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# Patent System in the ASEAN Member States: In Search of Developing Effective Ways for a Better Patent System

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An efficient protection of Intellectual Property Rights (IPs) has a positive impact on the economy as it can help attract foreign investment and encourage the advancement of science and technology. There has been much discussion among the ASEAN member States in harmonizing their IP systems to encourage registration and utilization of IPRs among them. However, many legal infrastructures should be prepared in each of the ASEAN member countries and at the ASEAN level before the harmonization of the IP system. In the patent area, the harmonization idea requires more effort since there is also a huge difference in technology development among them. This article discusses various strategies in harmonizing the patent system in the ASEAN member states. This author would look into similar regional organizations, such as the African Regional Intellectual Property Organization and the African Intellectual Property Organization to compare their patent systems to those of the ASEAN to promote the utilization of patents in the ASEAN region.

#### Keywords

Patent System, Intellectual Property, ASEAN, Harmonization of IP System, ARIPO, OAPI

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# 1. Introduction

The ASEAN has developed efficient cooperation system in protecting Intellectual Property (IP) rights among its members since they signed the ASEAN Framework Agreement on Intellectual Property Cooperation in 1995. The current IP protection system in the region is more concrete and effective than before enough to bring more trading activities and foreign investments to its member states. Its policy mainly aims to harmonize the patent system among its member states, even though there is a gap in technology development and legal and regulatory framework between member States.

The primary goal of this research is to examine the current and future policies of the ASEAN and its member states in harmonizing its patent system. This article will look into the policy options of other regional organizations, namely the African Regional Intellectual Property Organization (ARIPO), the African Intellectual Property Organization (OAPI) and European Union (EU) in order to find and recommend effective ways for developing the patent system in the ASEAN.

# 2. Patent System in the ASEAN Member States

### A. International IP Laws

The IP system in a country, including patents, is established predominantly as a consequence of its obligations under global, regional, multilateral or bilateral agreements.<sup>1</sup> The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is the most comprehensive multilateral IP agreement that plays an important role in shaping the national laws of the WTO member States. TRIPS sets minimum IP protection norms and standards, including patents which shall be applied to the WTO member States.

As of today, all the ASEAN member States (AMS) are signers of TRIPS.<sup>2</sup> Since most the AMS are developing or least-developed countries (LDC), however, they have the privilege to postpone the application of TRIPS for several years. Article

<sup>&</sup>lt;sup>1</sup> Michael Blakeney, International Intellectual Property Jurisprudence after TRIPS, in INTELLECTUAL PROPERTY IN THE New MILLENNIUM: ESSAYS IN HONOUR OF WILLIAM R. CORNISH 3 (D. Vaver & L. Bently eds., 2004).

<sup>&</sup>lt;sup>2</sup> WIPO, Member States, https://www.wipo.int/members/en/#20.

65(2) of TRIPS provides: "A developing country Member is entitled to delay for a further period of four years the date of application, as defined in paragraph 1, of the provisions of this Agreement other than Articles 3, 4 and 5."<sup>3</sup> Also, for the provisions on product patents of Section 5, Part II of TRIPS, a developing country member may delay the application to such areas of technology for an additional period of five years.<sup>4</sup> Considering Article 66(1) of TRIPS which entitles the LDC to postpone 10 years from one year after the general date of entry into force of the Agreement Establishing the WTO, most AMS did not have to implement TRIPS regulations for a total of 11 years from 1 January 1995.<sup>5</sup> Up until today, Cambodia, Laos PDR, and Myanmar did not apply the provisions of TRIPS and have been given a transitional period extension until July 1, 2034.<sup>6</sup>

Apart from TRIPS, the Paris Convention for the Protection of Industrial Rights (Paris Convention), the Patent Cooperation Treaty (PCT), and the Patent Law Treaty (PLT) are also relevant multilateral agreements for patent protection administered under the World Intellectual Property Organization (WIPO). Since 1883, the Paris Convention has not only protected industrial property, which has comprised several object types, namely "patents, utility models, industrial designs, trademarks, service marks, trade names, appellations of origin," but also supported the repression of unfair competition.<sup>7</sup> PCT, which was concluded in 1970, helps to seek patent protection for an invention simultaneously in many member states of PCT by filing a single international patent application.<sup>8</sup> In 2000, meanwhile, PLT was adopted to harmonize and streamline formal procedures concerning national and regional patent applications which makes such procedures more user-friendly.<sup>9</sup> Paris Convention and PCT have been ratified by almost all AMS, except Myanmar. However, until 2022, none of AMS has become a member of PLT.

- <sup>5</sup> TRIPS Agreement art. 66(1).
- <sup>6</sup> WTO, WTO Members Agree to Extend TRIPS Transition Period for LDCs until 1 July 2034, (June 29, 2021) https:// www.wto.org/english/news\_e/news21\_e/trip\_30jun21e.htm.
- <sup>7</sup> Selvie Sinaga, Utilization of Intellectual Property Rights By Indonesian Small and Medium Enterprises: A Case Study of Challenges Facing The Batik and Jamu Industries (2012) (Ph.D. dissertation, University of Wollongong) (on file with author).
- 8 WIPO, PCT FAQ, https:/w.wipo.int/pct/en/faqs/faqs.html.
- <sup>9</sup> WIPO, Patent Law Treaty, https://www.wipo.int/treaties/en/ip/plt.

