The Prospects of Intellectual Property Rights as a Credit Collateral: An Indonesia-Singapore Comparative Study

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Abstract

Introduction to The Problem: The development of the creative industry has an impact on the need for capital. The government has made new policies related to the financing mechanism of the creative economy through Government Regulation (PP) Number 24 of 2022 concerning the Implementation of Law Number 24 of 2019 concerning the Creative Economy. The government is trying to provide support in the form of a credit financing scheme with IPR as a collateral to financial institutions.

Purpose/Objective Study: This study aims to determine the prospects of IPR as a credit guarantee after the issuance of PP Number 24 of 2022. To see the extent of the effectiveness of the PP, this study presents a comparison of IPR commercialization in Singapore, which is one of the countries that has successfully implemented IPR as a credit.

Design/Methodology/Approach: The research method used is normative juridical with analytical descriptive specifications.

Findings: The results indicated that to implement IPR as a credit guarantee, collaboration between institutions is needed and several instruments must be fulfilled, namely concerning legal regulations, government institutions, financial institutions, valuation institutions, insurance institutions, and secondary markets. Indonesia does not fully have these six instruments, especially in terms of institutions related to valuation institutions and their technical implementation guidelines, insurance institutions in case of bad credit, and the secondary market as the last place to sell IPR assets. The implication is that IPR-based credit financing for creative economy actors in Indonesia has not run optimally.

Paper Type: Research Article

Keywords: Intellectual Property Rights; Credit Guarantee; IPOS; Singapore

Introduction

Intellectual Property Rights (IPR) have recently become quite a trend in society. (Sitorus, 2022). Apart from being considered an intangible asset (Prakoso, 2020),
people consider IPR to have investment and economic value (Saputra et al., 2023). Even along with the times and increasing global market competition, IPR can also be used as collateral to obtain financing from financial institutions. This began with the ratification of the results of the 13th session of the United Nations Commission on International Trade Law (UNCITRAL) in 2008 concerning Security Rights in Intellectual Property, which stated that IPRs would be used as collateral to obtain bank credit internationally (United Nations Commission on International Trade Law, 2008).

The Indonesian government then ratified the results of the trial by issuing Law Number 28 of 2014 concerning Copyright (Copyright Law) and Law Number 13 of 2016 concerning Patents (Patent Law), by including IPR material as financing credit collateral under the results of the UNCITRAL trial. It is stated in Article 16 paragraph (3) of the Copyright Law that "copyright can be used as an object of fiduciary security", as well as in Article 108 paragraph (1) of the Patent Law that "the right to a patent can be used as an object of fiduciary security." The enactment of these provisions, indirectly copyright objects such as copyrighted works that are tangible (paintings, sculptures, portraits, etc.) or intangible (films, music, etc.) can be used as objects of fiduciary security. If it requires a bank loan, then the copyright owner can make its intellectual property rights as collateral to the bank with a fiduciary scheme (Eka, et al., 2021).

The same thing applies to patents. Patents are essentially intellectual property granted by the country to inventors for technological inventions with a strategic role in supporting national development and advancing public welfare. Increased patent protection is considered very important for inventors and patent owners, because it can motivate inventors or other inventors to be more creative in creating their products (Mashudoratun, 2013). In these conditions, patent and simple patent applicants who need additional capital can put up their patent rights as collateral to the bank, so they do not need to wait for financing from other people or foreign companies to produce their product inventions.

The implementation of the two laws has not been optimal because they have not fully supported by a number of parties, including the bank institutions. It is also constrained by the lack of revision to Article 43 of Bank Indonesia Regulation Number 14/15/PBI/2012 on types of credit collateral (Marlin, 2022). The issue of IPR as an object of collateral then reappeared after the government enacted Government Regulation Number 24 of 2022 concerning the Implementation of Law Number 24 of 2019 concerning the Creative Economy.

The PP states in article 1 paragraph (1) that "the creative economy is the manifestation of added value from Intellectual Property that comes from human creativity based on cultural heritage, science, and / or technology." Then the financing of IPR, especially in the context of the creative economy industry, is reaffirmed in...
paragraph (4) which states that "an Intellectual Property-based financing scheme is a financing scheme that makes Intellectual Property an object of collateral for bank financial institutions or non-bank financial institutions in order to provide financing to Creative Economy Actors."

The Government seeks to provide support in the form of credit financing schemes that can use IPR objects as collateral for bank and non-bank based financial institutions. The government also considers that in IPR, there is a potential value to explore in order to make a great contribution to the global economy, including:

1. The existence of IPR can provide innovation for MSMEs to maintain their business hegemony.
2. IPR can drive business acceleration through the efficiency of the processes created because IPR assets are intangible assets.
3. IPRs are resistant to crises, because IPRs are considered adaptable and tend to be more flexible in keeping up with the times, such as technology-based companies (games, virtual reality, and software) (Sitorus, 2022).

