

Legal Characteristics of Patents as Collateral Assets in Banking Transactions

Habibah Fatihatur Rizqo*

University of Jember, Indonesia

Dyah Ochtorina Susanti

University of Jember, Indonesia

Ainul Aziah

University of Jember, Indonesia

*Corresponding Author's Email: habibahicha2@gmail.com

Article	Abstract
How to cite: Habibah Fatihatur Rizqo, et al., 'Legal Characteristics of Patents as Collateral Assets in Banking Transactions' (2026) Vol. 7 No. 2 Rechtenstudent Journal Sharia Faculty of KH Achmad Siddiq Jember State Islamic University. DOI: 10.35719/rch.v7i2.426 Article History: Submitted: 08/03/2026 Reviewed: 16/03/2026 Revised: 08/04/2026 Accepted: 20/04/2026 ISSN: 2723-0406 (printed) E-ISSN: 2775-5304 (online)	Patents as part of intellectual property possess economic value that can potentially be utilized as collateral in banking financing. The development of Indonesian positive law has normatively recognized patents as fiduciary collateral, particularly following amendments to patent legislation and the enactment of creative economy regulations. Nevertheless, in banking practice, patents have not yet been fully accepted as loan collateral due to various juridical and technical constraints. This article aims to analyze the legal characteristics of patents as objects of fiduciary security, examine their regulation based on the principle of legal certainty, and propose future regulatory directions to enable the effective operationalization of patents as loan collateral. This research employs normative legal research methods using statutory and conceptual approaches. The findings indicate that although patents normatively qualify as fiduciary collateral, the absence of valuation standards, execution mechanisms, and integrated registration systems results in insufficient legal certainty. Therefore, comprehensive implementing regulations and an integrated legal framework are required to optimize patents as banking collateral instruments. Keywords: <i>Patent, Fiduciary Security, Legal Certainty, Banking.</i> Abstrak Hak paten sebagai bagian dari kekayaan intelektual memiliki nilai ekonomi yang berpotensi dimanfaatkan sebagai objek jaminan utang dalam pembiayaan perbankan. Perkembangan hukum positif Indonesia telah membuka ruang normatif bagi penggunaan paten sebagai objek jaminan fidusia, khususnya setelah perubahan Undang-Undang Paten dan lahirnya regulasi ekonomi kreatif. Namun, dalam praktik perbankan, paten belum sepenuhnya dapat diterima sebagai agunan kredit karena berbagai kendala yuridis dan teknis. Artikel ini bertujuan untuk menganalisis karakteristik hukum hak paten sebagai objek jaminan fidusia, mengkaji pengaturannya berdasarkan prinsip kepastian hukum, serta merumuskan arah pengaturan ke depan agar paten dapat dioperasionalkan secara efektif sebagai jaminan utang. Penelitian ini menggunakan metode penelitian hukum normatif dengan pendekatan perundang-undangan dan konseptual. Hasil penelitian menunjukkan bahwa meskipun paten secara normatif memenuhi syarat sebagai objek jaminan fidusia, belum tersedianya standar valuasi, mekanisme eksekusi, serta sistem pendaftaran terintegrasi menyebabkan belum terpenuhinya kepastian hukum. Oleh karena itu, diperlukan regulasi turunan yang komprehensif dan sistem hukum yang terpadu agar paten dapat berfungsi optimal sebagai instrumen pembiayaan perbankan. Kata Kunci: <i>Hak Paten, Jaminan Fidusia, Kepastian Hukum, Perbankan.</i>

Introduction

Global economic developments demonstrate a fundamental shift from a natural resource-based economy to a knowledge and innovation-based economy. In this context, intellectual property occupies a strategic position as an economic asset with high commercial value. Patents, as a form of intellectual property, are no longer understood solely as an instrument of legal protection for inventors, but also as an asset with the potential to be utilized in financing and banking activities.¹ In banking practice, collateral is a key instrument for mitigating credit risk. To date, banking in Indonesia has been dominated by the use of conventional collateral in the form of land, buildings, and other tangible movable assets. This reliance on conventional collateral has limited access to financing for innovation- and technology-based businesses, which generally lack high-value physical assets.² This situation demonstrates a mismatch between the characteristics of the modern economy and the collateral instruments used in banking practices.

Patents fulfill the requirements of being an intangible movable object with economic value and transferability. Law Number 42 of 1999 concerning Fiduciary Guarantees explicitly opens the possibility for intangible movable objects to be used as collateral. Furthermore, Law Number 65 of 2024 concerning Patents recognizes patents as exclusive rights that can be transferred to other parties. Therefore, there are no legal barriers to the use of patents as collateral for debt in banking.