<sup>&</sup>lt;sup>3</sup> UNCTAD ET AL., RESOURCE BOOK ON TRIPS AND DEVELOPMENT / UNCTAD-ICTSD 712 (2005), https://digitallibrary. un.org/record/556860.

<sup>&</sup>lt;sup>4</sup> TRIPS Agreement art. 65 (4). It reads: "To the extent that a developing country Member is obliged by this Agreement to extend product patent protection to areas of technology not so protectable in its territory on the general date of application of this Agreement for that Member, as defined in paragraph 2, it may delay the application of the provisions on product patents of Section 5 of Part II to such areas of technology for an additional period of five years."

### B. Internal Laws and Terms of Patent Protection of the ASEAN Member States

As all AMS already signed TRIPS, they are required to provide the minimum standards of patent protection as stipulated in the Agreement. To comply with TRIPS, all the members have to adjust their national patent laws. As of today, all the member States except for Cambodia, Laos PDR, and Myanmar have revised or passed their new patent laws after the ratification of the Agreement. The following address the national patent law of each member States.

#### 1. Brunei Darussalam

Brunei Darussalam passed S 57/2011 on Patents Order in 2011 which took effect on January 1, 2012.<sup>10</sup> Prior to that date, patent protection in Brunei Darussalam was obtained through the re-registration of a patent granted in the UK, Malaysia, or Singapore. After S57/2011 was implemented, the re-registration process was discontinued in favor of a regular patent application filing process.<sup>11</sup> In 2017, the Patent Order 2011 was amended with S32/2017 on the Patent (Amendment) Order.<sup>12</sup>

The term of patent protection in Brunei Darussalam is 20 years after the filing date. However, the term may be extended if the patent office in Brunei Darussalam or the country which is part of the Paris Convention or a member of the WTO delays unreasonably in granting the patent.<sup>13</sup> It is estimated that a patent granting normally takes between two to four years in Brunei.<sup>14</sup> Such extension is also based on an unreasonable curtailment of the opportunity to exploit the patent caused by the process of obtaining marketing approval for a pharmaceutical product. It happens when the patent contains an active ingredient of any pharmaceutical product which requires marketing approval.<sup>15</sup>

#### 2. Indonesia

In 2001, Indonesia renewed its Patent Law to comply with the basic standards of patent protection stipulated in TRIPS. In 2016, Indonesia passed a new Patent Law (Law No. 13 of 2016) which includes some new provisions not only improving patent

<sup>11</sup> Id.

<sup>12</sup> Id.

<sup>13</sup> Id.

<sup>14</sup> Id.

<sup>15</sup> Id.

<sup>&</sup>lt;sup>10</sup> South-East Asia IPR SME Helpdesk, IP Country Factsheet: Brunei Darussalam, https://dip.gov.la/wp-content/uploads/2021/09/201\_Brunei-Factsheet\_SEA-IPR-SME-Helpdesk.pdf.

protection in Indonesia, but also satisfying the national interest of the Indonesian people.<sup>16</sup> One of the new provisions is Indonesia's controversial patent working requirements stated in Article 20 of Law No. 13 of 2016. This article requires a granted patent be worked<sup>17</sup> in Indonesia within three years. Otherwise, it can be revoked by the government.<sup>18</sup> This requirement was followed by protests from foreign business groups and governments.<sup>19</sup> However, Omnibus Law, that has been passed in 2020, has loosened the requirement by expanding the definition of activities that would satisfy the working requirement into producing, importing, or licensing.<sup>20</sup> A patent is granted for 20 years from the filing date in Indonesia and it cannot be extended. To keep it valid, annual payments must be made after the patent is granted.<sup>21</sup>

#### 3. Malaysia

In Malaysia, a patent is governed under the Patents Act 1983 and the Patents Regulations 1986. Since both were passed before Malaysia ratified TRIPS in 1994, the law and regulation have been amended to adjust to the minimum standards of patent protection required by TRIPS a few times. The Patent Act 1983 was amended four times after the ratification of TRIPS with the last amendment in 2006.<sup>22</sup> Meanwhile, the Patent Regulations 1986 has also been amended six times with the latest amendment in 2011.<sup>23</sup> Patent protection in Malaysia lasts for 20 years from the date of filing and it cannot be extended.<sup>24</sup>

- <sup>17</sup> Nick Redfearn, Indonesia's Controversial Patent Implementation Rules Are Enacted, ROUSE (July 31, 2018), https:// rouse.com/insights/news/2018/indonesia-s-controversial-patent-implementation-rules-are-enacted.
- <sup>18</sup> Law No. 13 of 2016 on Patent (Ind) art. 20 ¶1.
- <sup>19</sup> The Indonesian Minister of Law and Human Rights responded this protests by issuing Regulation No. 15 of 2018 which provides a period of 3 to 5 years for a patent holder to apply this requirement in Indonesia. If the reasons remain valid, the patent holder can apply for further extensions after 5 years period. For details, *see* Redfearn, *supra* note 17.
- <sup>20</sup> Andrew Diamond & Prudence Jahja, Controversial Omnibus Law Introduces New Rules on Patents and Trademarks, MANAGINGIP (Dec. 9, 2020), https://www.managingip.com/article/2a5cy419r9rqg58eoo54w/controversial-omnibuslaw-introduces-new-rules-on-patents-and-trademarks.
- <sup>21</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Indonesia, https://www.southeastasia-iprhelpdesk.eu/sites/default/ files/publications/Indonesia%20Fasctsheet.pdf.