The growth of business potential that exists in IPR has an impact on the legal protection of IPR, especially for developed countries following the rise of the creative economy sector and the transformation of the digital economy (Loseva et al., 2022). Some countries with poor natural resources have begun to transform into developed countries due to their success in developing IPR and the creative economy (Iswi Hariyani et al., 2018). There is no denying that the power of ideas nowadays seems to be more prominent than the power of material and authority. Smart and brilliant ideas implemented in the form of new creations and innovations could change human civilization (Umantsiv et al., 2023).

This paper will present a comparison with the use and commercialization of IPR in Singapore to see the prospects of IPR as a credit guarantee in Indonesia after the issuance of PP Number 24 of 2022. As is known, Singapore is one of the countries in Southeast Asia that has successfully developed IPR-based banking credit (Intellectual Property Office of Singapore, 2021). The Singapore government aims to make the country a central intellectual property site in Asia, as intellectual property has a high potential to help grow the world’s economy (Barizah, 2017). In 2001 Singapore established the Intellectual Property Office of Singapore (IPOS), which is an IPR management institution established under the Singapore Ministry of Law to provide IPR-based credit or financing. Through this institution, the Singapore government took the initiative to assist IPR-based companies to monetize their intellectual property for business growth and expansion (Intellectual Property Office of Singapore, 2021).

In previous research, Arcani revealed that IPR as intangible assets can be used as an object of bank credit guarantee because it includes movable objects with intangible forms, has economic value, can be transferred, and can be covered by fiduciary
guarantees. IPR has also met the elements as an object of fiduciary guarantee as stated in the Fiduciary Guarantee Law that "the object of fiduciary guarantee is movable objects, both tangible and intangible, which can be owned and transferred ownership rights" (Arcani, & Sukihana, 2022). However, although it has been emphasized in the provisions of the legislation to be able to become an object of banking collateral, in fact not all banks can accept this. The obstacles are due to: (a) there is no juridical support, both in the form of implementing regulations related to IPR as a guarantee for bank loans that have been mandated by law "Copyright Law, Patent Law" and revisions to Bank Indonesia Regulations (PBI) related to collaterals that are used as the basis for banks; b) there is no clear concept related to due diligence and valuation of IPR assets; c) limited period of protection of IPR assets; d) the character of IPR; e) legal risks; f) there is no special appraisal institution for IPR assets in Indonesia (Kurnianingrum, 2017).

To overcome these obstacles, collaboration among institutions is needed, including government institutions, non-profit institutions, SMEs, and business association (Rifqi & Wardhani, 2022). This collaboration aims to identify the needs of SME activists, especially those involved in intellectual property. In addition, governments and policy makers can promote more effective use of the IP system by entrepreneurs and SMEs by increasing awareness and knowledge of all elements of the IP system, facilitating the application process, and reducing transaction costs for entrepreneurs and SMEs to use the IP system (Sukarmijana & Saponga, 2014).

This research will improve by inserting the latest legal instrument namely PP Number 24 of 2002, and conducting a comparative analysis with the implementation of IPR as a credit guarantee in Singapore. So in this study there are two main topics of discussion, i.e. the implementation of IPR as a credit guarantee in Singapore and the prospect of IPR as a credit guarantee in Indonesia after the issuance of PP Number 24 of 2022.

**Methodology**

The type of research normative juridical research, using a conceptual approach and a comparison of the implementation IPR as a credit collateral between Indonesia and Singapore. This method is intended to analyze legal issues based on applicable rules or regulations by combining with the subject matter discussed in this paper (Suteki, 2021). As Soerjono Soekanto stated that normative juridical research is a legal research conducted by examining library materials or secondary data as basic material to be researched by searching for regulations and literature related to the problem under study (Mamudja, et al., 2001). This study used analytical descriptive style. This research will explain and describe in detail, systematically, and thoroughly about everything related to IPR as a collateral. This is still a new phenomenon in Indonesia, therefore referring to the application of IPR as a credit guarantee in Singapore, this research will comprehensively explain due diligence, valuation of IPR
assets, juridical support in the form of regulations, and any instruments needed to develop to ensure that IPR can successfully be used as a credit collateral.

**Results and Discussion**

**Implementation of IPR as a Credit Guarantee in Singapore**

Generally, the concept of IPR as bank credit guarantee (collateral) was born and developed in Western countries with legal certainty which has been running well. The development of the creative industry has an impact on the need for capital. The creative economy is one of the industries that have a direct relationship with IPR (Syafrida et al., 2023). The application of IPR as a credit guarantee is based on the development of the business world where product owners as well as IPR owners need additional capital to support the sustainability of their business, so they conduct a credit agreement with IPR as a collateral object (Mulyani, 2012).

Based on a comprehensive understanding of IPR protection as a credit guarantee, this paper will focus on the implementation of IPR as a credit guarantee in Singapore. As we know today, Singapore has IPOS (Intellectual Property Office of Singapore) which was established in 2001 as a national authority that registers and takes responsibility for the administration of intellectual property rights (IPR) involving the registration and protection of IPR, and also provides consultation and education services regarding IPR management (Eka, et al., 2021). IPOS is a legal entity under Singapore’s Ministry of Law committed to build Singapore into an international IPR centre because IPR has the potency to help the world’s economic development (Rikap, & Flacher, 2020).

