Code, Rep. Act No. 8293 (2015).

Intellectual Property Office (IPOPHL). (2013). Office Order 13-170.

- Intellectual Property Office. (2018). Annual report for the year 2018.Intellectual Property Office
- Intellectual Property Office. (2020a). *Intellectual Property Academy*. Retrieved from https://www.ipophil.gov.ph/ ip-academy/
- Intellectual Property Office. (2020b). *Inventors Assistance Program.* Retrieved from https://www.ipophil.gov.ph/ inventor-assistance-program/#:~:text=Inventor%20 A s s i s t a n c e % 2 0 P r o g r a m % 2 0 % 2 D % 2 0 IPOPHL&text=For%20some%20inventors%20in%20 developing,innovation%20and%20intellectual%20 property%20protection.&text=This%20program%20 matches%20under%2Dr
- Intellectual Property OfficeIPOPHL. (2020c). *IPOPHL*, *CHED Ttie Uup to Iintegrate IP in Uuniversities and Ccolleges*. Retrieved from: https://www.ipophil.gov.ph/ news/ipophl-ched-tie-up-to-integrate-ip-in-universitiesand-colleges/
- Intellectual Property Office. (2020d). *IPOPHL and PIDS* sign MOU on strengthening IP research. Retrieved from https://www.ipophil.gov.ph/news/ipophl-and-pids-signmou-on-strengthening-ip-research/
- Intellectual Property Office. (2020e). Juana Make a Mark Program. Retrieved from https://www.ipophil.gov.ph/ juana-make-a-mark-trademark-assistance-program/
- Intellectual Property Office. (n.d.a). Intellectual Property Office. Retrieved from https://www.ipophil.gov.ph/ news/ipophl-sets-patent-workshops-training-to-spurprotection-commercialisation-of-university-research/
- Intellectual Property Office. (n.d.b). Seven point agenda. Retrieved from https://www.ipophil.gov.ph/ipophl-7point-agenda/
- Implementing Rules and Regulations for Patents, Utility Models and Industrial Designs. (2011).
- International Shoe v. State of Washington (1945).
- International Trademark Association. (2020). Interview with Philippines IP Office Director General Barba: Part II. Retrieved from: https://www.inta.org/perspectives/ interview-with-philippines-ip-office-director-generalbarba-part-ii/
- Japan Patent Office. (1998). Kokka-Koumuin no Shokumuhatsumet ni taisuru Hoshoukin Shiharai Yoryo (The Guideline of Remuneration for Inventions Made by Government Employees). Japan Patent Office.
- Library of Congress Copyright Office. (2005). Notice of inquiry: Orphan works' federal register 3739. Library of Congress
- Mühlendahl, S. (2009). Territorial intellectual property rights in a global economy—Transit and other 'free zones.' In Wolrad Prinz zu Waldeck und PyrmontMartin J. AdelmanRobert BrauneisJosef Drexl, *Patents, and technological progress in a globalized world MPI studies on intellectual property, competition and tax law.* Springer Berlin Heidelberg. Pages 653-673

- Mühlendahl, S. D. (2009). Territorial intellectual property rights in a global economy—Transit and other 'free zones.' Wolrad Prinz zu Waldeck und PyrmontMartin J. AdelmanRobert BrauneisJosef Drexl, Patents and technological progress in a globalized world. MPI studies on intellectual property, competition and tax law (vol. 6). Springer.
- New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.
- Patents for Humanity Program Improvement Act, H.R. 7259, 116th Cong. (2020). Retrieved from https://www. congress.gov/bill/116th-congress/house-bill/7259
- Peuker, A. (2012). Territoriality and extraterritoriality in intellectual property law. *Queen Mary Studies in International Law, Brill.* Voulme 11. Pages 189-228.
- Pharmaceutical Research and Manufacturers of America. (2016). 2016 biopharmaceutical research industry profile. Washington, DC: Pharmaceutical Research and Manufacturers of America.
- Philippine News Agency. (2020). *IP registration to speed up via "Sci-tech Superhighway."*. Retrieved from: https://www.pna.gov.ph/articles/1122138.
- Technology Transfer Act of 2009, Rep. Act No. 10055 (2010).
- Sweet Lines v. Teves (1978).
- TRIPS. (1995). Agreement on Trade-Related Aspects of Intellectual Property Rights.
- UNDP. (2001). Human Development Report 2001: Making new technologies work for human development. New York Oxford Oxford University Press 2001
- Universal Declaration of Human Rights (1948).
- United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (, June 10, June 1958.)
- United States Patent and Trademark Office (USPTO). (n.d.). *Patents for humanity*. Retrieved from https://www.uspto. gov/ip-policy/patent-policy/patents-humanity
- World Health Organization. WHO Constitution (1948).
- World Health Organization United Nations Development ProgramWHO-UNDP. (2005). Remuneration guidelines for non-voluntary use of patent on medical technology.
- World Health Organization, World Intellectual Property Organization, World Trade Organization (WHO-WIPO-WTO). (2012). Promoting access to medical technologies and innovation, intersections between public health, intellectual property, and trade. WHO-WIPO-WTO
- World Intellectual Property Organization (2008). *WIPO intellectual property handbook*. World Intellectual Property Organization
- World Intellectual Property Organization . (2011). *World intellectual property report*. Geneva. World Intellectual Property Organization

- World Intellectual Property Organization . (n.d.a). *Topics* from A to Z on patents. Retrieved from https://www. wipo.int/patents/en/topics/utility\_models.html. World Intellectual Property Organization
- WIPO. (n.d.b). What is intellectual property? Retrieved from https://www.wipo.int/edocs/pubdocs/en/intproperty/450/ wipo\_pub\_450.pdf
- WIPO, Advisory Committee. (2019). Study on IP enforcement measures, especially anti-piracy measures in the digital environment. WIPO.
- World Health Organization. (2020a). Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19). WIPO.
- World Health Organization. (2020b). *Situation report 1*.WHO.