

BALANCING I.P. RIGHTS AND COMPETITION LAW THROUGH REGULATION OF PATENT POOLS IN INDONESIA: A COMPARATIVE ANALYSIS

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ABSTRACT

In 1998, Heller and Eisenberg, discovered the ‘tragedy of the anticommons’ which occurs when there are numerous patent holders who must give their consent before a technology can be used. Consequently, where excessive property rights are claimed, some technology is underused, and innovation is stunted. To solve this issue, the patent owners can aggregate their patents into a single ‘patent pool.’ However, there are significant anticompetitive harms which may arise from such a practice. Hence, this paper aims to answer the question of whether the creation of patent pools as an antidote to the ‘tragedy of anticommons’ would be at the cost of competition law. This research found that it is possible to use patent pools as a solution to the tragedy of the anticommons, while preventing harm to competition. The Indonesian Competition Authority can take inspiration from EU regulations to create a ‘safe harbor’ for companies who engage in technology transfer agreements if they meet the market share thresholds. They can also improve the framework for analysing patent pools by laying out the different categories of patents to ascertain the different levels of harm they bring to competition.

Keywords: *Competition Law, Patent Pools, Intellectual Property Law, E. U. Law, Indonesia*

I. INTRODUCTION

Imagine that there is a biotech company which is on the verge of a breakthrough in one of its genetic engineering technologies. However, to bring this new technology to market, the company would most likely infringe several existing patents because the manufacturing methods used to produce the technology would infringe certain existing process patents. Thus, if the company wants to proceed in marketing its new technology, it will need to enter into licensing agreements with several owners of the relevant patents. Consequently, the company would have to incur excessive royalty fees, just by the very fact that it

has to contract individual with numerous patent holder. This is referred to as the “*complements problem*,” where there exist numerous owners of complementary patents, each of which are necessary to manufacture a particular product or complete a certain process.¹

Cournot considered the problem faced by a manufacturer of brass who had to purchase two key inputs, copper and zinc, each controlled by a monopolist.² As Cournot demonstrated, the resulting price of brass was *higher* than would have been had a single firm-controlled trade in both copper and zinc and sold these inputs to a competitive brass industry (or made the brass itself). Worse yet, the combined profits of the producers were lower as well in the situation of *complementary monopolies*. Accordingly, the result of the balkanised rights to copper and zinc was to harm to both consumers and producers. The same applies today when multiple companies control *blocking patents* for a particular product, process, or business method.

How can the inefficiency associated with multiple blocking patents be eliminated? One natural and attractive solution in the brass manufacturing example above is for the copper and zinc suppliers to join forces and offer their inputs for a single, package price to the brass industry.³ The two monopolist suppliers would find it in their joint interests to offer a package price that is *less* than these two components would sell for when priced separately. The blocking patent version of this principle is the rights holders will find it attractive to create a *package license* or *patent pool*, or in some situation to simply engage in *cross licensing* so they can each produce final products themselves.

Heller and Eisenberg discussed the complements problem in the context of biotechnology patents, making an amusing comparison to the classic “*tragedy of the commons*”.⁴ The tragedy of the commons is a famous theory which posits that an economic resource (such as fishing grounds, forests and clean water) will be at risk of overuse and may even be depleted were it not protected by property rights.⁵ As an homage to this theory, Heller and Eisenberg proposed a new theory called the “*tragedy of the anticommons*” which exists when there are too many property rights (i.e. patents) over a complementary technology. Such

¹ Carl Shapiro, “Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting,” in *Innovation Policy and the Economy*, by Adam B Jaffe et al. (Cambridge, Mass.: MIT Press, 2001), <https://archive.org/details/innovationpolicy00mitp>. 5.

² Carl Shapiro, “Chapter 6 Theories of Oligopoly Behavior,” in *Handbook of Industrial Organization*, by Richard Schmalensee, vol. 1 (Elsevier, 1989), 329–414, [https://doi.org/10.1016/S1573-448X\(89\)01009-5](https://doi.org/10.1016/S1573-448X(89)01009-5). 339.

