JURNAL ILMIAH DUNIA HUKUM
Volume 10 Issue 1 October 2025
ISSN Print: 2528-6137 | ISSN Online: 2721-0391

Quo Vadis: Technology Transfer Regulation in the IPR System in Indonesia

Puti Mayang Seruni
Faculty of Law, Universitas Islam Riau
**Correspondence e-mail: putimayangseruni@law.uir.ac.id*

Submission
2025-Feb-24
Review
2025-Agust-15
Accepted
2025-Oct-14
Publish
2025-Oct-16

Abstract

This article aims to examine how the current regulation of technology transfer in Indonesia, especially in relation to the IPR regime, and its relevance to Indonesia's development. Adoption and application of science and technology, as one of the keys in implementing the vision of a Golden Indonesia in 2024, can be achieved through technology transfer. To achieve this, it is necessary to have regulations that require foreign companies to transfer technology to the host because the success of technology transfer depends on the regulations of the host country. The problem addressed in this study is that the 2023 Job Creation Law actually eliminates the obligation to transfer technology as stipulated in Article 20, paragraph 2 of the Patent Law. Using a normative legal research approach, this study looks at secondary data from primary, secondary, and tertiary legal materials that are pertinent to the issue. The results of the discussion show that technology transfer, IPR, and development are closely related. Technology transfer as a means to gain access to science and technology that is protected by IPR. IPR is fundamental for a nation because economic progress can be seen from the acquisition of intellectual property owned by the nation. The richer the intellectual property, the faster the nation's economic growth. Government intervention in technology transfer is essential for economic development and welfare in Indonesia. Therefore, the obligation of technology transfer must be regulated in several laws and regulations, especially in the Job Creation Law and Patent Law.

Keywords: *Technology Transfer; IPR; Patent Law.*

How to Cite: Puti Mayang Seruni." Quo Vadis: Technology Transfer Regulation in the IPR System in Indonesia " *Jurnal Ilmiah Dunia Hukum*, 10 no. 1 (2025): 127-142. DOI : 10.35973/jidh.xxxxxx

1. Introduction

Indonesia's development blueprint is outlined in the Golden Indonesia Vision 2024. This vision is achieved by focusing on four aspects known as the "four pillars of Indonesian development 2024". These pillars are human development, science and technology development, equitable regional development, sustainable economic development, and national security and governance enhancement. Among the four pillars, the primary key to the success of the other pillars comes from the first pillar, namely human development and, mastery of science and technology. The other three pillars will not be "achieved if human development and mastery of science" and technology in Indonesia are not well accomplished.

This first pillar requires accelerating educational quality equality, increasing the role of culture and the contribution of science and technology to national development, improving people's health and lives, and, finally, reforming the labor system. Several components are required to increase science and technology's contribution to national development, including science and technology adoption and application,

independence and capability, collaboration among universities, government, and the private sector, and an increase in innovation funds. The adoption and application of science and technology are interesting topics for this article.

Knowledge of science and technology development can be adopted and applied through Technology Transfer. Technology transfer is usually a process of transferring technological innovation from developers to technology users. This process is successful if it has been commercialized in a product.[1] This technology transfer-related purchase will improve the technological proficiency required for developing nations to industrialize faster, augmenting the output of commodities and services within the industrial sector.[2] The importance of science and technology in the Indonesian industry will grow due to the industry and the transfer of suitable technology from other nations under terms, circumstances, and prices advantageous to national interests.[3] This is important for the future of research and its implementation in developing new products, methods, tools, materials, and services.[4] To achieve this, it is necessary to have regulations that require foreign companies to transfer technology to the host country because the success of technology transfer depends on the host country's laws.[5] Unfortunately, the obligation of technology transfer has been weakened since the 2023 Job Creation Law. This study will analyze one of the main challenges in realizing the Golden Indonesia Vision, which is the weak implementation of technology transfer within the intellectual property rights (IPR) legal system.

Technology transfer regulations in Indonesia have previously been expressly regulated in Article 20, paragraph 2 of Law Number 13 Year 2016 on Patents. The article emphasizes that "making products or using processes as referred to in paragraph 1 must support technology transfer, investment absorption and/ or provision of employment". This regulation is encouraging for Indonesia as it can allow the country to be independent of machinery and technology imports from other countries. However, this provision has resulted in pros and cons, especially for foreign investors. Hence, the government issued Minister of Law and Human Rights Regulation No.

---

[1] Umi Salama and Sonny Yuliar, "Evaluasi Kebijakan Pengukuran Tingkat Kesiapterapan Teknologi," *Jurnal Studi Pembangunan*, 2015, 1–8, https://www.researchgate.net/profile/Umi-Salama-3/publication/351039273_Evaluasi_Kebijakan_Pengukuran_Tingkat_Kesiapterapan_Teknologi/links/6080d028881fa114b41b72c6/Evaluasi-Kebijakan-Pengukuran-Tingkat-Kesiapterapan-Teknologi.pdf.

