



Empowerment of Intellectual Property Centers: Challenges and Opportunities for Higher Education and R&D Institution

Tri Rusti Maydrawati

Faculty of Law, Universitas Hangtuah, Indonesia

Corresponding e-mail: tri.rusti@gmail.com

ARTICLE INFO

ABSTRACT

Keywords

IPC Empowerment; Higher Education; R&D Institution

The existence of the Covid-19 pandemic brought significant changes in people's lives, especially a large number of research and innovation carried out by higher education and R&D institutions in solving problems and finding solutions in drugs and other medical equipment. The results of its must be disseminated to the public, including the protection of intellectual property rights (IPs). In the management of IPs, each higher education is expected to have an IP Center as mandated by law. However, not all of them have it. It will certainly have an impact not only at the local level but also nationally, for that reason so empowerment of IPs Centers is a necessity. The purpose of this study is to find answers about higher education and R&D institutions that do not yet have IPs centers and to analyze the empowerment of IPs centers in increasing the number of their IPs as well as the challenges and opportunities. Method of research uses normative juridical. The results of the research are that all of them haven't IPs center, so it must be formed, that are adapted to their abilities and capacities, because the empowerment of IP centers nationally, will increase the number of registrations for IP applications, at least it will also bring benefits, especially the welfare of the community and all parties.



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

© 2022 Published by UAD Press

Introduction

The emergence of ten new variants of the mutated corona virus causing panic and anxiety in all walks of life (Rohmi, 2021). This variant is suspected to be more virulent and faster in spreading and has claimed many victims. This condition makes the government take a stance and action as an effort to handle it. At this time, the Covid 19 Pandemic has entered its second year, and it cannot be predicted when it will end, since it was discovered in Wuhan, China at the end of December 2019 (CBC, n.d.; Lidya Julita S, 2021). While entering Indonesia in March 2020 (news.detik.com, 2020). The existence of this pandemic, either directly or indirectly, has brought about a significant change in people's lives. The positive impact is the number of various research and innovations (Martha Herlinawati, n.d.) which is expected to be a solution in the midst of a pandemic, including as a form of adaptation in the current situation.

Various research and innovations are also carried out by the Higher Education Institutions and Research and Development Institutes in Indonesia (Rohmi, 2021). This shows how important the innovations produced in various fields are in the fields of health, education, trade, social culture, and other fields, as a breakthrough in overcoming the problems that exist due to the COVID-19 pandemic (nasional.tempco.co, 2020). Many Universities exist, encouraged to collaborate with Research and Development Institutions, such as the Indonesian Institute of Sciences and the Agency for the Assessment and Application of Technology (Maria Fatima Bona, n.d.).

In Article 20 of Law No. 20 of 2003 concerning the National Education System, it is stated in paragraph 1, that The Higher Education Institutions can take the form of academies, polytechnics, colleges, institutes, or universities, while in paragraph 2, universities are obliged to carry out education, research, and community service. These three activities are better known as the Tri Dharma of Higher Education. According to 2019 statistics, Indonesian Higher Education Institutions numbered 4,621 with the following details: University: 633, institute: 238, College: 2,501, Academy: 909, Community Academy: 36 and Polytechnic 304. (PDDikti & Kemendikbud, 2018). Higher Education Institutions each produce at least 3 innovations in one year, the total is $4621 \times 3 = 13,863$ innovations per year. This is a fantastic amount to add to the increase in domestic applications.

Innovations and inventions produced by universities as a forum for the intellectual community cannot be separated from the implementation of the Tri Dharma of Higher Education. Based on law number 18 of 2002 concerning the National System of Research, Development and Application of Science and Technology, Higher Education as one of the institutional elements in the National Research System is burdened with the obligation to disseminate information on the results of research and development activities as well as their intellectual property, as long as it does not reduce the interests of intellectual property protection. Article 13 paragraph 1 implies that universities are obliged to manage intellectual property. This means that universities need to have a special unit/institution that handles intellectual property management.