This normative recognition has not been followed by effective implementation. In practice, banking institutions still demonstrate a high degree of caution in accepting patents as credit collateral. This hesitation is not caused by a lack of legal basis, but rather by the high legal and technical risks inherent in the nature of patents. These risks include the difficulty of assessing the economic value of patents, the limited protection period, and the unclear enforcement mechanism in the event of a debtor's default.³

Valuation issues are central to the use of patents as collateral. Unlike tangible assets, which are relatively stable and easily valued, the economic value of patents depends heavily on the invention's commercial potential, technological relevance, and market dynamics. To date, Indonesia lacks a standard for patent valuation that banking institutions can use as a reference. As a result, patent valuations tend to be subjective and do not provide legal certainty for creditors.⁴ Furthermore, legal administration is also a hindering factor. The patent registration system falls under the authority of the Directorate General of Intellectual Property, while fiduciary guarantee registration is handled by the Directorate General of General Legal Administration. The lack of integration between the two systems results in the principle of publicity in guarantee law not functioning optimally, potentially giving rise to legal conflicts of interest over a single patent object.⁵

Another equally important issue is the unclear enforcement mechanism for patent rights as fiduciary collateral. The Fiduciary Guarantee Law does grant creditors executorial rights, but

¹ Lon L. Fuller, *The Morality of Law* (New Haven: Yale University Press, 1969), 39

² Trias Palupi Kurnianingrum, "Hak Kekayaan Intelektual sebagai Jaminan Kredit Perbankan," *Negara Hukum* Vol. 8, No. 1 (2017): 45

³ Sri Mulyani, "Pengembangan Hak Kekayaan Intelektual sebagai Collateral," *Jurnal Dinamika Hukum* Vol. 12, No. 3 (2012): 521

⁴ Reni Budi Setianingrum, "Mekanisme Penentuan Nilai Ekonomis Hak Kekayaan Intelektual sebagai Objek Jaminan," *Jurnal Media Hukum* Vol. 23, No. 2 (2016): 178

⁵ Rachmadi Usman, *Hukum Jaminan Keperdataan* (Jakarta: Sinar Grafika, 2013), 201

it does not specifically regulate the enforcement mechanism for patents. Given that patents are exclusive rights related to the sustainability of inventions, their enforcement mechanism cannot be equated with the enforcement of tangible objects. This regulatory gap further reinforces banks' hesitation in accepting patents as credit collateral.⁶

Practices in several countries demonstrate that intellectual property can be effectively utilized as collateral for financing if supported by an adequate legal system. Singapore, for example, has developed intellectual property-based financing with regulatory support, a valuation institution, and an integrated administrative system. This experience demonstrates that the primary issue lies not in the nature of patents as collateral, but rather in the regulatory design and legal infrastructure that support their implementation.⁷

Based on the above description, this article aims to analyze the legal characteristics of patent rights as objects of debt collateral in banking, assess their regulations from the perspective of legal certainty, and formulate the direction of future regulations so that the use of patent rights as fiduciary collateral can be carried out effectively and fairly.

Research Method

This research is a prescriptive, normative legal study. The approaches used include a statute approach and a comparative legal approach. The statute approach examines legal provisions governing patents, fiduciary guarantees, and creative economy policies. Meanwhile, the comparative approach examines intellectual property-based financing practices in other countries to inform recommendations.

Primary legal materials consist of Law Number 42 of 1999 concerning Fiduciary Guarantees, Law Number 65 of 2024 concerning Patents, and Government Regulation Number 24 of 2022 concerning the Creative Economy. Secondary legal materials include textbooks, scientific journals, and opinions of legal experts. All legal materials were analyzed qualitatively using deductive reasoning methods.

Results and Discussion

Legal Certainty and Enforceability of Patents as Collateral in Banking Transactions

Legally, patents are a form of intellectual property rights that are classified as intangible movable property. This qualification places patents within the legal regime of property, so they can theoretically be the object of legal action, including being used as collateral for debt.⁸ The material characteristics of a patent lie not in its physical form, but rather in the exclusive rights vested in the patent holder to exploit the invention in the technological field.

Patents fulfill all three elements. The economic value of a patent derives from the exclusive rights vested in the holder to use the invention personally or to license it to others. This exclusive right provides the potential for quantifiable financial gain. Furthermore, the Patent Law explicitly stipulates that patent rights may be transferred through a written agreement, inheritance, gift, or other legally permitted means.⁹

In the context of guarantee law, Law Number 42 of 1999 concerning Fiduciary Guarantees expands the scope of guarantee objects beyond tangible movable objects to include

⁶ Rachmadi Usman, *Hukum Kebendaan* (Jakarta: Sinar Grafika, 2021), 112

⁷ World Intellectual Property Organization (WIPO), *Using Intellectual Property as Loan Collateral* (Geneva: WIPO, 2013)

⁸ Rachmadi Usman, *Op.Cit.*,

⁹ Law Number 65 of 2024 on Patents.

intangible movable objects. This provision normatively opens up space for patent rights to become the object of fiduciary guarantees. Therefore, from a legal dogmatic perspective, there is no conflict between the nature of patent rights and the concept of fiduciary guarantees.¹⁰

However, this normative position has not yet fully translated into the acceptance of patents as collateral for debt in banking practice. Banks generally still view patents as high-risk assets, primarily due to their intangible nature and fluctuating economic value. This situation indicates that normative recognition alone is insufficient to make patents an effective collateral instrument.

