



## Patent System in The Control of Science and Technology In Indonesia: Intellectual Property Rights (IPR) and Development

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### ABSTRACT

Intellectual Property Rights (IPR) is one form human wealth resources that are intangible and are the result of human intellectual ability mindset. Basically, Property Rights Intellectual Property Rights (IPR) is an exclusive right given to someone which has produced works, arises as a result of intellectual abilities humans in various fields who produce a process or product which is beneficial to humans and can be enjoyed economically by man himself. The aim of this research is to determine the patent system in mastering science and technology in Indonesia. The research method used is normative juridical with analytical descriptive research specifications. The results of the research are that the government must have a good patent information service system for patents that have become public domain, so that when the patent expires, the technology that has become public domain can be widely used by the Indonesian people. Law enforcement and patent protection are very important to create a fair and competitive business. This not only helps innovation and investment, but also protects intellectual property rights that greatly influence Indonesia's technology and economy. By collaborating between sectors and protecting intellectual property rights, Indonesia can continue to progress in the future.

**Keywords:** Patent system, science and technology, Indonesia.

### ABSTRAK

Hak Kekayaan Intelektual (HAKI) merupakan salah satu bentuk sumber kekayaan manusia yang tidak berwujud dan merupakan hasil pola pikir kemampuan intelektual manusia. Pada dasarnya Hak Milik Hak Kekayaan Intelektual (HAKI) adalah suatu hak eksklusif yang diberikan kepada seseorang yang telah menghasilkan suatu karya, yang timbul sebagai akibat dari kemampuan intelektual manusia dalam berbagai bidang yang menghasilkan suatu proses atau produk yang bermanfaat bagi manusia dan dapat dinikmati secara ekonomi oleh manusia. manusia itu sendiri. Tujuan penelitian ini adalah untuk mengetahui sistem paten dalam penguasaan ilmu pengetahuan dan teknologi di Indonesia. Metode penelitian yang digunakan adalah yuridis normatif dengan spesifikasi penelitian deskriptif analitis. Hasil penelitiannya adalah pemerintah harus memiliki sistem pelayanan informasi paten yang baik terhadap paten-paten yang sudah menjadi domain publik, sehingga ketika paten tersebut habis masa berlakunya, teknologi yang sudah menjadi domain publik tersebut dapat dimanfaatkan secara luas oleh masyarakat Indonesia. Penegakan hukum dan perlindungan paten sangat penting untuk menciptakan usaha yang adil dan kompetitif. Hal ini tidak hanya membantu inovasi dan investasi, tetapi juga melindungi hak kekayaan intelektual yang sangat mempengaruhi teknologi dan perekonomian Indonesia. Dengan berkolaborasi antar sektor dan melindungi hak kekayaan intelektual, Indonesia dapat terus maju di masa depan

Kata Kunci: Sistem Paten, Ilmu Pengetahuan dan Teknologi, Indonesia.

### Pendahuluan

The Preamble to the 1945 Constitution of the Republic of Indonesia states that the purpose of establishing the Indonesian government, among other things, is to protect the entire Indonesian nation and all of Indonesia's blood, promote general welfare, and participate in implementing world order (Syihab, 2001). The Preamble to the 1945 Constitution contains many dimensions, including



humanitarian, social, economic, legal and international relations which must be maintained and developed according to national needs (Hidayah, 2012).

In modern times, it can be understood that economic globalization and free trade have influenced enormous changes in the field of law. Countries in the world that are involved in economic globalization and free trade, both developed and developing countries and even underdeveloped countries, must standardize laws in their economic activities. Economic globalization is increasingly being developed based on the principles of trade liberalization or other free trade which has had an influence on the laws of every country involved in economic globalization and free trade. The flow of economic globalization and free trade is difficult to resist and must be followed because economic globalization and free trade develops through negotiations and agreements (Soenarto, 1996).

International. The implications of economic globalization on law cannot be avoided because legal globalization follows economic globalization, in substance various laws and agreements spread beyond national boundaries (cross-border). Lawrence M. Friedman's view is correct, which states that law is not autonomous, but on the contrary, law is open at all times to external influences (Prasetiyo, 2020).

In the last decade, sophisticated and modern industrial technology has been discovered, so regulations related to this are needed, which include patents, designs and copyrights. This aims to provide a legal guarantee and to make it easier if there is a transfer of rights which is realized in the form of statutory regulations which aim to prevent violations (Anita Sinaga & Tiberius Zaluchu, 2015).