[2] Muchtar Anshary Hamid Labetubun, Rory Jeff Akyuwen, and Theresia Nolda Agnes Narwadan, "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime," *Sasi* 28, no. 1 (2022): 89–109, https://doi.org/10.47268/sasi.v28i1.829.

[3] Labetubun, Akyuwen, and Narwadan.

[4] Waskito Dwiwicaksoputro et al., "Transfer of Technology Process between Indonesia and France," *International Journal of Social Science Research and Review* 6, no. 1 (2023): 312–19, https://doi.org/https://doi.org/10.47814/ijssrr.v6i1.918.

[5] Sok Gee Chan et al., "Country-of-Origin Effects on Technology Transfer in Foreign Direct Investment," *The Journal of International Trade & Economic Development*, 2023, 1–26, https://doi.org/https://doi.org/10.1080/09638199.2023.2262615.

15/2018 on Patent Implementation by Patent Holders.[6] The content material of the Ministry of Law and Human Rights Regulation tends to have weaknesses. The Patent Regulation negates the provisions of Article 20 of the 2016 Patent Law because there was a delay.[7] There is no legal certainty about how long a patent holder can delay fulfilling their duties.[8] Therefore, it is implied that the provisions are drafted to promote foreign interests over domestic ones.[9] Article 20, paragraph 2 of the current Patent Law, has been amended through the 2023 Job Creation Law. In the 2023 Job Creation Law, there is no longer an obligation to transfer technology. This is the weakness of the Job Creation Law in the implementation of technology transfer.

Previous studies have discussed technology transfer in the IPR system. The first study was conducted by Muchtar Anshary Hamid, Rory Jeff, and Theresia Nolda Agnes Narwadan, entitled "Legal Implications of Foreign Investment Relating to Technology Transfer In The Patent Regime," which examines how foreign investment affects technology transfer practices in Indonesia. This study shows that foreign companies wishing to invest in Indonesia must provide job training to local workers through technology transfer.[10] This obligation has been regulated in regulations related to investment in Indonesia to encourage independence in the industrial sector.[11]

Bakti Trisnawati conducted the second study entitled "The Importance of Technology Transfer for Indonesia," which examines the significance of technology transfer in Indonesia. This study concludes that technology transfer is essential to improve socio-economic conditions in Indonesia, especially in increasing the production of goods and services that can produce more inputs, innovate these inputs, and double output.[12] From a business standpoint, technology transfer is a resource created by costly and risky expenditures.[13] Technology transfer is essential for educational development so that the nation's children can absorb knowledge and technology from developed countries.[14]

Ajay K. Singh and Sanjeev Kumar conducted further research entitled "Expert's Perception on Technology Transfer and Commercialization, and Intellectual Property

---

[6] Muh. Ali Masnun et al., "Politik Hukum Penguasaan Teknologi Di Indonesia," *Jurnal Pandecta* 16, no. 2 (2021): 266–77, https://doi.org/http://dx.doi.org/10.15294/pandecta.v16i2.31458.
[7] Masnun et al.
[8] Masnun et al.
[9] Muh Ali Masnun, "Persoalan Pengaturan Kewajiban Pemegang Paten Untuk Membuat Produk Atau Menggunakan Proses Di Indonesia," *Jurnal Hukum IUS Quia Iustum* 26, no. 2 (2019): 326–48, https://doi.org/https://doi.org/10.20885/iustum.vol26.iss2.art6.
[10] Labetubun, Akyuwen, and Narwadan, "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime."
[11] Labetubun, Akyuwen, and Narwadan.
[12] Bakti Trisnawati, "The Importance of Technology Transfer for Indonesia," in *Proceedings of the International Conference on Law, Economics and Health (ICLEH 2020)* (Atlantis Press, 2020), 49–52, https://doi.org/10.2991/aebmr.k.200513.009.
[13] Trisnawati.
[14] Trisnawati.

Rights in India: Evidence from Selected Research Organizations." This study shows that the implementation of technology transfer from research institutions to industry in developing countries is lower than in developed countries.[15] In India, there has been an increase in the number of patents, copyrights, and trademarks since 2006, but the technology transfer process from research institutions to industry is not significant.[16] The main reason is that research cannot measure the economic value of the technology created, so the government needs to make policies related to this.[17]

The studies described previously show that no studies have been found that examine the development of technology transfer regulations in Indonesia in the IPR system, which shows the originality of this study to fill the gap in this field. Previous studies focused on exploring the implementation of technology transfer along with the benefits and obstacles to its implementation. Meanwhile, this study that the author conducted examines the regulatory aspects of technology transfer in Indonesia, especially after the existence of the Job Creation Law.