As collateral for debt, patents have fundamentally different characteristics than tangible movable property. First, patents are intangible, so their existence can only be proven through administrative registration with the Directorate General of Intellectual Property. This situation requires an accurate and integrated administrative system to ensure certainty regarding the ownership and legal status of patents used as collateral.¹¹

Second, the economic value of patents is not static, but rather depends heavily on the level of utilization of the invention, market conditions, and technological relevance. Unlike land or motor vehicles, which have relatively stable values, patents can experience significant increases or decreases in value within a short period of time. Therefore, assessing patents as collateral requires a specific valuation approach based on the potential for commercialization and the sustainability of the technology.¹²

Third, patents have a limited protection period. The Patent Law limits patent protection to twenty years from the date of filing the application. This time limit directly impacts the suitability of patents as collateral for long-term debt. Banks, as creditors, must take the patent's validity period into account to prevent the collateral's value from decreasing before the debtor's obligations expire.¹³

Fourth, patent rights are transferable, either through assignment or licensing. This characteristic serves as a normative basis that strengthens the legitimacy of patents as objects of fiduciary security. However, the transfer and encumbrance of a patent must be made in writing and recorded to maintain the principle of publicity in security law. Without clear registration, the validity of property rights over a patent has the potential to give rise to future legal disputes.¹⁴

Based on these characteristics, it can be asserted that patents do meet the requirements for debt collateral, but require different legal treatment than conventional collateral. This difference in characteristics is the main reason why banks remain cautious in accepting patents as credit collateral.

The regulation of patents as fiduciary collateral in Indonesia has a fairly strong legal basis. Law Number 42 of 1999 concerning Fiduciary Collateral does not limit collateral to tangible objects but also includes intangible movable objects. This provision opens the door for patents to be used as fiduciary collateral.¹⁵ Furthermore, the Patent Law and Government Regulation No. 24 of 2022 concerning the Creative Economy strengthen this legitimacy by

¹⁰ Law Number 42 of 1999 on Fiduciary Guarantees.

¹¹ Sri Mulyani, *Op.Cit*

¹² Reni Budi Setianingrum, *Op.Cit*.

¹³ Law Number 65 of 2024 on Patents

¹⁴ Trias Palupi Kurnianingrum, "Hak Kekayaan Intelektual sebagai Jaminan Kredit Perbankan", *Negara Hukum*, Vol. 8 No. 1, 2017, 45

¹⁵ Law Number 42 of 1999 on Fiduciary Guarantees

recognizing intellectual property as an economic asset that can be utilized in financing activities. Therefore, there is no legal prohibition for banks to accept patents as collateral for credit.

From the perspective of legal certainty, as expressed by Lon L. Fuller, this regulation does not fully meet the principle of internal legal morality.¹⁶ Legal certainty is determined not only by the existence of written norms, but also by their clarity, consistency, and enforceability in practice. One major problem is the lack of a standard for assessing the economic value of patents. To date, there are no regulations that provide detailed and uniform patent valuation methods. As a result, banking institutions lack objective guidelines for determining the suitability of patents as collateral. This situation creates legal uncertainty and high economic risk for creditors.¹⁷

Another problem is the lack of a certified and nationally recognized intellectual property appraisal institution. Without a competent appraisal institution, patent valuation results are potentially subjective and legally irresponsible. This further reinforces banks' hesitation in accepting patents as collateral for loans. Furthermore, the fiduciary guarantee registration system and the patent registration system still operate separately. The lack of integration between the Directorate General of Intellectual Property and the Directorate General of General Legal Administration results in the principle of publicity in collateral law not functioning optimally. This situation has the potential to give rise to ownership conflicts and disputes over priority of rights if the same patent is encumbered by more than one legal interest.¹⁸

The enforcement aspect is a crucial element in collateral law. The Fiduciary Guarantee Law grants creditors the right of execution in the event of default by the debtor. However, this regulation does not specifically address the enforcement mechanism for collateral, such as patents. Patent enforcement cannot be equated with the enforcement of tangible objects. Patents are exclusive rights related to inventions and the sustainability of innovation. If executed improperly, it has the potential to eliminate the economic value of the patent or even destroy the invention in question. Therefore, the patent enforcement mechanism must be carefully designed and adapted to the nature of exclusive rights.¹⁹ The lack of clear enforcement regulations has made banking institutions reluctant to accept patents as collateral. Banks tend to choose collateral that is easily enforced and offers certainty of value. This situation again demonstrates that the main problem lies not in normative recognition, but rather in the inadequate design of the legal system.

Future legal regulation regarding patents as collateral is not only a necessity in the context of developing a national legal system, but also an inevitability in the development of Indonesia's modern economy. As the country enters an era of technology-based innovation, where research and creativity become the centers of economic growth, the law can no longer rely on the old paradigm that focused on physical assets such as land, buildings, or vehicles. Instead, the law must transform to accommodate the new reality: that a nation's economic value is no longer determined by the size of its land, but by the extent to which the nation is able to create new knowledge, new technologies, and new solutions through patent-protected

¹⁶ Lon L. Fuller, *Op.Cit.*

¹⁷ Jessica Francis Gunawan & Yunanto, "Implementasi HKI sebagai Jaminan Kredit Perbankan", *Syntax Literate*, Vol. 7 No. 12, 2022, 13456

¹⁸ Rachmadi Usman, *Op.Cit.*

¹⁹ World Intellectual Property Organization (WIPO), *Using Intellectual Property as Loan Collateral* (Geneva: WIPO, 2013)

innovation. Thus, legal reform is not merely normative reform, but a form of awareness that intangible assets have become a strategic resource for the modern state.²⁰

The development of this legal regulation is increasingly urgent because, although Law Number 13 of 2016 concerning Patents has opened the opportunity for patents to be used as collateral, the operational mechanisms necessary to make this happen are still lacking. This situation creates a gap between the law on the books and the law in practice. De jure, patents can be used as collateral, but de facto, financial institutions, particularly banks, continue to refuse to use patents as collateral because the mechanisms for encumbrance, assessment, and enforcement of patents are not yet fully regulated.

