

The Protection of Abstract Intellectual Property in the Law Review No. 11 in 2019 on the National System of Science and Technology

Nanda Dwi Rizkia^{a*}, An an chandrawulan^b, Isis Ikhwansyah^c, Agus Darmawan^d, ^aStudents of the Faculty of Law the Program Doctor of Univeristas Padjajaran, Bandung, ^{b,c}Lecture of Faculty of Law, University of Padjajaran, Bandung, ^dThe Head of the Sector of Legal Services of Ministry of SOE, Jakarta, Email: ^{a*}nandhadwirizkya@gmail.com

This research will analyse abstract intellectual property protection of the law by the act of no.11 in 2019 on the national system of science and technology. The approach that is used is normative, using law to find a rule of law, the principles of law, and legal procedures in responding to the doctrines of legal issues. Science and technology in this position to advance the state and nations are questionable , but the policy of science and technology as regulated in the law no.18 / 2002 about the national system of research and application of science and technology was perceived to be unable to provide optimal clarification in the contribution to national development. Efforts were made to repair this by way of implementing Act no.11 in 2019 on the national system of science and technology. In article 57, the act of the national system of science and technology, there are article related protections, Human resources, science and technology, get protection in conducting the research, development, assessment, and application, and inventions and innovations.

Key words: *Law, intellectual property, legal protection..*



Introduction

As far back as the history record of ancient peoples until now reflects the rights of people to have control over land and goods, a certain person may be recognised and respected by the Government to protect their interests and wealth. At the same time as this, technological change conceptions about wealth have also changed. Now the system of law puts wealth in three categories: the first is the most community acknowledged, the right of private ownership in personal wealth, known as intangible things. The second is real wealth such as land and buildings; third, wealth known as intellectual wealth. Relating to intellectual property, all countries acknowledged the right of wealth in the form of an idea, products as in the form of copyright, patent, brand, and trade secret, the layout of integrated circuit, varieties of a plant (Maria Alfons, 2017).

The conception of intellectual property is based on the notion that requires sacrifices of labour, time, and cost. The existence of such sacrifices makes the resulting work have economic value because of the benefits enjoyed. It is also based on the concept of cases that push the need for an appreciation for the work in the form of legal protection for intellectual property. Substantively, understanding intellectual property can be described as arising or born from the capabilities of intellectual man. Intellectual property rights are categorised as who finally holds the rights to the works of the intellectual in the form of knowledge, art, literature, technology. Intellectual property, according to David Bainbridge, is, "that area of law which concerns legal rights associated with creative effort, commercial reputation and goodwill." It seems that Bainbridge's conception is very close to the legal approach. It is very logical because it is assessing intellectual property problems. While another argument said that intellectual property is the recognition and award to someone or a body of law on contrivance or the creation of the work of their intellect with special conferral of the rights for them, both social and economical. Intellectual property is part of economic law and one of the agenda from the existence of the liberalisation of free trade, which was set out in an agreement establishing the World Trade Organisation (WTO). One agreement achieved by the agenda from the meeting in Morocco (Marrakesh agreement) which was held on April 15th 1994, concerned the Trade Related Aspect of Intellectual Property rights (TRIPs). In this regard, it is questionable why developing countries such as Indonesia agreed to be bound with TRIPs in a system of trade rules with the WTO. And how TRIPs make a positive contribution and increase opportunities to increase economic and social development. Overall, there is a continuity between the standards contained in TRIPs with the previous intellectual property systems that have gone before and were formed during any given period of time. There is a continuing domestic driver for the development and implementation of the intellectual property protection system. Viewed from the perspective of the policy, intellectual property is not recognised and protected solely in the interest of intellectual property itself, or just not being painstaking in response to international



obligations, but as an element that the integral law and trade require in order to increase investment and trade which are more profitable.