Singapore’s measures to achieve this goal are to equip companies to pledge their IPRs and provide financing, which is frequently the most important aspect of the production process. To facilitate IPR-based financing, Singapore developed a credible and reliable IPR valuation system to support deals. Singapore facilitates this valuation through two main areas: (i) providing credible IPR valuation guidelines and practices, and (ii) offering a common corporate governance framework to encourage enhanced IPR disclosure by companies.

The role of valuation institutions is very important, apart from being the main support, valuation institutions also play a role in valuing assets that will be used as collateral for banks. IPOS has collaborated with several valuation panels appointed through IPFS. This panel includes professional valuers such as (i) Baker McKenzie, Wong & Leow, (ii) Consor Intellectual Asset Management, (iii) Deloitte & Touche Financial Advisory Services, (iv) Duff & Phelps Singapore, (v) Ernst & Young Solutions, (vi) KPMG Services and (vii) Pricewaterhouse Coopers Advisory Services. However, other IPR appraisers support other financing channels, such as banks that have their appraisal agencies.

Singapore also works closely with the International Valuation Standard Council (IVSC), an international organization that develops independent global standards for
the valuation profession. The IVSC established the International Valuation Standard (IVS) in 1985 as a guide for professional appraiser globally (Ballwieser, 2020). This valuation standard is followed by professional valuation institutions in Singapore. The IVSC applies three approaches to valuation including:

1. Income Approach
   This approach is orientated towards the fair value of the asset determined by the amount of income generated from the asset. This approach generally requires two criteria must be met, which are: 1: primary economic benefits (including the ability to generate income, additional income, or cost reduction) and future benefits that can be predicted reasonably. This approach is frequently used to value intangible assets such as technology, contractual relationships, trade names, trademarks, licenses, franchise agreements, and non-competition agreements (Beyazkilic Koc & Yildirim, 2023).

2. Market Approach
   This approach determines the value of an asset by reference to market activity (e.g., transactions on similar assets). Thus, it involves conducting a field survey to find a similar asset to be valued as a comparison to the appraised object. There are also two criteria required to be complied with for this valuation:
   a. There is information available on arm's length transactions of a similar nature, and
   b. There is sufficient information to allow the appraiser to adjust for all significant differences between the subject assets and the ones involved within the transaction.

3. Cost Approach
   This approach determines the value of an asset from the cost of creating or replacing a similar asset or an existing asset providing similar service potential or utility. Simply put, this approach focuses on the costs incurred to create an IPR-based creative work. This approach can be used in cases where no other approach can be applied; however, the appraiser should strive to identify alternative methods before applying this method in circumstances where the asset involved does not satisfy the criteria as mentioned in paragraphs 60.2 and 60.3 of the IVS 105 valuation guidelines.

There are basically two methods in this approach: 1) replacement cost and 2) reproduction cost. Most intangible assets, however, do not have a physical form for reproduction, hence the replacement cost method is most commonly applied. This method considers the bank will not pay more for the asset compared to the cost of replacing the existing asset with a substitute with comparable utility or function (Parker, 2021).

To increase access to IP-based financing, in 2014 Singapore through IPOS appointed several financial institutions including DBS Bank Ltd, Evia Capital Partners Pte Ltd, Oversea-Chinese Banking Corporation (OCBC) Ltd, Resona Merchant Bank Asia Limited and United Overseas Bank (UOB) Ltd (Dewi, et al., 2021). IPOS has an
important role in helping companies to use their IPR to obtain financing from designated banks. There are at least three financing models applied, namely: 1) debt financing; 2) government grants; 3) equity financing (Intellectual Property Office of Singapore, 2021).

1. Use of IP in Debt Financing
   In 2014 Singapore pioneered the Intellectual Property Financing Scheme (IPFS) which allows IPR-based companies in Singapore to access financing by pledging their IPR as collateral to lending banks. Through this scheme, the Singapore Government shares the risk of loan losses (80 percent) of IP-backed loans with PFIs to encourage the acceptance of IP assets as collateral. In practice, the scheme requires a credit assessment and collateral valuation conducted by members of a panel of experts or appraisers appointed by IPOS. Companies seeking financing through this scheme bear the cost of IP valuation and other necessary administration. As an incentive to encourage the use of IPFS, IPOS subsidizes appraisals for successful applications (Fei, 2014).

2. Government-backed guarantees and funds
   In October 2015, Singapore introduced the Enterprise Financing Scheme-Venture Debt Program (EFS-VDP) to finance the growth of innovative companies. This form of financing targets high-growth startups that do not have significant tangible assets to pledge to conventional banks. Through this scheme, companies can use the loan for several purposes, including to (i) grow and expand existing capacity, (ii) diversify into other product lines, (iii) supplement working capital requirements, or (iv) undertake new projects (EFS, 2019).

