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Application of Science and Technology in Intellectual Property Rights Process Patent

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Abstract: This research aims to analyze, explain and understand the application of science and technology to intellectual property rights in process patents and to analyze, explain and understand legal protection for process patents. The type of research used is empirical legal research because it is motivated by the idea that law cannot be separated from people's lives in the form of values and attitudes/behavior, but law can be studied from its empirical aspect, namely how the law is in reality in people's lives. The results of this research reveal that the application of IPTEKS and Intellectual Property Rights in the patent process means that Indonesian society as a society does not respect Intellectual Property Rights. The reality in society still shows that there are many violations of Patent Rights and it is suspected that they have reached a dangerous level and can damage the order of life in society in general, especially creativity to give birth to new discoveries. Meanwhile, legal protection for process patents developed by indigenous Papuans according to the Patent Law is granted on the basis of an application. And until December 2021, through the Trade and Small and Medium Industry IPR Consultation Clinic, the Papua Province Industry and Trade Service, several inventions regarding traditional medicines have been registered at the Patent Office in Jakarta. The form of legal protection can be seen from the application of Law Number 13 of 2016 concerning Patents.

Keyword: Application of Science and Text, Intellectual Property Rights, Process Patent

INTRODUCTION

A new phenomenon in the global community and market is the intensive use of the fastest growing technology in human history, namely "information technology". Entering the twenty-fourth century, interaction and cooperation between various local cultures and various communities will strengthen mutually acceptable values towards the development of universal and universal core values, thus stimulating the formation of a more independent society.

In line with changes in the economic, financial and technological fields, globalization is

also creeping into the lives of traditional communities in Papua Province to be creative in developing various types of medicines, which at the international level, the debate regarding legal protection tends to lead to the Patent Law regime.

For traditional Papuan people, they understand the richness of plants and animals, the functioning of ecosystems and the techniques for using and managing these plants and animals specifically and in detail as a system of traditional knowledge and technology. In relation to the protection of traditional knowledge, experts say that indigenous and rural communities throughout the world often protest the existence of IPR (Intellectual Property Rights) laws which only aim to protect the creations and inventions of developed countries, but fail to protect their traditional works and knowledge. Most governments from developing countries and members of traditional societies hope for universal recognition of traditional knowledge in IPR law.

The various arguments they put forward as a form of disappointment are very reasonable. The IPR system based on western liberal ideas of ownership of various intellectual property is more profitable for western artistic products and inventions. Because many traditional works and knowledge were created or originated from rural communities, have become popular throughout the world (for example Asmat artwork) and are sometimes basic necessities (for example traditional medicines), from a commercial perspective KHKI like this are quite valuable. However, most of the income from these sales ends up in the hands of companies from outside the area where the work originates, and more often than not, foreign companies.

The United States often accuses developing countries of pirating IPR. Estimated royalty losses are US $ 202 million per year due to infringement of agricultural chemical patents and US $ 2.5 billion per year for pharmaceutical patents. In 1986 research by the US Department of Commerce stated that US companies claimed losses of US $ 23.8 billion per year due to ineffective enforcement of IPR protection. On the other hand, if donations from farmers from developing countries and traditional communities are added together, the position is reversed, the US owes US $ 302 million for agricultural royalties and US $ 5.1 billion for medicines.

Patents on traditional knowledge have caused a lot of controversy among developing countries. Traditional communities are often disadvantaged due to the use of traditional wealth owned by traditional communities by other parties without the knowledge and permission of traditional communities as inventors. Many medicinal plants that grow in residential areas of traditional communities have been researched by giant and multinational pharmaceutical industries in advanced industrial countries into medicines that are protected by patents owned by these companies. Large profits are earned by pharmaceutical companies because these patented drugs are sold at high prices to cover research costs and pursue profits for the company.