The elimination of technology transfer rules within the intellectual property rights framework, specifically regarding patents, undermines the foundations of human growth and the advancement of science and technology in Indonesia. According to data from the World Intellectual Property Organization (WIPO), in 2023, 68.7% of patent applications filed worldwide originated in Asia, a 10% increase from 2013.[18] This indicates that Asian countries, especially China, are experiencing rapid technological advancement. In 2023, China (5 million patents) had the highest number of patents in force, followed by the US (3.5 million), Japan (2.1 million), the Republic of Korea (1.3 million), and Germany (928,106).[19] Meanwhile, Indonesia has never released data on the total number of patents it holds. Indonesia can't have a vision of science and technology mastery that is targeted to be achieved by adopting science and technology. Yet, it weakens the regulations that require the transfer of technology as a means of adoption. This issue is addressed in this article. This article examines the current regulation of technology transfer in Indonesia, especially concerning the intellectual property rights regime and its relevance to Indonesia's development.

---

[15] Ajay K. Singh and Sanjeev Kumar, "Expert's Perception on Technology Transfer and Commercialization, and Intellectual Property Rights in India: Evidence from Selected Research Organizations," *Journal of Management, Economics, and Industrial Organization* 6, no. 1 (2022): 1–33, https://doi.org/http://doi.org/10.31039/jomeino.2022.6.1.1.

[16] Singh and Kumar.

[17] Singh and Kumar.

[18] WIPO, World Intellectual Property Indicators 2024: Highlights, 2024, www.wipo.int.

[19] WIPO.

2. Research Method

This study is a normative legal analysis utilizing secondary data from library resources. The secondary data consisted of primary legal materials in the form of laws and regulations related to technology transfer in the IPR regime for patents such as The Patent Law, including Law Number 14 of 2001 on Patents and Law Number 13 of 2016 on Patents, Law Number 25 of 2007 on Investment, aw Number 6 of 2023 stipulates government regulations instead of Law Number 2 of 2022 on Job Creation into Law. Secondary legal materials were obtained from research results, articles, and books. This research was conducted using a statute approach and a conceptual approach. The statute approach was chosen because this article examines all laws and regulations relating to the transfer of technology in the IPR regime for patents to get an overview of the regulation of the law. Therefore, the disharmony between the provisions on technology transfer in the Patent Law and the 2023 Job Creation Law can be analyzed. The conceptual approach was chosen because it is the right approach to build legal concepts. [20] Therefore, a new concept regarding the obligation of technology transfer within the framework of intellectual property rights (IPR) in Indonesia can be developed.

The data collected was then analyzed using a qualitative method. This research method collects and analyzes the data obtained from the literature review results related to the issues to be addressed. This qualitative analysis produces descriptive data. The results of the research were presented descriptively. The collected material was then described logically and systematically, and it was finally linked and analyzed with the literature study results to answer the problem. The conclusions in the research were drawn together based on deductive logic, which is the drawing of the findings that process from general things to more specific things.

3. Research Results and Discussion

3.1. Relevance of Technology Transfer, IPR Protection, and Development

Development in Indonesia, especially in the economic sector, requires technology to maximize the available resources. Today, in the era of globalization, where national borders are becoming increasingly blurred, cross-border business competition is increasingly competitive. Therefore, businesses with innovation and technology will dominate the market. Regarding industrial activities, technology is vital in maximizing the production process to run effectively and efficiently. It has been realized that production activities depend on the sophistication of technology, knowledge, innovation, ideas, and specific

[20] Peter Mahmud Marzuki, *Penelitian Hukum* (Jakarta: Kencana Prenada Media Grup, 2010).

methods to increase production.[21] Technology is the key to industrial development, transforming raw resources into commercial products. Sustainable development also depends on a country's independence in mastering technology.

Technology is the outcome of research and development endeavors. The results of research that produces commercialized technology are then protected as intellectual property rights in the patent regime. IP rights are fundamental to a nation because economic progress can be seen from the acquisition of intellectual property owned by the country. The richer the intellectual property, the faster the nation's economic growth.

Unfortunately, this is a bottleneck for developing countries like Indonesia. Capital ownership and educational attainment affect research activities in Indonesia. This research activity is the key to the birth of technology. For countries that lack research output, one way to gain access to technology is through technology transfer.