The establishment of the Intellectual Property Center is expected to become an institution capable of being a center for information and services for Intellectual Property Rights (IPR), including in marketing the IPR. However, in reality not all Higher Education Institutions and Research and Development Institutes have Intellectual Property centers (Education, 2017). The low number of applications for protection of the domestic Intellectual Property is believed to be related, among others, to the limited infrastructure facilities related to the number of Intellectual Property Centers in Indonesia. Based on a survey conducted by the Directorate General of Higher Education in November 2008 it was noted that from 1999 to 2007 the number of IP Centers established especially in The Higher Education Institutions only reached 80 Intellectual Property Centers. This figure is certainly still far from the number of The Higher Education Institutions in Indonesia (Education, 2017).

Based on this background, the problems that arise are how Higher Education Institutions and Research and Development Institutions do not or do not have IP Centers, and whether the empowerment of IP Centers will be able to increase the obtaining of Intellectual Property Rights including the challenges and opportunities it faces. The purpose of this

study is to find answers about universities and research and development institutions that do not yet have Intellectual Property centers, and to find and analyze the empowerment of intellectual property centers in increasing the obtaining of intellectual property rights and also the challenges and opportunities.

This research is very important to do considering the position and role of the existence of this center is as a driving force in increasing the obtaining of intellectual property rights both from the academic community and society in general, for example business actors who need protection and marketing of the products they produce. If all higher education institutions and R&D institutions have centers, it will increase the obtaining of intellectual property rights nationally so that the Indonesian nation is able to compete globally in the international arena. In addition, for Universities that do not yet have a center, they will soon establish one, including knowing the opportunities and challenges that will be faced in the future, as well as knowing what steps must be taken in preparation for the establishment of the IP center.

Methodology

This research method is normative legal research (juridical normative) using a statutory approach, which is an approach carried out by observing laws and regulations related to legal issues (problem formulation). The legal materials used in this study include: Primary legal materials, namely laws and regulations, especially those relating to the empowerment of intellectual property centers and IPR legal protection, and secondary legal materials which are legal materials that support the doctrine of textbooks, legal dictionaries, legal journals, and seminar papers used to discuss legal issues.

Results and Discussion

The Importance of Establishing IP Centers in Higher Education Institutions and R&D Institutions

Higher education must carry out the Tridharma of teaching, research, and community service. The output from their activities is intellectual property. So, in Higher education needed IPs center for to register and protection of their intellectual properties. Based on the existing legal material along with several regulations related to the formulation of the problem, it can be distinguished the interests of the formation, namely there are several interests, including:

1. National Interest in Increasing the Number of Domestic IPR

The low application for registration of Intellectual Property Rights has actually been going on for a long time, as conveyed by the Deputy Minister of Research and Technology for the Utilization and Socialization of Science and Technology, Idwan Suhard, in his foreword in the Book of Incentives for Intellectual Property Rights Edition 1, 2010 which displays statistics on 2009 patents issued by the Directorate General of Intellectual Property Rights, that domestic patents are only in the range of 4.25% compared to 91.17% for ordinary patents, and 3.48% compared to 1.09% for simple patents (Riset and Teknologi n.d.). The low domestic demand is also stated in the 2017 Research and Technology performance

report (Education 2017). The problem of low domestic applications will also continue until 2021, this is as stated Director General of Intellectual Property Freddy Harris at the virtual opening of the Patent Safari kick off which was held in Semarang City as the first area that the number of patent applications submitted by domestic applicants does not exceed 10 percent of the total patent applications, with an average number of 1300 to 1800 applications annually, of which the rest are submitted by foreign applicants (PDDikti and Kemendikbud 2018).

The low domestic application for IPR registration, when juxtaposed with the number of universities as much as 4,621 plus the number of existing R&D institutions should be sufficient in increasing applications for IPR registration, but in reality, this is not the case. This is as conveyed by Heri Hermansyah, Director of Intellectual Property Management Plt. Director of Research and Community Service, National Research and Innovation Agency in the Patent Safari event, who explained about the productivity of IPR produced by Higher Education Institutions only about 5130 pieces, including the number produced by R&D Institutions 1,559 pieces in the 2014-2019 period, as shown in the Figure 1.