A patent or *oktori* has existed from the XIV and XVth centuries, for instance in the Italian state and in Britain, but the nature of the provision of this right in those days was not intended for an invention but given priority in the selection to draw experts from overseas. The aim is to have the magicians settled in the states which invited him so that they can develop their skills in each country. So, a patent or *oktori* has become a kind of "permission settled." Nevertheless, the presence of the inventor encouraged arguing about his new land based on his skill in a particular field, where he sought to dwell there permanently. So, there is also a similarity in using the patent term today. When an inventor was able to stay in the country with special treatment, it was because he was able to offer a positive contribution to progress for people in the country. The patent is part of intellectual property rights, which in this framework belong to the category of industrial property rights (Industrial Property Rights). The intellectual wealth right itself is part of objects, that is intangible goods. Understanding objects in a juridical manner is everything that can become the object of rights. While that can become the object, it is not only tangible but also intangible goods. In the act of / civil law, Germany (1990) used the term *sache* to mention goods or tangible (1811).

The word *sache*, employed in the sense of very wide and not personal and used by humans. We use the term *zaak* in the Book of the Civil Code Indonesia, the rights mentioned last by Professor Sri Soedewi. The rights of it is set out in the Book of Civil Code Indonesia, the formulation of objects according to the article 499 in the Book of Civil Code Indonesia is namely: every right and every goods who are the objects of property, had enough as an excuse to put HKI law objects in the system. In the land of origin of the Book of Civil Code Indonesia, Dutch in a new Book of Civil Code, those rights have been placed in a book chapter. In relation to the description above, Professor Mahadi suggested the view that the brainchild, the hearts of the human brain (*Menslijke Idean, Voort-Brengselen van de Menslijke Geest*). It could also become the object of the absolute right. Even though the brainchild is not a material object (*stoffelijke voorwerp*). It is also not a subjective right in the field of wealth law (*Nocheen subjectief Vermogensrech*). So, it is not included in the article 499 Civil Code and so also it was not among the right into the formulation of its own soul (*zakelijk rech*). But if the fruit of the mind can be manifested in the form of tangible objects, then the fruit of thought can be protected, so the brainchild can be protected as the intellectual wealth right, and thus covered into understanding objects according to article Civil Code. Though Professor Mahadi called into question why the term Intellectual was used, on the immaterial thing, so that then the term Intellectual Property Right was found. Professor Mahadi admitted not getting more detailed information about the origins.



Industrial property right is a part of intellectual property right, which belongs to the industrial property rights, this is patent brand; industrial design and others (Novanti, 2017).

A patent is a certain right based on the act given to the opinion or the finder of (uitvinder) or according to the laws of a party who is entitled to its request to receive the agony of asking that question for new finding in the fields of technology, over a discovery that there are new ways of working, or finding an improvement in new ways of working, for a certain time period to be applied in the field of industry. The rights of it be eliminated, because only the inventor that produces the invention alone can be given the rights, but he has been able to carry approval to the investment or the giving of other parties to implement them for example through license. New findings over a discovery that is already in place must show how the parties would find a new approach to the new ways of working, and this must contain an inventive step that is a step with more developed creative thinking from the results of a previous discovery. The weakness of inventors in Indonesia lies in inability to take steps improving on existing inventions. In the United States and Japan, patents every day are fulfilled by researchers studying existing patent formulas and looking for an inventor's step to be projected into a new patent (Ok Saidin, 2015).

So it is not surprising if in a year hundreds or even thousands of new patents are listed in their patent offices. As for second thoughts to patent a regime that patent is the protection that active (active protection). Such a system is one of the most apparent obstacles to patents of a regime for the people of Indonesia in general. Community patent regimes are applicable for active demands to file for protection. Local people who would like to ask for patent protection should carry out administrative processes and register with the patent office. But first they have to compose the document containing patent specifications and claims to acquire the desired protection. Steven M. Rubin and Stanwood C.Fish stated that: "Patents are costly and require great expertise to initiate, maintain, defend, and license." Although the document within the preparation of the patent was conducted by consultants. But it also does not guarantee the local people who are interested in making all that (Agus Sardjono, 2009).