Future legal regulation must begin with regulatory harmonization. This harmonization includes adjusting the Fiduciary Guarantee Law to explicitly state that intellectual property rights, including patents, are legally valid collateral. The absence of an explicit mention creates legal uncertainty that not only harms patent holders but also hinders banking institutions from extending credit to businesses holding high-value intellectual assets. When an object is not expressly mentioned in the collateral law, banks will reject it, citing legal ambiguity. As institutions obligated to apply the principle of prudence, banks require assurance that the collateral has a clear normative basis.

The Fiduciary Guarantee Law is a crucial step for patents to gain full recognition as collateral objects.²¹ This revision can be strengthened by the development of implementing regulations in the form of a Government Regulation or a Regulation of the Minister of Law and Human Rights to regulate the procedures for encumbering patents as collateral, including requirements, administrative procedures, recording, transfer, and enforcement mechanisms. The Financial Services Authority (OJK) must issue regulations providing technical guidance to banks regarding the procedures for granting credit using patents as collateral. Without OJK sectoral regulations, banks will lack the internal legitimacy to accept patents as collateral. Therefore, regulatory harmonization requires not only a revision of the law but also detailed and technical implementing regulations.

Future legal arrangements must also establish an integrated recording system between the Directorate General of Intellectual Property (DJKI), the Ministry of Law and Human Rights, and the Financial Services Authority. This recording system is crucial because the principle of publicity in collateral law requires that all collateral be publicly available to third parties. Currently, the DJKI does not have a feature that allows for the recording of collateral status in the patent database. As a result, patents that have been secured are not visible to the public or other creditors through the patent system. This creates the risk of double collateral, where a debtor pledges the same patent to multiple creditors without their knowledge. The primary purpose of collateral recording is to prevent multiple collateralization, which can lead to disputes.²²

Future legal arrangements must also address patent valuation. Valuation is one of the weakest points in Indonesia's current legal system. The lack of a national standard for patent valuation makes patent values highly subjective and unreliable as a basis for granting credit. Banks require patent values that are scientifically and legally justifiable. Therefore, the

²⁰ World Bank, *The Global Innovation Index 2023: Innovation in the Digital Age*, 2023, 4

²¹ Ahmad M. Ramli, *Hukum Kekayaan Intelektual: Penyempurnaan Sistem Perlindungan di Indonesia*, PT Alumni, Bandung, 2019, 120

²² Reni Budi Setianingrum, "Pentingnya Publisitas dalam Pembebanan HKI sebagai Jaminan," *Jurnal Media Hukum*, Vol. 23 No. 2 (2016), 178

government must immediately establish an IPR valuation agency that operates based on internationally recognized methodological standards. This agency must employ experts who understand technological, economic, legal, and market aspects to conduct comprehensive assessments. Patent valuation cannot be carried out by just any party, as it requires multidisciplinary competency.²³

Appraisal institutions must develop national standards for patent valuation, encompassing the income approach, the market approach, and the cost approach. The income approach is used to assess the potential cash flow from a patent, the market approach is used to compare the patent with similar patents previously traded, and the cost approach is used to assess the research costs incurred to develop the patent. These standards must be regulated in a Ministerial Regulation or an OJK Regulation so that the assessment results have legal force and can be used as a basis for banks in determining collateral value. With national valuation standards, banks will be more confident in accepting patents as collateral, and patent holders will have broader access to financing.²⁴

Future legal arrangements must address the mechanism for encumbrance of patents as collateral for debt. Encumbrances must be executed through a notarial deed to ensure strong evidentiary power in the future. Notaries should be provided with operational guidelines through regulations of the Minister of Law and Human Rights regarding procedures for verifying patent ownership, checking patent status, and including execution clauses in collateral deeds. Notaries should also be authorized to access the DJKI database to ensure that patents intended to be encumbered are legally registered and not in dispute. This will ensure the encumbrance process is more orderly and transparent, and provide protection for creditors.²⁵

Future legal arrangements must also address the crucial role of notaries in the encumbrance, recording, and execution of collateral. Notaries should be provided with specific training on the characteristics of patents, how to verify patent status, and how to draft collateral deeds that contain complete and clear execution clauses. Notaries should also be granted official access to the DJKI database so they can verify that patents to be encumbered with collateral have been legally registered, are not in dispute, and are not encumbered by other parties. This will strengthen the role of notaries in the legal system and provide protection for creditors and debtors.²⁶

The government must provide regulations that enable integration between the innovation ecosystem, the financing ecosystem, and the legal ecosystem. This integration can be achieved through the establishment of a special body to coordinate patent commercialization, patent assessment, financing, and dispute resolution. This body can serve as a liaison between the Directorate General of Intellectual Property Rights (DJKI), the Financial Services Authority (OJK), the Indonesian Chamber of Commerce and Industry (KADIN), research institutions, and financing institutions. With a coordinating body, the IPR-based financing ecosystem will operate more efficiently and integratedly.