³ Shapiro, “Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting.” 5.

⁴ M. A. Heller and R. S. Eisenberg, “Can Patents Deter Innovation? The Anticommons in Biomedical Research,” *Science (New York, N.Y.)* 280, no. 5364 (May 1, 1998): 698–701, <https://doi.org/10.1126/science.280.5364.698>. 698-710.

⁵ *Ibid.*, 698.

‘tragedy’ occurs when there are numerous gatekeepers (i.e., patent holders), each of whom must assent before an innovation or technology can be brought to market. The consequence is that with such excessive property rights, the technology will be underutilised, and as a result future innovation could be curtailed.

Solving the complements problem requires coordination among rights holders. This coordination is most commonly achieved through the creation of patent pools. Patent pools can be defined as “*an agreement between two or more patent owners to license one or more of their patents to one another or to third parties.*”⁶ The logic behind patent pools is that the complementary patent rights are aggregated by the patent holders into one single pool, so that anyone who wishes to license the aggregated technology will only need to enter into a single licensing agreement with the manufacturer. The patent pool will then be available to its member as well as any other third parties who wish to license the pool, and each of its members would be entitled to collect licensing fees in proportion to each patent’s value.⁷ A patent pool may take the form of a joint venture, created by two or more patent holders for the purpose of sharing their intellectual property rights.⁸ Although historically patent pools have been concentrated in Europe and the United States, Asian companies have recently increased their participation in patent pools given their growing role in technological innovation.⁹

However, such coordination itself faces two types of obstacles. First, there are inevitable coordination costs that must be overcome.¹⁰ Second, antitrust sensitivities are invariably heightened when companies in the same or related lines of business combine their assets, jointly set fees of any sort, or even talk directly with one another. Because such coordination may involve the elimination of competition, there is a complex interaction between private and public interests. Even as coordination among rights holders is critical, from a public-policy perspective it cannot be presumed that private deals are in the public interest simply by making a transaction more efficient. Competition authorities would legitimately want to know whether consumers are helped or

⁶ World Intellectual Property Organization (WIPO), “Patent Pools and Competition – A Comparative Analysis” (WIPO Secretariat, April 2014). 3

⁷ Robert Merges, “Institutions for Intellectual Property Transactions: The Case of Patent Pools,” January 1, 1999. 129.

⁸ World Intellectual Property Organization (WIPO), “Patent Pools and Competition – A Comparative Analysis,” 3.

⁹ World Intellectual Property Organization (WIPO), “World Intellectual Property Report 2011, The Changing Face of Innovation, Chapter 3: Balancing Collaboration and Competition,” (Geneva: WIPO Secretariat, 2011). 121.

¹⁰ Shapiro, “Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting,” 9.

harmed by any arrangement; injured parties may seek redress under antitrust laws or by alleging patent misuse

To be clear, however, patent pools do provide several pro-competitive effects as they are created to essentially avoid the inefficiencies caused by the complements problem. In this regard, the World Intellectual Property Organization (WIPO) has identified four main pro-competitive effects that could be generated by patent pools.¹¹

First, and most importantly, is that patent pools generate efficiencies. Patent pools facilitate efficient production of goods and services because pooling patents that are complementary means that the required inputs are placed in the hands of the most efficient and qualified producers. For instance, two or more firms may own certain IP assets that are not sufficient individually to manufacture a specific product and therefore hold each other hostage, preventing the production to happen as each firm needs the other firm's complementary IP rights to have a working technology. In such a situation, the two companies would be blocking each other's patents, effectively preventing markets and consumers from the beneficial introduction of an innovative product or service.¹²

Patent pools, therefore, represent a common instrument to deal with that kind of inefficiency, allowing complementary IP assets to be organised under a single contract (the pool) to not only be cross licensed among the patent pool members, but also licensed to interested third parties. In fact, it has been argued that pool members should also be allowed to individually license out their own patents. This may have positive effects by keeping prices under competitive pressure and by possibly ensuring that the patent pool is welfare-enhancing.¹³ In fact, if the pool members are vertically integrated, they may have an incentive not to license the pooled patents to potential or actual third-party competitors or to overcharge royalties to third parties as this would raise rivals' costs while patent holders would be able to internalise those higher costs.