The failure of the modern IPR system to protect knowledge and intellectual works stems from a perspective that prioritizes protecting individual rights rather than community rights. IPR can usually be owned by one or a group of individuals who can be identified (either ordinary people or companies). The conditions that must be met to obtain individual property rights reflect basic beliefs, usually considered to be of concern to western countries, although this can be disputed and that economic benefits are the main reference for work. Private property rights were then introduced to allow economic use.

Developments in technology are directed at improving the quality of mastery and use of technology in order to support the transformation of the national economy and an economy based on competitive advantage. So that support for national development can take place consistently and sustainably. Based on Law Number 13 of 2016, a patent is an executory right granted by the state to investors for the results of their inventions in the field of technology for a certain period of time to carry out the invention themselves or give approval to other

parties for its implementation. An invention is an inventor's idea that 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. An inventor is a person or several people who jointly implement ideas that are expressed in activities that produce inventions. Meanwhile, the patent holder is the inventor as the patent owner, the party who receives the rights to the patent from the patent owner, who is registered in the general register of patents.

Based on Law Number 13 of 2016, the scope of patent protection is an ordinary patent for 20 (twenty) years from registration and cannot be extended. A simple patent is a patent that can be granted for any new invention. Development of existing products or processes, and their application in industry. This means that a simple patent is granted for an invention in the form of a product that is not only different in its technical characteristics, practically different from previous inventions due to its shape, configuration, construction, or components which include tools, goods, machines, the composition of the formula, the use of the compound, or the system, the protection is for 10 (ten) years from registration and cannot be extended.

Most traditional works are created by traditional people in groups, meaning that many people contribute to the final product. Traditional knowledge is often discovered by chance. Moreover, traditional inventions and knowledge can also be developed by different people over a long period of time. Most traditional societies do not recognize the concept of individual rights, where property has a social function and is public property. Thus, inventors in traditional societies are not interested or want to prioritize individual rights or ownership rights over their inventions. Sometimes there is a representative of the community who holds and controls the information or invention of the community, but it can also be said that real ownership cannot be transferred to that representative in accordance with the terms of non-traditional legal systems (e.g. through a contract) that most governments recognize. this non-traditional legal system. Thus, it is very difficult to determine the inventor of traditional property protected by the IPR legal system. When viewed from a legal perspective, it is rare for someone from a traditional society to have the right to file charges against an offender.

After going through a long discussion process, on August 18 1945 the 1945 Constitution of the Republic of Indonesia was ratified and the articles relating to Human Rights were Articles 27 to 34 (before amendments). The principle of legal protection for the people against government actions relies on and originates from the concept of recognition and protection of human rights because historically in the West, the birth of the concept of recognition and protection of human rights was directed at limiting and placing obligations on society and the government. For Indonesia, in an effort to formulate principles of protection for the people based on Pancasila, starting with a description of the concept and declaration of human rights or The Universal Declaration of Human Rights, which is a universal standard regarding human rights. The universal nature of the declaration can be seen from the formulation, namely: a) All articles in the declaration always begin with words that contain universal meaning, namely everyone, no one, men, women; b) Its validity is not limited to certain countries; c) The Declaration is not only an appeal to nations but to every individual and every institution of society; and d) UN organs in defending human rights in order to create world peace are not only limited to UN countries.

Reality has proven that traditional knowledge and technology systems have been used for decades by traditional community groups. Researchers have recorded some of this knowledge as well. This often results in the knowledge not being new, and thus failing to meet the requirements of newness. Even if it is successfully registered, at a later date this invention can be taken by outside parties and the registration can be cancelled. To obtain protection, traditional communities must find the sources and then look for new commercial uses before other people know about the invention in order to register it to obtain patent rights.

In responding to various problems relating to the basic rights of indigenous or traditional communities over their intellectual works which are born from their creativity, feeling and initiative, the Papua Provincial Government has briefly and firmly regulated legal protection for the intellectual works of indigenous communities and other residents in Papua in Law Number 21 of 2001 concerning Special Autonomy for Papua Province, which in the provisions of Article 44 confirms that: "The Provincial Government is obliged to protect the intellectual property rights of indigenous Papuans in accordance with statutory regulations".

