

Overview of Intellectual Property Rights at Semarang State University in the Year Period 2020 – 2024

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Abstract: The digital era is characterized by rapid growth in innovation and creative industries. Alongside these developments, the risk of copyright infringement has become a significant challenge, highlighting the importance of registering works to safeguard intellectual property rights (IPR). This research aims to analyze trends in intellectual property rights registration within the Semarang State University environment and explore how these trends contribute to enhancing institutional protection of IPR. The study employs a descriptive observational approach with a time series design. The research population includes all intellectual property rights registered at Semarang State University between 2020 and 2024. Using total sampling, the study examines 6,125 registered works during this period. Secondary data were obtained from the Institute for Research and Community Service at Semarang State University. Results indicate a consistent increase in intellectual property rights registration over the last five years. The most commonly registered types of IPR are copyright, followed by simple patents, patents, industrial product designs, trademarks, geographical indications, and plant variety protection. These findings provide valuable insights for universities aiming to strengthen IPR management and encourage innovation.

Keywords: IPR, creative, innovative.

INTRODUCTION

Intellectual Property Rights (IPR) refer to legal rights granted to individuals or entities over their intellectual creations, fostering an environment that promotes innovation and creativity (Gupta, 2024). IPR grants creators exclusive rights to utilize their works for a specific period, enabling them to gain recognition or financial benefits from their innovations. Protected intellectual property encompasses various forms of creations, such as inventions, literary and artistic works, designs, symbols, brands, and images used in commerce. According to the World Intellectual Property Organization (2024), IPR includes six main categories: patents, copyrights, trademarks, industrial designs, geographical indications, and trade secrets.

In Indonesia, the legal framework for IPR is established through several regulations. Copyrights are governed by Law No. 28 of 2018, while patents and simple patents fall under Law No. 31 of 2016. Laws pertaining to industrial product designs, trademarks, geographical indications, integrated circuit layout designs, trade secrets, and the protection of plant varieties are regulated by Law No. 31 of 2000, Law No. 20 of 2016, Law No. 32 of 2000, and Law No. 29 of 2000, respectively. These regulations aim to safeguard intellectual property and provide a legal basis for addressing disputes related to IPR in the country.

The digital era has ushered in unprecedented opportunities for innovation, information dissemination, and idea exchange on a global scale. However, it has also brought challenges related to protecting intellectual property. The ease of accessing information and creative works online has increased the risks of copyright infringement, intellectual property theft, and counterfeit products. Consequently, registering and protecting intellectual property has become more critical than ever to ensure the recognition and security of creators' rights (Astawa & Kurniawan, 2024).

Despite these challenges, the role of IPR in fostering sustainable development, especially in academic institutions, remains underexplored. The strategic importance of IPR in universities lies in its potential to drive research, innovation, and technology transfer while enhancing institutional competitiveness globally. However, there is a lack of comprehensive data or studies examining how IPR trends manifest within higher education institutions, particularly in Indonesia. This research addresses this gap by investigating trends in intellectual property rights, including copyrights, patents, simple patents, trademarks, industrial product designs, protection of plant varieties, and geographical indications at Semarang State University. By analyzing these trends, the study aims to provide insights

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into the current state of IPR management in higher education and its implications for fostering a robust culture of innovation (Wiroonrath et al., 2024).

MATERIALS AND METHODS

The type of research used in this study is descriptive observational. The design adopted is a time series, which involves recording and analyzing data in a sequential and evenly spaced time period, such as annually or monthly (Long et al., 2023). This research aims to observe data patterns and trends in intellectual property rights (IPR) registered at Semarang State University. These intellectual property rights include seven categories: copyright, simple patents, patents, industrial product designs, trademarks, plant variety protection, and geographical indications.

Univariate analysis is utilized in this study, focusing on frequency distribution to describe and summarize the collected data. The choice of univariate analysis was made because it allows for a straightforward examination of the distribution of each type of intellectual property right and facilitates the identification of trends or patterns over the specified time period. However, further justification regarding how this analysis helps answer the research questions is needed and should be elaborated in future studies.