There is some indication of a number of high complexities in the granting of the patent protection, among others:

1. To obtain protection, the inventor must apply to the State through the Patent office to obtain the patent rights. To the supplication of patent cost as the amount set by the government;
2. Before submitting their request, first the inventor or applicant must prepare all documents as a requirement, especially a document containing claims, a description of the discovery of sources (when necessary), and abstract of invention sought for protection;
3. When there is a parties object at the request of the proposed guidelines, the inventor or an active application have to provide a refutation or objection that his application was not

rejected by the patent office. Although the word from the inventor is the rights, but of course, the inventor has the interest to file the disclaimer as a patent office consideration to grant the application;

4. In order for the patent office to proceed to the inspection phase, the inventor or applicant must apply for a substantive examination to the patent office within 36 months from the date of receipt of the patent application, with charged;
5. If there are things that are considered less obvious and less complete by the patent Office, the inventor or applicant must explain or complete the less obvious things. If not, applications were not approved because they were regarded as having been withdrawn by the applicant;
6. If a patent application is rejected, the inventor or applicant may appeal. When the rejection is based on the substantive factor, the appeal must have been filed within 3 months from the date of submission of the rejection notice;
7. Once the patent rights are acquired, the inventor must pay an annual fee. If he does not pay the fee, the corresponding patent is deemed null and void;
8. The acquired patent is still open for cancellation due to the other party's lawsuit. In the event of a cancellation lawsuit, the patent holder must defend in front of a commercial court. The above mentioned points demonstrate how the process of obtaining and defending patents required the role of active inventor or the holder of a patent. Such provisions are not recognised and are not in accordance with the traditions of local people in Indonesia. People in general do not understand that there are mechanisms of protection against intellectual work as a property (Lindsay, 2002).

From the background as outlined above, this study will review the protection of intellectual property in terms of the act of no.11 in 2019 of the national system of science and technology.

Method

This writing used descriptive research carried out with a normative juridical approach. The type and source used was secondary data. The data collection was conducted primarily with a technique using study documents (library research and online research) by means of an inventory of secondary data necessary, both in the form of material primary law, secondary and tertiary, then doing a search for history and synchronisation between the law materials. Material primary law was used, consisting of legislative regulations.

Data in this research was conducted via a study of the relevant literature available to book. Articles, research results and legislation were sourced relating to the consistency of arrangements for material transfer agreements as a means of patent protection. The research carried out was to analyse the concept of the welfare state with existing references in

legislation, books, articles, and the results of previous studies. Next to be analysed was the consistency of the arrangement of the material transfer agreement as an effort to protect genetic resources. Normative legal research uses data relating to legal research, which is analysed with three aspects, namely clarification, comparing, and connecting. In other words, a researcher who uses qualitative research methods is not merely aiming at revealing the truth, but in understanding the truth with data that has been collected from library research. Furthermore, data was analysed qualitatively to answer the proposed research problem.

Results and Discussion

According to the John Locke Theory of Property

Intellectual wealth right or abbreviated “HKI” in the Indonesian language is a word used to indicate intellectual property rights (IPR), namely the rights arising out of the mind that produces a product or process from one who might actually help mankind. So in principle the intellectual wealth right (IPR) can be said in the economic sense to be the result of intellectual creativity. The objects arranged in intellectual property rights are works that arise or are born because of human intellectual abilities (Yoga and Ahmad, 2018).

According to Budi Santoso, the intellectual wealth right context is considered to be a right which arises as an outgrowth of human intellectual ability in such diverse fields that produces a process or products beneficial to mankind. Intellectual Property Rights has two main aspects namely; the first is the process and product covering a wide range of fields, ranging from the fields of art and literature to inventions and innovations in technology and all other forms that are the result of the process of human creativity through creativity, taste, and work. Second, the copyrighted work or invention creates property rights for the creator and inventor; because of their nature as property rights, the rights of a creator or inventor of their work must be protected. Protection against Intellectual Property rights is basically a recognition of such property and the right to a certain period of time to enjoy it or exploit own wealth last. During any given period of time, no-one else could have access to or use, or exploit these rights without permission.

The intellectual wealth right is absolute, meaning that IPR can be defended against anyone, and those who have the right can sue for violations committed by anyone. The holder with the right to intellectual property also had the right to a monopoly of the rights which can be used by banning anyone without consent to make the creation of / its discovery or use it. The concept of "IPR" ownership came from John Locke, 16th-century British philosopher, concerning thoughts on property rights. According to Locke, property rights are one of three things that cannot be separated from human. People are born or "tabula rasa" means in the free state and equivalent under law partaking. Partaking of law forbids anyone destroying or



eliminating life, freedom, and property rights. These three things, according to Locke, cannot be released from human beings because they come from the Almighty.