<sup>24</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Malaysia, https://www.southeastasia-iprhelpdesk.eu/sites/default/ files/publications/Malaysia%20Factsheet.pdf.

<sup>&</sup>lt;sup>16</sup> Anis Rosiah, Alasan Hukum Pembentukan Pasal 20 Undang-Undang No. 13 Tahun 2016 di Indonesia [Legal Reason for Formulating Article 20 of Law No. 13 of 2016 on Patent in Indonesia] (2019) (Master Thesis, Universitas Islam Indonesia).

<sup>&</sup>lt;sup>22</sup> Intellectual Property Corporation Malaysia, Patent Act 1983, http://www.myipo.gov.my/en/patent-act-1983.

<sup>&</sup>lt;sup>23</sup> Id.

#### 4. The Philippines

A patent is protected in the Philippines under Republic Act No. 8293 Intellectual Property Code which took into effect on January 1, 1998. It is a comprehensive IP code which was adopted based on the WIPO Models in 1995.<sup>25</sup> Besides patent protection, this code protects utility model, trademark and geographical indication, copyright, industrial design, layout design of integrated circuits, and undisclosed information, as well.<sup>26</sup> In the Philippines, patent protection is granted for 20 years from the filing date, subject to payment of annuities for validity, and cannot be extended.<sup>27</sup>

#### 5. Singapore

In terms of IP protection, Singapore has the most developed patents, legislation, procedures, and enforcement in the region. In the past, the country did not have its own IP and relied on the re-registration of IPRs protected in the UK. Between 1987-2000, Singapore established a set of IP laws comprising patent, copyright, trademark, design acts, and an act protecting the layout designs of integrated circuits.<sup>28</sup> Singapore protects patent inventions through the Patent Act (Chapter 221) 1995, which had been amended several times with the latest amendment in 2017.<sup>29</sup> Unlike other AMS, Singapore does not apply the flexibility offered in Article 27.3 (b) of the TRIPS Agreement that allows member states to exclude from patentability plants and animals other than micro-organisms and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes.<sup>30</sup> Such a decision was made because the government would like to encourage research and investment into horticulture, agriculture, and biodiversity in Singapore by granting patent protection for plant and non-human animal varieties.<sup>31</sup> Singaporean patents are protected for 20 years from the filing date, subject to the payment of annual renewal fees starting from the end of the 4th year.<sup>32</sup>

<sup>31</sup> Id.

<sup>&</sup>lt;sup>25</sup> Christoph Antons, Intellectual Property Law in Southeast Asia: Recent Legislative and Institutional Developments, 1(Special Issue) J. INFO. L. & TECH. 1-12 (2006).

<sup>&</sup>lt;sup>26</sup> Id.

<sup>27</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Philippines, https://www.southeastasia-iprhelpdesk.eu/sites/ default/files/publications/Philippines%20Factsheet.pdf.

<sup>&</sup>lt;sup>28</sup> Supra note 25, at 2.

<sup>&</sup>lt;sup>29</sup> Intellectual Property Office of Singapore, Patents and Designs Legislative Amendments to Enter Into Force on 30 Oct 2017, https://www.ipos.gov.sg/media-events/updates/ViewDetails/patents-and-designs-legislative-amendments-to-enter-intoforce-on-30-oct-2017.

<sup>&</sup>lt;sup>30</sup> Antons, *supra* note 25, at 3.

<sup>32</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Singapore, https://www.southeastasia-iprhelpdesk.eu/sites/default/

#### 6. Thailand

In Thailand, a patent is protected under Patent Act B.E. 2522 (1979) with the last amendment on January 1, 1999. Thailand is a country where the patent has generated much controversy. When the country faced the AIDS crisis in the 1990s, the Thai government was criticized for failing to use the compulsory licensing mechanism on pharmaceutical patents because they were afraid of losing foreign investment.<sup>33</sup> Patents of invention last twenty (20) years from the filing date in Thailand, without possibilities for extension/renewal. The registration process currently suffers severe backlogs and takes up to 5 to 6 years or more. Patent applications in physics and biotechnology fields can take for 5 to 9 years and in some cases well over 10 years, especially for pharmaceutical and complex chemical patents.<sup>34</sup>

#### 7. Vietnam

The patent system in Vietnam was first introduced during the French colonial era in 1893.<sup>35</sup> Prior to Vietnam's accession to the WTO in 2007, the country issued many new laws and regulations to strengthen the protection and enforcement of IP rights and to upgrade these laws to meet the TRIPS Agreement.<sup>36</sup> In 2005, Vietnam passed a comprehensive IP law (Law No. 50/2005/QH11) that became effective as of July 1, 2006. This law governs patents in the country as well. IP owners and practitioners in Vietnam perceive this law as providing adequate protection and full compliance with TRIPS obligations. Subsequently, implementing decrees and regulations have been established to make detailed provisions and guidelines to implement the IP Law 50/2005.<sup>37</sup> Protection of invention patents registered in Vietnam is for 20 years from the filing date, without possibilities for extension/renewal. The registration process typically takes at least up to 20 months.<sup>38</sup>

files/publications/Singapore%20Factsheet.pdf.

<sup>34</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Thailand, https://www.southeastasia-iprhelpdesk.eu/sites/default/ files/publications/Thailand%20Factsheet.pdf.