3. Use of IP for equity financing
   Singapore also provides an ecosystem environment for innovative companies seeking equity investment from angel investors or venture capital (VC) firms. This provides an alternative for companies with early-stage IP, as banks typically provide financing for more mature IP where the risks can be better managed. In recent years, several top-tier VC firms such as Insignia Ventures, Sequoia Capital, Vickers Venture Partners, and Accel have injected funds into innovative and IPR-based companies in the Fintech, Biotech, Artificial Intelligence (AI), Urban Solutions and Sustainability, and Healthcare areas.

There are three stages in the process of applying for IP-based financing through the IP Financing Scheme (IPFS) in Singapore, consisting of the following (Kurnianingrum, 2017):

1. Feasibility Assessment (Stage 1)
   a. Verify that the company meets the eligibility requirements.
   b. Approach PFIs to obtain preliminary credit assessment.
   c. Complete the IPR asset valuation application form.
   d. Approach an IPR asset valuation agency from the Panel of Valuers (POV) for the valuation of IPR assets. The applicant must then obtain an IPR asset valuation report from the appointed valuation agency.
2. Loan Application (Stage 2)
   Complete all required forms and submit them to the PFI, along with the appraisal report and other supporting documents for the loan application, within four weeks from the date of the appraisal report.

3. Document Review (Stage 3)
   a. PFI will review the submitted documents and conduct a risk analysis.
   b. If approved, PFI will offer the loan to the applicant.

Singapore also realizes that in practice IPR-based financing or credit applications have a very high risk. This is also an obstacle when considering IA/IP as debt collateral, so its implementation has not been maximized. To overcome this risk, Singapore has two methods as preventive measures for mitigation efforts, i.e. enforcing IP/IA-based insurance, providing legal aid, and secondary market (Intellectual Property Office of Singapore, 2021).

Regarding insurance, in addition to loss-sharing with IPFS, through Enterprise of Singapore (ESG) Singapore also launched a Loan Insurance Scheme (LIS) providing guarantees against loan defaults for financiers. Under LIS, IPR-based companies can access short-term capital financing from PFIs along with insurance that will share loan defaults with PFIs in the event of insolvency.

Furthermore, for lenders to remain confident when providing financing, in 2019, IPOS in collaboration with Lloyd’s Asia and Antares Underwriting Asia, launched the Intellectual Property Insurance Initiative for Innovators (IPIII) to fulfill this need. The initiative aims to provide companies with protection in the form of insurance for legal expenses related to IP infringement. Under IPIII, patent, trademark, or design companies registered in Singapore can take out an insurance policy to enforce IP rights or defend against allegations of IP infringement. The insurance policy will cover the legal costs of pursuing and defending the action.

To create conducive and sustainable IP-based financing, Singapore is also working to create a secondary market for IP objects. This market provides a channel for financiers to sell their IPR collateral and creating liquidity and making IPR more attractive. In this regard, Singapore established the Innovation Marketplace by Innovation Partner for Impact (IPI) and the A*STAR Collaborative Commerce Marketplace (ACCM). IPI is a platform providing technology opportunities, expertise and resources at various technology readiness levels (TRLs) across international locations. IPI is a subsidiary of Enterprise Singapore creating opportunities for companies to grow beyond borders and accelerate their innovation processes through its access to a global innovation ecosystem and advisory services. IPI facilitates and supports companies’ innovation processes, covering commercialization and go-to-market strategies (Impact, 2023)

The ACCM platform, with over 1,000 companies, serves as a marketplace platform focused on commercially-ready technology-based business-to-business (B2B)
solutions. ACCM is a platform to enrich the innovation ecosystem by encouraging broad engagement between companies. Companies can network, learn & collaborate to develop unique commercial solutions and explore new business opportunities. ACCM currently has 25 industry sectors engaged in various fields, which can certainly help the secondary market process in Singapore get the right market share (Marketplace, 2023). Both platforms enable companies and technology providers to collaborate and find business solutions together, with IPR as the underlying enabler.

**Prospects of IPR as a Credit Collateral in Indonesia**

The development of the Creative Economy experiences several obstacles, such as limited access to banking (Rusadi & Benuf, 2020), promotion, infrastructure, capacity building of Creative Economy Actors, and synergy among stakeholders (Yuliandari, 2022). As an effort to overcome these obstacles, on July 12, 2022, President of the Republic of Indonesia Joko Widodo stipulated Government Regulation (PP) Number 24 of 2022 concerning the Implementation of the Creative Economy. This PP also gives hope to creative economy actors to get easy financing or credit from financial institutions.

The prerequisites for obtaining IP-based financing, creative economy owners must comply with several provisions as stated in article 7 which states that intellectual property-based financing is submitted by creative economy owners to bank financial institutions or non-bank financial institutions. In applying for IP-based credit, there are 4 (four) conditions that must be met, namely having a creative economy business financing proposal, having an agreement related to the intellectual property of creative economy products, and having a registration letter or intellectual property certificate.

