

REFLECTIONS ON THE EXPANSION OF INTELLECTUAL PROPERTY PROTECTION IN BILATERAL AND REGIONAL TRADE AGREEMENTS

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Abstract: This paper considers the effects of Bilateral and Regional Trade Agreements (BRTA's) on intellectual property law. More specifically, it addresses the issues arising from the uniform treatment of different intellectual property rights in relation to the duration of the patent protection. The author discusses instances in which the uniform patent protection period of twenty years may be too short and some instances where the said protection may be too long. With BRTA's advancing upon the TRIPS Agreement in substance, scope and depth, the context in which these intellectual property rights operate becomes highly important.

Keywords: patent protection, TRIPS, data protection, patent linkage, BRTA

1. INTRODUCTION

The patent system should be designed to effectively balance rewards and incentives to inventors with the interests of users and the public. The TRIPS Agreement attempts to achieve these goals through ensuring widespread coverage of the agreement and by standardising intellectual property (IP) norms. There are undoubtedly many valid reasons for doing so, but one less than ideal consequence of this approach in regards to patents is that very different technologies, sectors and products are treated in the same manner.

One example of issues coming from the uniform treatment of all IP rights relates to the length of patent protection. While Article 33 of TRIPS mandates 20 years protection from date of filing a patent application it seems reasonable to question whether such a period is optimal. It may be that this period offers too little protection, or perhaps too much. What is also lost with the uniform term of protection is the large difference between and among innovative sectors. For instance, while a technology patent used in mobile devices may be relevant in the marketplace for approximately five years the pharmaceutical patent may still have a market well beyond twenty years.

Moreover, while most products can freely enter the market the situation is much more difficult, complex and expensive in regards to pharmaceuticals where the time taken to secure regulatory approval (i.e. clinical trials, application for marketing) significantly eats into the patent period. This reduces the incentive to spend

money and resources on complex, risky new drugs. In many respects, the multitude of ways in which the industry seeks to extend patent and other *sui generis* IP-like protections is simply a means for a minimum period of post-marketing approval exclusivity on the market.

With this in mind, it seems inappropriate to provide the same treatment for all forms of IP. The market for pharmaceuticals and agro-chemicals usually extends well beyond that of most other patented products yet it is only these sectors that must go through prolonged period of pre-market testing and approval from a regulatory agency and thus face a significantly reduced period of market exclusivity. On average, the market exclusivity period for pharmaceuticals is 8-12 years (which means it takes 8-12 years for the inventor to clear all the regulatory hurdles and bring the product to market).¹

Of course, it cannot be forgotten that the innovative pharmaceutical industry is also constantly seeking to extend the minimum period and we do not at present operate under a system of a specified period of post-exclusivity protection. The 20 year patent period provides on average 8-12 years protection, but in some cases provides little or no protection for complex products which needed an extensive period of testing and/or faced regulatory hurdles.

In many respects, this author is sympathetic to a call for radical change to a simpler system which guarantees a period of market exclusivity – it could be 8 years, 10, 12, etc. – regardless of the term of patent protection.² The point here is not to argue that pharmaceuticals are over or under protected, but instead to simply to raise the possibility of a fixed period of market exclusivity as an alternative to the present system. Under a system which guarantees a certain period of market exclusivity, the product would be licensed to all other interested manufacturers and a reasonable royalty paid to the innovator when the term of patent protection exceeds that of the guaranteed period of market exclusivity. Should the term of patent protection exceed that of the guaranteed period of market exclusivity, the product would be licensed to all other interested manufacturers and a reasonable royalty paid to the innovator. Should the patent term expire prior to the period of guaranteed

** This article is based on existing works of the author, most notably Bryan Mercurio, *Winning the War on Drugs; Re-evaluating Pharmaceutical Patent Law and Policy in Hong Kong* (Cambridge University Press, expected 2017).

¹ This often cited figure can be found in, among other publications, European Commission, "Pharmaceuticals Sector Fiche" (16 December 2011), <http://trade.ec.europa.eu/doclib/docs/2012/january/tradoc_148988.pdf>.

² The economic evidence behind this idea is reviewed in, Bryan Mercurio, "TRIPS and innovation: a necessary reappraisal?" paper commissioned by the International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, November 2014, available at <http://e15initiative.org/publications/trips-patents-and-innovation-a-necessary-reappraisal/>.

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market exclusivity or have never been granted, the innovator still has an incentive to create, with the comfort that it will have the opportunity to recoup its research and development (R&D) costs and make a profit. The point of such a system is to ensure a period of market exclusivity so as to reward the invention and encourage further innovation. The industry would no longer need to create or lobby for enhanced protections and every stakeholder would have certainty in their respective positions.

But of course we do not have such a system. Hence the innovative pharmaceutical industry continues pushing for measures to extend protection. Increasingly, these measures are included as a matter of course in bilateral and regional trade agreements (BRTAs), and even to some extent in WTO accession protocols. This may not be as nefarious as some would have the public to believe; again, the industry is simply seeking to ensure a period of market exclusivity in order to recoup R&D and have the opportunity for profit.

2. THE FALLOUT FROM STANDARDISATION: CONTEXT MATTERS

That being the case, countries should be aware of the realities and vigilant and mindful against overprotection and upsetting the delicate balance between inventors and societal interests. Far too often, important contextual differences between jurisdictions are ignored when agreeing to and/or implementing so-called “TRIPS-plus” obligations. Provisions are adopted almost verbatim from the legislation of the *demandeur* without considering the context and without any attempt to localise or take account of flexibilities which may be permitted. Two notable examples of this include test data protection and patent linkage.