<sup>36</sup> South-East Asia IPR SME Helpdesk, IP Factsheet: Vietnam, https://www.southeastasia-iprhelpdesk.eu/sites/default/ files/publications/Vietnam%20Factsheet.pdf.

<sup>38</sup> IP Factsheet: Vietnam, *supra* note 36.

<sup>&</sup>lt;sup>33</sup> Nurul Barizah, The Development of ASEAN's Intellectual Property Rights Law; From Trips Compliance to Harmonization, 7(1) INDON, L. REV. 95 (2017).

<sup>&</sup>lt;sup>35</sup> Pham Nghia, Transplanted Law-An Ideological and Cultural Analysis of Industrial Property Law in Vietnam, in INTELLECTUAL PROPERTY HARMONISATION WITHIN ASEAN AND APEC 125-38 (C. Heath et al., eds., 2004).

<sup>&</sup>lt;sup>37</sup> ASEAN Intellectual Property Association, IP Protection in Vietnam, http://www.aseanipa.org/index.php/members/vietnam/185-ipguidesvietnam/507-ip-guides-for-vietnam.

AMS	Patent Law	Implementation	Term of Patent Protection
Brunei Darussalam	S 57/ 2011 on Patents Order in 2011 (amended as S32/ 2017)	Re-registration process was discontinued in favor of a regular patent application filing process.	20 years after the filing date
Indonesia	Law No. 13 of 2016 on Patents	Article 20 of the Patent Law No. 13 of 2016 that requires a granted patent must be worked within three years in Indonesia has been loosened by Omnibus Law, that has been passed in 2020. In the Omnibus Law 2020, the requirement of working a patent in Indonesia is expanding from making a product or using the process in the patent to producing, importing, or licensing.	20 years after the filing date
Malaysia	Patent Act 1983 and Patent Regulation 1986	Patent Act 1983 was amended four times with the last amendment in 2006. Patent Regulation 1986 was amended six times with the last amendment in 2011.	20 years after the filing date.
The Philippines	Republic Act No. 8293 Intellectual Property Code	This Act protects also utility model, trademark and geographical indication, copyright, industrial design, layout design of integrated circuits, and undisclosed information.	20 years after the filing date
Singapore	Patent Act (Chapter 221) 1995 with the latest amendment in 2017	Does not apply the flexibility offered in Article 27.3 (b) of the TRIPS Agreement.	20 years after the filing date
Thailand	Patent Act B.E. 2522 (1979) with the latest amendment in 1999	The registration process currently suffers severe backlogs.	20 years after the filing date
Vietnam	Law No. 50/2005/ QH11	Implementing decrees and regulations have been established to make detailed provisions and guidelines to implement the IP Law 50/2005/QHII	20 years after the filing date

Table 1: Comparison of National Patent Law	vs
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### 8. Cambodia, Laos PDR, and Myanmar

Cambodia, Laos PDR, and Myanmar are within the category LDCs which are not required to apply almost all the provisions of the TRIPS until at least July 1, 2034.<sup>39</sup> As part of Cambodia's accession to the WTO, the country passed the Law on

Patents, Utility Models, and Industrial Designs in 2003. It was then followed by an implementing Declaration (Prakas) on the Procedure for the Grant of Patent and Utility Model Certificates in 2007.<sup>40</sup>

Before joining the WTO, Laos' IP laws went through considerable amendments. In 2011, Laos issued Law No. 01/NA to protect all kinds of IPRs, including patents. This 2011 law has been replaced by the new Law on Intellectual Property No. 38/ NA of 2017 which took effect on June 1, 2018.<sup>41</sup>

Myanmar was the first one which ratified TRIPS in 1995. Ironically, however, Myanmar is the only country in the ASEAN which does not have any law on patents in effect. Although on March 11, 2019, the Myanmar parliament already enacted the Pyidaungsu Hluttaw Law No. 7/ 2019 (Patent Law). However, the new Patent Law is still pending and will come into operation only upon notification from the President of Myanmar.<sup>42</sup> The term of patent protection in these three countries are the same, 20 years from the date of filing.<sup>43</sup>

Regarding the utility model or petty patent, Brunei Darussalam and Singapore do not recognize this type of IPR. It means all inventions in this category need to file a patent application to get protection in these countries.<sup>44</sup> Other AMS protect utility models or petty patents in their jurisdictions for a different period of time. The protection term of the utility model in Cambodia and the Philippines is 7 years, while Indonesia, Laos PDR, Malaysia, and Vietnam protect it for 10 years.<sup>45</sup> Only Thailand provides 6 years of protection for utility models or petty patents. In Malaysia and Thailand, the protection can be extended for another 2 consecutive 5-year terms and twice for 2 more years, respectively. Laos PDR allows the protection of utility model or petty patent is renewed once for another 2 years.<sup>46</sup> In the new Patent Law, Myanmar provides 10 years of protection for the utility model from the filing date.<sup>47</sup>

- <sup>45</sup> Id.
- <sup>46</sup> *Id*.
- <sup>47</sup> Collopy & Teng, *supra* note 42.

<sup>&</sup>lt;sup>40</sup> See Patent Protection Landscape in Cambodia, ROUSE (May 30, 2018), https://rouse.com/insights/news/2018/patentprotection-landscape-in-cambodia.

<sup>&</sup>lt;sup>41</sup> Nick Redfearn, Laos Amends Its IP Law, ROUSE (June 17, 2018), https://rouse.com/insights/news/2018/laos-amends-itsip-law.