Secondly, patent pools can reduce or eliminate the need for litigation over patent rights because such disputes can either be easily settled or avoided through the creation of a patent pool. A reduction in patent litigation would save businesses time and money and avoid the uncertainty of patent rights caused by litigation. These benefits small- and medium-sized companies as they cannot usually bear the costs of litigation.

¹¹ World Intellectual Property Organization (WIPO), "Patent Pools and Competition – A Comparative Analysis," 9–10.

¹² Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting," 9.

¹³ Josh Lerner and Jean Tirole, "Efficient Patent Pools," *American Economic Review* 94, no. 3 (June 2004): 3, <https://doi.org/10.1257/0002828041464641>.

Third, patent pools facilitate licensing for technologies that are jointly owned by many firms. Therefore, patent pools can reduce transaction costs as licensees only need to enter into a single licensing agreement with one patent pool. In addition, royalty stacking can be eliminated: this occurs when firms charge inefficiently high prices for subsets of patents that cover complementary technologies.¹⁴ In other words, a royalty stacking effect takes place “when access to multiple patents is required to produce an end product, forcing the manufacturer’s products to bear multiple patent burdens, usually in the form of multiple licensing fees.”¹⁵

Royalties are charged for the separate use, for example, of patents individually owned by different companies but all of which are necessary to produce a complex product. This would lead to a total royalty that are unlikely to be compatible with efficient and welfare-enhancing use of IP rights.¹⁶ Indeed, the transaction costs associated with the definition and the management of multiple licensing contracts necessary to manufacturing the specific technology would be so high as to deter potential users from actually engaging in the pre-contractual discussions. This, in turn, may have an impact on the downstream price of products that use those technologies since costs related to stacked royalties will be passed on to consumer.¹⁷

Fourth, in situations where patents are mutually blocking or one patent infringes the other, a patent pool may be an efficient solution to clear blocking patents. Clearing blocking patents may, in turn, lead to the faster development of a given technology. Faster development of technology is pro-competitive as it increases dynamic efficiency.

Although patent pools may bring benefits such as increased efficiency, reduced transaction costs and the elimination of royalty stacking, it may unfortunately also have several anticompetitive effects. In the same report on patent pools and competition, WIPO¹⁸ found at least three possible negative effects patent pools may have on competition.

First, patent pools may cause a distortion to the competitive market if the pool contains substitute patents. Two patents are considered substitutes

¹⁴ Ryan Lampe and Petra Moser, “Patent Pools: Licensing Strategies in the Absence of Regulation,” *Advances in Strategic Management* 29 (August 21, 2012): 1, [https://doi.org/10.1108/S0742-3322\(2012\)0000029007](https://doi.org/10.1108/S0742-3322(2012)0000029007).

¹⁵ U.S. Dep’t of Justice and Fed. Trade Comm’n, “Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition,” n.d., 62, www.usdoj.gov/atr/public/hearings/ip/222655.pdf.

¹⁶ Francois Leveque and Yann Meniere, “Economics of Patent Pools,” *Microeconomix Economic Focus*, n.d.

¹⁷ Lihui Lin, “Licensing Strategies in the Presence of Patent Thickets,” *Journal of Product Innovation Management* 28 (April 26, 2011): 698–725, <https://doi.org/10.1111/j.1540-5885.2011.00835.x>.