Test data protection requires the domestic regulatory authority to not “use” originator test data to approve an application for a generic for a period of years (5-11 in most BRTAs). There is no set standard, and permutations are numerous and can be more onerous. For instance, one variation of test data protection would require a domestic regulatory authority to refuse an application from generic for marketing approval on the basis of test data submitted to another jurisdiction, even if the drug is not available in that market.

Separate to patent rights, test data protection rewards the creation of data through rigorous and standardised tests. In most cases, the period of protection runs concurrently with patent rights, but this is not always the case. For instance, there may not have been a patent granted or the period of patent protection may have expired.

While Article 39.3 of the TRIPS Agreement merely protects “against unfair commercial use”,³ BRTAs go further in safeguarding data from any use other than by the originator. The use of alternatives and limitations vary among BRTAs but, in the main, are fairly restricted in scope and do not differentiate between and among the needs and priorities of treaty partners. What is also lost is that while the justification for test data protection is ultimately to allow the originator to recoup R&D and provide incentives for further meaningful testing, it is doubtful whether small markets, developing and LDCs cumulatively possess enough purchasing power to influence the behaviour of pharmaceutical companies.

Patent linkage is another TRIPS-plus obligation found in many BRTAs. Patent linkage is the practice of national pharmaceutical registration authorities “linking” the traditionally separate process of granting marketing approval – that is, the right to market the drug after demonstrating that it is safe and effective – with the patent status of an originator drug. Patent linkage is not mentioned in the TRIPS Agreement, but its genesis pre-dates the Agreement with the Hatch-Waxman Act (1984) as part of a grand bargain which facilitated the entry of generic pharmaceuticals into the US market. Patent linkage now exists in countries as diverse as, *inter alia*, China, Japan, Mexico, South Korea, Singapore, Cambodia and Canada but technically remains unlawful in the EU.

Often included in trade agreements, especially with the US,⁴ are various versions of patent linkage that usually include most if not all of the following:

- a requirement on the generic to notify the patent owner when it applies for marketing approval;
- an obligation on the regulatory agency to prevent a generic drug applicant from gaining marketing approval for a product covered by an originator during the patent term;
- a register of patents and to verify the patent status of any drug during the registration process;

³ See i.e. Carlos M. Correa, “Unfair Competition Under the TRIPS Agreement: Protection of Data Submitted for the Registration of Pharmaceuticals” (2002) 3(1) Chicago Journal of International Law 69; UNCTAD, The TRIPS Agreement and Developing Countries p.48 (UN, UNCTAD/ITE/1 1996) <http://unctad.org/en/docs/ite1_en.pdf> (“...authorities are not prevented ... from using knowledge of such data, for instance, to assess subsequent applications by third parties for the registration of similar products”). The EU, US and others do not adhere to the majority view. See i.e. European Commission, “Legal Issues Related to Compulsory Licensing under the TRIPS Agreement: An EU Contribution” (2006), http://trade.ec.europa.eu/doclib/docs/2006/may/tradoc_1220_31.pdf; Office of the General Counsel, US Trade Representative, “The protection of Undisclosed Test Data in Accordance with TRIPS Article 39.3”, unattributed paper for submission in bilateral discussions with Australia (May 1995).

⁴ In some cases, include that of Cambodia and China, test data protection was included as part of the countries WTO accession protocol.

- the possibility of an (automatic) injunction against the generic once an infringement claim is made;
- an incentive for the generic to challenge the patent, in the form of an exclusive sales period for the first generic to have successfully challenged the validity of the patent at issue.

The importance of context cannot be overstated. Prior to the Hatch-Waxman Act, the availability of generic pharmaceuticals in the US was extremely limited owing to the fact that clinical trials or other originator data submitted in an application for marketing approval was treated as a trade secret.⁵ Thus, generic manufacturers could not apply for marketing approval during the life of the patent, absent conducting their own clinical trials. In exchange for granting generics the opportunity to apply for marketing approval during the patent term, the US implemented patent linkage and other measures, including test data protection. By contrast, in Canada pre-1987 medicines were almost automatically compulsory licenced at a 4% royalty rate and even after 1987, only provided for a waiting period of 7-10 years before issuing a compulsory licence, depending on whether the active pharmaceutical ingredient was imported into Canada or manufactured domestically.⁶ As a result of agreeing to patent linkage in the NAFTA, Canada abandoned its generic-friendly system and in the process delayed the availability of generic pharmaceuticals to the marketplace. The point, again, is that the same law can have vastly different consequences depending on the state of the law.

Despite obvious differences in context, most adopters of patent linkage rely on the same justification as the US and virtually copy the US model.⁷ In many situations, the result is counterproductive and/or harmful and in many others simply inappropriate. As an example of the latter, we will look at providing an incentive to the first generic to successfully challenge the patent of the originator. Patent litigation is notoriously extremely expensive, but in the US market it may be worthwhile for a generic to initiate proceedings. The value to the generic in US, which has 50 percent of the worldwide pharmaceutical market, is potentially vast. But for most other countries, the market exclusivity in the incentive period may not even recoup the costs of litigation. Thus, generics rarely challenge the originator product and the net result is to

delay generic entry into the market, with potential costs to health spending in the country.

To date, the only two countries which seem to have fully considered the context and effectively tailored their patent linkage regime are Australia and South Korea. While both countries have adopted patent linkage as a result of BRTAs with the US, both have deviated from the US model. For instance, Australia requires the patent owner to apply to a court in order to receive an injunction against a generic competitor. South Korea, meanwhile, requires an originator to register all patents prior to it receiving market approval and issues injunctions only to prevent significant damage.