Every human being has himself as his own and no one has the right to the person of another person except the owner himself, including the work of his body and the work of his hands and senses. This means that every person naturally has the right to have all the potential inherent in his personal self and all the work that results. Locke's thinking about property rights was strongly influenced by the Stoic school and previous thinkers. Stoicism adheres to natural law, that the rules of justice are derived from the government contained in natural law. Because justice is also related to the existence of private property rights, property rights should be discussed in natural law. The existence of justice is intended to direct people to use common property rights for the common good, and private property rights for their personal interests. Next the thoughts of two figures influenced by Locke's views. Grotius accepted the Stoics' theory that everything in nature was shared. Nature or the world exists to be shared by humans. All humans have the same right to use it for personal gain.

The problem is how common property rights can be turned into private property that cannot be contested by others. Grotius replied that personal property was obtained through work, initially by taking care of and safeguarding certain physical goods, a person could have a legitimate claim on these items as his personal belongings. According to Grotius, property rights were not first obtained through mutual agreement, but together with human labour, only then did their social legitimacy arise from mutual agreement. Agreement or a positive law does not share private property rights, but only destroys private property rights that have been obtained through one's work. Locke then followed Grotius's idea, which is about joint ownership provided by nature and private ownership obtained from work.

The Theory of Intellectual Property Rights Protection

The theory of IPR protection as expressed by Robert M. Sherwood is as follows: the creator or inventor who will be given protection needs to be given an award for the effort or effort contained in understanding about community appreciation for one's efforts, a recognition or success. The Recovery Theory says, perhaps without a deep assessment, that the inventor or creator or designer who has wasted time, money and energy to produce his intellectual work needs to be given the opportunity to regain what he will issue. Theory of Incentives (Incentive Theory) says that incentives are useful to attract efforts and funds for the implementation and development of the creativity of inventions and enthusiasm to produce new discoveries.

In Public Benefit Theory, it is said that the basis for granting intellectual property rights is to develop the economy. Risk Theory says that intellectual property is the result of research that



risks making it possible for other people to first find legal protection against efforts or activities that contain that risk. The theory Economic Growth Stimulus Theory recognises the protection of IPR as an economic development tool. Economic development is the overall objective of establishing an effective protection system or IPR. A patent is one of a nation's progress indicators. Productivity of intellectual property, especially patents in Indonesia, continues to increase. The LIPI is an institution that contributes the highest number of patents nationally. Compared to other non-ministerial research institutes, ministries and universities in Indonesia, LIPI leads the largest number of patents to reach 662 patents (data up to April 2018). Filings with the highest proportion until now are in the year 2017 with 159 patents. The number of patents obtained is nothing but the contribution of intellectual thought from LIPI researchers. The knowledge possessed by researchers is capitalised and protected by patents. Patents are a form of protection of intellectual property, especially in the field of technology. The rapid development of technology requires researchers to think hard to produce an innovative work that can benefit society in the field of technology. But not merely a research result can be patented. Patents have three main requirements, namely to contain novelty inventive steps that can be patented to the industry.

The Act of No.11 in 2019 of the National System of Science and Technology

In running the role and its function as a means of development, the renewal of a law community should not be static but must be dynamic, law must be able to oversee the development of society, in the economic, political, social and cultural fields. Referring to the core understanding that is derived from the opinions of legal experts, intellectual property is wealth that is born or arises from the creativity of human thought, creativity does not only occur individually in the present, but many have emerged communally in the past that are still relevant to use to date. All of that must be given appreciation, recognition and legal protection in the form of granting rights, for example intellectual property rights in which there are exclusive rights both in the form of moral rights and economic rights so that the actions of other parties who violate these rights can be prevented and sanctions can be imposed. The act of Sinas on science and technology represents a change in direction for science and technology development that should be channeled towards increasing the contribution of technology to the development of various sectors, especially economic sectors. The purpose of the Law on Sinas Science and Technology is to form effective relationship patterns to form productive, responsive and efficient behaviour.