¹⁸ World Intellectual Property Organization (WIPO), “Patent Pools and Competition – A Comparative Analysis.”

if they cover alternative technologies and if they do not prevent the use of another patent in the same field as it relies on a technology not covered by the first patent.¹⁹ The technologies covered by substitute patents can be used in parallel without infringing the other patent. They are therefore potentially competing with each other. Patent pools that consist of substitute patents have a negative effect on competition because it is likely that competition between two substitute patents would be eliminated if these patents are pooled.

Second, patent pools may lead to anticompetitive licensing practices, such as grant-back licenses. This happens where pool members are required to share improved technologies with the members of the pool at no fee if these technologies are deemed relevant to the pool. While grant-backs prevent individual members whose patent technologies become essential to the pool from holding up other members, it may also reduce or even eliminate the incentive to hide development in progress. Because improved technologies need to be shared with the pool, companies do not have an incentive to hide developments in progress. However, grant-backs may reduce the incentives to invest in future innovation because such future innovation would need to be shared with the pool at no fee, thus potentially reducing R&D efforts if the results of such efforts cannot be monetised. This creates anti-competitive effects to the market as it inhibits innovation and may allow patent owners to charge supra-competitive prices to the licensees.

Third, patent pools may encourage potential collusion, for example, by creating fora to share competitively sensitive information, such as pricing, marketing strategies, or R&D information among its members.²⁰ This may potentially encourage the creation of hardcore anti-competitive agreements such as price-fixing cartels, or through a more nuanced form of collusion such as hub-and-spoke agreements or tacit collusion agreement, which are facilitated through sharing of strategic business information.

Bearing these issues in mind, it is worth considering whether the creation of patent pools as an antidote to the 'tragedy of anticommons' would be at the expense of competitive markets. To answer this question, this paper provides a comparative analysis of E.U. competition laws in formulating a solution to Indonesia's regulatory framework that ensures society may still reap the benefits of patent pools, while safeguarding the market from any possible anticompetitive effects.

¹⁹ World Intellectual Property Organization (WIPO), 4.

²⁰ Nuno Pires de Carvalho, *The TRIPS Regime of Competition and Undisclosed Information* (The Hague : Frederick, MD: Kluwer Law International ; Sold and distributed in North, Central, and South America by Aspen Publishers, 2008), 67.

This research employs a comparative legal research format to compare Indonesia's and the E.U.'s regulatory framework.²¹ This research method facilitates better understanding of the functions of the rules and principles of laws and involves the exploration of detailed knowledge of the law of other countries to understand them, to preserve them, or to trace their evolution.²² Specifically, the cross-jurisdictional comparison focuses on the doctrinal development of each jurisdiction, categorising this paper as comparative-doctrinal research. As such, the main sources of data are primary (laws in their original form, i.e., laws, statutes, and regulations), and secondary (literature i.e., books and journals) sources of law. This paper then employs the comparative analysis to identify the similarities and differences in the way that the EU system regulates patent pools, and then to formulate a series of recommendation based on those findings to improve the current regulatory framework in Indonesia.

II. THE INDONESIAN REGULATORY FRAMEWORK: KPPU REGULATION NO. 2 OF 2009

The primary legal basis for Indonesia's competition law lies in Law No. 5 of 1999 on The Prohibition of Monopolistic Practices and Unfair Business Competition.²³ Although the law was seen as a major milestone when enacted in 1999, it did not unfortunately provide sufficient basis to resolve newer issues where competition law and intellectual property laws conflict. This can be seen from the fact that only one article in the entire law contains the phrase "intellectual property;" namely Article 50(b) which states: "exempted from the provisions of this law are: [...] agreements related to intellectual property rights, such as licenses, patents, trademarks, copyright, industrial product design, integrated electronic circuits, and trade secrets as well as agreements related to franchise."

This provision is problematic because there are no further qualifications or requirements to invoke the exemption. Hence, it seems to give the impression that the law provides an absolute exemption for all IP agreements, even if they contain severe anticompetitive harm.²⁴ However, an exception to the law

²¹ Michael McConville, *Research Methods for Law*, ed. Wing Hong Chui, 2007, <http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780748633593>.