What should be clear is that BRTAs significantly advance upon the TRIPS Agreement. This should not be surprising. In many respects, TRIPS is a minimum standards agreement and (ostensibly) limited to “trade related” aspects of IP.⁸ By contrast, BRTAs never had to stay within or defend the “trade related” constraint. Thus, BRTAs have advanced the TRIPS agenda in subject matter, scope and depth, both procedurally and substantively. In building upon the minimum standards of TRIPS, BRTAs have also increasingly become more regulatory in appearance and design.

While one thinks of regulatory cooperation or even harmonisation, what is usually meant in the IP context is that a *demandeur* requests that the partner country(ies) take its approach to IP law. The system is not so much reaching an agreement but “harmonisation” through the export of one regime to a partner country. Such an approach was demonstrated above in the context of test data protection and patent linkage.

This export-oriented approach to BRTA IP negotiations can, however, fail under certain circumstances. The perfect example here is the poorly named and ill-fated Anti-Counterfeit Trade Agreement (ACTA). The ACTA was in large part initiated and negotiated to remedy the failings of TRIPS in regards to enforcement. Negotiations became stuck when several countries refused to agree on anything which actually required changes to their legal setting and thus provisions drafted to provide for any number of options.⁹

⁵ For background, see Ellen J. Flannery and Peter Barton Hutt, “Balancing Competition and Patent Protection in the Drug Industry: The Drug Price Competition and Patent Term Restoration Act of 1984” (1985) 40(3) *Food Drug Cosmetic Law Journal* 269;

⁶ For information on Canada’s schemes, see Christopher Scott Harrison, “Protection of Pharmaceuticals as Foreign Policy: the Canada-U.S. Trade Agreement and Bill C-22 versus the North American Free Trade Agreement and Bill C-91” (Spring 2001) 26 *North Carolina Journal of International Law & Commercial Regulation* 457.

⁷ These countries include Canada, Singapore, Mexico, Cambodia, China and Russia.

⁸ In reality, the limited “trade-related” nature of TRIPS became a fiction as the negotiations progressed, and as recently pointed out by Antony Taubman, Director, Government Procurement, Intellectual Property and Competition Policy Division at the WTO, it is extremely difficult to ascertain what is “trade-related” in goods, and more difficult to determine when IP embedded in service sectors. Antony Taubman, “The Coming of Age of the TRIPS Agreement: Framing Those “Trade-Related Aspects” in Christophe Geiger (ed) *The Intellectual Property System in a Time of Change: European and International Perspectives* (CEIPI, 2016).

⁹ See generally Bryan Mercurio, “Beyond the Text: The Significance of the Anti-Counterfeiting Trade Agreement (ACTA)” (2012) 15(2) *Journal of International Economic Law* 361.

So when no less than six negotiating countries claim that the ACTA would not require any changes to the domestic system, one has to question whether the agreement would have any effect on combatting counterfeiting and piracy. The answer is pretty clearly, no. Proponents of the ACTA were not discouraged, however, and simply shifted the narrative to provide an *ex post* justification for the negotiations – that was, to embed meaningful standards among like-minded countries in the hope others eventually follow.

This is not to say that the trend towards the regulatory approach is all bad for the “taking” country. There are instances where it can be beneficial, or appropriate. For instance, many BRTAs build upon Article 51 of TRIPS which obliges Members to suspend the release of imported goods into the local market by customs authorities (trademark or copyright) upon an application. While Article 51 provides that Members “may also provide” such treatment to exports, numerous BRTAs in fact do make this a requirement. That customs should refuse to knowingly and wilfully allow the exports of counterfeits and pirated goods does not seem to be harmful (particularly, when the counterfeit is a pharmaceutical), although it should be noted that it may add considerably to the workload and responsibilities of the local customs agency.

Another advance would be to add precision to the undefined and vague terms in the TRIPS Agreement. One example here, perhaps controversial, is by defining the term “commercial scale” in Article 61 of TRIPS, which mandates criminal liability for wilful counterfeiting and piracy “on a commercial scale”. While the WTO DSB has weighed in on the meaning of the term,¹⁰ countries are free to provide for a stricter definition in BRTAs. This can of course arguably go too far, for example, Article 17.11.26(a) of the US-Australia FTA requires criminal procedures and penalties to be applied to “wilful trademark counterfeiting or copyright piracy on a commercial scale”, with the latter including: “significant wilful infringements of copyright, that have no direct or indirect motivation of financial gain; and wilful infringements for the purposes of commercial advantage or financial gain”. Such provisions are noteworthy because they require parties to implement their TRIPS obligations so as to require them not only to criminalise conduct that is objectively on a “commercial scale” but also conduct involving particular commercial “purposes”.¹¹

¹⁰ See *China — Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, DS362. The panel defined the term commercial scale to be “the magnitude or extent of typical or usual commercial activity with respect to a given product in a given market” before finding the US as complainant failed to provide evidence which demonstrated cases excluded from criminal liability met the standard for “commercial scale”.

¹¹ This provision is followed up by subsection (b), which obliges each Party to treat “wilful importation or exportation of pirated copyright goods or of counterfeit trademark goods as unlawful

Some BRTAs also explicitly provide for exceptions. For example, BRTAs can explicitly provide for bolar/regulatory review provisions or set perimeters which enshrine the legality of a generic pharmaceutical manufacturer to use a patented product for the purposes of making an application for marketing approval from the relevant authority. Again, while a panel in *Canada—Pharmaceutical Patents*¹² found such activity to fall within the scope of the Article 30 exception in TRIPS this does not mean that every Member must explicitly allow for such an exception. With the negotiation of a BRTA and implementing legislation, this exception becomes part of domestic law. Other examples of TRIPS-Plus provisions which may be more neutral include the prioritization of either trademarks or geographical indications, depending on whether the negotiation is with the US or EU, respectively.¹³

But the regulatory approach taken in many BRTAs can also have detrimental effects on the “taking” party. Again, these negative effects normally come when the *demandeur*, and quite frankly the “taking” country, fail to recognise or take account of the different contexts and abilities of the negotiating countries. For example, while US now exports not only obligations akin to its Digital Millennium Copyright Act (DMCA) but also some “fair use” provisions, what is lost is that some partner countries would not have needed the fair use provisions because the underlying action would not have been deemed to be a violation of domestic copyright law.