Furthermore, in Article 8, bank and non-bank financial institutions will carry out several stages of verification of the business and letters or IP certificates belonging to creative economy actors and will provide an assessment of their IP which will be used as collateral. Some of the things that banks do include: verification of creative businesses, verification of letters including IP certificates, assessment of IP to be used as collateral, disbursement of funds to creative economic actors, and receipt of return of financing from creative economic actors according to the agreement.

Regarding the financing scheme, Article 9 states that in its implementation, financial institutions will provide loans by using IP as an object of debt collateral in the form of fiduciary guarantees for IP; contracts in creative economic activities; and collection rights in creative economic activities. Of the three guarantee models, fiduciary guarantee is the most popular, because it has been mentioned in the Copyright Law and Patent Law. In practice, a fiduciary guarantee is an ancillary agreement to the main agreement that creates an obligation for the parties to fulfill a performance (Helitha Muchtar et al., 2023).
Hereinafter, in Article 10, intellectual property that will be used as collateral for banks must fulfill two conditions, namely: first, the intellectual property must have been recorded or registered at the DJKI of the Ministry of Law and Human Rights, and second, the IP product has been well managed independently or has transferred its rights to other parties. Intellectual property that has been managed means intellectual property that has been commercialized by its owner or other parties based on an agreement. The design and development of IP-based financing schemes and IP-based creative economy product marketing systems (Jafar, 2023), it is expected to stimulate the development of the creative economy ecosystem in Indonesia.

This PP has actually sufficiently accommodated important instruments related to the implementation of IPR-based financing. Some of these instruments include legal regulations, government agencies, financial institutions, appraisal institutions, insurance institutions, and secondary markets. These instruments are adopted from Singapore's mechanism in implementing IPR as an object of debt collateral.

**Regulation**

In the first instrument, Indonesia issued Law Number 24 of 2019 concerning the creative economy then in 2022, with the same number, the president passed PP Number 24 of 2022 concerning implementing regulations for the Creative Economy Law. In the regulation, it has also been mentioned that the scheme used in the financing mechanism is to use a fiduciary guarantee scheme. But for now, of the various types of IPR that exist, only copyrights and patents have mentioned fiduciary guarantees as an agreement scheme (Disemadi, 2022). This means that IPRs that can be used as collateral for bank loans are only copyrights and patents. Whereas the creative economy sector is very diverse, and not only oriented towards copyrights and patents.

In addition, there are other obstacles from the regulatory side, the implementation of the two regulations (Law and PP No. 24) is still awaiting the revision of Bank Indonesia Regulation No. 14/15/PBI/2012 on Types of Credit Collateral. Article 43 of the PBI states that collateral that can be used as collateral includes:

1. Securities and shares that are actively traded on the Indonesian stock exchange or have an investment rating that is pledged.
2. Land, warehouses, and dwellings are secured by a mortgage.
3. A machine that is an integral part of the land and is secured by a mortgage.
4. Aircraft or ships with a size above 20 cubic meters are bound by a mortgage.
5. Motor vehicles bound by fiduciary security, and
6. A warehouse receipt that is bound by a security interest in the warehouse receipt.

Based on the collateral mentioned, collateral such as IPR has not been explicitly mentioned in the article above. It is because the authorities (BI and OJK) are still examining the prospects and feasibility of IPR including digital asset as a collateral for
bank loans (Mulyani et al., 2023). This includes studying the technical rules and implementation, because this is closely related to the issue of IPR valuation, the availability of a secondary market, and the implementation of execution in the event of default or bad credit. This is exacerbated by the lack of law enforcement officials who have a good understanding of IPR. (Riswandi, 2021).

**Government Institution**

Government institution serves as a place of registration, recording, and all matters relating to IPR protection in the creative economy. Indonesia currently has the Direktorat Jenderal Kekayaan Intelektual (DJKI), which is an implementing agency under, and responsible to, the Minister of Law and Human Rights, headed by a Director General. DJKI has the task of organizing the formulation and implementation of policies in the field of intellectual property under the provisions of laws and regulations (DJKI, 2021). If you look at the duties and functions of the DJKI, IPR protection only stops at the registration or recording stage. Even though it is related to the creative economy, IPR protection has a very broad meaning. IPR protection is not only about registration or documentation, but it should start from the beginning of making creative economy products until the products are marketed (Riswandi, 2021).

PP Number 24 of 2022, in chapter III which consists of 12 articles (articles 18 - 29) has mentioned the facilitation provided by the government and/or regional government which includes:

1. technical guidance, including business legality, IP management, quality improvement and product marketing (article 20).
2. business licensing services and/or integrated registration electronically (Article 21).
3. access to and/or assistance in financing, consisting of the provision of incentives and special financing schemes (Article 22).
4. business information/consultation services in the form of providing a data access portal and business consultation (Article 23).
5. marketing promotion assistance, consisting of promotional support through the media, and the provision of promotional programs (Article 24).
6. provision of a digital collective management system, consisting of product inventory, preparation of a list of business criteria, provision of a platform for product marketing, and integration of electronic systems (Article 25).
7. access to marketing, consisting of prioritization of procurement of goods and services, and establishing a communication forum between business actors (Article 26).
8. marketing incubation through designated institutions, in the form of providing resources and services to accelerate the service process (Article 27).
9. assistance in calculating the valuation of Intellectual Property, including assistance in calculating assets directly and establishing an IPR asset valuation institution (Article 28).
In Singapore, IPR protection in the creative economy involves cooperation between institutions, be it government agencies or private institutions. To build an ecosystem conducive to IPR-based financing, Singapore has two main steps to take, namely:

1. Government cooperation with private institutions as an effort to encourage IPR-based financing, and increase awareness and support so that IPR-based financing can run effectively.