²² Vernon Valentine Palmer, "From Leretholi to Lando: Some Examples of Comparative Law Methodology," *The American Journal of Comparative Law* 53, no. 1 (2005): 261–90.

²³ Indonesia, Law No. 5 of 1999 on The Prohibition of Monopolistic Practices and Unfair Business Competition (hereinafter Law No. 5/1999).

²⁴ UNCTAD, "Development Dimensions of Intellectual Property in Indonesia: Access to Medicines, Transfer of Technology and Competitiveness," 2011, 46, https://unctad.org/en/Docs/diaepcb2011d6_en.pdf.

is something which is extremely potent; it would mean that the case being exempted is free from any antitrust scrutiny. Thus, it only seems logical that there should be strict requirements under which this exemption can be exercised to ensure that the exemptions are only granted when it is proven that the agreement does not cause any significant anti-competitive effects in the market.

Fortunately, Indonesia Competition Commission (“KPPU”) issued Regulation No 2 of 2009 on the Implementation Guidelines for the Provision of Article 50 Letter b,²⁵ which aimed to balance IP rights with competition law protections, by establishing that the exemptions under Article 50(b) are not absolute and by providing several conditions precedent to invoking the exemption. In this regard, the KPPU established a four-step test within KPPU Regulation No. 2/2009 as a parameter to analyse whether an IPR licensing agreement could be granted an exception under Article 50(b) of Law No.5/1999:²⁶

1. The first step is to look at the subject matter of the issue at hand; if the matter concerns a refusal to grant licenses, it is not the license itself which should be examined but rather an analysis of whether the patent for which the license was requested could be categorised under the essential facilities doctrine. Unfortunately, the regulation fails to elaborate on the essential facilities doctrine.

If the patent or IP in question is not considered an essential facility, the exemption under Article 50(b) could be granted. However, if it is considered to be an essential facility then the exemption would not be automatically granted, and thus further investigations must be made to look into potential violations of Law No.5/1999.

2. The second step is to determine whether the agreement which is the object of the problem is an IPR licensing agreement. If the agreement in question is not actually an IPR licensing agreement, then the exemptions under Article 50(b) do not apply.
3. After establishing that the agreement in question is an IPR licensing agreement, the third step is to look at whether the relevant IPR licensing agreement has fulfilled all the relevant requirements under the law, such as the requirement of registration in the DGIPR. If the agreement is not registered in the DGIPR then the exemptions do not apply.
4. The fourth step is to examine whether in the IPR licensing agreement in question there are certain clauses which clearly are anti-competitive in

²⁵ Indonesia, Indonesia Competition Commission Regulation No. 2 of 2009 on the Implementation Guidelines for the Provision of Article 50 Letter b (hereinafter KPPU Regulation No. 2/2009).

²⁶ *Ibid.*, 10.

nature. If there are no clear indications of the existence of those clauses in the agreement, then the exemptions under Article 50(b) are applicable to the agreement. To determine whether the IPR licensing agreement in question contains clauses which are anti-competitive, what needs to be analysed is whether there are any clauses which relate to an exclusive dealing obligation.

5. Based on the guidelines provided by KPPU Regulation No.2/2009, IPR licensing agreements which are related to exclusive dealing are those which contain the following clauses: a) Patent Pooling and Cross Licensing; b) Tying Arrangements; c) Limitation on raw materials; d) Limitations on production and sales; e) Limitations on price and resale price; and f) Grant-back licenses.
6. However, it should be noted that the existence of one or more of the clauses in a licensing agreement does not necessarily mean that licensing agreement is automatically anti-competitive. There must be several conditions to be examined from each of those clauses to determine whether the agreement does in fact have anti-competitive effects on the market.