The population in this research encompasses all intellectual property rights registered at Semarang State University from 2020 to 2024. Total sampling was employed as the sampling technique, resulting in 6,125 works being included in the study. These are distributed as follows: 516 works in 2020, 891 works in 2021, 887 works in 2022, 1,216 works in 2023, and 2,615 works in 2024.

The data source for this study is secondary data obtained from the Institute for Research and Community Service at Semarang State University. This data consists of the number of works registered for intellectual property rights during the 2020–2024 period. Data collection was conducted in December 2024 through documentation studies, involving the review and recapitulation of diaries, transcripts, documents, books, and other records. While this methodology provides a comprehensive dataset, information about the validity and reliability of the data needs to be included to strengthen the study's credibility.

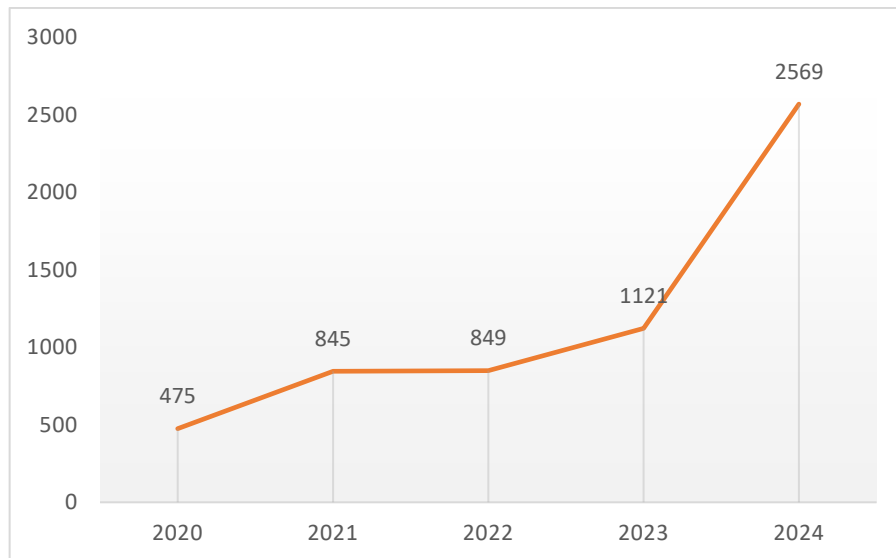
RESULTS AND DISCUSSION

The results of the frequency distribution of the types of intellectual property rights in 2020 - 2024 registered at the Institute for Research and Community Service, Semarang State University, state that copyright has an average (SD) of 1171.8 (814.14). Simple patents showed a mean (SD) of 35 (9.03). Patents showed a mean (SD) of 9 (14.61). Industrial product design shows a mean (SD) of 5.2 (2.86). Trademarks showed a mean (SD) of 3.4 (1.52). Plant variety protection showed a mean (SD) of 0.2 (0.45). Geographical indications show a mean (SD) of 0.4(0.89).

Table 1. Distribution of Intellectual Property Rights for the 2020-2024 Period

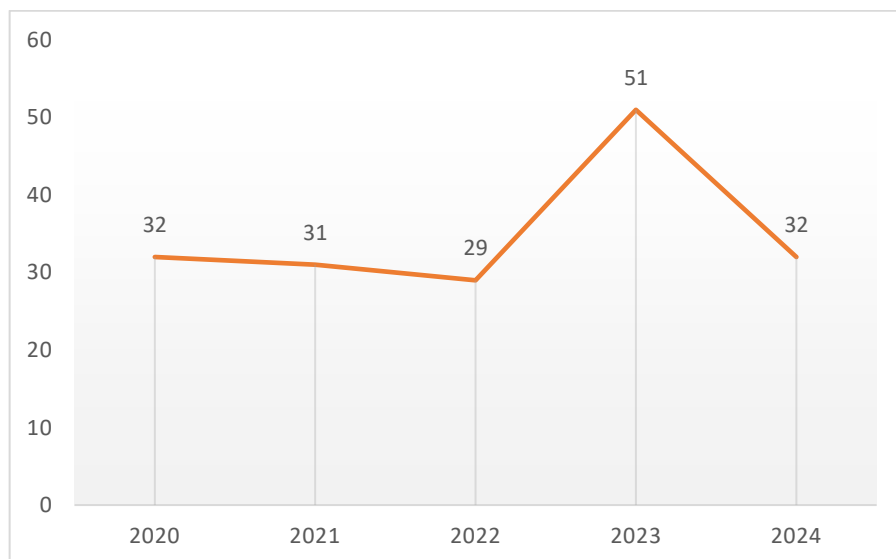
Type	Centering Measure		Size of Spread	
	Mean	Median	Standard Deviation	Min-Max
Copyright	1171,8	849	814,14	475-2569
Simple Patent	35	32	9,03	29-51
Patent	9	2	14,61	1-35
Industrial Product Design	5,20	5	2,86	2-9
Trademark	3,4	3	1,52	2-5
Plant Variety Protection	0,2	0	0,45	0-1
Geographical Indication	0,4	0	0,89	0-2