<sup>&</sup>lt;sup>42</sup> Daniel Collopy & Yeo M. Teng, *Myanmar: New Patent Law Pending in Myanmar*, MONDAQ (May 20, 2020), https:// www.mondaq.com/patent/937554/new-patent-law-pending-in-myanmar.

<sup>&</sup>lt;sup>43</sup> South-East Asia IPR SME Helpdesk, Patent Protection in South-East Asia, https://www.southeastasia-iprhelpdesk. eu/sites/default/files/publications/EN\_patent.pdf.

<sup>&</sup>lt;sup>44</sup> Id.

# C. Application and Enforcement

In the AMS as well as most developing countries, patents have become the most problematic among other IPRs. Patents are the most difficult to administer compared to other IPRs, but statistics show a very low level of domestic patent applications. Most of the patent applications in the AMS come from foreign corporations.<sup>48</sup> Table 2 shows the number of patent applications filed by a resident, non-residents, and from abroad<sup>49</sup> in 2019.

AMS/Categories	Resident	Non-Resident	Abroad
Brunei Darussalam	5	115	5
Cambodia	0	248	11
Indonesia	1,309	6,851	49
Laos	0	0	8
Malaysia	989	5,839	934
Myanmar	0	0	0
Philippines	476	3,517	154
Singapore	1,778	11,487	6,168
Thailand	863	6,662	649
Vietnam	1,021	6,674	112

Table 2: The Number of Patent Applications in ASEAN in 2019

Source: WIPO Statistical Country Profile<sup>50</sup>

Table 2 shows that the number of patent applications submitted by residents of the AMS are far below the patent applications filed by a non-resident. Even, non-resident patent applications are six times higher than resident applications in Singapore that has the most developed IP legislation, procedures, and enforcement in the region.

<sup>50</sup> WIPO, WIPO Statistical Country Profile, https://www.wipo.int/ipstats/en/statistics/country\_profile.

<sup>&</sup>lt;sup>48</sup> Christoph Antons, Harmonisation and Selective Adaptation as Intellectual Property Policies in Asia, in INTELLECTUAL PROPERTY HARMONISATION WITHIN ASEAN AND APEC 108-24 (C. Antons et al., eds., 2004).

<sup>&</sup>lt;sup>49</sup> A resident filing refers to an application filed in the country by its own resident; whereas a non-resident filing refers to the one filed by a foreign applicant. An abroad filing refers to an application filed by a resident of a given country/ jurisdiction with at patent office of another country/jurisdicition. See WIPO, Industrial Property Statistics Glossary, https://www.wipo.int/ipstats/en/statistics/glossary.html.

The reality that patent applications in the ASEAN region are dominated by foreigners creates a misconception among the people of the AMS that patents are not for them. This misconception adds fuel to many other problematic issues surrounding the patent system in each of the AMS.

Another issue is a significant backlog of patent applications in the majority of the national patent offices in the AMS. This happened mainly because of a lack of resources and skilled staff. As a result, some offices in the AMS simplify granting procedures where the national office takes into account the examination conducted by other authorities, such as the European Patent Office, the US Patent Office, and the Japan Patent Office.<sup>51</sup> Cambodia and Laos PDR employ such a method to grant a patent in their jurisdiction due to a lack of skilled patent examiners. For example, Cambodia and Laos PDR signed MoU with the Intellectual Property Office of Singapore in 2015<sup>52</sup> and the China National Intellectual Property Administration<sup>53</sup> respectively to accelerate the patent application process in their jurisdictions.

Regarding enforcement, it has been well-known that IP enforcement is weak in most of the AMS. According to the International Property Right Index 2020, Singapore provides the strongest IP protection with a score of 8,217 compared to Malaysia (6,223), the Philippines (5,729), Thailand (4,793), and Vietnam (4,631), Brunei (4,570), and Indonesia (4,389).<sup>54</sup> Unfortunately, the Index does not provide data on IP protection in the remaining AMS (Cambodia, Laos PDR, and Myanmar). According to the Special 301 Report,<sup>55</sup> made by the United States Trade Representative (USTR), Indonesia is on the Priority Watch List because Indonesia's 2016 Patent Law continues to raise concerns, including the patentability criteria for incremental innovations and the disclosure requirements for inventions related to traditional knowledge and

<sup>&</sup>lt;sup>51</sup> Reto Hilty & Roberto Romandini, Developing a Common Patent System: Lessons to Be Learned from the European Experience, in INTERNATIONAL INTELLECTUAL PROPERTY AND THE ASEAN WAY: PATHWAYS TO INTEROPERABILITY 254-90 (E. Ng & G. Austin eds., 2017).

<sup>&</sup>lt;sup>52</sup> Singapore Furthers IP Cooperation with Cambodia to Expedite Quality Patent Grants, https://asiaiplaw.com/article/ singapore-furthers-ip-cooperation-with-cambodia-to-expedite-quality-patent-grants.

<sup>&</sup>lt;sup>53</sup> PRC National Intellectual Property Administration, China and Laos Sign First MoU on IP Cooperation: Laos Recognizes China's Invention Patent Examination Results, http://english.sipo.gov.cn/news/officialinformation/1122882.htm.