The regulation further provides several specific provisions that regulate patent pools and even grant-back licenses. In the case of patent pools, the Regulation stipulates that patent owners have the right to pool their patents because such practices can increase efficiency by reducing transaction costs and thus reducing the price of the goods, which is beneficial for consumers.²⁷ However, the regulation prohibits patent pools where they clearly have anticompetitive effects, such as if the patent pool makes the production of a certain products to be dominated by the patent pool owners or if the patent pool creates barriers for their competitors to compete on an equal playing field.²⁸

The rationale behind this approach is to attempt to balance both intellectual property and antitrust concerns. On one hand, patent pools were created to offset the inefficiencies caused by the complements problem, and as a result it may have pro-competitive effects on the market. Therefore, the KPPU Regulation affirms the rights of patent owners to pool their patents to preserve the efficiencies generated through the creation of the patent pools. On the other hand, the KPPU has still cautioned the possibility of antitrust scrutiny if there are indications that patent pools are abused to make it difficult for other players in the market to compete on a level playing field. In this regard, the Commission is trying to protect the interests of the patent holders without sacrificing anti-trust concerns.

²⁷ *Ibid.*, 11.

²⁸ *Ibid.*, 12.

In the case of grant-back clauses, the Regulation states that clauses in an IPR licensing agreement which contains a grant-back obligation by the licensee could be seen as a clause which is clearly anti-competitive in nature and is thus prohibited under the Regulation.²⁹ This is because grant-back clauses prevent licensees from being able to freely develop their technology and it allows the licensor to unfairly own the rights over an invention that they did not create or invent themselves. Although this policy decision to completely prohibit grant-back clauses might seem unwarranted, it could be argued that it is justified especially considering that such clauses are universally regarded as harmful to competition and innovation. Based on Article 40 of the TRIPs Agreement (Agreement on Trade Related Aspects of Intellectual Property Rights), the WTO recognises its Member States' regulatory powers to prohibit and prevent anticompetitive practices in IP licensing agreements. In this regard, Article 40 explicitly stipulates that licensing agreements containing exclusive grant-back clauses are anti-competitive. Hence, the KPPU is justified in adopting a *per se* prohibition against grant-back clauses, since even the WTO recognises the inherent harm that such clauses have to competition, even to the extent that the TRIPs Agreement would recommend its Member States to make such licensing practice illegal.

III. THE E.U. REGULATORY FRAMEWORK: EU TECHNOLOGY TRANSFER BLOCK EXEMPTION REGULATION

After experiencing a surge in technological advancements over the past two decades, the European Commission ("EC") finally enacted a regulation which provides the analytical framework for technology license agreements under E.U. competition law; namely the EC Technology Transfer Block Exemption Regulation ("TTBER") and the Guidelines on Technology Transfer Agreements ("Guidelines"). The core function of block exemption regulations is to provide a 'safe harbour' for those agreements which meet the requirements of the regulation to be excluded from the application of Article 101(1) of the Treaty on the Functioning of the European Union ("TFEU"). Such exemptions provide businesses the certainty that their agreements will not be condemned as an anticompetitive under E.U. competition law.³⁰

To enjoy 'safe harbour' treatment, all block exemption regulations require the parties to the agreement not to exceed a predetermined market

²⁹ *Ibid.*, 14.

³⁰ Helena Selander, "The Assessment of Patent Pools Under Competition Law: A Comparative Analysis" (Lund University, 2014), 18, <https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=4230801&fileId=4275665>.

share threshold. In the context of the TTBER, the regulation provides that technology transfer agreements may be eligible for ‘safe harbour’ treatment where the combined market share of the parties does not exceed: i) 20% if the agreement is concluded between actual or potential competitors; or ii) 30% if the agreement involves non-competing businesses.³¹

On the issue of patent pools, both the TTBER and its Guidelines state that ‘safe harbour’ treatment does not cover licensing agreements which are used for the pooling of patents, due to the possible anticompetitive effects inherent in such agreements (TTBER, 2004, para. 7).³² The Guidelines further mention that in analysing patent pools it is necessary to distinguish between the different types of patent pools, namely: complementary, substitute, essential and non-essential patent pools.