Based on graph 1, it is known that there is a trend towards an increase in the number of copyrights registered at the Institute for Research and Community Service, Semarang State University. The number of copyrights has always increased in the last 5 years. A very significant increase of 129% in the number of 1448 copyrights occurred from 2023 to 2024, namely from 1121 to 2569.



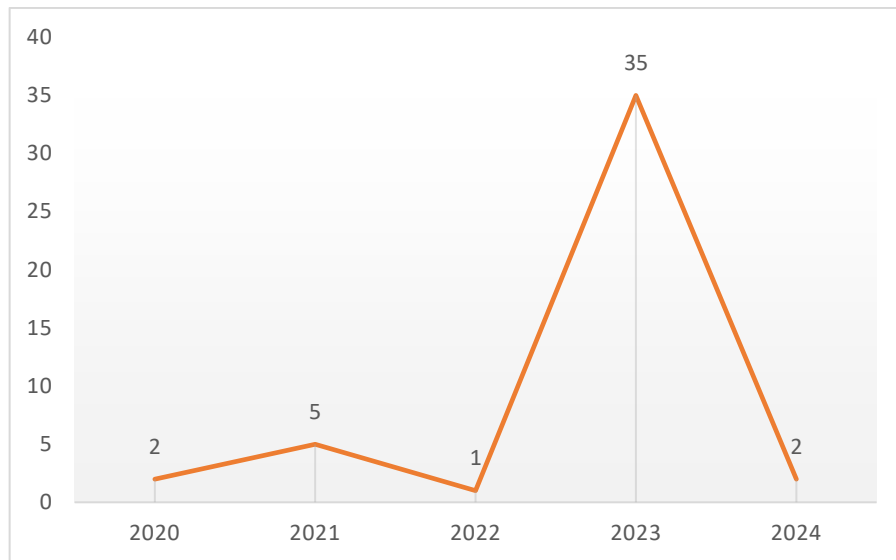
Graph 1. Number of Copyrights at Semarang State University 2020 - 2024

Based on graph 2, it can be seen that the number of simple patents registered at the Institute for Research and Community Service, Semarang State University tends to fluctuate. The number of simple patents experienced a slight decrease during 2020 – 2022, namely from 32 in 2020, fell to 31 in 2021, and fell again in 2022 to 29. In 2023, simple patents increased by 75% to 51 works. The decline will occur again in 2024 by 37% to 32 simple patent works.



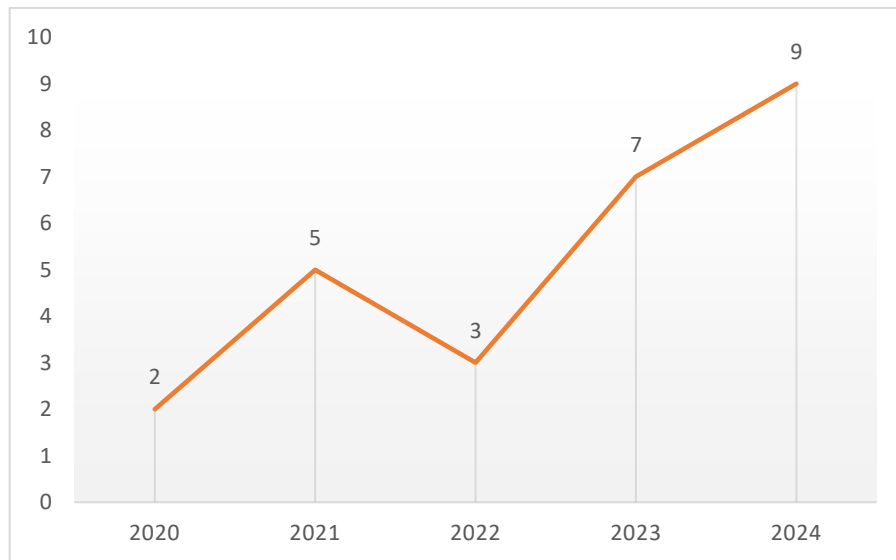
Graph 2. Number of Simple Patents at Semarang State University 2020 - 2024