<sup>&</sup>lt;sup>54</sup> The International Property Rights Index (IPRI) was developed to serve as a barometer for the status of property rights across the world. The IPRI consists of 3 core component indexes, namely: the legal and political environment, the protection of physical property rights, and the IPR. The IPR component evaluates the protection of intellectual property rights, patent protection, and copyright piracy. *See* Sary Levy-Carciente, The International Property Rights Index 2020 Full Report, Property Rights Alliance, https://atr-ipri2017.s3.amazonaws.com/uploads/IPRI+2020+Full+Report.pdf.

<sup>&</sup>lt;sup>55</sup> The Special 301 Report (Report) is the result of an annual review of the state of IP protection and enforcement in the US trading partners around the world. See USTR, 2021 Special 301 Report, https://ustr.gov/sites/default/files/files/ reports/2021/2021%20Special%20301%20Report%20(final).pdf.

genetic resources.<sup>56</sup> Two other AMS, Thailand and Vietnam, have been placed on the Watch List 2019 due to a lack of enforcement efforts to combat counterfeit and pirated goods.<sup>57</sup> Although other AMS are not mentioned in the Special 301 Report, it does not mean that their IP enforcement is already good.

# 3. Efforts of the ASEAN related to Patents

The first effort made by the ASEAN related to IP is the signing of the ASEAN Framework Agreement on Intellectual Property Cooperation by 7 AMS (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam) on December 15, 1995. In the Framework Agreement, the AMS recognizes the important role of IPR for the flow of trade and investment among them and the importance of cooperation in IPR protection in the region.<sup>58</sup> One of the Framework Agreement's objectives is to "explore the possibility of setting up of an ASEAN patent system, including an ASEAN Patent Office, if feasible, to promote the region-wide protection of patent bearing in mind developments on regional and international protection of the patent."<sup>59</sup>

After the Framework Agreement was signed, the ASEAN Working Group on Intellectual Property Cooperation (AWGIPC) was created to implement the Framework Agreement. AWGIPC is the sectoral group responsible for IP issues in the region. It is composed of all IP offices of the AMS. The AWGIPC shapes the path to harmonizing the IP system in the ASEAN. It went through many phases commencing with the Hanoi Action Plan (1999-2004), moving on to the ASEAN IPR Action Plan (2004-10), and followed by the ASEAN IPR Action Plan (2011-15) and the latest ASEAN IPR Action Plan (2016-25).<sup>60</sup>

There are a few things related to patents that had been set up in the Hanoi Action Plan (1999-2004). In protection and facilitation, the AMS agreed to strengthen technical cooperation relating to patent search and examination, and setting up the ASEAN electronic database patents by the year 2004, respectively. In cooperation, the AMS

<sup>&</sup>lt;sup>56</sup> Id. at 53.

<sup>57</sup> Id. at 79, at 84.

<sup>&</sup>lt;sup>58</sup> The ASEAN Framework Agreement on Intellectual Property Cooperation 1995.

<sup>59</sup> Id. art. 1 (4).

<sup>&</sup>lt;sup>60</sup> Soh K. Liang & Chew P. Keat, Proposal for PAN-ASEAN Trademark Registration: A Case for the Practical Application of the Interoperability Principle, in INTERNATIONAL INTELLECTUAL PROPERTY AND THE ASEAN WAY: PATHWAYS TO INTEROPERABILITY 210-29 (E. Ng & G. Austin eds., 2017).

would like to establish an ASEAN regional patent filing and registration system by the year 2000.<sup>61</sup> Although more than twenty years have passed since 1999, the ASEAN has not yet achieved its stated goal to build the patent regional filing system.<sup>62</sup>

The ASEAN IPR Action Plan (2004-10) has developed four main strategic programs. In this regard, the ASEAN National IP Offices has created the ASEAN patent data bank, a brokering system for patented technology through the Enhancing Activities in Cooperative Business Development Services (BDS).<sup>63</sup> In the subsequent ASEAN IPR Action Plan (2011-15), there are 4 strategic goals related to patents with the leader for each action. Table 3 show the details.

Strategic Goals	Goals	Led By	
To Develop a Balanced IP	Implementation of the ASEAN Patent Search and Examination Cooperation (ASPEC)	ASPEC) Singapore	
System	Capacity Building for Patent Professionals/ Attorneys		
To Enhance IP Infrastructure	Ratification of the Patent Cooperation Treaty.	the ASEAN Secretariat	
To Promote IP Creation, Awareness, and Utilization	The establishment of at least twenty regional patent libraries/patent information search facilities in ASEAN by 2015.	Philippines	
To Intensify Intra-ASEAN IP Cooperation	Organizing capacity-building activities for patent examiners.	Malaysia and Singapore	

Table 3: Strategic Goals related to Patents with the Leader for Each Action<sup>64</sup>

Of the above-mentioned goals, some have been implemented nearly 100%, while another goal is not yet implemented. The goal that has been fully implemented is the establishment of the ASEAN Patent Examination Cooperation (ASPEC) and ASEAN IP Portal. Another goal, accession of all AMS to the PCT has not yet been obtained 100% since Myanmar still does not sign the PCT as of July 2022. Either, 20 regional

<sup>63</sup> ASEAN, ASEAN Intellectual Property Rights Action Plan 2004-2010, https://asean.org/speechandstatement/aseanintellectual-property-right-action-plan-2004-2010/.

<sup>&</sup>lt;sup>61</sup> The Hanoi Plan of Action 1999-2004, adopted in Hanoi-Vietnam on December 15, 1998, https://asean.org/hanoiplan-of-action.