2. Not only do IPR-based financing but there must be a more holistic strategy and approach that can answer the needs. As well as building a strong IPR portfolio to develop IPR management capabilities before applying for credit.

Ministries in Singapore have also collaborated to support the financing needs of the creative industries. There are three institutions formed namely IPOS, EDB, and ESG. IPOS (Intellectual Property Office of Singapore) is a legal entity under the Singapore Ministry of Law that is responsible for all IPR administration in Singapore. IPOS is committed to establishing Singapore as an international IPR center. In carrying out its duties, in 2014 IPOS established the Intellectual Property Financing Scheme (IPFS) which allows IP-based companies in Singapore to access financing by pledging their IP as collateral to banks. Through this scheme, the Singapore Government shares the risk of loan losses (80 percent) with PFIs to encourage the acceptance of IPR assets as bank collateral.

Additionally, the EDB (Economic Development Board) is a government agency under the Ministry of Trade and Industry which is responsible for enhancing Singapore as a global center for Business Development, Talent and Innovation. ESG (Enterprise of Singapore) is a government agency under the Ministry of Trade and Industry which is responsible for enterprise development. ESG helps companies build the capability to innovate and commercialize internationally. In doing so, ESG has introduced the Enterprise Financing Scheme-Venture Debt Program (EFS-VDP) to finance the growth of innovative companies. This form of financing targets high-growth startups that do not have significant tangible assets to serve as collateral for conventional bank loans. The form of financing undertaken by ESG is by injecting capital directly into startup companies through SEEDS Capital. ESG also provides consulting services related to IPR in the creative economy through its subsidiary Innovation Partner for Impact (IPI).

**Financial Institution**

Financial Institution has an important role in providing financing to debtors. To increase access to IP-based financing, in 2014 Singapore through IPOS appointed several financial institutions including DBS Bank Ltd, Evia Capital Partners Pte Ltd, Oversea-Chinese Banking Corporation (OCBC) Ltd, Resona Merchant Bank Asia Limited and United Overseas Bank (UOB) (Intellectual Property Office of Singapore, 2021). These five banks will provide IPR-based financing in Singapore. The Indonesian government has not yet appointed any banks that will be used as government partners in implementing IPR-based credit financing.
Valuation Institution

Valuation institution plays an important role in valuing IPR assets. In Indonesia, there is no clear concept related to valuation, appraisal institutions, and legal due diligence on IPR assets. Therefore, banks are still reluctant to apply IPR as credit collateral, in addition to the absence of changes to PBI number 14/15/PBI/2012, the absence of valuation institutions with a clear concept is also one of the causes, because this valuation requires certainty of the value of IPR assets to be pledged.

WIPO defines valuation as a process of identifying and measuring the financial benefit of an asset (Kipa, 2009). Regarding the valuation of IPR as an intangible asset, it is a process to determine the financial value of the subject of IPR (Kipa, 2009). This valuation is a tool to achieve a strategy in terms of development, resource allocation, and measuring the level of investment in order to achieve optimal needs.

The IPR valuation process includes collecting data and information related to intellectual assets, analyzing factors affecting the value of intellectual assets, and calculating the market value of these intellectual assets (Sarkar & Mitra, 2023). The results of IPR valuation can be used for various purposes, such as determining the selling price or transfer of intellectual assets, determining the value for accounting or tax purposes, determining the value for loan applications, or for legal purposes such as in litigation or contract negotiations (Wahyuni, 2020).

The government is currently working to create regulations as the basis for creating an appraisal institution with standards referring to international appraisal provisions. Regarding the stage, the regulation has been included in the 2023 National Legislation Program (Prolegnas) (Humas BPHN, 2023). The Ministry of Finance (KEMENKEU) as the institution housing the appraisers has submitted the draft law to the Coordinating Ministry for Maritime Affairs and Investment (KEMENKOMARVES) for immediate discussion by the House of Representatives (DPR).