Graph 3 illustrates the fluctuating trend in the number of patent works at the Institute for Research and Community Service, Semarang State University. The trend in patent works in the 2020-2024 period is fluctuating. It is known that patent works in 2023 are 34 times more than in 2022, but there is also a significant decrease of 94% in 2024.



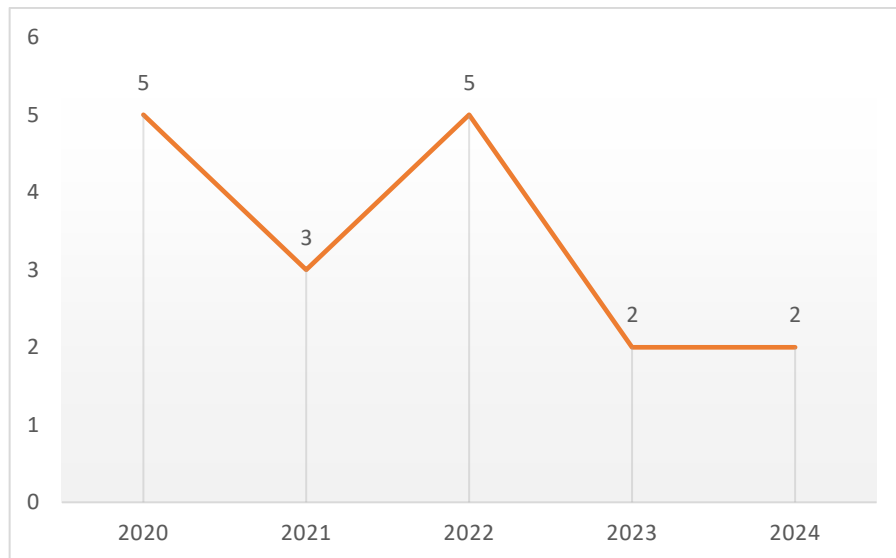
Graph 3. Number of Patents at Semarang State University 2020 - 2024

Based on graph 4, it is known that there is a tendency to increase the number of copyrights registered at the Institute for Research and Community Service, Semarang State University. The number of copyrights has always increased in the last 5 years. A very significant increase of 129% in the number of 1448 copyrights occurred from 2023 to 2024, namely from 1121 to 2569.



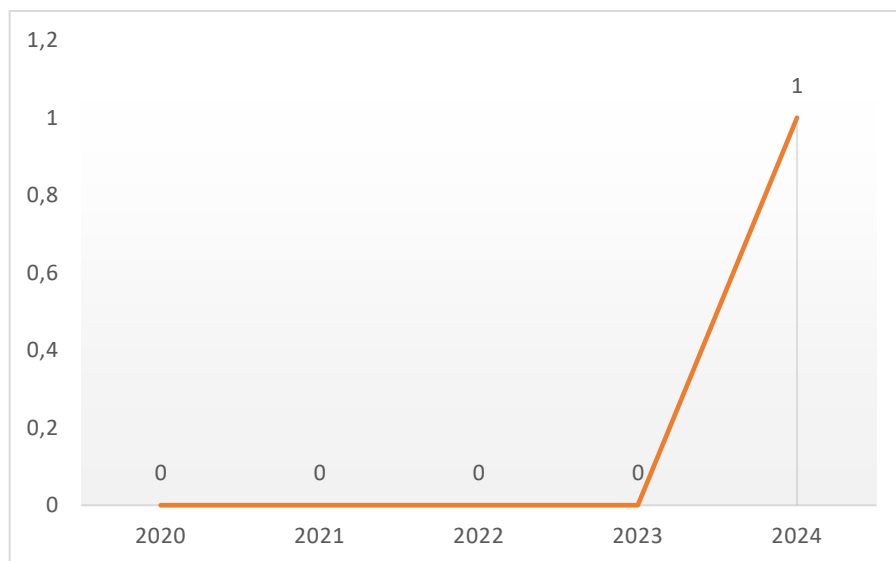
Graph 4. Number of Industrial Product Designs at Semarang State University in 2020 - 2024