A patent pool contains complementary patents if each of the patents are necessary to implement a certain technological standard, whereas substitute patents exists if each patent can individually fulfil such purpose.³³ Nevertheless, patents might be substitutes in part but at the same time regarded as complementary, resulting in firms wanting to license both patents even if they partially overlap in coverage of the same technology. Licensing both patents might be beneficial to ensure future efficiency of the licensing.

In this regard, the Guidelines state that patent pools containing substitute patents will be generally considered to violate Article 101(1) TFEU and would not be exempted under Article 101(3) TFEU, because such patent pools would diminish price competition among the patent owners and would thus lead to higher royalties for the licensees.³⁴ Pooling of substitute patents also risks causing collective bundling and price fixing between competitors. Meanwhile, patent pools which consist of complementary patents are considered to have procompetitive effects since they may reduce transaction costs and would thus lead to lower royalty fees.³⁵ Such patent pools would therefore serve as the best antidote to the ‘complements problem.’

Additionally, the Guidelines also stipulate that essential and non-essential patent should be identified when analysing possible infringements by patent pools. Based on the Guidelines, patents are considered essential if there are no other substitutes to produce such technology outside of the patent pools or if it constitutes a necessary component of the pooled technology to fulfil

³¹ TTBER, Art. 3.

³² TTBER, 2004, para. 7.

³³ Selander, “The Assessment of Patent Pools Under Competition Law: A Comparative Analysis”, 21.

³⁴ European Commission, “Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements,” *Official Journal of the European Union*, Communication from the Commission, no. C 89/3 (2004): 253.

³⁵ *Ibid.*, 253.

a certain technological standard.³⁶ Hence, essential patents are also, by default, complementary.

In this regard, patent pools which are comprised of non-essential patents are considered likely to infringe Article 101(1) TFEU because it may result in an anticompetitive foreclosure for third party technologies, leaving them unable to license their substitute patents to the patent holders and foreclosing them from the market.³⁷ Furthermore, since non-essential patents are not complementary, and are therefore likely to be in competition with each other, pooling such patents are considered as anti-competitive as it may increase the risk of collusion by facilitating the sharing of strategic commercial information.³⁸ The Commission additionally suggests that patents should be excluded if they are later made non-essential due to further developments.³⁹

A patent pool holding a strong position in the market runs the risk of having a negative impact on competition. The Guidelines therefore state that pools having such qualities should be open and non-discriminatory, and additionally they must not be exclusive to ensure that the pooling does not result in foreclosure and anti-competitive effects on the downstream markets.⁴⁰ The restriction on exclusivity clauses accounts for all pooling arrangements, inhibiting agreements restricting parties' rights to license its patents outside the pool. Such non-competitive clauses could obstruct competition by foreclosing third parties' attempts to enter into licensing agreements and preventing technological development.

Regarding the issue of grant back clauses, the TTBER do not cover exclusive licensing obligations of any improvements made by the licensee to the licensed technology. Thus, the safe harbour now only covers non-exclusive grant-back obligations.⁴¹ Exclusive grant-back obligations must be assessed individually, but the remainder of the agreement may still benefit from the safe harbour.

³⁶ *Ibid.*, 252.

³⁷ Selander, "The Assessment of Patent Pools Under Competition Law: A Comparative Analysis," 22.

³⁸ European Commission, "Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements," 221.

³⁹ *Ibid.*, 222.

⁴⁰ Selander, "The Assessment of Patent Pools Under Competition Law: A Comparative Analysis," 23.

⁴¹ European Commission, "Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements," 129–32.