<sup>&</sup>lt;sup>62</sup> Weerawit Weeraworawit, *The Harmonisation of Intellectual Property Rights, in* INTELLECTUAL PROPERTY HARMONISATION WITHIN ASEAN AND APEC 108-24 (C. Antons et al., eds., 2004).

<sup>&</sup>lt;sup>64</sup> ASEAN, ASEAN Intellectual Property Rights Action Plan 2011-2015, https://www.aseanip.org/Portals/0/PDF/ ASEAN%20IPR%20Action%20Plan%202011-2015.pdf.

patent libraries/patent information search facilities have not been established in the ASEAN. For the ASEAN IPR Action Plan (2016-25), here are the goals related to patents:

- 1. Continue implementation of ASPEC;
- 2. Establish an ASEAN database for published applications and registered patents;
- 3. Identify similarities and differences in practices of patent and industrial design among the ASEAN member countries;
- 4. Update or draft national patent substantive examination manuals;
- 5. Develop ASEAN Common Guidelines on Patent Examination;
- 6. Accession to the PCT by AMSs;
- 7. Establishment of a regional network of patent libraries within schools and universities in AMSs, to increase access to global scientific and technology information for research and development;
- 8. Implement online filing for patents, trademarks, and industrial design Applications;
- 9. Conduct a Feasibility Study for an ASEAN Patent System; and
- 10. Ensure IP Offices' patent databases and relevant information are easily accessible to their customers, partners, industry, and the public.<sup>65</sup>

The main goals of the previous and current IPR Action Plans, such as transparency, public awareness, and access to international treaties, remain the same. However, the ASEAN IPR Action Plan 2016-2025 is more detailed and includes developing regional IP platforms, such as online filing systems for trademarks, patents, and industrial designs.<sup>66</sup> Although progress is being made slowly, the ASEAN is on the correct route as it implements the aforementioned objectives incrementally. In addition, the EU assists the ASEAN via the ARISE Plus Intellectual Property Rights (ARISE+IPR) project, which assists the ASEAN in achieving the objectives outlined in the ASEAN IPR Action Plan 2016-2025. It will be achieved through a series of capacity building initiatives, the development of information instruments, the exchange of best practices, the adoption of international standards, and targeted information and awareness-raising campaigns to promote the creation, use, protection, and application of IP rights.<sup>67</sup>

<sup>&</sup>lt;sup>65</sup> ASEAN, ASEAN Intellectual Property Rights Action Plan 2016-2025: Updates to the ASEAN IPR Action Plan (2d. ed.), https://www.aseanip.org/Portals/0/PDF/ASEAN%20IPR%20Action%20Plan%202016-2025%20v2.0.pdf?v er=2021-06-10-135518-427.

<sup>&</sup>lt;sup>66</sup> The Updated ASEAN IP Action Plan for 2016-2025, Lexology, https://www.lexology.com/library/detail.aspx?g= 3be9b880-f316-4f93-8920-399def39d895.

<sup>&</sup>lt;sup>67</sup> The EU International IP Cooperation, About ARISE + Intellectual Property Rights, https://internationalipcooperation. eu/en/ariseplusipr/about-arise-ipr.

### 4. Lesson from Similar Regional Organizations: ARIPO, OAPI and EU

Two regional organizations are deemed to have a similar condition to the ASEAN, namely the ARIPO and its sister organisation, African Intellectual Property Organization (Organisation Africaine de la Propri*été* Intellectuelle: OAPI). Likewise the ASEAN, the member states of these two regional organizations are within the category of developing or LDCs.

ARIPO is an intergovernmental organization that grants and administers IP titles on behalf of its member States and provides IP information in the form of search services, publications, and awareness creation. Membership of the organization is open to all member states of the African Union (AU) or the United Nations Economic Commission for Africa (ECA). The present members of ARIPO include Botswana, The Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Rwanda, Sao Tome, and Principe, Sierra Leone, Somalia, Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe. The ARIPO Secretariat is based in Harare, Zimbabwe.<sup>68</sup> These are anglophone states located on African continents.

Regarding patents, ARIPO is mandated to grant patents on behalf of the Harare Protocol on Patents, Designs, and Utility Models. The Harare Protocol was adopted on December 10, 1982 in Harare, Zimbabwe which entered into force in 1984. Under the protocol, an applicant for the grant of a patent for an invention can, by filing only one application, designate any one of the Harare Protocol Contracting States in which that applicant hopes the invention to be accorded protection. The protocol requires the filing of the application to be made with any one of the contracting States or directly with the ARIPO Office.<sup>69</sup>

The ARIPO Office examines the application's compliance with formal requirements and notifies each designated State when the prescribed requirements are met. The ARIPO undertakes or arranges for substantive examination of the patent application. After the expiration of the six months, the ARIPO shall grant and publish the patent granted.<sup>70</sup> The ARIPO system is designated to be an additional system of protection coexisting with the national patent systems of its member States. Its main purpose is to grant regional patents with an effect in all designated member States through a common granting authority under its own rules and standards of

<sup>68</sup> ARIPO, About Us, https://www.aripo.org/about-us.

<sup>&</sup>lt;sup>69</sup> ARIPO, Patents, https://www.aripo.org/ip-services/patents.

<sup>&</sup>lt;sup>70</sup> The Harare Protocol on Patents and Industrial Designs (2002 ed.) §3, ¶7.