Technology transfer is a term used in transferring research results from researchers to be used in production activities.[22] The United Nations Conference on Trade and Development (UNTAD) draft code of conduct on technology transfer defines technology transfer as: [23]

"*Transfer of systematic knowledge for the manufacturer of a product, for the application of process or the rendering of a service and doesn't extend to the transaction involving a mere sale of goods.*"

According to this definition, technology transfer refers to the systematic transfer of knowledge for processing a product, applying a process, or providing technical assistance. Still, it does not include the sale of goods. According to this definition, technology transfer appears limited to national boundaries. Meanwhile, from an international perspective, technology transfer occurs through transactions between the country that owns and receives the technology. According to Blakeney, the international aspect of technology transfer is achieved through transactions between countries that own the technology and those that receive it. According to Blakeney, the international dimension of technology transfer can be defined as "*The introduction into a*

[21] & Koine P. W Osano, H. M., "Role of Foreign Direct Investment on Technology Transfer and Economic Growth in Kenya: A Case of the Energy Sector," *Journal of Innovation and Entrepreneurship* 5, no. 31 (2016): 1–25, https://doi.org/https://doi.org/10.1186/s13731-016-0059-3.
[22] Singh and Kumar, "Expert's Perception on Technology Transfer and Commercialization, and Intellectual Property Rights in India: Evidence from Selected Research Organizations."
[23] D. Thomson, "The UNTAD Code on Transfer of Technology" (1982).

country of technologies which exist elsewhere but not yet in that country."[24] Therefore, the term technology transfer is also often used to describe the acquisition of technology from a country, especially developed countries or foreign companies, to the recipient country.

Developing countries face difficulties in implementing technology transfer. On the one hand, technology transfer is required for Indonesia's technological advancement and to foster creativity in technology development research activities. Mastery of technology is currently the key to development in many fields in every country, including economics, society, culture, and education. On the other hand, developing countries face several challenges in implementing technology transfer, including[25]

a. The cost is high, especially if it is done with a license agreement, particularly for developing countries with limited budgets.
b. Creating dependency on technology. Developing countries aspire to be independent and not depend on other countries. However, technological innovation is complex because limited knowledge makes technology transfer attractive.
c. This dependence can make human resources in user countries uninterested in innovating independently. However, technology transfer also has the opportunity to be a trigger to improve the existing technology. Innovations emerge with the ability to master the existing technology. Mastery of existing technology can be realized through technology transfer.
d. With technology in all sectors, the new challenge is layoffs, as machines will replace the workers. As a result, employment is reduced, and unemployment and poverty may increase.

There are several ways to implement technology transfer, including[26]

a. Foreign Direct Investment
   Long-term investments made directly by a foreign business are known as foreign direct investments. Through this direct investment, technology transfer and knowledge transfer can be carried out from the investor and technology owner to the destination country. However, The investor maintains authority over production and asset management. This scheme makes the country dependent because the investor controls the management and production process.

[24] M. Blakeney, *Legal Aspects of the Transfer of Technology to Development Countries* (London: London Oxford: ESCPublishing, 1989).
[25] Muchtar Anshary Hamid Labetubun, Rory Jeff Akyuwen, and Theresia Nolda Agnes Narwadan, "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime," *Sasi* 28, no. 1 (2022): 89–109, https://doi.org/10.47268/sasi.v28i1.829.
[26] Labetubun, Akyuwen, and Narwadan.

b. Joint Venture

A partnership between companies in different countries whose ownership depends on capital ownership. This kind of technology transfer is attractive because Indonesian labor and foreign experts can work together to make one product directly, accelerating technology transfer efficiently. This has to do with knowledge transfer, which means that investors must train Indonesian workers to improve the caliber of human resources. This education should ideally be a medium for technology transfer. Therefore, Indonesia simplifies bringing in foreign workers to support it.[27] Foreign workers (TKA) who occupy expert positions and are categorized as professionals are required to transfer technology and expertise to their assistants through education and training.[28]

c. License Agreements

A license agreement is written permission from the patent owner to the patent user to use trademarks, technology, patents, copyrights, and other special skills. A license is permission to use an object protected by ownership to enjoy its economic benefits according to the agreement with the patent owner. Therefore, a royalty is paid as a return. This license agreement can be all-in and only for certain parts, for example, a license only for production or sales and others.

d. Turnkey Projects

Turnkey projects are the building and infrastructure upgrades needed by international businesses to manufacture their products in emerging nations. When the facility is finished, the company hands over the facility to the local company. Not only facilities but also worker training are usually provided.

e. Know-How Contract

Provisions regarding the transfer and acquisition of technology in written form are separate from the license contract for specific reasons. It is also permissible for the provisions contained in the license contract to relate to patents of inventions or other objects of industrial property rights. This situation is possible if the invention's owner is also the know-how rights developer. For example, factory equipment layout diagrams, spare parts

[27] Mashari and Sanusi, "Penggunaan Tenaga Kerja Asing Guna Mendukung Pembangunan Nasional Dibidang Alih Teknologi Di Indonesia," *Jurnal Ilmiah Hukum Dan Dinamika Masyarakat* 22, no. 1 (2024): 28–41, https://doi.org/http://dx.doi.org/10.56444/hdm.v22i1.4908.