These legal reform measures are ultimately expected to change the public and government's perspective on patents. Patents are no longer viewed as symbolic assets, but as strategic assets with real economic value and can be used as financing instruments. Thus, innovation does not stop in the laboratory or on the researcher's desk, but can move forward

²³ Eddy Damian, *Hukum Kekayaan Intelektual*, Alumni, 2009, 72–75

²⁴ Direktorat Jenderal Kekayaan Intelektual, *Pedoman Penilaian Aset Intelektual*, DJKI, 2022

²⁵ Ikatan Notaris Indonesia, *Pedoman Pelaksanaan Tugas Notaris*, 2020.

²⁶ Habib Adjie, *Hukum Notaris Indonesia*, PT Refika Aditama, 2017, 143–150.

and provide social and economic benefits to the wider community. Herein lies the philosophy of legal reform, which considers not only the text of the law but also how law can act as an instrument of community empowerment, an instrument of justice, and an instrument of development.

Future regulatory requirements will also cover the enforcement of collateral in the event of default by the debtor. Fiduciary collateral generally involves execution using an executorial title on the fiduciary collateral certificate, which allows the creditor to execute the object without a court decision. However, in the case of patents as collateral, the execution procedure is not the same as the execution of movable objects such as motor vehicles or machinery. Patents lack a physical existence that can be seized directly, so their execution must be carried out through a change of ownership status within the intellectual property administration system or through the sale of licensing rights to a third party. Therefore, harmonization must regulate the specific enforcement mechanisms for intellectual property rights, including which authority is authorized to make transfers, how patent auction proceeds are managed, and how protection is provided to third parties who have contractual relationships with the patent holder.²⁷

Integration between the Directorate General of Intellectual Property and the judiciary is needed to oversee the execution of patent rights as collateral. The Commercial Court, which currently handles intellectual property disputes, could be given additional authority as the institution authorized to grant approval or ratification for the execution of patent collateral. This way, the enforcement process would remain subject to the principle of due process of law, but would not lose its flexibility and efficiency. Furthermore, an intellectual property information system needs to be developed to transparently list the status of the fiduciary collateral imposed on a patent, including whether the patent is in dispute, in the licensing process, or has been transferred due to execution.

Harmonization of regulations is also closely related to the implementation of the *lex specialis* principle in the Indonesian legal system. Fiduciary security law is a special law that regulates the encumbrance of objects as collateral outside of pawns and mortgages, while patent law is a special law that regulates exclusive rights to inventions in the technological field. When these two special legal systems intersect, integrative derivative regulations are needed to prevent overlap or legal vacuum. Using a sectoral approach alone will only exacerbate the dysfunction of the legal system, therefore, a cross-sectoral and interdisciplinary approach is needed to establish new norms that bridge the fiduciary system and the intellectual property system. One way is to establish a Government Regulation or Presidential Regulation that bridges the two systems formally and operationally.²⁸

Future regulations regarding patents as objects of fiduciary guarantee must be based on the needs of evolving socio-economic realities and not simply follow normative legal traditions that tend to stagnate. The increasing dependence of the national economy on the technology and innovation sector demands legal reform that can facilitate and encourage the development of a sustainable innovation ecosystem. By providing legal certainty that patents can be used as fiduciary guarantees, inventors will be encouraged to be more active in creating new technologies, and financial institutions will have greater confidence in funding technology-based projects. Thus, this harmonization not only functions legally but also serves as a tool to encourage innovation-based national economic development.

²⁷ M. Hadi Shubhan, *Hukum Kepailitan: Prinsip, Norma, dan Praktik di Peradilan* (Jakarta: Kencana, 2019), 178.

²⁸ Andrian Sutedi, *Hukum Jaminan: Hak Jaminan Kebendaan* (Jakarta: Sinar Grafika, 2017), 150.

Future patent regulations should also address the transfer of patent rights across jurisdictions, which are used as collateral for international financing. In the era of globalization and free trade, patents are often owned by foreign entities or used as the subject of cross-border agreements. Therefore, the fiduciary guarantee system must be able to adapt to international legal principles, including the recognition of patent guarantees imposed abroad, the principle of good faith in the transfer of rights, and international dispute resolution mechanisms. Indonesia must be active in international forums such as WIPO, ASEAN, and global trade organizations to encourage the convergence of norms regarding intellectual property guarantees so that national interests remain protected within a transnational legal framework.²⁹

Future regulations regarding patents as objects of fiduciary collateral must also consider the sustainability and dynamics of rapidly changing technology. Patents have a limited protection period, and in some sectors, such as information technology, changes and updates occur within months. Therefore, the collateral scheme needs to specifically regulate how to treat patents whose validity period is about to expire or whose value has decreased due to the emergence of substitute technologies. This scheme should include a clause in the fiduciary agreement that anticipates potential changes in the patent's value during the financing period and allows for periodic evaluation of the collateral by the financing institution. In this way, patents not only serve as formal collateral but also truly serve a sustainable and adaptive economic function.