METHOD

The method used is a normative and empirical juridical approach, normative juridical which is carried out by researching library legal materials or mere secondary data, which includes research on legal principles, legal systematics, levels of vertical and horizontal synchronization, legal comparisons and legal history. Meanwhile, the empirical is focused on knowing the application of science and technology to intellectual property rights in the intellectual work of Indigenous Papuans in the field of Patent Process.

RESULTS AND DISCUSSION

The party entitled to obtain a Patent is the Inventor or Person who further receives the Inventor's rights in question. If an invention is produced by several people together, the rights to the invention are owned jointly by the inventors concerned. The Patent Holder for an Invention produced by an Inventor in an employment relationship is the party providing the work, unless otherwise agreed. The provisions as intended in paragraph (1) also apply to inventions produced, both by employees and workers who use available data and/or facilities in their work.

The Patent Holder for an Invention produced by an Inventor in an official relationship with a government agency is the government agency in question and the Inventor, unless otherwise agreed. After the Patent is commercialized, the Inventor as referred to in paragraph (1) is entitled to receive compensation for the Patent he produces and non-tax sources of state revenue. In the event that the government agency as the patent holder cannot implement the patent, the inventor, with the approval of the patent holder, can implement the patent with a third party. Regarding the implementation of the Patent as intended in paragraph (3), apart from government agencies, the Inventor obtains Royalties and third parties receive economic benefits and commercialization of the Patent.

The party implementing the invention at the time the application for the same invention is submitted, still has the right to implement the invention even if the same invention is later granted a patent. The party implementing an invention as intended in paragraph (1) is recognized as the previous user. The party implementing an invention as intended in Article 14 can only be recognized as a previous user if after being granted a patent for the same invention, he/she submits an application as a previous user to the Minister. Recognition as a previous user is given by the Minister in the form of a previous user certificate after fulfilling the requirements and paying fees. The rights of the previous user end when the patent for the same invention expires.

Previous users cannot transfer rights as previous users to other parties, either by license or transfer of rights, except by inheritance. Previous users can only exercise the rights to implement the Invention. Previous users have no right to prohibit other people from implementing the Invention. The special position of the government, especially because of the special qualities attached to it, which are not possessed by ordinary people, has led to long-standing differences of opinion in the history of legal thought, namely regarding whether the state can be sued or not in front of a judge. In carrying out its duties, the government requires freedom of action and has a special position compared to ordinary people.

Therefore, the issue of suing the government before a judge cannot be equated with

suing ordinary people. The issue of suing the government is considered a difficult part of civil law and State Administrative Law. Theoretically, Kranenburg explains chronologically that there are seven concepts regarding the issue of whether the state can be sued before a civil judge, namely: first, the concept of the state as an institution of power is linked to the concept of law as a decision of the will realized by power, stating that there is no state accountability; second, the concept that differentiates the state as ruler and the state as fiscus. As a ruler, the state cannot be sued and conversely as a fiscus the state can be sued; third, a concept that puts forward the criteria for the nature of rights, namely whether a right is protected by public law or civil law; fourth, a concept that puts forward the criteria for the legal interests that are violated; fifth, a concept that relies on unlawful acts as a basis for suing the state. This concept does not matter whether what is violated is a public law regulation or a civil law regulation; sixth, a concept that separates function and implementation of function. Functions cannot be sued, but their implementation which results in losses can be sued; seventh, a concept that puts forward a basic assumption that the state and its instruments are obliged in their actions, whatever the aspect (public law or civil law), to pay attention to normal human behavior. Justice seekers can demand that the state and its instruments ensure that they behave normally. Any behavior that changes normal behavior and results in losses can be sued.