We can also see this effect in Technical Protection Measures (TPMs), which is unaddressed in TRIPS and where WIPO treaties require Contracting Parties to merely provide “adequate legal protection and effective legal remedies against the circumvention of effective technological measures” used by authors, performers and phonogram producers in connection with the exercise of their rights that restrict unauthorized acts in respect of their works, performances or phonograms.¹⁴

BRTAs entered into by the US provide a far more detailed two-tiered approach which tracks the language in the DMCA on liability and civil and criminal penalties for: (1) the act of *circumventing* a TPM that controls access to a protected work, performance, phonogram, or other subject matter; (2) the *manufacture of and trafficking* in devices, or the provision of services, for the circumvention of all types of TPM (that is, both access

activities subject to criminal penalties to at least the same extent as trafficking or distributing such goods in domestic commerce.”

¹² *Canada – Patent Protection of Pharmaceutical Products*, DS114.

¹³ For discussion, see Michael Handler and Bryan Mercurio, “Intellectual Property” in Simon Lester, Bryan Mercurio and Lorand Bartels (eds) *Bilateral and Regional Trade Agreements: Analysis and Commentary* (2nd ed, Cambridge University Press, 2016) 324-363.

¹⁴ WIPO Copyright Treaty, Article 11. See also WIPO Performances and Phonograms Treaty, Article 18.

control and copy control devices). While there is some difference between agreements in terms of the level of prior knowledge required of protection (actual, constructed or simply left unaddressed) across all agreements, the exceptions to this obligation are limited in all these agreements.¹⁵

3. CONCLUSION

These reflections on the incorporation of IP into trade agreements are by no means comprehensive. Instead, the simple point to be made in this article has been to demonstrate some ways in which BRTAs advance upon TRIPS in substance, scope and depth. In most cases, this involves adding detail and becoming more prescriptive. In the process, the “taking” country often relies on the same justification for the measures and adopts a similar if not the same version of the measures as the *demandeur*. The loss of context is regrettable, less than optimal and often done on the basis of no empirical research or studies. With more countries adopting TRIPS-Plus obligations there is an increasing amount of evidence which could, if utilized correctly, be used by researchers and policymakers when deciding whether to adopt or amend these measures. This article is therefore foremost a call not to ignore this evidence.

BIBLIOGRAPHY

Primary Sources

China — *Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, DS362.
Canada — Patent Protection of Pharmaceutical Products, DS114.
WIPO Copyright Treaty, Article 11.
WIPO Performances and Phonograms Treaty, Article 18.

Secondary Sources

Antony Taubman, “The Coming Of Age Of The TRIPS Agreement: Framing Those “Trade-Related Aspects” in Christophe Geiger (ed) *The Intellectual Property System in a Time of Change: European and International Perspectives* (CEIPI, 2016).
Bryan Mercurio, “Beyond the Text: The Significance of the Anti-Counterfeiting Trade Agreement (ACTA)” (2012) 15(2) *Journal of International Economic Law* 361.
Bryan Mercurio, “TRIPS and innovation: a necessary reappraisal?” paper commissioned by the International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, November 2014, available at <http://e15initiative.org/publications/trips-patents-and-innovation-a-necessary-reappraisal/>.

Bryan Mercurio, *Winning the War on Drugs; Re-evaluating Pharmaceutical Patent Law and Policy in Hong Kong* (Cambridge University Press, expected 2017).

Carlos M. Correa, “Unfair Competition Under the TRIPS Agreement: Protection of Data

Christopher Scott Harrison, “Protection of Pharmaceuticals as Foreign Policy: the Canada-U.S. Trade Agreement and Bill C-22 versus the North American Free Trade Agreement and Bill C-91” (Spring 2001) 26 *North Carolina Journal of International Law & Commercial Regulation* 457.

Ellen J. Flannery and Peter Barton Hutt, “Balancing Competition and Patent Protection in the Drug Industry: The Drug Price Competition and Patent Term Restoration Act of 1984” (1985) 40(3) *Food Drug Cosmetic Law Journal* 269

European Commission, “Legal Issues Related to Compulsory Licensing under the TRIPS Agreement: An EU Contribution” (2006), http://trade.ec.europa.eu/doclib/docs/2006/may/tradoc_122031.pdf

European Commission, “Pharmaceuticals Sector Fiche” (16 December 2011), <http://trade.ec.europa.eu/doclib/docs/2012/january/tradoc_148988.pdf>.

Michael Handler and Bryan Mercurio, “Intellectual Property” in Simon Lester, Bryan Mercurio and Lorand Bartels (eds) *Bilateral and Regional Trade Agreements: Analysis and Commentary* (2nd ed, Cambridge University Press, 2016) 324-363.

Office of the General Counsel, US Trade Representative, “The protection of Undisclosed Test Data in Accordance with TRIPS Article 39.3”, unattributed paper for submission in bilateral discussions with Australia (May 1995). Submitted for the Registration of Pharmaceuticals” (2002) 3(1) *Chicago Journal of International Law* 69;

¹⁵ See Handler and Mercurio, above n 13.