Graph 5 illustrates a downward trend in trademarks at the Institute for Research and Community Service, Semarang State University. The decline in trademark work occurred in 2021 and 2023, where each year experienced a decline of 40% and 60% from the previous year. An increase in the number of trademarks of 40% will occur in 2022. Meanwhile, the number of trademarks will remain constant from 2023 to 2024.



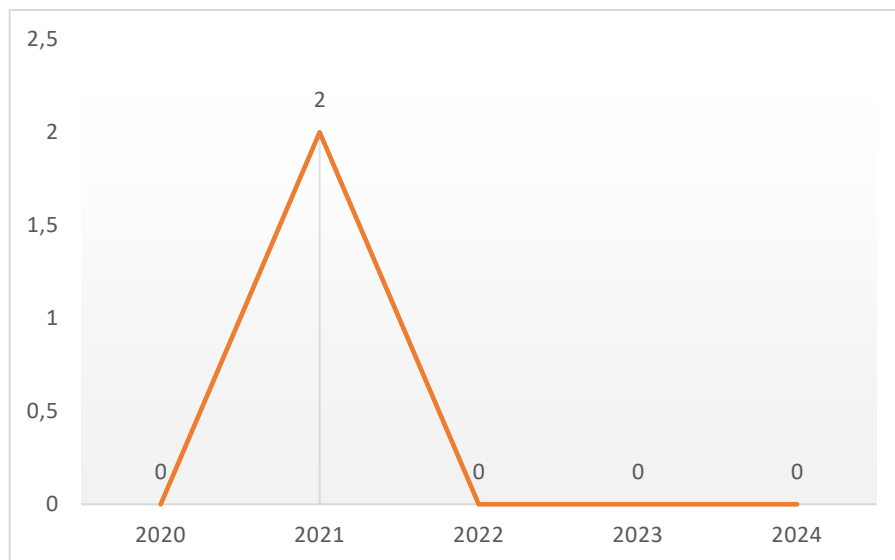
Graph 5. Number of Trademarks at Semarang State University 2020 – 2024

Graph 6 shows that there is a trend of increasing plant variety protection work at the Institute for Research and Community Service, Semarang State University. This type of work has never existed from 2020 to 2023. The first plant variety protection in the last 5 year period was only recorded in 2024, namely 1 work.



Graph 6. Number of Plant Variety Protections at Semarang State University in 2020 -2024

Based on graph 7, it is known that there is a tendency to decrease the number of geographical indications registered at the Institute for Research and Community Service, Semarang State University. The number of geographical indication works registered is only 2 works in 2021. The years 2022 to 2024 do not show any registered geographical indication works.



Graph 7. Number of Geographical Indications at Semarang State University 2020 - 2024

Copyright is the largest type of intellectual property registered with the Institute for Research and Community Service, Semarang State University with a total of 5,859 copyrighted works in the last 5 years. According to Law of the Republic of Indonesia no. 28 of 2014, copyright is an executive right of the creator which arises automatically based on declarative principles after a work is realized in real form without reducing restrictions in accordance with the provisions (Government of the Republic of Indonesia, 2014). Copyright relates to literary and artistic creations, such as books, music, paintings, sculptures, films and technology-based works. In certain languages, copyright is also referred to or considered as a creator's right (World Intellectual Property Organization, 2016). The period of copyright protection varies depending on the type of work, from 25 years from publication to lifetime plus 70 years after the creator dies (Crews, 2020).