Indonesian society in the context of international relations is known as a society that does not respect Intellectual Property Rights (HKI). The reality in society still shows that there are many violations of patent rights and it is suspected that they have reached a dangerous level and can damage the order of life in society in general, especially creativity to give birth to new discoveries. Even though weaknesses in the substance and structure of the law have improved over time, indicators of public legal awareness (legal culture) regarding the implementation of the Patent Law have not received serious attention. The Patent Law will work well if the community's legal culture supports it, namely from a culture of ignoring patent rights, changing to a culture of respecting patents.

The cause of imitation or plagiarism is the mental attitude of researchers who want to obtain something easily and cannot appreciate other people's work. From searching several articles, it can be concluded that in Indonesia there is no respect for the ethics of science and intellectual rights. This is because the education system from the start did not educate people to be creative. Apart from the business philosophy of "pursuing the maximum profit with the smallest possible sacrifice", the actors behind the act of imitating registered or temporarily registered patents are mostly intellectuals, both for personal gain and for the benefit of the company where they work. Another phenomenon that causes imitation of registered copyrights and patents is the role of the Mafia. The role of the Mafia refers to works and inventions that have obtained a patent, but are not directly used by the inventor. The owners of Copyrights and Patents actually wait and hope for use by other parties through Copyright and Patent licensing agreements. However, on the other hand, he also hopes that his Copyright and Patent rights will be violated by third parties. If there are violations of the Copyright and Patent rights he owns, he will file a lawsuit for compensation for unauthorized use of the Copyright and Patent. As a result, in practice so far quite a lot of companies have suffered losses due to the role of this mafia.

Imitation of the knowledge and technology systems developed by indigenous people and other community members in Papua today regarding microorganisms (pure preservation) and the development of the properties of "red fruit" have begun to be revealed, carried out by fellow local communities, the pharmaceutical industry in Jakarta and tourists abroad. To find out how sacred the basic rights of indigenous people are to the system of knowledge and use of natural materials and their development for the benefit of humanity in the pharmaceutical industry, as a comparison, the case of the "neem tree" in India will be briefly explained.

The position of the case is, that for centuries traditional Indian society discovered and

used the “neem tree” for various medicinal purposes. The bark, leaves, flowers, seeds and fruit plants are used to treat various diseases and health problems such as malaria, leprosy, diabetes, ulcers, skin disorders and constipation. Branches of the neem tree are used as toothbrushes to kill germs and neem oil is used to produce toothpaste, soap and methane. Moreover, the "neem tree" can be used as a contraceptive, building material (because it is resistant to termites) and as a strong pesticide. The “neem tree” is an important part of Indian culture. In some areas, local people start the new year by eating parts of the “neem tree” and in other areas the tree is considered sacred and worshipped.

In Jayapura and several other areas, local communities, both individuals and community groups under the umbrella of a foundation (sometimes the legality of which is unclear) imitate the "Efficacy of Red Fruit Juice (SBM) Healthy Planta Products" produced by the inventor and developer I Made Budi , which the general public considers the medicinal properties of the word "Knowing the Elmaut, the Red Fruit that Conquers Deadly Diseases", as quoted from the Trubus media, February 2005. Based on information provided by I Made Budi, that at the end of 2004, a pharmaceutical company in Jakarta had produced finished medicine in the form of pills from Planta Sehat's Sari Buah Merah (SBM), and the problem had been resolved through a mediator. Appropriate compensation has been received and the company will not produce the pills in question, pending the acquisition of patent rights by I Made Budi, and this will likely be followed up with a non-exclusive license agreement.

Imitation of the Red Fruit Sari (SBM), a Healthy Planta product, is increasingly common among local communities, and has even been commercialized outside Papua at quite expensive prices. And sometimes this imitation Planta Healthy Red Fruit Juice (SBM) can endanger consumers who use it (a case occurred in Jayapura against 8 members of the Provincial DPR). It is possible that similar things will also happen in other areas outside Papua, as the author found the sale of red fruit juice in packaging that is very different from the one made by I Made Budi.