Previously, the regulation on Appraisers and the results of appraisals conducted by Government Appraisers and Private Appraisers was still sectoral and no institution had been established or appointed as a regulator overseeing Government Appraisers and Private Appraisers (DPR, 2023). This sectoral regulation would certainly not be strong enough to cover all interests related to the Appraisal profession. Compared to other professions like Advocates, Notaries, and Accountants, only the Appraisal Profession has not been regulated by law. This makes the appraiser’s position still weak in case of problems related to appraisal, such as the interests of certain parties who feel harmed by the value issued by the appraiser, the emergence of lawsuits, misuse of appraisal results, and others. Therefore, the establishment of the Appraisal Law is very important because it can provide legal certainty, provide standardized appraisal models, and legal protection for both appraisers and the public (Partisipasiku, 2023).
The other thing needs to be done is to conduct due diligence on the IPR being assessed. Due diligence is one of the activities that requires special competence to obtain data and analyze data. It can also be interpreted as a process of examining the intellectual assets owned by a company before carrying out business transactions or investments involving these assets, including making IPR as a credit collateral. The aim of due diligence is to ensure that the company or business entity has legal rights to its intellectual assets, there are no conflicts with other parties, and the assets have a value in accordance with market value (Kurnianingrum, 2017).

The concept of due diligence is also mentioned in the provisions of Article 6 of the Fiduciary Guarantee Law, which states that the fiduciary guarantee deed at least contains the identity of the parties, data on the main agreement, a description of the object used as the object of the guarantee, the value of the guarantee, and the value of the object used as the object of the guarantee.

Article 12 paragraph (3) of PP Number 24 of 2022 states the following criteria for appraisal institutions:
1. have a public appraiser license from the ministry that organizes government affairs in the field of state finance.
2. have competence in the field of Intellectual Property valuation; and
3. registered with the ministry that organizes government duties in the field of a creative economy.

Intellectual property appraisers are given special authority by the Ministry of Finance to conduct and calculate the valuation value of intellectual property that will be used as an object of credit guarantee. Article 12 paragraph (1) states that there are four valuation approaches: cost approach, market approach, income approach, and other valuation approaches under applicable valuation standards.

Article 12 as a whole mentions the tasks and things that need to be considered when conducting the valuation of intellectual property objects. Article 12 explicitly states that two appraisers have the authority to conduct the valuation process. The appraisers are the "intellectual property appraiser" and the "appraisal panel" mentioned in paragraph (6) which is a group of people appointed by the financial institution. The duties of the "intellectual property appraiser" are mentioned in Article 12 paragraph (5), which are:
1. conduct an assessment of the Intellectual Property that will be used as collateral;
2. conduct a market analysis of Intellectual Property that will be used as collateral; and/or
3. review the analysis report on the use of Intellectual Property that has been used in the industry.

The duties of the assessment panel as referred to in paragraph (7) are to conduct an assessment of Intellectual Property that is not assessed by the Intellectual Property appraiser for Creative Economy Actors who apply for Financing. So, we can conclude
that both have different definitions and tasks. Intellectual Property Appraisers come from outside parties (third parties) who carry out financing with IPR guarantees, while the appraisal panel comes from the party providing credit, in this case the financing institution itself. Although different, both are parties having special criteria and abilities, as well as competence in the field of intellectual property with training and certification of eligibility being examined (Dedi, 2023).

In terms of valuation, Singapore facilitates through two key areas: (i) by establishing credible IPR valuation guidelines and practices, and (ii) by providing a general framework on corporate governance to encourage better IPR disclosure by companies. This means Singapore has been referring to the IVSC guidelines as an institution creating internationally standards for appraisal (Ballwieser, 2020). It certainly has implications for products valued by Singaporean appraisal institutions based on the institution’s guidelines. The products or IPR assessed can be made as a bank collateral internationally because they have referred to the provisions of international valuation. Some banks and institutions referred on IVSC guidelines include: Singapore Institute of Surveyors and Valuers, Institute of Valuers & Appraisers of Singapore, United Overseas Bank Ltd, Sea Ltd, DBS Bank Ltd, OCBC Bank.

Indonesia has an institution joining the IVSC, namely the Indonesian Society of Appraisers (ISA), or in Indonesian is often called the Masyarakat Profesi Penilai Indonesia (MAPPI) (Amanupunjo, & Prastiwi, 2020). Nevertheless, PP Number 24 of 2022 does not mention or even slightly mention ISA or MAPPI.

**Insurance Institution**

This institution is very important, especially in convincing banks to be willing to provide financing without any hesitation if a default or bad credit occurs. PP Number 24 does not even discuss insurance, even though insurance plays an important role when defaults occur.

Credit insurance in Indonesia is regulated in the Minister of Finance Regulation Number 124/PMK.010/2008 on the Implementation of Credit Insurance and Suretyship Business Lines. As mentioned in article 1 paragraph (2), Credit Insurance is a general insurance business line that provides guarantees for the fulfilment of financial obligations of credit recipients if the credit recipient is unable to fulfil its obligations in accordance with the credit agreement.