STUDY ON INTELLECTUAL PROPERTY TEACHING IN VIETNAM

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Abstract: Intellectual Property (IP) is not a new notion in Vietnam. IP has played an important role for the development of Vietnam and people's awareness about IP is partly increasing. So IP is a course not only for law students but also for other students such as engineering and business students in Vietnam. Although the demand for IP teaching is high in the context of Vietnam's fast international economic integration, the available courses are very limited and the syllabus is poor. The courses are primarily introductory courses in nature, although issues in IP from an academic and practical perspective are vast. It is submitted that policy-makers, business people and students should have their own specialized courses. To improve the situation, it is the author's view that Vietnamese higher education institutions, together with the assistance of the relevant authorities, liaise and more with foreign partners to increase the quality of IP courses and syllabi. This paper considers the current status of IP teaching in Vietnam and also analyses the demand thereof. The paper also recommends potential solutions to promote IP education in Vietnam, improve the content of available courses and syllabi, and concludes that IP education in Vietnam requires significant development.

Keywords: Intellectual property teaching, courses, syllabi, book, Vietnam

1. INTRODUCTION

Vietnam is an underdeveloped economy. Since its shift to an open economy in the year 1986, it has seen more progress. The Vietnamese economy has been in double transition: it is moving from a centrally planned state economy to a market economy; and it is also moving from an agricultural economy to an industrial economy¹. To reach this objective, Vietnam requires advanced technologies. The best ways to secure such technologies is to promote foreign technology transfers and to build a solid domestic technology market with strong R&D institutions. Acquiring local advanced technologies with strong R&D institutions takes time, however in the interim, the most suitable way to secure advanced technology is through foreign technology transfers, in particular the transfer of technology via foreign direct investment into Vietnam.

Vietnam's open door policy has contributed to development of Vietnam due to foreign investment. Between 1988 and 2016, Vietnam has received 336.757 billion USD in foreign investment. The upward direction

of economic development and foreign direct investment is similar. Technology levels, particularly in the fields of precise mechanics, electronics, software industry, telecommunication, biotechnology, etc. have improved².

However, Vietnam still lacks the technologies for national development to accelerate its industrialization and modernization process, and needs more advanced technologies transferred from developed countries. To attract more foreign investors and to also ensure the protection of the rights of such foreign investors, Vietnam needs to promote stricter protection of intellectual property rights (IPRs) for foreign technologies. However, Vietnam faces various challenges in this regard, in particularly after its accession to World Trade Organization (WTO) in 2007, and after joining the ASEAN Economy Community (AEC) in December 2015 and participating in the Trans-Pacific Partnership (TPP) Agreement trade negotiations up until 2016.

The objective of IP as stated in the Preamble of TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) is, "[d]esiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade". Article 7 of TRIPS also stipulates "[t]he protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations"³.

The objective of IP protection and enforcement is also stated in the Article 18.2 of the TPP which provides that the "protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations"⁴.

On the basis of the aforementioned texts, it is apparent to the author that in the context of international integration and free trade development, IP plays a very important role not only for different stakeholders, including business persons, governmental officials, inventors and creators, but also the general public. The effective protection of inventions is one of the factors

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¹ Strategy of Socio-Economic Development of Vietnam toward 2020.

² Synthetization from Nguyen Tan Vine, *Nhìn lại giá trị của FDI ở Việt Nam sau gần 30 năm (Look backward the value of FDI in Vietnam after nearly 30 years)*, Economy and Forecast Review, No. 01/2017, updated on 31/01/2017.

³ <https://www.google.com.vn/webhp?ie=UTF-8&rct=j#q=trips+agreement+word>

⁴ <https://thuvienphapluat.vn/tintuc/vn/hiiep-dinh-TPP/11782/hiiep-dinh-tpp-chuong-18-so-huu-tri-tue>

that encourage foreign companies to invest in Vietnam, which leads to the promotion of foreign technology transfer in Vietnam and also helps to pave the way for domestic technology development.

Universities and research institutes are the main source of new inventions to be patented and commercialized. Thanks to patent commercialization development, Vietnam aims to have an innovation-driven economy based on IP. This means that people should know about IP, more particularly researchers and technologists, who need to be trained effectively and efficiently in the universities.

Therefore, IP teaching is very important in raising awareness about IP at different levels. Awareness leads to a nurturing of the IP culture, better protection of IPRs, and the promotion of IP commercialization. This is an important step in the setting up of technology markets and for the socio-economic development of the country.

The following sections will examine the current status of IP teaching in Vietnam, illustrate the gaps therein and also suggest possibilities and opportunities for further development in IP education in Vietnam.

2. CURRENT STATUS OF IP TEACHING IN VIETNAM

While there were IP regulations in Vietnam before 1981, which aimed at promoting creativity, there were very few and did not have as its objective, the effective protection of IP. IP law was developed between the period between 1981 and 1995 with the introduction of the Ordinance on Industrial Property and other decrees relating specifically to patent protection (i.e. Decree No. 31/CP dated on 23/01/1981 regulating patent protection; Decree No. 200/HDBT dated on 28/12/1988 regulating utility solution protection; Decree No. 201/HDBT dated on 28/12/1988 regulating the purchase of patent and utility solutions use rights). However, it can be noted that the IP protection was effective. The period between 1995 and 2005 was marked by two important events: the issuance of the Civil Code of 1995 when IPRs were recognized as civil rights for the first time; and a new IP Law in 2005 when Vietnam could be said to have integrated into the global economy. Since 2005 there has been further development of IP law in Vietnam, with modifications in 2009 and the negotiations of IPRs laws within TPP framework. IP law also began being taught in Vietnam as a separate subject in 2005.⁵

With the socio-economic and technological development of Vietnam, IP subjects have been taught more and more at the universities, using the WIPO Handbook.⁶ Further,

⁵Extract and translation from https://vi.wikipedia.org/wiki/L%E1%BB%8Bch_s%E1%BB%AD_lu%E1%BA%ADt_s%C3%A1ng_ch%E1%BA%BF_c%E1%BB%A7a_Vi%E1%BB%87t_Nam (accessible on 28 May, 2017).