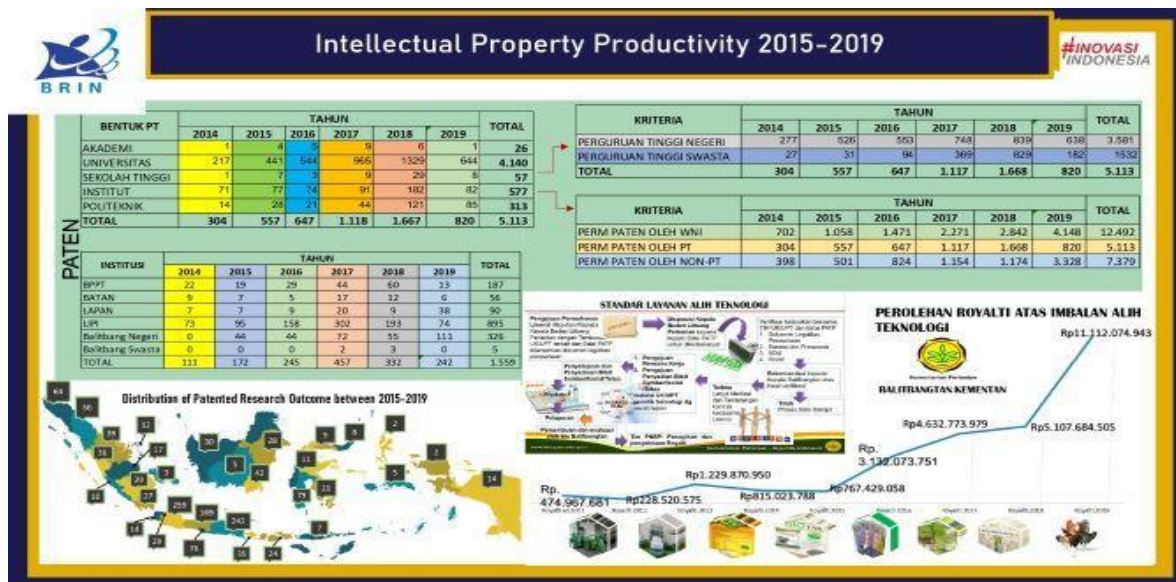


Figure 1. IPR Productivity 2014-2019
Source: Research and Technology-BRIN

The low domestic registration is also directly related to whether or not there are institutions that manage and handle intellectual property owned by the higher education institutions and R&D institutions. It is proven by the efforts of Research and Technology, since 2010 has launched an incentive program for the establishment and strengthening of IP Centers and Achieve IPR as the program was socialized in a number of cities attended by various private and state universities (Ristekbrin, n.d.). This program is still ongoing, however, incentives for establishment have been removed since 2014 and there are only incentives for strengthening IPR centers in universities. The explanation above proves that the existence of an IP center to increase the obtaining of IPR is needed in increasing the obtaining of IPR nationally. Considering the high and low of a direct IPR obtaining is an important record to show the performance and research and technology activities of a country. Comparison of the number of applications and patent registrations in developed and developing countries

shows that patents can be one of the indicators in determining and assessing the economic and technological performance of a country (Radhyca Nanda Pratama, 2019).

2. *The Importance of the Mandate of Legislation*

There are several laws and regulations that can be used as the basis for establishing an IP center, either directly or indirectly, as previously mandated by Law number 18 of 2002 concerning the National System of Research, Development and Application of Science and Technology, Universities are required to seek the establishment of IP centers in accordance with their capacities and capabilities as well as the obligation to disseminate information on the results of research and development activities as well as their intellectual property, which has been replaced by Law Number 11 of 2019 concerning the National System of Science and Technology, then Law Number 12 of 2012 concerning Higher Education, Government Regulation Number 20 of 2005 concerning Transfer of Intellectual Property Technology and Results of Research and Development Activities by Higher Education And the Research and Development In Article 16 of the Government Regulation it is stated that "In carrying out the obligation to seek the transfer of intellectual property, technology as well as the results of research and development activities, the higher Education institutions and R&D institutions are required to form a work unit that is responsible for the implementation of the management and transfer of intellectual property technology and the results of research and development activities in their environment. This work unit has the task of carrying out management and transfer of intellectual property, technology as well as the results of research and development activities produced by the higher Education institutions and R&D institutions.