IV. LESSONS LEARNED FROM THE E.U. APPROACH TO IMPROVEMENT OF INDONESIA'S REGULATORY FRAMEWORK

Under KPPU Regulation No.2/2009, patent pools are not *per se* illegal, unless they contain grant-back clauses. Instead, the Regulation acknowledges the rights of patent-holders to pool their patents and cross-license their patents, because this has pro-competitive effects on the market such as reducing inefficiencies created by the complements problem. However, the Regulation does recognise that under certain circumstances, patent pools and cross-licensing can have anti-competitive effects on the market, in which case it would then not be entitled with the exemption and will be subject to further investigation.

Unfortunately, the Regulation does not provide any tests or clear guidelines to measure possible anti-competitive harm which could be caused by patent pools or cross-licenses. Nevertheless, it does cite an example where if the cross-licensing or patent pooling makes the production or marketing of a certain product to be dominated by that company or having the effect of making it difficult for other competitors to compete effectively on a level playing field, then that cross licensing and pooling clause could be seen as having an anti-competitive effect on the market.

To better improve the Regulation, the KPPU could also learn from the TTBER and its Guidelines in using the different categorisation of patents to determine their anti-competitive effects on the market, if those patents were pooled or cross-licensed. Under the TTBER Guidelines, the EC distinguishes between four types of patents: substitute vs. complementary patents and essential vs. non-essential patents. This distinction is made because these different types of patents will have different impact on the market if they are pooled or licensed together, therefore the antitrust scrutiny made on the different types will also be different.

As for substitute and complementary patents, the difference is that substitute patents cover alternative technologies so that one can be replaced by the other, which means they are in direct competition with each other.⁴² Complementary patents on the other hand must be used together to produce a specific output and are not substitutes for each other, which means they are not competing with each other.⁴³

From this definition, it is clear then that substitute patents can cause more anti-competitive effects if they were pooled or cross-licensed together, because by pooling or cross-licensing them competition between such substitute

⁴² World Intellectual Property Organization (WIPO), "Patent Pools and Competition – A Comparative Analysis," 4.

⁴³ Selander, "The Assessment of Patent Pools Under Competition Law: A Comparative Analysis," 11.

technologies would be eliminated.⁴⁴ On the other hand, this concern does not apply to complementary patents because actual or potential competition is not lessened, and because technologies of complementing patents go hand-in-hand in producing a specific output, pooling or cross-licensing them would actually be pro-competitive.⁴⁵ The EC further notes that patent pools entailing substitute patents would likely result in higher licensing costs due to reduced price competition among patent holders, putting a strain on competition.⁴⁶ Pooling of substitute patents also risk causing collective bundling and price fixing between competitors.⁴⁷ For this reason, the EC has settled that inclusion of substitute technologies in patent pools shall, as a general rule, be considered an infringement of Article 101(1) TFEU.⁴⁸

V. CONCLUDING REMARKS

While patent pools may be used as an effective antidote for the ‘tragedy of the anticommons’ conundrum, they also have a number of harmful ‘side effects’ to competition. Fortunately, however, with the right analytical framework, this paper has also discovered that there are certain precautions which can be taken by the Indonesian lawmakers and competition authority to ensure that patent pools do not remedy the ‘tragedy of the anticommons’ at the expense of a competitive market. First, the KPPU can take inspiration from the E.U. TTBER and its Guidelines to create a ‘safe harbour’ for companies who engage in a technology transfer agreement if they meet the market share thresholds. Secondly, to better improve KPPU Regulation No. 2/2009, KPPU could improve the analytical framework for analysing patent pools by laying out the different categories of patents to ascertain the different levels of harm they may bring to competition; namely to distinguish between complementary and substitute patents, and between essential and non-essential patents. Finally, it can be said that the KPPU’s approach in classifying grant back clauses as *per se* illegal does not need to be changed as it is already consistent with E.U.’s approach.

⁴⁴ World Intellectual Property Organization (WIPO), “Patent Pools and Competition – A Comparative Analysis,” 4.

⁴⁵ World Intellectual Property Organization (WIPO), 5.

⁴⁶ European Commission, “Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements,” 217.

⁴⁷ *Ibid.* 217.

⁴⁸ *Ibid.* 216.

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