⁶WIPO, *WIPO Intellectual Property Handbook: Policy, Law and Use*, WIPO publication, (2005).

many theses, dissertations and books about IP have been published locally as IP protection and exploitation became increasingly important for building national policy.⁷

With the author's personal teaching experience of IP subjects, IP teaching in Vietnam can be classified by the author into two main categories:

- IP teaching for university students;
- IP teaching for government officials, business persons and the general public.

Regarding IP teaching for university students, in general, IP and some IP-related courses are taught mainly for law students (specializing in civil law, economic law and international law) with two credits per subject as compulsory subjects. The following higher educational institutions provide compulsory IP courses for two credits: Hanoi University of Law; School of Law under Vietnam National University, Hanoi; Hochiminh City University of Law; School of Law under Hue University; School of Law under Danang University; School of Law under Can Tho University; School of Law under Thai Nguyen University; and Open University; Banking Institute. In fact, the law students learn about both national and international IP law.

The content of IP law courses is made up of the following subjects:

Chapter I – Introduction to IP Law

- Introduction to IP: notion, demand for protection of IPRs
- Introduction to Vietnam's IP law: establishment history, sources, contents
- Introduction to international IP law: establishment history, system of conventions on IP

Chapter II – Copyrights and related Rights

- Introduction to copyrights and related rights: definition, characteristics, demand for protection, principles for protection'
- Content of Vietnamese laws on copyright and related rights protection: conditions for protection, subject matter and rights, rights transfer
- Contents of some conventions on copyrights and related rights

Chapter III – Industrial Property Rights

- Introduction to industrial property rights: definition, characteristics, principles, subject matter
- Contents of Vietnamese laws on industrial property protection: conditions for protection, subject matter and rights, rights transfer
- Contents of some conventions on industrial property rights

⁷ Kamil Idris, *Intellectual Property: A Power Tool for Economic Growth*, WIPO publication, (2005).

Chapter IV – Plant variety rights

- Introduction to plant variety rights: definition, characteristics, principles for protection, demand for protection
- Contents of Vietnamese laws on plant variety rights: conditions for protection, subject matter and rights, rights transfer
- Contents of some conventions on plant variety rights

Chapter V – IPR protection

- Notion, definition, characteristics
- Enforcement - Infringing behaviour
- Methods for protection of IPRs pursuant to Vietnamese and international laws⁸

Notwithstanding the small differences unique to each institution, each Chapter is usually taught in five or six sessions.⁹ The textbooks often used for law students are the Textbook of IP Law from Hanoi University of Law and Materials of IP Law from Ho Chi Minh University of Law.¹⁰

With regard to non-law students (i.e. students from the disciplines of Business, Social Sciences and Arts/Culture schools), an introductory course on IP is taught, but this is normally an elective subject.¹¹ For example, the Foreign Trade University teaches an introductory IP course to students in Faculty for International Economy and Business which is made up of the following basic contents:¹²

Chapter I – Introduction to IP

- What is IP
- Importance of IPRs to business
- Vietnam's IP history
- Vietnam's current IP laws
- Some International Conventions on IP

⁸ Summary and extracts from the following sources (accessed on 24 May, 2017): http://www.hcmulaw.edu.vn/hcmulaw/index.php?option=com_content&view=article&id=5613:luat-dan-su&Itemid=150; http://v1.ou.edu.vn/kti/Documents/decuongmonhoc2014_luat_KT/LUAT%20SO%20HUU%20TRI%20TUE%202014.pdf and <http://law.hvnh.edu.vn/phap-luat-so-huu-tri-tue-6945newsList1417199.html>

⁹ <http://law.hvnh.edu.vn/phap-luat-so-huu-tri-tue-6945newsList1417199.html>

¹⁰ <http://text.123doc.org/document/2506723-de-cuong-mon-hoc-luat-so-huu-tri-tue.htm> and http://www.hcmulaw.edu.vn/hcmulaw/index.php?option=com_content&view=article&id=5613:luat-dan-su&Itemid=150 (all accessed on 27 May, 2017)

¹¹ National University of Economics and Foreign Trade University teach IP introduction and basic management.

¹² http://www.academia.edu/8689661/TR%C6%AF%E1%BB%9CNG_%C4%90%E1%BA%AOI_H%E1%BB%8CC_NGO%E1%BA%AOI_TH%C6%AF%C6%A0NG_Khoa_Kinh_t%E1%BA%BF_v%C3%A0_Kinh_doanh_qu%E1%BB%91c_t%E1%BA%BF (accessed on 28 May, 2017).

Chapter II – Industrial Property Rights

- Definition
- Characteristics
- Principles
- Subject matter: patent, trademarks, trade secrets, geographical indications, trade names
- Conditions for protection, subject matter and rights, rights transfer
- Contents of some conventions on industrial property rights

Chapter III – Copyrights and related Rights

- Definition
- Characteristics
- Demand for protection
- Principles for protection
- Contents of Vietnamese laws and of some conventions on copyrights and related rights

Chapter IV – Plant variety rights

- Definition
- Characteristics
- Principles for protection
- Demand for protection
- Contents of Vietnamese laws and of some conventions on plant variety rights

Chapter V – IPR protection

- Definition
- Characteristics
- Infringing behaviours
- Methods for protection of IPRs pursuant to Vietnamese and international laws.