The existence of IP Centers can also be found in the Law of Intellectual Property Rights, namely the Patent Law No. 13 of 2016 in Article 24 Paragraph 2, that Patent applications made by micro, small and medium enterprises, educational institutions, and government research and development institutions may be applied for registration through intellectual property clinics or intellectual property centers. Based on a number of laws and regulations, it shows that the interests of establishing an IP center are in accordance with the mandate of the applicable laws and regulations as positive law.

3. *Institutional Interests for Institutions, Academics and Society*

The interests of establishing an IP Centers are basically for the interests of higher education institutions, first is that higher education institution has carried out the mandate as mandated by the law. Second is that the more patents produced by the academic community within the Higher Education Institution and have been commercialized in the industrial world and utilized by the community, it will create and increase income/income generate/fund raising for universities and R&D institutions. For example: distribution of royalties, apart from that, there are also opportunities for collaboration with other institutions, both nationally and internationally. As done by Duke university which manages most of the IPR asset portfolio for commercialization through (cayuse.com, 2021).

Third IPR management through IP Centers can be a strategy and performance indicator of a Higher Education. The more innovations and intellectual property rights produced, the higher the score in the Accreditation of BAN PT, including the Innovation Performance

Assessment, which is also beneficial for the ranking of the Research and Community Service Institute cluster. Fourth, the existence of IP Centers to encourage and advance the increase in the obtaining of IPR in Higher Education and R&D institutions if it is associated with the roles and functions in Universities and R&D Institutions, because the process of managing IPR is simpler, faster and more effective, in protecting the output of the Tridharma of Higher Education, including assist in assisting the making of technology transfer agreements or licensing and advocating if there are disputes in the field of intellectual property rights.

The importance of establishing an IP Centers for the academic community, at the next level is the researcher's personal self to increase points and coins. Most researchers in a Higher Education or R&D institution are already very busy with research carried out and community service, so that sometimes they do not have time to register applications for research results in the protection of Intellectual Property Rights. Including the academic community in implementing the Tri Dharma of Higher Education, sometimes they do not understand the functions and benefits of Intellectual Property rights, so they seem to be ignorant. This can be seen as when researchers get grants from both external and internal sources to conduct research, the results are published immediately, even though an application for IPR should be submitted for copyright, patent,

Another problem that is often experienced by inventors from universities is that inventors are often late to correct substantive examinations, because it can happen that a letter sent by the Directorate General of Intellectual Property Rights does not reach the hands of the inventor or the letter is lost somewhere, suddenly a letter appears containing a notification that registration is considered withdrawn. In addition, understanding of IPR registration is still lacking so that there are still many inventors who feel that patent registration is still difficult, takes a long time and is expensive, which results in low patent applications (Journal et al., 2019). If there is an IP center, it can be helped and found a solution, so that researchers feel helped and encouraged to produce more innovations and inventions.

For researchers in developed countries who work for research institutions or companies, they usually do not directly deal with IP asset management because the task will be handled by a special unit in their organization, with another name for the IP center, the IPR unit or technology licensing office. For example: British Technology Group (UK) and Stanford Office of Technology Licensing (USA). Independent researchers in developed countries have the choice of either managing their own IP assets or joining independent technology licensing organizations to commercialize their inventions or other intellectual work. An example of an independent technology licensing organization is Arthur D. Little (USA)(Ratna Nurhayati, 2020).

The existence of IP Centres is also needed by the community, especially people who have micro, small and Medium Enterprises (SMEs) who need to register the products they produce. Including the MSMEs which are fostered by a Higher Education. Patent Application Statistics based on MSMEs and Non MSMEs are still relatively low. The level of awareness of creative business actors in Indonesia in registering intellectual property (IP rights) is still low, only around 7.25% (Hamalatul Qur'ani, 2018). The low number of SMEs that have IPRs could be due to a lack of understanding of knowledge about Intellectual Property Rights, there is no cost to manage them, including not thinking about taking care of IPRs because they feel that IPRs are not important and are still not a top priority. For this reason, the role of the IP

Centres is needed to help overcome the problems of SMEs, including the participation of researchers from Research and Development Institutions, Universities, as well as business and industry players to continue to explore the potential for innovation that suits the needs of the community.