Likewise, the ingredients for preserving the "Mummy" from the Chief of the Balliem Valley, in the form of sarian (galenic) preparations which have been used for generations to preserve the "Mummy" in question, have been researched by international experts in the field of chemistry and biology, under the guise of tourists. brought medicinal ingredients from Papua and developed a method for caring for mummies from the indigenous people of the Baliem Valley, then registered it for patent legal protection in his country. The cases mentioned above are a blurry portrait of imitation of knowledge and technology systems developed by indigenous people and other community members in Papua, which from a civil law aspect is an unlawful act, even though the invention has not been registered. A patent right is an object in the material sense when connected with the provisions of Article 570 of the Civil Code, therefore it is part of the wealth of the person who owns it. As stated in the background to the problem, the definition of the knowledge and technology system developed by indigenous Papuans does not have a literal explanation in Law Number 21 of 2001 concerning Special Autonomy for Papua Province. However, what the legislators mean is a right related to a patent. Meanwhile, the indigenous Papuan community was expanded to include members of other communities in Papua Province.

Article 44 of Law Number 21 of 2001 concerning Special Autonomy for Papua Province states that: "The Provincial Government is obliged to protect the intellectual property rights of indigenous Papuans in accordance with statutory regulations." Thus, the provisions of Article 44 refer to the implementation of various laws and regulations that apply nationally in the field of Intellectual Property Rights law, including the Law on Patents. According to the Civil Law system which underlies Indonesian national law, humans have natural intellectual property rights, which are the product of human thought. This means that humans have natural rights or material products originating from their intellectual work and their ownership must be recognized. Thus, the concept or theory mentioned above is the most

essential basis possessed by Inventors, who because of their intellectual work or because of their thinking produce inventions in the field of technology.

An inventor is a person who, individually or several people, jointly implements an idea expressed in an activity that results in an invention (Article 1 number 3 of the Patent Law). Meanwhile, an invention is an inventor's idea that is put into 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. To produce this invention requires a significant sacrifice of time and costs from the inventor.

Invention and development as a process of human thought and inherent naturally as a property of the Inventor (discoverer) have received adequate knowledge of legal protection because it is one of human rights, as stipulated in Chapter III. Part Three, Article 13 of Law Number 39 of 1999 concerning Human Rights, states that "every person has the right to develop and obtain benefits from science and technology, art and culture in accordance with human dignity for the welfare of his person, the nation and humanity". Thus, legal protection for knowledge and technology systems developed by indigenous Papuan people basically has the core of recognizing the right to property in the field of Patents, and the right to enjoy or exploit the Patent rights themselves during that certain time, other people can only enjoy or use or exploit these rights with the permission of the right owner.

The existence of such legal protection is intended so that patent rights owners can use or exploit the property safely. In turn, this sense of security then creates a climate or atmosphere that allows people to work together to produce subsequent discoveries. On the other hand, with legal protection, rights owners are asked to reveal the type, form and working methods as well as the benefits of their property. He can safely disclose (disclose) the results of his findings, because there is a guarantee of legal protection. On the other hand, people can use it on the basis of permission, or even develop it further.

Although in reality efforts to legally protect the knowledge and technology systems developed by indigenous Papuans through registration have not been optimal, however, as of December 2004, the Trade and Small and Medium Industry IPR Consultation Clinic of the Papua Province Industry and Trade Service has submitted 3 (three)) Patent application at the Patent Office in Jakarta. Meanwhile, 3 (three) discoveries and developments of traditional medicines and foods are still in the process of making descriptions of the Invention, which contain complete information about the procedures for implementing the Invention and the claims contained in the Invention. This is an improvement and refinement of the Patent application submitted by the Inventor, so that it meets the formal requirements or completeness of the requirements as intended in Article 24 of the Patent Law, as well as Article 4 and Article 5 of Government Regulation Number 34 of 1991 concerning Procedures for Patent Applications.