[28] Muhammad Nahyan Zulfikar et al., "Alih Pengetahuan Tenaga Kerja Asing (Tka) Di Indonesia (Ditinjau Dari Aspek Regulasi Dan Kebijakannya)," Jurnal Ius Civile: Refleksi Penegakan Hukum Dan Keadilan 7, no. 1 (2023): 38–53, https://doi.org/https://doi.org/10.35308/jic.v7i1.6958.

lists and new material specifications, machine operating instruction manuals, packaging, and job descriptions.[29]

3.2. Past and Present Technology Transfer Regulations in the Realm of IPRs

Government intervention in technology transfer is essential for economic development and welfare in Indonesia. Therefore, the state must force technology transfer through the rule of law, both sui generis regulations and extend it to other related regulations.[30] Sui generis technology transfer regulations that receive special attention from the government will provide benefits and advantages for the host country in managing the technology transfer obtained.[31]

As a tool for social change, the law must be able to regulate emerging trends. Thus, technology transfer must be governed by Indonesian law in order for related parties to get scientific information.[32] Technology has a key role in boosting the nation's socioeconomic development as a developing nation, particularly in the industrial sector's ability to produce goods and services more quickly. The importance of science and technology in Indonesia's industrial life will grow as a result of industry and the entry of suitable technology from other nations with terms, circumstances, and prices that are advantageous to national interests.[33]

In this case, China is among the most prosperous countries. China's technology investment policy has transformed the country into a new economic powerhouse that produces garments, toys, electronic devices, and advanced transportation.[34] Industrialization is critical for developing countries in terms of improving their welfare. Thus, the presence of foreign investors is required. However, every country aspires to be self-sufficient. Mastering technology allows a country's industrial development to progress without relying on

---

[29] Suyud Margono and Amir Angkasa, *Komersialisasi Aset Intelektual Aspek Hukum Bisnis* (Jakarta: Gramedia Widiasarana Indonesia, 2002).

[30] Candra Irawan, "Pengaturan Alih Teknologi Pada Kegiatan Penanaman Modal Untuk Percepatan Penguasaan Teknologi Di Indonesia," *Supremasi Hukum: Jurnal Penelitian Hukum* 28, no. 1 (2019): 71–82, https://doi.org/https://doi.org/10.33369/jsh.28.1.71-82.

[31] Reinardus Budi Prasetiyo, "Perkembangan Aspek Hukum Alih Teknologi Di Indonesia," *PROGRESIF: Jurnal Hukum* 15, no. 2 (2020): 108–35, https://doi.org/https://doi.org/10.33019/progresif.v15i2.1822.

[32] Rory Jeff Akyuwen and Muchtar Anshary Hamid Marselo Valentino Geovani Pariela Labetubun, "Clausula Restrictions In Technology Transfer Patent License Agreements That Impact On Unfair Competition," *Journal of Legal, Ethical and Regulatory* 24, no. 3 (2021): 1–9.

[33] Labetubun, Akyuwen, and Narwadan, "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime."

[34] Muh. Ali Masnun et al., "Politik Hukum Penguasaan Teknologi Di Indonesia," *Jurnal Pandecta* 16, no. 2 (2021): 266–77, https://doi.org/http://dx.doi.org/10.15294/pandecta.v16i2.31458.

foreign investors as technology owners. This effort can be accomplished through technology transfer.

The acquisition related to technology transfer will increase the mastery of technology needed for the rapid industrialization of developing countries, namely, accelerating the industrial sector's output of goods and services.[35] Science and technology will become more important in the Indonesian industry as a result of the industry and the introduction of suitable foreign technology on terms, circumstances, and prices that are advantageous to the country's interests.[36] To achieve this, there needs to be regulations that require foreign companies to transfer technology to the host country because the success of technology transfer depends on the host country's laws.[37]

There are several laws and regulations that either directly or indirectly regulate technology transfer in Indonesia. They are:

a. Law Number 6 of 1956 on the Establishment of the Indonesian Science Council. This law aims to advance and guide science, as well as provide considerations regarding scientific issues in Indonesia, and is the forerunner of the Indonesian Institute of Sciences (LIPI).

b. Law Number 5 of 1984 on Industry and Law No. 3 of 2014 on Industry. This law covers the implementation of government affairs in the industrial sector, the National Industrial Development Master Plan, industrial policies, industrial zoning, development of industrial resources and infrastructure, as well as industrial empowerment and security.

c. Laws related to science and technology, including Law Number 18 of 2002 on the National System for Research, Development, and Application of Science and Technology and Law Number 11 of 2019 on the National System for Science and Technology, comprehensively regulate the National Science and Technology System. This law covers the national system as a whole, not just its research, development, and application aspects, including patent and technology transfer regulation.

d. The Patent Law, including Law Number 14 of 2001 on Patents and Law Number 13 of 2016 on Patents; Regulations in Indonesia that regulate exclusive rights to technological inventions, with the aim of protecting inventors and encouraging innovation for the advancement of the nation.