4. *The Importance of National Drivers of Economic Growth*

In essence, indirectly the existence of IPR Centers is also a driving force for economic growth, if all higher institutions have IPR centers, it is certain that the number of domestic applications will increase, and have an impact on national income. The existence of an IPR center has a strategic and important position in assisting the government in submitting IPR protected both online and offline. It is not an exaggeration if the IPR center is considered a mediator / extension of the Director General of IPR. Evidently, the Director General of Intellectual Property Rights holds a national meeting once a year with all IPR centers throughout Indonesia (risbang.ristekbrin, 2019), with various themes, such as strengthening the management of IP Centers in The higher education institutions and R&D institutions , including inviting collaboration (Dijen KI, n.d.).

The small number of IPR centers has also encouraged the Ministry of Research and Technology and Technology since 2010-2014 to provide incentives for IPR centers, namely incentives for establishing and strengthening IPR Centers. But now the incentives are in the form of coaching and strengthening IP Centers (Direktorat Pengelolaan Kekayaan Intektual Kementerian Riset dan Teknologi/Badan Riset dan Inovasi Nasional, 2020) As the aims and objectives of providing IPR incentives are:

- a. Increase the obtaining of Patent Rights and ownership of IPR for Technology Products and Creative Products;
- b. Increase the interest of researchers to conduct research and development that has the potential for intellectual property rights;
- c. Encouraging the growth of IPR-based national industry;
- d. Increase researchers' understanding of the importance of IPR in relation to R&D activities.

The targets for granting IPR incentives are:

- a. Increased obtaining of Patents and ownership of IPR for Technology Products and Creative Products;
- b. Motivated researchers to conduct research that has the potential for IPR;
- c. Utilization of Domestic IPR to encourage the growth of national industry;
- d. Increased awareness of researchers on the importance of IPR

Meanwhile, the benchmarks for success are the increasing number of intellectual property rights registered with the Directorate General of Intellectual Property Rights, the increasing number of Intellectual Property Rights Centers in Higher Education and R&D institutions, and strengthening of the management of intellectual property rights centers.

Position and Status of IP Centers in The Higher Education Institutions and R&D Institutions

The position and status of IP Centers in a Higher Education and R&D institution are not the same, there is no specific benchmark regarding the organizational structure of IP Centers. However, Existence can be divided into three types, namely directly under the Chancellor and/or under the Institute for Research and Community Service, the IP Centers are located at the same level at the Center for Study in the Institute of Research and Community Service (LPPM) Environment, and under the Faculty, for example the Faculty of Law. For example, the IP Centers at the Bogor Agricultural Institute (IPB) under the coordination of the Vice Chancellor IV for Research and Cooperation (Hendra, 2017), IP Centers at Tri Sakti University under the Research Institute while those managed under the Faculty of Law, Center for Intellectual Property Studies Faculty of Law Airlangga Universitas.

Within the Ministry of Maritime Affairs and Fisheries, the Marine and Fisheries Research and Human Resources Agency, also established the IP Centers. The Research and Development Agency of West Kalimantan Province has established an Intellectual Property Rights Center or what is known as the HIP Centers "Litbangjirap Enggang Gading". Including the manager's position, some are still ad hoc, and some are structural. IP Centers has human resources who are in charge of several groups of expertise, including the field of management, the field of law, the field of marketing, the field of technology.

The Establishment Procedures of IP Centers in The Higher Education Institutions and R&D Institutions

The initial step in the establishment of IP Administrators in the higher education institutions and R&D institutions is a Letter of decree from the highest leader in such the Institutions, either from the Rector, Chairperson or Director. Such the letter of a decree consists of two kinds, namely the Letter of a Decree for the Establishment of the IP Centers itself as an institution or unit that will have a longer validity period and The Letters of decree for personnel or crew with a limited period or period, these personnel can be change at any time. For example, a term of officer has expired or there is dismissed of a managing member.