A patent is an exclusive right to produce, copy, distribute and license a technology granted by a state. The basic premise of the patent system is that exclusive rights are necessary to generate economic value or incentives for an innovation. Patents are only granted to works or technologies that meet a number of criteria (Arza et al., 2023). A patented work can be in the form of one or several inventions which are still a single invention and fulfill the three patent requirements or criteria. Patent requirements include novelty, an inventive step, and can be applied in industry (Verhoeven et al., 2016). The patent protection period is valid for 20 years.

Simple patents are part of patents. A simple patent is an invention that has more practical use value than previous inventions and is visible or tangible (Pressman & Blau, 2020). Simple patents according to Law of the Republic of Indonesia Number 13 of 2016 are granted for new inventions, developments of existing products, and can be applied in an industry. A patent is said to be simple if it meets the requirements of novelty and can be applied in industry. The novelty in question is a new discovery or development of an existing technology, so that the technology is more perfect. The difference between a patent and a simple patent is that a simple patent only consists of one invasion and has a tangible form (Hovenkamp, 2016). The simple patent protection period is valid for 10 years.

Industrial design rights are protection of the visual design of an object. Industrial design is the creation of a shape, configuration or composition of patterns or colors, or a combination of patterns and colors in three-dimensional or two-dimensional form that has aesthetic value. Industrial design can be used to manufacture products, industrial commodities, or handicrafts. Registration of industrial product designs is an important step for industrial players to protect innovation and add value to products (Alamanda & Mutmainah, 2024). Apart from that, product design rights can also protect a

product or brand from plagiarism and imitation activities. Law of the Republic of Indonesia Number 31 of 2000 concerning industrial designs states that protection for Industrial Design Rights is granted for a period of 10 (ten) years starting from the Acceptance Date.

According to Law of the Republic of Indonesia Number 20 of 2016 concerning Brands and Geographical Indications, a brand is a sign in the form of an image, logo, name, word, letter, number, and arrangement of colors in two or three dimensions, sound, hologram, or a combination of the two know more about these elements. The aim is to differentiate goods and/or services from similar goods. Trademarks are signs or labels used to represent the identity of a product or service. Trademarks can include words, images, colors, sounds and scents (Trappey et al., 2020). The owner of a trademark will have the exclusive right to use the mark for a certain period of time with the right to renew it indefinitely. The term of protection for trademarks is 10 years.

Plant variety protection is special protection provided by the state, which in this case is represented by the Government and its implementation is carried out by the Plant Variety Protection Office, for plant varieties produced by plant breeders through plant breeding activities. The aim of the right to protect plant varieties is to recognize the role of farmers as cultivators and conservationists as well as society's contribution to biodiversity (HIRIMUTHUGODAGE & SAMARATUNGA, 2016). According to Law Number 29 of 2000, there are varieties that cannot be given plant variety protection, namely varieties whose use is contrary to rules, order, morality, religious norms, health and environmental sustainability. Plant varieties that can be given protection include varieties of new, unique, uniform, stable and named plant types or species (Vasudevan et al., 2024). The protection period for protecting plant varieties is 20 years for annual plants and 25 years for annual plants.

Quoting from Law Number 20 of 2016, a geographical indication is a sign that indicates the area of origin of goods, which, due to geographical environmental factors including natural factors, human factors, or a combination of these two factors, gives certain characteristics and qualities to the goods generated. Geographical Indications function to indicate an item as originating from an area with qualities, characteristics or reputation associated with its geographic origin.

CONCLUSION

The registration of intellectual property rights at the Institute for Research and Community Service, Semarang State University, has shown a consistent increase over the last five years. The types of intellectual property most frequently registered, from highest to lowest, include copyrights, simple patents, patents, industrial product designs, trademarks, geographical indications, and plant variety protections. This upward trend reflects the growing awareness within the academic community about the importance of safeguarding their discoveries and innovations. To support the development of university policies, future studies should explore specific determinants that influence this trend, focusing on individual-level factors. Moreover, universities are encouraged to implement concrete measures, such as training programs on intellectual property rights, to further enhance understanding and compliance among academics.

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