Like other insurance in general, credit insurance serves to protect something valuable from financial risks that appear. In this case, credit insurance provides protection and guarantees for debtors if they die due to accidents, illness (natural), disability due to accidents, layoffs, or experience other events stipulated in the insurance policy, making them unable to continue their obligations to pay off loans to Banks or Creditors (creditors) (Redaksi, 2021). Therefore, against these risks, the Insurance company as the insurer is obliged to pay off the loan or obligation of the insured.
This insurance provides benefits for both parties. For debtors, the advantages received are the repayment of the remaining credit without arrears, the repayment of interest on the payment of the remaining credit and arrears, and making loan applications easier for debtors. The existence of a guarantee shows that the insurance company will cover the repayment of credit reduces the risk of default, so the loan application by the debtor will be processed more easily. As for creditors, credit insurance provides a guarantee of repayment for loans issued by creditors. Therefore, the risk of experiencing losses due to default can be mitigated (Namiera et al., 2022).

There are currently two types of credit insurance in Indonesia, namely consumptive credit insurance and productive credit insurance. Consumptive credit insurance can be utilized for coverage of the risk of default on consumptive credit, for example the risk of default in Home Ownership Loans (KPR) and Motor Vehicle Loans (KKB). Meanwhile, productive credit insurance is used to cover the risk of default on productive credit, for example the risk of default on People's Business Credit (KUR) (Listiani & Julianty, 2022).

These insurance policies are intended for anyone who applies for a loan from a bank, rural bank (BPR), or finance company, whether it is an individual debtor or the corporate and Small and Medium Enterprises (SMEs) segments. For individual debtors, this insurance can be utilized when applying for KPR, KKB, or credit card loans. Meanwhile, for the corporate segment, this insurance can be utilized when applying for KUR (Listiani & Julianty, 2022).

The types of insurance mentioned above are intended for loans without collateral. For types of credit accompanied by collateral such as IPR using a guarantee mechanism, in this case a fiduciary guarantee. Guarantee and insurance are two different things. In its implementation, guarantee uses a loss avoidance mechanism, while insurance uses a loss funding mechanism (Fauziyah, 2022). Even though it has used a guarantee mechanism, it does not rule out the possibility that the implementation of IPR-based credit will also involve insurance so that no party is harmed.

The use of credit insurance runs in parallel with the valuation of IPR assets. If the assessment is carried out according to a standardized method and has been carried out by a credible appraisal institution by referring to one type of assessment, the risk of defaulted credit leading to default can be avoided. Otherwise, if valuation standards have not been created, and credible appraisal institutions have not been formed, then the application of credit insurance on IPR will experience obstacles. This is because financial institutions realize that every grant of credit must contain risk.

Singapore has been aware of the fact that in practice IPR-based financing or credit granting carries a very high risk. This risk is not only related to the financial ability of the debtor to repay the principal loan along with the interest incurred, but also the risk of default due to unexpected events. This also becomes an obstacle when considering IA/IPR as collateral for debt, so the implementation has not been optimal.
Therefore, Singapore launched the Loan Insurance Scheme (LIS) providing guarantees against loan defaults for financiers. Under the LIS, IP-based companies can access short-term capital financing from PFIs accompanied by insurance to share loan defaults with PFIs in case of bankruptcy (Intellectual Property Office of Singapore, 2021).

Secondary Market
The last instrument is the secondary market for IPR. The absence of an IPR secondary market ecosystem is a major obstacle in the implementation of IPR-based financing. This is because banks can execute the pledged IPR, but to get a commensurate value for the financing that has been provided, banks have difficulty when they want to sell it back to the secondary market because the IPR secondary market ecosystem in Indonesia has not been built.

Singapore has also realized this, they are trying to create a secondary market for IPR objects (Eka, et al., 2021). In this case, Singapore formed the Innovation Marketplace which is managed by two institutions, namely: Innovation Partner for Impact (IPI) and A*STAR Collaborative Commerce Marketplace (ACCM). The Innovation Marketplace by IPI is a platform that provides technology opportunities, expertise, and resources at various technology readiness levels (TRLs) across international locations (Lidia, et al., 2017). The A*STAR platform, with over 1,000 companies, serves as a marketplace platform focused on commercially ready technology-based business-to-business (B2B) solutions. Both platforms enable enterprises and technology providers to collaborate and find business solutions together, with IPR as the underlying enabler.

Conclusion
Overall, PP Number 24 of 2022 has accommodated quite a number of important instruments related to the implementation of IPR-based financing. Some of these instruments include legal regulations, government institutions, financial institutions, valuation institutions, insurance institutions, and secondary markets. In the second instrument, Indonesia currently has a Directorate General of Intellectual Property (DJKI) which, based on its duties and functions, IPR protection only ends at the registration or recording stage. Whereas if it is related to the creative economy, then IPR protection has a very broad meaning. In the third instrument, until now the government has not appointed any banks that will be partners with the government to carry out IPR-based credit financing. Then the fourth instrument relates to an appraisal institution playing an important role in conducting an assessment of the IPR to be pledged. In Indonesia, there is no clear concept regarding the valuation of IPR assets, appraisal institutions, and legal due diligence on IPR assets. The fifth instrument is an insurance institution. PP Number 24 does not even mention insurance. Even though insurance plays an important role in the event of bad credit. The sixth instrument is the secondary market for IPR. The absence of an IPR
secondary market ecosystem is a major obstacle in the implementation of IPR-based financing.

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