Granting patents to support innovation activities and technological inventions that must be protected. If there is no adequate protection, it may be better for the inventor to keep the technology. On the other hand, by granting a patent, the state asks the inventor to disclose his invention in a patent specification whose description can be widely accessed, so that the public can learn from the invention and it is hoped that the public will produce other inventions that are more advanced than the invention for which the patent is being requested. Patent protection is granted for immaterial elements defined through legal criteria and exclusive rights covering immaterial content (Manthovani, 2020).

The fundamental purpose of the patent system is to support the development of technology for the benefit of society at large. The central issue in this case is how and with what intent the balance between inventors and third parties can be maintained. On the one hand, we must provide incentives related to economic rewards and granting exclusive patent rights. On the other hand, it can be maintained that the consequences of the patent blocking system are a reward for its contribution to society (Soebagyo, 2019).

The granting of patent rights by the authorities, based on applicable law, is very strong because it is granted by the government. The patent holder has absolute rights to income in the form of the patented object. Patent rights, like trademark rights and author's rights, are absolute rights, which are not material rights, but can apply to anyone else. The holder of the patent right has monopoly rights over its income. This means that he can use his right to prohibit anyone without his consent from making what he has patented. So, he has a very strong position against his rivals (Sulistianingsih et al., 2021). Even against parties who violate their rights, they can take criminal or civil legal action. Violators can be charged with committing a crime. However, what is more important for him is the demand for compensation for damages against the offender, because in practice these demands sometimes amount to large sums of money. Patent rights are objects in the material sense according to the Civil Code (jo. Article 570 of the Civil Code). Therefore, it is part of the wealth of the person who owns it. According to the provisions of the law, these rights include movable objects, but are often treated as immovable objects by law (Sustrila, 2014).

### **Metode Penelitian**

Judging from its type, this research can be classified as normative legal research or library research methods, namely legal research carried out by reviewing and researching library materials in the form of primary legal materials and secondary legal materials. Secondary data in this type of



research is divided into three types of data, namely primary legal materials, secondary legal materials, and tertiary legal materials. Primary legal materials are legal materials originating from: the 1945 Constitution of the Republic of Indonesia. (Setiawan, Gilang, Shailawa Ramb Madani, 2023)

Secondary legal materials, namely legal materials that provide explanations of primary legal materials such as draft laws, research results, scientific work from experts law, and so on. After going through the process of data collection and data processing, the data is then analyzed qualitatively descriptively, this analysis technique does not use statistical figures, but rather an explanation in the form of sentences that are presented in a straightforward manner. The data that has been analyzed and described is then concluded using a deductive method, namely deducing from general statements into specific statements.

### **Hasil Penelitian dan Pembahasan**

#### **Iptek Patent System in Science and Technology Development**

The patent system is a legal mechanism that gives its holder exclusive rights to produce, use and sell certain inventions or innovations for a certain period of time. UU no. 13/2016 explains that the National patent system includes: provisions for sufficient disclosure, provisions for exceptions to exclusive patent rights, provisions for patent licensing, provisions for mandatory licenses, and a patent information service system (Anggun Lestari Suryamizon, 2017). Based on the provisions of the law, there are 3 urgencies for the Patent System in the Development of Science and Technology in Indonesia as follows:

a. Supporting the Encouragement of Innovation and Research

The patent system provides incentives for researchers, scientists, and innovators to develop new ideas. With the exclusive rights granted by patents, individuals or companies feel safer investing time and resources in research, because they have the guarantee of legal protection against unauthorized use by others (Chalim, 2011).

b. Encourage Investment in Research and Development.

Companies and investors tend to be more motivated to inject funds into research and development projects when they know that the results can be protected by patents. This creates an environment where companies feel confident about taking risks in innovation, as the opportunity for return on investment becomes more attractive. (Wahyuni & Zainuddin, 2021)

c. Ensuring Protection of Intellectual Property Rights to Create a Competitive Business Environment

The patent system creates a legal basis for protecting intellectual property rights. By protecting certain inventions or innovations, companies can build significant competitive advantages. It also encourages the creation of a competitive business environment, where companies compete to create new solutions and improve the quality of their products or services (Rubiyanti & Sudjatmiko, 2012).

#### **Context of Business Law in Indonesia**

The importance of the patent system in the development of science and technology creates a positive sillus where innovation is encouraged, investment is encouraged, and business develops in an environment that encourages technological and economic progress (Masnun et al., 2021).

Business law in Indonesia covers a number of aspects that form the framework for company operations. This system includes federal and local regulations that govern various aspects of business activities, including company formation, business contracts, employment relations, and other aspects. Indonesia has a variety of regulations relating to various industries, and companies must understand and comply with these legal frameworks to operate legally and effectively (Svalerit & Irawan, 2021).