[35] Labetubun, Akyuwen, and Narwadan, "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime."
[36] Labetubun, Akyuwen, and Narwadan.
[37] Chan et al., "Country-of-Origin Effects on Technology Transfer in Foreign Direct Investment."

e. Law Number 25 of 2007 on Investment. This law aims to encourage a conducive investment climate, improve public welfare, and protect micro, small, and medium enterprises and cooperatives.

f. Law Number 6 of 2023 stipulates government regulations instead of Law Number 2 of 2022 on Job Creation into Law. This law was created to re-regulate aspects related to investment facilitation, protection, and empowerment of MSMEs, and improving worker welfare, which were previously regulated in Law Number 11 of 2020, which was deemed formally flawed by the Constitutional Court.

Article 20, paragraph 2 of the Patent Law expressly regulates technology transfer in the context of intellectual property rights in Indonesia. According to the article, "making products or using processes as referred to in paragraph 1 must support technology transfer, investment absorption and/or provision of employment." This regulation is good news for Indonesia because it can help the country avoid relying on imported machinery and technology. From a legal and political standpoint, this provision provides a clear direction for formulating regulations governing the implementation of patents by patent holders for independence and technological progress in Indonesia.[38]

However, this provision has drawn pros and cons, especially for foreign investors, until the government issued Minister of Law and Human Rights Regulation No. 15/2018 on Patent Implementation by Patent Holders.[39] The content of the Minister of Law and Human Rights Regulation tends to have weaknesses. The Minister of Law and Human Rights Regulation negates the provisions of Article 20 of the 2016 Patent Law because of a delay.[40] Regarding the statute of limitations for failing to fulfill the patent holder's obligations, there is no legal certainty.[41] Implicitly, foreign interests are given preference in the provisions' formulation over local ones.[42]

The 2023 Job Creation Law has amended Article 20, paragraph 2 of the Patent Law. The Job Creation Law 2023 eliminates the obligation to transfer technology under patent-related regulations. The law contradicts the vision of a golden Indonesia in 2045, in which mastery of science and technology is the primary strategy for achieving it. The government cannot issue regulations that deviate from the vision of a golden Indonesia in 2045. In this regard, it is clear that the legal and political direction of the Job Creation Law 2023 is more favorable to

[38] Masnun et al., "Politik Hukum Penguasaan Teknologi Di Indonesia."
[39] Masnun et al.
[40] Masnun et al.
[41] Masnun et al.
[42] Masnun, "Persoalan Pengaturan Kewajiban Pemegang Paten Untuk Membuat Produk Atau Menggunakan Proses Di Indonesia."

investor interests. The bias towards investor interests is not surprising. Legal products, particularly laws, are created by legislative bodies. Running for office requires substantial funding to win campaigns and gain public support, especially in a system influenced by money. To meet these financial needs, politicians are often "sponsored" by individuals and entities with economic power, including investors. As a result, it is expected that the regulations enacted will favor the interests of investors. In this context, technology transfer is often viewed as not beneficial to investors. Similarly, the Minister of Law and Human Rights Regulation Number 15 of 2018 was issued to answer investors' concerns regarding Article 20, paragraph 2 of the Patent Law related to technology transfer obligations. However, in the author's opinion, formulating legal policies about technology mastery should be based on a law and economics approach that balances the perspectives of justice and welfare so that not only the interests of investors are prioritized but also the future of an independent nation in the fields of industry and technology mastery.[43]

However, the Investment Law also governs technology transfer in the realm of IPR. In the 21st century, in the context of economic globalization, the role of investment law is vital in determining a country's economic development in the long term.[44] According to Article 10, paragraph 4 of the Investment Law, "investment companies that employ foreign workers are required to organize training and transfer technology to Indonesian workers by the provisions of laws and regulations." The obligation to transfer technology through knowledge transfer to workers demonstrates that Indonesia's investment law politics seeks to lead to scientific and technological self-reliance rather than continuing to rely on technology imports and foreign investment. Even Article 18 of the Investment Law emphasizes that the government provides facilities to investors who meet specific criteria. One of the requirements is the transfer of technology. The facilities in question are facilities in the field of tax administration.

In addition to the two regulations mentioned above, the amendment to Article 45 of Law Number 13 of 2003 on Manpower in the 2023 Job Creation Law emphasizes the need for technology and knowledge transfer from foreign workers to accompanying workers. The article explains that transferring technology and expertise is intended to allow workers, particularly assistants, to replace foreign workers.