Future regulations must also encompass the legal education dimension at the university level, professional training institutions, and other non-formal educational institutions. Knowledge of intellectual property law and its relationship to guarantee law remains very limited among legal practitioners, notaries, law enforcement officials, and the general public. Many notaries, for example, do not understand how to draft a deed of fiduciary guarantee for patent rights because there are no standard guidelines or specific training covering this topic. Therefore, material on intellectual property-based financing must be integrated into the legal education curriculum and legal professional training to create competent human resources to support the development of a legal system that integrates patents as objects of fiduciary guarantee.³⁰

This upcoming regulation is also related to efforts to build national technological sovereignty. By making patents the object of collateral, the state is actually creating an ecosystem that supports the emergence of more domestic inventions and innovations, which then have economic value and can be used as a means of obtaining financing. Thus, the nation's intellectual potential can be optimally mobilized to support knowledge-based economic development. The state will no longer rely solely on physical assets for economic security but will also rely on intellectual assets born from creativity, research, and technology. This harmonization is a concrete manifestation of economic transformation that is grounded in human resources and national innovative excellence as the foundation for sustainable growth.³¹

The upcoming regulation of patent rights as an object of fiduciary collateral must be seen as part of a shift in national legal orientation from a colonial legal system based on physical objects to a more modern legal system suited to the needs of the digital economy. The colonial legal system did not recognize intangible objects as collateral, as at that time the concept of

²⁹ Erman Rajagukguk, *Hukum Bisnis Indonesia* (Jakarta: FH UI Press, 2018), 231.

³⁰ M. Hadi Shubhan, *Hukum Kepailitan dan Jaminan Kredit* (Jakarta: Kencana, 2019), 85.

³¹ Hikmahanto Juwana, *Hukum Kekayaan Intelektual dan Ekonomi Kreatif* (Jakarta: UI Press, 2018), 214

objects was still rigid and limited to what could be seen and touched. However, in the current era, the highest value in the economy lies in intangible objects such as brands, patents, trade secrets, algorithms, and data. Therefore, the legal system must adapt to keep up with the times and the needs of society. Harmonization is a means to restructure the legal system so that it can recognize and protect intellectual property functionally as part of national wealth.

It should also be emphasized that this upcoming regulation is not without risks. There is a possibility that a financing system that is too aggressive in using patents as collateral will create an economic bubble based on intangible assets with unstable value. Therefore, the regulation must be accompanied by strict prudential regulations, including risk assessment, limiting the loan-to-patent value ratio, and ongoing oversight by financial authorities. These risk mitigation mechanisms must be part of the regulatory design to prevent the patent-based financing system from triggering a new crisis due to overvaluation or misuse of the collateral system. In this regard, the Financial Services Authority (OJK) plays a crucial role in overseeing policy implementation and maintaining the stability of the national financial system.³²

Normatively, future regulations need to stipulate that patent rights, as intangible objects, can be used as objects of fiduciary collateral, with regulations that adapt to the specific characteristics of patents as exclusive rights protected by the state for a certain period. Patents fulfill the basic principles of collateral because they are transferable, have economic value, and can be assessed. The absence of this regulation should not be maintained, considering that the values of modern legal development encourage the recognition and legal protection of intellectual assets as part of the legal subject's wealth. Therefore, explicit recognition in the law, supported by operational implementing regulations, is an important step in overcoming the normative obstacles that have existed so far.³³

The execution aspect is also a crucial point requiring clarity in harmonization. In the case of a debtor in default, the execution of patent rights cannot be equated with the execution of movable property such as vehicles or inventory, because patents do not have a physical existence that can be directly seized.³⁴ Patent enforcement must be carried out through an administrative transfer of rights at the Directorate General of Intellectual Property, or through a license auction to a third party, which of course requires separate legal provisions and detailed technical arrangements. Without enforcement procedures appropriate to the object's characteristics, the guarantee system will be ineffective, and the risk of misuse will increase.

The dynamic and contextual economic value of patent rights presents a unique challenge in implementing a guarantee system. Unlike fixed assets, whose value is relatively stable, the value of a patent can fluctuate depending on technological developments, market cycles, and commercialization success. Therefore, a systematic and legally recognized valuation mechanism is needed, including certification of patent appraisal institutions with technical, legal, and economic competence. Patent valuations cannot be conducted subjectively or unilaterally, as this will lead to disputes and legal uncertainty. Therefore, part of harmonization is establishing a regulatory framework regarding valuation methods, appraiser qualifications, and accountability for valuation results as the basis for granting guarantees.³⁵

The principle of publicity, a key principle in collateral law, also requires attention in harmonization. Publicity ensures transparency of information to third parties that a right has

³² Rahmi Jened, *Kekayaan Intelektual dalam Sistem Pembiayaan Nasional* (Jakarta: Kencana, 2019), 130.

³³ Ali Achmad Chomzah, *Hukum Kekayaan Intelektual: Paten, Merek, dan Hak Cipta* (Jakarta: Prestasi Pustaka, 2018), 98.

³⁴ Sri Soedewi Masjchoen Sofwan, *Hukum Benda dan Jaminan Kebendaan* (Yogyakarta: Liberty, 2017), 95.

³⁵ Andrian Sutedi, *Jaminan Fidusia dan Aplikasi di Perbankan* (Jakarta: Sinar Grafika, 2017), 142

been encumbered as collateral. In an ideal system, the status of patent encumbrances as collateral should be officially recorded in a publicly accessible database, such as the e-Fiducia or e-HAKI systems. However, the current reality shows that these two systems operate separately and are not yet integrated. This lack of integration raises the risk of double transactions, transfers of rights that conflict with collateral rights, and increases the potential for disputes. Harmonization here must include the unification of information systems, data interoperability, and mutual recognition between institutions regarding the legal status of collateral objects.