Intellectual Property Rights (IPR) play an important role in business law in Indonesia. IPR involves legal protection of creativity and innovation, such as patents, trademarks and copyrights. The relationship between business law and IPR protection creates an environment in which companies can protect their products or innovations from unauthorized use by other parties (Nanda Pratama, 2019). This protection encourages companies to innovate and invest in research and development, because they have legal guarantees of exclusive rights to their work or inventions. Thus, IPR protection is key in creating a competitive and competitive business environment. Efforts by the government and related institutions to enforce IPR laws also play an important role in providing legal certainty and encouraging innovation at the national level (Utama, 2012).



## Patent System in Indonesia

A patent is a special right based on law granted to the opinion or inventor (uitvinder) or according to law the party entitled to obtain it, upon request submitted to the authorities, for new inventions in the field of technology, improvements to existing inventions, methods new work, or finding a new improvement in the way of work, for a certain period of time that can be applied in the way of work, for a certain period of time that can be applied in the industrial field. Patents in Article 1 paragraph (1) of Law Number 13 of 2016 concerning Patents state that a Patent is an exclusive right granted by the state to an inventor for the "result of his invention" in the field of technology, who for a certain period of time implements the invention himself or gives his approval to other party to carry it out. Furthermore, Article 1 paragraph (2,3) states that an invention is an inventor's idea which is expressed in a specific problem solving activity in the field of technology in the form of a product or process, or improvement and development of a product or process. Meanwhile, an Inventor is a person or several people who jointly implement an idea that is expressed in an activity that results in an Invention (Yodo, 2017).

Inventions that can be granted a Patent based on Article 5 paragraph (1) of Law Number 13 of 2016 concerning Patents are inventions that are considered new as intended in Article 3 paragraph (1) if on the Filing Date, the Invention is not the same as the previously disclosed technology. Furthermore, in Article 5 paragraph (2), the meaning of previously disclosed technology is technology that has been announced in Indonesia or outside Indonesia in writing, oral description or through demonstration, use, or in other ways that enable an expert to carry out the invention beforehand. receipt date or priority date in the case of an application submitted with Priority Rights (Sirat, 2019).

To get a patent, there are several things you can do, namely: the registration system known in the world, namely, the registration system and the examination system. According to the registration system, every application for patent registration is granted a patent by the patent office automatically. The specifications of the application only contain a description of the requested monopoly and are not provided with a detailed explanation. Therefore, the limits of monopoly cannot be known until a dispute arises which is presented in court which will for the first time determine the extent of permitted monopoly (Radhyca Nanda Pratama, Dilla Nurfiana Astanti, 2019). That is also why patents registered according to the registration system without prior investigation and examination are considered to be of low value or patents that have a weak status (Hanoraga, 2000).

### The Role of the Patent System in Mastering Science and Technology

The patent system has a crucial role in supporting the development of Science and Technology (IPTEK) (Atsar, 2023). Here are some ways the patent system makes a positive contribution:

- a. Provides Financial Incentives: The granting of exclusive rights by the patent system provides financial incentives for innovators and companies to make large investments in S&T research and development. This is because they know that, by obtaining a patent, they will gain exclusive profits on their innovation for a certain period.
- b. Encourage Publication of Inventions: To obtain a patent, an invention or innovation must be documented and disclosed in detail. It contributes to the common knowledge base by providing information accessible to the wider community, encouraging information exchange and collaboration in the field of S&T.
- c. Reduced Investment Risk: By owning a patent, innovators and companies can feel safer investing resources in high-risk research projects. Patents provide legal protection, reduce the risk of uncertainty and increase the security of investment in science and technology
- d. Product Innovation: A technology company uses patents to protect new technology in its products. The exclusive rights granted by patents allow companies to lead the market, raise investment, and continuously improve their products. (Masnun et al., 2021)
- e. Company Growth: A successful start-up obtains a patent for its unique idea. With these exclusive rights, companies can attract business partners, increase competitiveness, and obtain additional financing to further develop the technology.



- f. Collaboration and Licensing: A case study of a company that uses its patents as a collaboration tool. By licensing business partners, they can expand the reach of their innovation and gain economic benefits from using the technology (Yodo, 2017).

### Kesimpulan

The government must have a good patent information service system for patents that have become public domain, so that when the patent expires, the technology that has become public domain can be widely used by the Indonesian people. Law enforcement and patent protection are very important to create a fair and competitive business. This not only helps innovation and investment, but also protects intellectual property rights that greatly influence Indonesia's technology and economy. By collaborating between sectors and protecting intellectual property rights, Indonesia can continue to progress in the future.

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