Each chapter is also taught in four to five sessions depending on the need and with a focus on business aspects of IP. The material is prepared by the lecturer of the university or by the visiting professor.¹³ In some instances, the University also invites experts to teach some specialized or advanced IP related courses such as trademarks and copyrights

IP is currently taught as an elective subject in only a few technical universities and schools although textbooks and other academic materials on IP, technology transfer and patent information exploitation have been available

¹³ As above.

since 2008.¹⁴ The teaching of IP is primarily focused on patents and technology transfer.

IP courses available in Vietnam are still general introductory courses and lack specialization in areas such as patent, trademark, design, layout topography, trade secret, copyright, or domain name. There is often insufficient time to teach these specialised areas and also insufficient human resources. Despite the importance of training and developing IP lecturers at higher education institutions in Vietnam, no such training currently exists.

IP education for governmental officials, businessmen and the general public is taught in various ways such as via seminars, short training courses, or online courses by National Office of IP (NOIP), Vietnam in collaboration with foreign institutions and other relevant ministries (for example, Ministry of Industry and Trade, Ministry of Culture, Sport and Tourism).¹⁵

In light of the above, it can be noted that IP teaching is established in Vietnam but the content of the available courses are limited and not broad enough to address the interests of different kinds of students.¹⁶ Moreover, in the context of the rapid socio-economic and technological development of Vietnam, the teaching of IP protection and dissemination is necessary and should be further developed for many reasons.

Firstly, the Vietnamese government has launched many policies and laws to promote science and technology (S&T) markets, in particular to promote the transfer and commercialization of technologies. This is illustrated in the following documents:

- S&T Strategy to 2020;
- Reforms of S&T Management mechanisms;
- Strategy of technology market development;
- Strategy of International integration in S&T;
- Law on Science and Technology (2000, amended in 2013);
- Law on Intellectual Property (2005, amended in 2009);
- Law on Standards and Technical Regulations (2006);
- Law on Technology Transfer (2006);
- Law on High Technology (2008) and

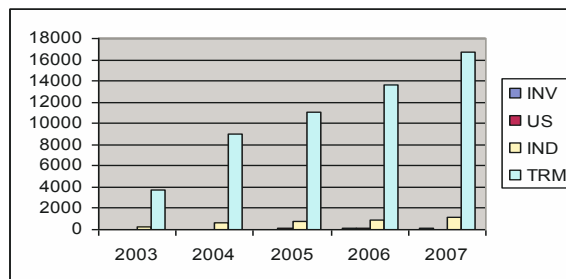
- 52 related decisions, decrees to guide law implementation¹⁷.

Secondly, there are some programs and projects which are funded and supported by the government and foreign agencies to promote the technology commercialization with 14 programs at the state-level (ten in S&T and four in social sciences and humanities), with the cooperation of 70 countries (more than 80 signed Agreements). Following these cooperation agreements, good projects are being implemented such as the IPP (Innovation Partnership Program, 2nd term); FIRST (Fostering Innovation through Research, Science and Technology), V-KIST and BIPP (Support to the Innovation and Development of Business Incubators Policy Project).¹⁸

Thirdly, according to the Ministry of Science and Technology, there are 505 R&D organizations; more than 400 universities and colleges, and 400000 enterprises including 2,800 S&T enterprises.¹⁹ There is a huge demand in these institutions for IP education and other IP-related subjects such as IP management, TT, innovation and technology management.

Fourthly, there has been a rapid increase of industrial property certificate numbers in Vietnam. This is illustrated in the following tables and figures below.²⁰

Figure 1: Number of IP Certificates from 2003 to 2007 (Before its accession to the WTO)



¹⁴ Phan Quoc Nguyen et al., *Textbook of intellectual property, technology transfer and patent information exploitation*, Bach Khoa Publishing House, (2008).

¹⁵ See more on the website of NOIP and of MOIT, www.noip.gov.vn and www.moit.gov.vn

¹⁶ In comparison with the contents of IP teaching in WIPO, *WIPO Intellectual Property Handbook*, op.cit.

¹⁷ See more details on the website of Ministry of Science and Technology, www.most.gov.vn

¹⁸ As above.

¹⁹ Till 11/2015. See details at www.most.gov.vn.

²⁰ See more at www.noip.gov.vn

Table 1: Number of IP Certificates from 2008 to 2014
(After its accession to WTO)

Year	Patents	Utility Solutions	Industrial Designs	Trade marks
2008	666	75	1337	23290
2009	706	64	1236	22730
2010	822	58	1152	16520
2011	985	69	1145	21440
2012	1025	87	1121	20042
2013	1262	107	1362	19659
2014	1368	86	1634	20579
2015	1388	117	1386	18340

Fifthly, thanks to the efforts of Vietnam, the Global Innovation Index (GII) of Vietnam has improved with a higher ranking as illustrated in Table 2 below :²¹

²¹ Figure extracts from GII scores. See details on the website: <https://www.globalinnovationindex.org/> (accessed on 27 May, 2017)

Table 2: Rank of Global Innovation Index of Vietnam and some countries

Year	No of countries	Highest score	Vietnam		Malaysia		Singapore		Thailand	
			Score	Rank	Score	Rank	Score	Rank	Score	Rank
2011	125	74.1	36.71	51	44.05	31	74.11	1	43.33	48
2012	141	68.2	33.9	76	45.9	32	64.80	3	36.90	57
2013	142	66.59	34.82	76	46.92	32	59.41	8	37.63	57
2014	143	64.78	34.89	71	45.60	33	59.24	7	39.28	48
2015	141	68.3	38.35	52	45.98	32	59.36	7	38.10	55

3. RECOMMENDATIONS AND CONCLUSIONS

Although the awareness of policy-makers, business persons and the general public in Vietnam is increasing and the number of IPR registrations has also increased in recent years, more needs to be done in relation to IP education.