Future regulations also concern the protection of the moral rights of inventors. While the economic rights of a patent can be pledged as collateral, moral rights cannot be transferred and must be respected by all parties, including creditors who receive these rights as collateral. In the execution process, the transfer of rights to a third party must not erase or disregard the inventor's name as the creator of the invention. This is crucial for maintaining scientific ethics, the credibility of the patent system, and preventing inhumane intellectual exploitation. Therefore, the patent enforcement system must clearly define the separation between moral rights and economic rights, and establish sanctions for those who violate these provisions.

The protection of vulnerable parties is also a crucial component of this harmonization conclusion. In many cases, debtors are inventors or small business owners who lack the negotiating power of financial institutions. When their patents are used as collateral, they require clear, transparent, and fair legal protection. Harmonization must prevent imbalances in power relations that could lead to the forced acquisition of patents or the misuse of technological information by creditors. The legal system must uphold the principles of proportionality, contractual fairness, and the protection of the equality of the parties to prevent the collateral system from becoming a tool of economic domination³⁶

The protection of vulnerable parties is also a crucial component of this harmonization conclusion. In many cases, debtors are inventors or small business owners who lack the negotiating power of financial institutions. When their patents are used as collateral, they require clear, transparent, and fair legal protection. Harmonization must prevent imbalances in power relations that could lead to the forced acquisition of patents or the misuse of technological information by creditors. The legal system must uphold the principles of proportionality, contractual fairness, and the protection of the equality of the parties to prevent the collateral system from becoming a tool of economic domination.³⁷

Prevent the collateral system from becoming a tool of economic domination.

Fiduciary guarantees for patents require regulators to provide clear, measurable, and enforceable mechanisms for binding, registration, and enforcement that are accessible to all stakeholders. Without these principles, the law becomes an ineffective text, lacking definitive guidance for notaries, financial institutions, or the government. Therefore, Fuller's theory emphasizes that legal certainty in regulating patents as objects of fiduciary guarantees can only be achieved if the legal system is developed comprehensively, consistently, and aligns the formulation of norms with their implementation practices.³⁸

Strengthening technical regulations, establishing the National Intellectual Property Assessment Institute (LPKIN), and integrating systems between the Directorate General of

³⁶ Sudikno Mertokusumo, *Penemuan Hukum dan Perlindungan Paten* (Yogyakarta: Liberty, 2017), 89.

³⁷ Yovita A. Mangesti & Bernard L. Tanya, *Moralitas Hukum: Memahami Gagasan Lon L. Fuller*, in Bernard L. Tanya dkk., *Teori Hukum: Strategi Tertib Manusia Lintas Ruang dan Generasi*, Genta Publishing, Yogyakarta, 2013, 142–145.

³⁸ Satjipto Rahardjo, *Ilmu Hukum*, Citra Aditya Bakti, Bandung, 2000, 21.

Intellectual Property Rights (DJKI) and the Directorate General of AHU (Agencies/Cities) are fundamental steps toward a modern and equitable fiduciary guarantee legal system. Furthermore, enhancing the role and capacity of notaries is a key factor in ensuring the validity and authenticity of patent legal bindings. If all these elements are realized, the law will fully fulfill its function: providing certainty, protecting the interests of the parties, and simultaneously encouraging national economic growth through the utilization of intellectual assets as a legitimate, transparent, and effective financing instrument.

It can be concluded that the future regulation of patent rights as objects of fiduciary guarantees is a strategic necessity that cannot be postponed. This harmonization encompasses normative, administrative, institutional, technical, social, economic, and political-legal aspects holistically. Without harmonization, patent rights, as one of the pillars of the nation's intellectual property, will not be able to maximize their potential as a financing tool and economic driver. The state must be actively present to create progressive regulations, an integrated administrative system, a credible assessment institution, and a strong oversight mechanism so that the patent-based financing system can operate fairly, efficiently, and sustainably. In the future, the success of national legal development in this area will be a reflection of Indonesia's ability to adapt to a modern economy that places innovation, technology, and intellectualism as the primary forces in building civilization.³⁹

The expected future regulation is the creation of a fiduciary guarantee legal system that balances legal certainty, justice, and benefit. This system should not be merely a rigid normative construct, but rather an instrument that facilitates the needs of the modern economy, particularly in the context of the increasing role of intellectual property as a strategic asset. The law must provide certainty for creditors regarding the enforceability of guarantees, fairness for patent owners as innovators, and benefits for the national economy by creating an inclusive and progressive financing climate.⁴⁰

The regulation of fiduciary guarantees for patent rights must support the paradigm shift of Indonesian law from merely declarative to functional and responsive to the dynamics of the creative economy. The law must not be limited to text, but must be able to address the practical needs of business actors, the technology industry, financial institutions, and the broader innovation ecosystem. In this context, the law is required to fulfill its role as living law, that is, law that lives, works, and benefits society. By combining procedural certainty, sensitivity to substantive justice, and an orientation toward sustainable benefits, the development of fiduciary guarantee laws for patent rights in Indonesia can serve as the foundation for a more modern, adaptive, and globally competitive financing system. Ultimately, the law should not only regulate but also drive innovation, strengthen the economic structure, and ensure that the benefits of intellectual property are felt by all levels of society.