#### patentability.<sup>71</sup>

Similar to ARIPO, OAPI is an IP intergovernmental organization governing much of French-speaking African states. OAPI was established in 1977 with the Bangui Agreement and is headquartered in Yaounde, Cameroon. It offers IPR holders a means of securing protection across all member States via a single OAPI registration.<sup>72</sup> Currently, there are 17 OAPI member states, namely Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Mali, Mauritania, the Niger, Senegal, and Togo.

Under the OAPI system, rights holders can apply to register patents, trademarks, and industrial designs and, if successful, the rights will be protected in the 17 member states. Within the OAPI patent system, only a formal examination is carried out; there is no substantive examination of a patent application. A patent is granted or issued by the Director General of the OAPI at the applicant's own risk.<sup>73</sup> While OAPI facilitates and maintains these registrations, enforcement in terms of infringement must be handled within the member States concerned. Other official actions in respect of the IP rights granted, such as cancellations, oppositions or assignments, are conducted through the OAPI headquarters in Cameroon.<sup>74</sup>

However, there is one big difference between these two organizations. The ARIPO has harmonized the IP Laws of its member States through protocols to which they voluntarily subscribe and thereafter domesticate. Its registration system is not unitary and protection is only granted in designated member states, which have an opportunity to accept or decline an application in a national process, following the initial ARIPO application stage. Conversely, OAPI has unified its member States' IP laws in a common code, the Bangui Agreement, and developed a single registration system that secures the grant of industrial property in all the member States.<sup>75</sup>

There is an even bigger difference between ASEAN, ARIPO, and OAPI. ARIPO and OAPI have first settled the laws that apply to all member States, while the ASEAN has struggled to establish the laws that can harmonize the patent system in the member States. Another issue is about the filing office. Although it has been stated in the ASEAN Framework Agreement on Intellectual Property Cooperation

<sup>74</sup> Id.

<sup>&</sup>lt;sup>71</sup> TSHIMANGA KONGOLO, AFRICAN CONTRIBUTIONS IN SHAPING THE WORLDWIDE INTELLECTUAL PROPERTY SYSTEM 77-8 (1st ed. 2013).

<sup>72</sup> O for OAPI, ROUSE, https://www.rouse.com/africa-atoz-guide/o-for-oapi.

<sup>&</sup>lt;sup>73</sup> *Supra* note, 64, at 88.

<sup>&</sup>lt;sup>75</sup> CAROLINE NCUBE, INTELLECTUAL PROPERTY POLICY, LAW AND ADMINISTRATION IN AFRICA 121-2 (1st ed. 2016).

as one of the objectives to "explore the possibility of setting up of an ASEAN patent system, including an ASEAN Patent Office," the ASEAN does not have an office until now. Taking a lesson, the ASEAN should first establish the laws that unify the diverse patent system in the AMS and then set up an ASEAN Patent Office. Without these, nothing is possible to harmonize the patent system among the AMS.

Lessons may also be gleaned from the EU's Unitary Patent and Unified Patent Court, despite their conditions being distinct from the ASEAN. Unitary Patent will allow a single request to the European Patent Office to cover patent registration in up to 25 EU member states (EPO). It will make the process simpler and less expensive for applicants.<sup>76</sup> The Unified Patent Court is an international judicial institution formed by the EU member states to oversee the legitimacy and infringement of Unitary Patents and European patents. Thus, it will put an end to costly parallel lawsuits and provide legal clarity.<sup>77</sup> However, like OAPI and ARIPO's efforts, to apply models such as the EU's Unitary Patent and the Unified Patent Court, the ASEAN needs to develop a single law and system for managing patents in the AMS and establish a unified patent office that handles either patent registration or patent infringement.

It is not an easy task to establish one single law that applies to all AMS and then set up an ASEAN Patent Office because each member State has different patent system. In any case, the political will of each member is the key to successfully establishing a single law that governs the patent system in the ASEAN and setting up an ASEAN Patent Office. It seems that each AMS is committed to its own perspective on how to regulate the patent system in the ASEAN. Actually, ARIPO and OAPI were easy to establish one single law that governs the patent system in their member States because both organizations are specially designed for intellectual property cooperation, while the ASEAN is focusing on diverse goals, such as economic, political-security, and socio-cultural ones. In the case of the EU, while the nature of the organizations is the same, the economic and development conditions are not. AMS is made up of one developed nation, Singapore, six developing countries, Brunei, Indonesia, the Philippines, Malaysia, Thailand, and Vietnam, and three least developed countries, Cambodia, Lao, and Myanmar, whereas the bulk of the EU members are developed.

<sup>&</sup>lt;sup>76</sup> The European Patent Office, Unitary Patent and Unified Patent Court, https://www.epo.org/applying/european/unitary. html.

# 5. Conclusion

There are a lot of works that should be done by the ASEAN to realize the patent harmonization dream. Although more detailed than the previous Action Plan, the goals mentioned in the ASEAN IPR Action Plan (2016-25) are still being ambitious. Nevertheless, it must be acknowledged that there is progress made by the AMS in realizing the goal, although it is at a slow pace. At this point, the ASEAN could learn from ARIPO and OAPI on how to harmonize the patent registration system in its region due to the similarity in economy and development level of their member States. However, one must remember that both ARIPO and OAPI have already established a single law that governs the patent registration system and a single patent office that deals with patent registration in each member state. Without patent registration system and a single patent office, the ASEAN could not harmonize the patent registration system in their region.

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