After long-term discussions, the National Science and Technology System Bill (the Sisal and National Science Bill) was approved as a law in plenary meetings. The National Science and Technology Bill is a law that complements the previous regulations. The National Science and Technology System Bill is a government initiative bill drafted since 2014, in lieu of Law

number 18 of 2002, which in its application has not been able to contribute optimally to national development. There are three factors that influenced Law 18 of 2002, namely:

1. The legal right did not manage a coordination mechanism between agencies and sectors on the level of policy formulation, the program planning for the budget and the implementation of a policy was not clear cut;
2. A lot of rules have changed, so that there should have been harmonisation and synchronisation, such as a law for the national financial system and a law for the national development planning system;
3. Law 18 / 2002 did not manage other special things and strategies along with the development of the environment and the system of science and technology. Law 18 of 2002 does not yet regulate details relating to the Material Transfer Agreement (MTA). The Draft Law on the National System of Science and Technology (RUU Sisnas IPTEK), was prepared to replace the "Law No.18 of 2002 about the National System of Research, Development, and Application of Science and Technology" which is considered capable of dealing with the times.

The act of the discussion of the national system of science and technology is expected to be a momentum for the improvement of research and innovation in governance improvement in Indonesia, the right science and technology policy can create a conducive science and technology ecosystem, so that, in time science and technology is able to contribute to the progress of national development. Conversely, inappropriate science and technology policies will reduce the potential for accelerating the achievement of the country's development targets, and Indonesia will only become a market and consumer of science and technology developed by other countries. Some of the explanations feature in the National Science and Technology Law, one of which is about intellectual property. Intellectual property from research and development in science and technology is managed in accordance with statutory provisions.

Ownership of intellectual property financed from the State revenue or expenditure budget or the regional revenue and expenditure budget is the right of the central government or regional government and the research and development institutions of the inventors. The central or regional government, inventors, and research and development institutions of the inventors have the right to the results of the commercialisation of intellectual property in accordance with statutory provisions. Ownership of intellectual property can be excluded if determined otherwise by the parties through a written agreement.

Regarding the protection in the act of the national system of science and technology, human resources in science and technology got protection in carrying out research, development, for the assessment research, development, assessment and application, as well as invention and

innovation. Protection is in the form of social security and legal assistance. Human resources in science and technology that have carried out research, study and application activities that produce inventions and innovations in accordance with scientific methodologies and research designs, development, studies, and applications that produce inventions and innovations, and have passed the ethics commission with no results as expected, there is no sanction in science and technology networks.

For the purpose of protection, everyone is prohibited from transferring biodiversity material, Indonesian local species, Indonesian social, cultural, and local wisdom, both in physical and digital form, as long as material testing can be carried out in Indonesia. In the event that a material test cannot be carried out in Indonesia, the transfer of material must be accompanied by a material transfer agreement as referred to in Article 76 letter h. In the provision of administrative sanctions, in the protection of intellectual property rights, especially patents, there are criminal provisions, wherein the article states that anyone who is without the right or unlawfully transfers Indonesian local species abroad, whether physical or digital without being equipped with material agreements as referred to in Article 77 paragraph (2), shall be liable to a maximum imprisonment of 2 (two) years or a maximum fine of two billion rupiah. In addition to basic criminal as referred to in paragraph and one shelter, an additional criminal offence may be imposed in the form of a prohibition to obtain a research permit in the territory of the republic of Indonesia within a certain period.

The Director General of strengthening and development of Ministry of research and technology / BRIN revealed that the National System of Science and Technology or the National Science and Technology Law is able to provide protection for biological resources. At the same time, it can impose sanctions on those concerned in accordance with the sanctions stated in the Act. Indonesia still likes to be cheated in terms of protecting the wealth of its biological resources. The most theft is in the name of research. "For example there are foreign researchers who are supposed to study one biological resource, but instead examine all of them." Therefore, the national System Science and Technology Act can minimise and protect Indonesia's biological wealth from foreign parties who want to harm Indonesia.

Conclusion

Indonesia is aware that the people in the construction of science and technology require the mastery, the utilisation, and advances to strengthen the position of the competitiveness of Indonesia in the life of global markets. This has been demonstrated by the publication of the act of no.18 / 2002 about the national system of research, development, and application of science and technology, but in its application it has not been able to make a contribution optimally to national development. Human resources in science and technology receive



protection in carrying out research, development, study and application, as well as inventions and innovations.



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