Formal requirements are administrative requirements including patent application documents. The requirements have been fulfilled if the application letter is complete and includes attachments regarding technical explanations, technical drawings of the invention for which a patent is requested. An examination of the completeness of the Patent application documents is carried out to determine whether or not there are any deficiencies that still need to be fulfilled.

Based on the results of interviews with resource persons, namely expert staff in the field of registration at the Trade and Small and Medium Industry IPR Consultation Clinic, Papua Province Industry and Trade Service and PPNS IPR Regional Office of the Papua Province Department of Justice and Human Rights, it is known that the Patent Applicant does not understand the preparation of abstracts, descriptions, short descriptions of inventions, claims. to be submitted in order to register the results of his technological discoveries. These quite complicated requirements ultimately give the impression that the patent registration procedure is complicated and takes quite a lot of time and money, when compared to other

types of IPR. Even as a regional registration implementer, there are still several technical instructions (juknis) and implementation instructions (juklak) such as administration, classification, inspection and automation that are not fully adequate to support maximum work implementation.

CONCLUSION

The results of this research reveal that the application of IPTEKS and Intellectual Property Rights in the patent process means that Indonesian society as a society does not respect Intellectual Property Rights. The reality in society still shows that there are many violations of Patent Rights and it is suspected that they have reached a dangerous level and can damage the order of life in society in general, especially creativity to give birth to new discoveries. Meanwhile, legal protection for process patents developed by indigenous Papuans according to the Patent Law is granted on the basis of an application. And until December 2021, through the Trade and Small and Medium Industry IPR Consultation Clinic, the Papua Province Industry and Trade Service, several inventions regarding traditional medicines have been registered at the Patent Office in Jakarta. The form of legal protection can be seen from the application of Law Number 13 of 2016 concerning Patents. Therefore, the government needs to amend the provisions of Article 1365 of the Civil Code which is no longer relevant to the current application of science and technology in the field of Intellectual Property Rights. Likewise, judges in handling cases of claims for compensation due to imitation of patent processes of indigenous people and other community members in Papua do not necessarily analogize the formulation of Article 1365 of the Civil Code as it is. Apart from that, to provide maximum legal protection to inventors for their inventions within the scope of simple patents (process patents), it is necessary to provide convenience regarding registration procedures and procedures as well as reduced registration fees. For this reason, there is a need for economic empowerment in the implementation of the Patent Law, so that humans and humanity are the normative, structural and substantial benchmarks, thereby placing empowerment as part of building the existence of individuals, families, communities, nations, governments and the State.

REFERENCE

Philipus M Hadian, 1987, *Perlindungan Hukum Bagi Rakyat Indonesia, Studi Prinsip-prinsip Pelaksanaannya oleh Pengadilan Umum dan Pembentukan Peradlan Administrasi Negara*, PT. Bina Ilmu. Surabaya.

Soerjono Soekanto dan Sri Mamudji, 1995, *Penelitian Hukum Normatif Suatu Tinjauan Singkat*, PT. Raja Grafindo Persada, Jakarta.

Sudargo Gautama, 1983, *Pengertian tentang Negara Hukum,* Bandung: Alumni. lihat pula J. Spier. Onrechtmatige Overheidsdaad. W.E.J. Tjeenk Wilink. Zwolle. 1987.

Republik Indonesia Undang-Undang Nomor 21 Tahun 2001 tentang Otonomi Khusus Bagi Provinsi Papua.

Republik Indonesia Undang-Undang Nomor 14 Tahun 2014 tentang Paten.

Republik Indonesia Undang-Undang Nomor 13 Tahun 2016 tentang Paten.

Republik Indonesia Peraturan Pemerintah Nomor 34 Tahun 1991 tentang Tata Cara Permintaan Paten.