The benefits and objectives of this a letter of decree are to show that the Higher Education already has an IP center, so that the Ministry of Law and Human Rights, especially the Director General of IP will register for account registration in the IP system, so that the manager of the IP center is equated with an IP consultant. The account can be used for online registration, in addition to the existence of The Letter of Decree is the institution's support for the existence of IP centers in its institution.

Development of IP Centers Management Standards

Roles and Functions of IP centers in increasing IPR Obtaining

The duties and functions of the HIP Centers are to explore and manage intellectual property assets (mainly from the academic community) as well as in the community; increase the obtaining of IP protection by maximizing the potential of IPR in universities (Research and

Public Relations); Encouraging the development of research and empowerment of IPR-oriented use of IP; Promote IPR and provide useful services regarding IPR for HIGHER EDUCATION and the wider community; Seeking legal protection strategies for IP; Seeking IP marketing and regulating its use for the common welfare

Guidelines for the Management and Utilization of Intellectual Property Rights are based on guidelines for IPR management (ownership, utilization, distribution of royalties), Guidelines for Technology Transfer, Guidelines for Cooperation, Guidelines for Commercialization, Guidelines for Licensing. As a Social role: Socialization, Education and Promotion of Intellectual Property Rights, Consulting Services, Facilitating the Obtaining of Intellectual Property Rights, Assisting SMEs, while IP Management includes Inventory of Inventions and Intellectual Property, Management and marketing of Inventions and IP, Intermediary institutions to facilitate industry and researchers/academics. Providing Consulting Services related to IPR to the Academic Community and the community. Increase researchers' understanding of the importance of IPR in relation to R&D activities. Facilitate the registration and protection of IPR. Increase the obtaining of patent rights and ownership of intellectual property rights in technology products and creative products. Encouraging the growth of IPR-based national industry.

Expected functions of IP Center is:

1. *Services and procedure to register*

Services/Internal Work Procedures in the Management of IPR Registration have the ability to carry out the mechanism for proposing IPR registration submitted by internal inventors and partners. Have administrative capabilities in budget management to support the management of IPR registration. Have the ability and authority to communicate with authority institutions related to IPR. Have the ability and authority to review the administrative requirements of an application for financing IPR protection, has the ability and authority to provide suggestions for improvement of IPR proposals. Have the ability and authority to provide advocacy and consultation related to IPR registration.

2. *Arrangement of the IPR document system*

IP center has the ability and authority to document IPR data regularly and systematically; Have the ability and authority to manage the confidentiality of IPR documents, especially Trade Secrets; have the ability and authority to issue Standard Operating and Procedures in the internal environment; Have the ability and authority to make agreements with third parties. These duties and functions are performed by the Management Group, assisted by the Legal Group, and shall be specified in the Standard Operating Procedure (SOP).

3. *Reviewing Data Searching and Preparation of IPR proposals*

IP center the ability and authority to conduct substantive reviews of IPR proposals; Have the ability and authority to search IPR data both electronically and manually; Have the ability and authority to provide suggestions for substantive changes to IPR proposals; Have the ability and authority to provide assistance and advocacy in the preparation of IPR proposals; Has the ability and authority to recommend or not recommend IPR proposals; Has the ability and authority to draft an opposition to the application for protection of

intellectual property rights of other parties; Have the ability to cooperate with the Legal group in the preparation of IPR proposals. These duties and tasks are performed by the expert group and must be specified in the SOP.

4. Management System Arrangement

IP center has the ability and authority to plan activities including socialization to commercialization of IPR; Have the ability and authority to recruit adequate and sustainable human resources Have the ability and authority to plan and develop resources; Have the ability and authority to carry out activities on an ongoing basis; These functions and duties are carried out by the Management Group and other groups, and must be stated in the SOP.