---

[43] Kristianus Pramudito Isyunanda, "Pemanfaatan Law And Economics Sebagai Metodologi Analisis Hukum Di Indonesia," *Mimbar Hukum* 34, no. 1 (June 2022): 125–60, https://doi.org/10.22146/mh.v34i1.2063.

[44] Ukas Ukas and Zuhdi Arman, "The Role Of Law In Economic Globalization In Indonesia," *Jurnal Ilmiah Menejemen Universitas Putra Batam* 9, no. 1 (2020): 44–49, https://doi.org/https://doi.org/10.33884/jimupb.v9i1.2173.

Several reviews of various sectors in the 2023 Job Creation Law reveal that the obligation for technology transfer has not been eliminated. Unfortunately, the obligation of technology transfer in patents has been abolished. Indeed, patent regulations and implementation in Indonesia are critical to patents' future success.

4. Closing

4.1. Conclusions

Technology transfer, intellectual property rights, and development are all closely related. IPR protects technology transfer as a means of mastering science and technology. Science and technology are some tools being developed in terms of IPR. IPR is critical to a nation because economic progress can be seen through the acquisition of intellectual property owned by the country. Technology transfer must be obligated on legal products to support national technological independence or for the principle of economic justice within the framework of sustainable development. The more intellectual property grows, the faster the country's economy grows. Nowadays, businesses that embrace innovation and technology will dominate the market. Regarding industrial activities, technology is critical to maximizing the production process's effectiveness and efficiency. It has been recognized that production activities rely on technological sophistication, knowledge, innovation, ideas, and specific methods to increase output.

As an appropriate instrument, the law influences how technology transfer is implemented in Indonesia. Government intervention in technology transfer is critical to Indonesia's economic and social development. In order to manage the transfer of acquired technology, the host nation will benefit from specific government attention given to sui generis technology transfer arrangements. Article 20, paragraph 2 of the Patent Law expressly regulates technology transfer obligations in Indonesia's intellectual property rights field. This provision had advantages and disadvantages, particularly for foreign investors, until the government issued Minister of Law and Human Rights Regulation Number 15 of 2018 on Patent Implementation by Patent Holders. This regulation implies that its provisions are designed to benefit foreign interests over domestic interests. The 2023 Job Creation Law eliminates the technology transfer obligation in patent-related regulations. This contradicts the vision of a golden Indonesia in 2045, in which mastery of science and technology is the primary strategy for achieving it. However, technology transfer regulations are still in place in other clusters, such as the investment and labor clusters, under the 2023 Job Creation Law.

4.2. Suggestions

The government and regulators must reaffirm the obligation of technology transfer in the IPR regime for investors so technology mastery can run optimally. To achieve this, it is necessary to reintegrating the technology transfer clause into the implementing regulations of the Job Creation Law, strengthening the monitoring mechanisms for technology transfer through investment agreements, imposing strict sanctions or even granting fiscal incentives to companies that fulfill their technology transfer obligations.

REFERENCES

Akyuwen, Rory Jeff, and Muchtar Anshary Hamid Marselo Valentino Geovani Pariela Labetubun. "Clausula Restrictions In Technology Transfer Patent License Agreements That Impact On Unfair Competition." *Journal of Legal, Ethical, and Regulatory* 24, no. 3 (2021): 1–9.

Angkasa, Suyud Margono and Amir. *Komersialisasi Aset Intelektual Aspek Hukum Bisnis*. Jakarta: Gramedia Widiasarana Indonesia, 2002.

Blakeney, M. *Legal Aspects of the Transfer of Technology to Development Countries*. London: London Oxford: ESCPublishing, 1989.

Chan, Sok Gee, Wai Mun Har, Kanagi Kanapathy, Saban Celik, and Bora Aktan. "Country-of-Origin Effects on Technology Transfer in Foreign Direct Investment." *The Journal of International Trade & Economic Development*, 2023, 1–26. https://doi.org/https://doi.org/10.1080/09638199.2023.2262615.

Irawan, Candra. "Pengaturan Alih Teknologi Pada Kegiatan Penanaman Modal Untuk Percepatan Penguasaan Teknologi Di Indonesia." *Supremasi Hukum: Jurnal Penelitian Hukum* 28, no. 1 (2019): 71–82. https://doi.org/https://doi.org/10.33369/jsh.28.1.71-82.

Kristianus Pramudito Isyunanda. "Pemanfaatan Law And Economics Sebagai Metodologi Analisis Hukum Di Indonesia." *Mimbar Hukum* 34, no. 1 (June 2022): 125–60. https://doi.org/10.22146/mh.v34i1.2063.