Moreover, there is a high demand for IP teaching in Vietnam that could in turn promote IP activity. In the short term, Ministries and higher education institutions need to design a more detailed curriculum for IP and IP-related courses, and they also should update the types of IP subjects available for students to reflect current issues in IP law. Introducing IP as a compulsory course for technical and business students should also be considered. In addition, there should also be more specific courses, projects, programs and online courses for government officials, businessmen and other stakeholders regarding IP, for example in respect to TT, Innovation Management, IP Licensing, and IP enforcement.

In the medium to long term future, Vietnam invests in increasing the number of professional IP teachers. It is necessary to train IP teachers in Vietnam through learning experiences and in line with international standards.

It is submitted that higher education institutions cooperate with local enterprises and competent agencies to revise and update the existing IP courses and thereafter classify IP teaching courses into the following levels:

Level 1- Basic IP:

This introductory program should be aimed at first-time learners (law and non-law), businesspeople, policy-makers, creators, innovators and inventors and should aim to provide the students with the most basic knowledge of IP including the role of IP, importance of IP, perspectives and development tendency of IP, basic principles of IP law, basic IP rights of owners and authors, basic skills and methods to protect IPRs, etc. The duration of the course should be about 10 lessons for two credits.

Level 2 -Advanced IP:

- This intermediate program should be aimed at students or persons seeking a deeper understanding and knowledge of IP law and IP management. This course would consider IP law and management, economic and legal aspects of IP, patent, trademark, design, and copyright, as well as the domestic and international IP system. The duration of the course should be about 15 lessons for 3 credits, including exercises and a small dissertation.

Level 3 - Expertise in IP / Master's in IP:

- This program should be aimed at persons who want to become IP lawyers or IP practitioners. This programme will be made up of general IP law as well as specialized subjects such as: patent, trademark, design, copyright, technology transfer, innovation management, IP commercialization, IP valuation, IP assessment and IP expertise, IP and e-commerce, IP with biotechnology, and IP with Internet. The duration of this programme should be about 8 months of in-class lessons, 2 months of training and an additional 6 months to prepare a thesis.

BIBLIOGRAPHY

Strategy of Socio-Economic Development of Vietnam toward 2020.

<http://text.123doc.org/document/2506723-de-cuong-mon-hoc-luat-so-huu-tri-tue.htm> and http://www.hcmulaw.edu.vn/hcmulaw/index.php?option=com_content&view=article&id=5613:luat-dan-su&Itemid=150 (all accessed on 27 May, 2017)

National University of Economics and Foreign Trade University teach IP introduction and basic management.

<http://www.academia.edu/8689661/TR%C6%AF%E1%B%9CNG%C4%90%E1%BA%AOI%20H%E1%BB%8CC%20NGO%E1%BA%AOI%20TH%C6%AF%C6%AONG%20Khoa%20Kinh%20t%E1%BA%BF%20v%C3%A0%20Kinh%20doanh%20qu%E1%BB%91c%20t%E1%BA%BF> (accessed on 28 May, 2017).

Phan Quoc Nguyen et al., Textbook of intellectual property, technology transfer and patent information exploitation, Bach Khoa Publishing House, (2008).

The website of NOIP and of MOIT, www.noip.gov.vn and www.moit.gov.vn

The website of Ministry of Science and Technology, www.most.gov.vn

Figure extracts from GII scores www.globalinnovationindex.org (accessed on 27 May, 2017)

Synthetization from Nguyen Tan Vinh, Nhìn lại giá trị của FDI ở Việt Nam sau gần 30 năm (Look backward the value of FDI in Vietnam after nearly 30 years), Economy and Forecast Review, No. 01/2017, updated on 31/01/2017.

<https://www.google.com.vn/webhp?ie=UTF-8&rct=j#q=trips+agreement+word>
<https://thuvienphapluat.vn/tintuc/vn/hiep-dinh-TPP/11782/hiep-dinh-tpp-chuong-18-so-huu-tri-tue>
 Extract and translation from https://vi.wikipedia.org/wiki/L%E1%BB%8Bch_s%E1%BB%AD_lu%E1%BA%ADt_s%C3%A1ng_ch%E1%BA%BF_c%E1%BB%A7a_Vi%E1%BB%87t_Nam (accessible on 28 May, 2017).

WIPO, WIPO Intellectual Property Handbook: Policy, Law and Use, WIPO publication, (2005).

Kamil Idris, *Intellectual Property: A Power Tool for Economic Growth*, WIPO publication, (2005).

Summary and extracts from the following sources

(accessed on 24 May,

2017):http://www.hcmulaw.edu.vn/hcmulaw/index.php?option=com_content&view=article&id=5613:luat-dan-su&Itemid=150 ;

http://v1.ou.edu.vn/ktl/Documents/decuongmonhoc2014_luatKT/LUAT%20SO%20HUU%20TRI%20TUE%202014.pdf and <http://law.hvnh.edu.vn/phap-luat-so-huu-tri-tue-6945newsList1417199.html>

<http://law.hvnh.edu.vn/phap-luat-so-huu-tri-tue-6945newsList1417199.html>.