5. Structuring the IPR Award and Recognition System

IP center Has the ability and authority to propose candidates for award and recognition of IPR to the parent institution; Have the ability and authority to assess and recommend a proposal that the inventor wants to submit as a participant in a competition/incentive program organized by another party; Have the ability and authority to organize an event related to the award and recognition system (IPR appreciation week).

6. Financial Management System Arrangement

IPs center has the ability and authority in receiving and disbursing accountability based on the authority they have their own account number (in the name of the IP Centers), have a NPWP on behalf of the IP Centers sent has a special treasurer for the receipt and expenditure of royalties (referring to the regulatory instrument issued by the Ministry of Finance).

7. Royalty Management System Arrangement

Have the ability and authority in managing the administration of royalties both as revenue and as expenses; Has the ability and authority to distribute royalties which are the rights of related parties (inventors and partners); Have the ability and authority to process the royalty budget disbursement; has the ability and authority to research and determine the validity of inventors who are entitled to receive royalties.

8. Agreement on the Negotiating System

IP Center has the ability and authority to formulate and determine negotiation strategies by involving all groups/activity elements, including inventors; Have the ability and authority to complete data to support the validity of assets so that they are ready to be brought to the negotiating table; Have the ability and authority to develop planning and negotiation techniques. These features and tasks are performed by all activity groups/components and shall be specified in the SOP.

9. Partnership Arrangement Agreement

IP center has the ability and authority to formulate and design a draft partnership agreement; Have the ability and authority to review draft partnership agreements related to IPR aspects; Have the ability and authority to recommend a suitable draft partnership agreement; Have the ability and authority to participate in partnership negotiations Have

the ability and authority to participate in partnership negotiations. These functions and tasks are performed by the Legal Group and are to be set out in the SOP.

10. Commercialization System Agreement

IP center has the ability and authority to review the commercial aspects of IPR proposals; Has the ability and authority to provide recommendations on forms of IPR protection; Has the ability and authority to recommend the form of business transactions on certain intellectual property rights; Have the ability and authority to estimate the value of IPR assets; Have the ability and authority to promote and offer assets to other parties; Have the ability and authority to negotiate the commercialization of IPR; These functions and duties are carried out by the Marketing Group, and must be stated in the SOP.

Opportunities at the Intellectual Property Rights Center

Some of the opportunities that will be faced by IP centers are the following opportunities to cooperate with mutually beneficial partners, increasing registration of intellectual property rights nationally, support from the government in the form of providing facilities and incentives, assistance in strengthening management for managers of IP centers. After strengthening the IPR center personnel consisting of the legal division, technology division, management division and marketing division, the socialization and training activities both on campus and outside campus will be lighter considering the crew already understands IPR a lot, there is an increase in IPR awareness, especially for human resources researchers will increase in the end towards the creative economy.

Opportunity to increase the capacity of human resources in the fields of management, law, technology, and marketing, to provide guidance and strengthening, as well as to improve the governance of the Intellectual Property Rights Center by compiling the duties and functions of the IPR Center personnel, preparing procedures and mechanisms, and preparing the necessary forms. Encourage lecturers to conduct research activities to produce products with IPR potential and commercial value.

Challenges facing IP centers

Often, the obstacles that exist at the Intellectual Property Centre are limited facilities and infrastructure, which makes the manager less enthusiastic. They are still in the process of registering and consulting IPRs. Does the Intellectual Property Rights Centre have the same authority as the Intellectual Property Rights Consultant? Not all of them understand the function of the IP Centre for the entire academic community. There are a few human resources who understand IPRs. Very few academics still do not understand IPRs. In general, IPR management and intermediary institutions are relatively weak, both quantitatively and qualitatively. These institutions still generally fail to meet basic requirements, both in terms of organizational management issues, infrastructure and resources, not to mention requirements as a modern, quality professional organization.