Labetubun, Muchtar Anshary Hamid, Rory Jeff Akyuwen, and Theresia Nolda Agnes Narwadan. "Legal Implications of Foreign Investment Relating to Technology Transfer in the Patent Regime." *Sasi* 28, no. 1 (2022): 89–109. https://doi.org/10.47268/sasi.v28i1.829.

Marzuki, Peter Mahmud. *Penelitian Hukum*. Jakarta: Kencana Prenada Media Grup, 2010.

Mashari, and Sanusi. "Penggunaan Tenaga Kerja Asing Guna Mendukung Pembangunan Nasional Dibidang Alih Teknologi Di Indonesia." *Jurnal Ilmiah Hukum Dan Dinamika Masyarakat* 22, no. 1 (2024): 28–41. https://doi.org/http://dx.doi.org/10.56444/hdm.v22i1.4908.

Masnun, Muh Ali. "Persoalan Pengaturan Kewajiban Pemegang Paten Untuk Membuat Produk Atau Menggunakan Proses Di Indonesia." *Jurnal Hukum IUS Quia Iustum* 26, no. 2 (2019): 326–48. https://doi.org/https://doi.org/10.20885/iustum.vol26.iss2.art6.

Masnun, Muh. Ali, Mahendra Wardhana, Dita Perwitasari, Intan Lovisonnya, and Astrid Amidiaputri Hasyyati. "Politik Hukum Penguasaan Teknologi Di Indonesia." *Jurnal Pandecta* 16, no. 2 (2021): 266–77. https://doi.org/http://dx.doi.org/10.15294/pandecta.v16i2.31458.

Muhammad Nahyan Zulfikar, Basri Basri, Jefrie Maulana, and Muharrir Muharrir. "Alih Pengetahuan Tenaga Kerja Asing (Tka) Di Indonesia (Ditinjau Dari Aspek Regulasi Dan Kebijakannya)." *Jurnal Ius Civile: Refleksi Penegakan Hukum Dan Keadilan* 7, no. 1 (2023): 38–53. https://doi.org/https://doi.org/10.35308/jic.v7i1.6958.

Osano, H. M., & Koine P. W. "Role of Foreign Direct Investment on Technology Transfer and Economic Growth in Kenya: A Case of the Energy Sector." *Journal of Innovation and Entrepreneurship* 5, no. 31 (2016): 1–25. https://doi.org/https://doi.org/10.1186/s13731-016- 0059-3.

Prasetiyo, Reinardus Budi. "Perkembangan Aspek Hukum Alih Teknologi Di Indonesia." *PROGRESIF: Jurnal Hukum* 15, no. 2 (2020): 108–35. https://doi.org/https://doi.org/10.33019/progresif.v15i2.1822.

Salama, Umi, and Sonny Yuliar. "Evaluasi Kebijakan Pengukuran Tingkat Kesiapterapan Teknologi." *Jurnal Studi Pembangunan*, 2015, 1–8. https://www.researchgate.net/profile/Umi-Salama-3/publication/351039273_Evaluasi_Kebijakan_Pengukuran_Tingkat_Kesiapterapan_Teknologi/links/6080d028881fa114b41b72c6/Evaluasi-Kebijakan-Pengukuran-Tingkat-Kesiapterapan-Teknologi.pdf.

Singh, Ajay K., and Sanjeev Kumar. "Expert's Perception on Technology Transfer and Commercialization, and Intellectual Property Rights in India: Evidence from Selected Research Organizations." *Journal of Management, Economics, and Industrial Organization* 6, no. 1 (2022): 1–33. https://doi.org/http://doi.org/10.31039/jomeino.2022.6.1.1.

Thomson, D. The UNTAD Code on Transfer of Technology (1982).

Trisnawati, Bakti. "The Importance of Technology Transfer for Indonesia." In *Proceedings of the International Conference on Law, Economics and Health (ICLEH 2020)*, 49–52. Atlantis Press, 2020. https://doi.org/10.2991/aebmr.k.200513.009.

Ukas Ukas, and Zuhdi Arman. "The Role Of Law In Economic Globalization In Indonesia." *Jurnal Ilmiah Menejemen Universitas Putra Batam* 9, no. 1 (2020): 44–49. https://doi.org/https://doi.org/10.33884/jimupb.v9i1.2173.

Waskito Dwiwicaksoputro, Gathut Imam Gunadi, Nadia Aurora Soraya, and George Royke Deksino. "Transfer of Technology Process between Indonesia and France." *International Journal of Social Science Research and Review* 6, no. 1 (2023): 312–19. https://doi.org/https://doi.org/10.47814/ijssrr.v6i1.918.

WIPO, World Intellectual Property Indicators 2024: Highlights, 2024, www.wipo.int.