Ideal Model

The Intellectual Property Rights Centre has management, socialization, consulting (advocacy and litigation), protection and marketing functions. Have the ability to carry out asset management, administration on an ongoing basis A authority in financial management, in particular royalty management. Has the ability, as a legal subject, to maintain legal relationships with other parties. Have adequate resources. Have the ability to recruit and develop sustainable human resources. Have an SOP on the mechanism for organizing activities in an integrated manner with the parent institution. Having human resources of various scientific disciplines that support, for example Management Group: multi-disciplinary Legal Group: legal discipline (IPR consultant, attorney). Expertise Group: multi-discipline Human Necessities; Performing Operations, Transporting; Chemistry, Metallurgy; Constructions; Mechanical Engineering, Heating; Physics; Electricity, etc. Marketing Group: multi-disciplinary Have adequate office physical equipment (work space for operational vehicles). Have a website with an adequate internet network and sufficient budget support.

Conclusion

Based on the discussion as explained, it is expected that Higher Education Institutions and R&D Institutions that do not have an IP Center, must form an IP center to manage intellectual property rights owned by the academic community and the community, in addition to empowering IP centers in a comprehensive manner. It will increase the number of registrations for IP applications and bring benefits to the government, universities, researchers and the wider community, considering the tasks and functions they carry out. While the existing opportunities can be optimized with all facilities and used as capital to get even better benefits. In facing these challenges. For higher education institutions that do not yet have an IP center, they should immediately establish one, by participating in grant incentives for fostering and strengthening IP centers, including preparing infrastructure facilities, according to their capabilities, as well as conducting collaborations or comparative studies at universities that already have IP centers and have produced royalties.

References

- cayuse.com. (2021). *Duke's IP Management Success*. Cayuse.Com.
- CBC. (n.d.). *WHO Announces Origin of Corona*.
- Dijen KI. (n.d.). *DJKI Jalin Kerja Sama dengan Dinas Terkait Provinsi Bali Dalam Membangun Kesadaran Pelindungan KI*. [www.Dgip.Go.Id](http://www.dgip.go.id).
- Direktorat Pengelolaan Kekayaan Intektual Kementerian Riset dan Teknologi/Badan Riset dan Inovasi Nasional. (2020). *Panduan Pengusulan Insentif Pembinaan Dan Penguatan Sentra Hak Kekayaan Intelektual (Sentra Hki) Tahun 2020*.
- Education, T. and H. (2017). *Guidelines for Proposing Incentives for Strengthening Intellectual Property Centers (IP Centres) in 2018*.
- Hamalatul Qur'ani. (2018). *Low Awareness of Registering Intellectual Property Due to Lack of Education*.
- Hendra. (2017). *Brosur Sentra KI IPB 2017*.
- Journal, P. L., Cara, D., & Online, D. (2019). 1, 2, 3. 2(02), 701-712.

-
- Lidya Julita S, C. I. (2021). *WHO Umumkan Asal Mula Munculnya Corona pada 15 Maret*. Maria Fatima Bona. (n.d.). *Universities Produce 1,000 Innovations During the Pandemic*. Www.Beritasatu.Com.
- Martha Herlinawati. (n.d.). *Various innovations in the midst of the Covid 19 pandemic were produced by Indonesia*. Www.Antaraneews.Com.
- nasional.tempo.co. (2020). *Key Research Collaboration to Overcome the Pandemic*. Nasional.Tempo.Co.
- news.detik.com. (2020). *Kapan Sebenarnya Corona Pertama Kali Masuk RI?* Detik.Com.
- PDDikti, & Kemendikbud. (2018). *Katalog Dalam Terbitan Catalogue of Publication*. 248.
- Radhyca Nanda Pratama. (2019). *Implications of the Obligation of Patent Implementation on the Implementation of Technology Transfer Implications of Obligations for Patent Implementation In Technology Transfer Processes*. *Justice Journal of the Faculty of Law*.
- Ratna Nurhayati. (2020). *Intellectual Property Rights in Distance Higher Education*. *Simpen.Lppm.Ut.Ac.Id*.
- risbang.ristekbrin. (2019). *Indonesia Must Increase Patent Productivity If It Wants To Be A Developed Country*. Risbang.Ristekbrin.
- Ristekbrin. (n.d.). *Indonesian Ministry of Research, Technology and Higher Education (Ristekdikti)*.
- Rohmi, N. (2021). *NoHere are 10 new variants of the mutated virus, identify the symptoms and how to prevent it*.