Conclusion

Patents are normatively qualified as objects of fiduciary collateral because they have economic value, are transferable, and fall under the category of intangible movable property. This recognition has been legally based through the Fiduciary Guarantee Law and the Patent Law. However, the implementation of patents as debt collateral in banking practices in

³⁹ Sudikno Mertokusumo, *Op.Cit.*

⁴⁰ Gustav Radbruch, *Rechtsphilosophie*, translated by R. Kusumaatmadja, Filsafat Hukum, Bandung: Alumni, 2014, 101–105.

Indonesia has not been optimal. This suboptimal use of patents as credit collateral is primarily due to the lack of legal certainty. The absence of standard patent valuation standards, the lack of certified intellectual property appraisal institutions, the lack of integration of patent registration systems and fiduciary collateral, and the unclear mechanism for patent enforcement in the event of default are the main factors hindering the acceptance of patents as collateral by banks. Thus, it can be emphasized that the main problem in the use of patents as objects of fiduciary collateral lies not in the normative aspect, but rather in the implementation and technical aspects. Without regulatory reforms that can guarantee comprehensive legal certainty, patents will remain difficult to utilize as an effective financing instrument to support an innovation-based economy.

Bibliography

Book

- Adjie, Habib. *Hukum Notaris Indonesia*. Bandung: Refika Aditama, 2017.
- Chomzah, Ali Achmad. *Hukum Kekayaan Intelektual: Paten, Merek, dan Hak Cipta*. Jakarta: Prestasi Pustaka, 2018.
- Damian, Eddy. *Hukum Kekayaan Intelektual*. Bandung: Alumni, 2009.
- Erman Rajagukguk. *Hukum Bisnis Indonesia*. Jakarta: Fakultas Hukum Universitas Indonesia Press, 2018.
- Fuller, Lon L. *The Morality of Law*. New Haven: Yale University Press, 1969.
- Jened, Rahmi. *Kekayaan Intelektual dalam Sistem Pembiayaan Nasional*. Jakarta: Kencana, 2019.
- Juwana, Hikmahanto. *Hukum Kekayaan Intelektual dan Ekonomi Kreatif*. Jakarta: UI Press, 2018.
- Masjchoen Sofwan, Sri Soedewi. *Hukum Benda dan Jaminan Kebendaan*. Yogyakarta: Liberty, 2017.
- Mertokusumo, Sudikno. *Penemuan Hukum dan Perlindungan Paten*. Yogyakarta: Liberty, 2017.
- Radbruch, Gustav. *Filsafat Hukum*. Diterjemahkan oleh R. Kusumaatmadja. Bandung: Alumni, 2014.
- Rahardjo, Satjipto. *Ilmu Hukum*. Bandung: Citra Aditya Bakti, 2000.
- Shubhan, M. Hadi. *Hukum Kepailitan dan Jaminan Kredit*. Jakarta: Kencana, 2019.
- Sutedi, Andrian. *Hukum Jaminan: Hak Jaminan Kebendaan*. Jakarta: Sinar Grafika, 2017.
- Sutedi, Andrian. *Jaminan Fidusia dan Aplikasinya di Perbankan*. Jakarta: Sinar Grafika, 2017.
- Usman, Rachmadi. *Hukum Jaminan Keperdataan*. Jakarta: Sinar Grafika, 2013.
- Usman, Rachmadi. *Hukum Kebendaan*. Jakarta: Sinar Grafika, 2021.
- Yovita A. Mangesti, dan Bernard L. Tanya. *Moralitas Hukum: Memahami Gagasan Lon L. Fuller. Dalam Bernard L. Tanya dkk., Teori Hukum: Strategi Tertib Manusia Lintas Ruang dan Generasi*. Yogyakarta: Genta Publishing, 2013.

Journal

- Gunawan, Jessica Francis, dan Yunanto. "Implementasi Penggunaan Kekayaan Intelektual sebagai Jaminan Kredit Perbankan." *Syntax Literate: Jurnal Ilmiah Indonesia* Vol. 7, No. 12 (2022).
- Kurnianingrum, Trias Palupi. "Hak Kekayaan Intelektual sebagai Jaminan Kredit Perbankan." *Negara Hukum* Vol. 8, No. 1 (2017).
- Mulyani, Sri. "Pengembangan Hak Kekayaan Intelektual sebagai Collateral." *Jurnal Dinamika Hukum* Vol. 12, No. 3 (2012).

- Setianingrum, Reni Budi. "Mekanisme Penentuan Nilai Ekonomis Hak Kekayaan Intelektual sebagai Objek Jaminan." *Jurnal Media Hukum* Vol. 23, No. 2 (2016).
- Akhmad, Junaidi, dan Muhammad Joni. "Pemanfaatan Sertifikat Hak Kekayaan Intelektual sebagai Collateral Kredit Perbankan." *Jurnal SMECDA* Vol. 6, No. 1 (2011).

Reports

- Direktorat Jenderal Kekayaan Intelektual. *Pedoman Penilaian Aset Intelektual*. Jakarta: DJKI, 2022.
- Ikatan Notaris Indonesia. *Pedoman Pelaksanaan Tugas Notaris*. Jakarta: INI, 2020.
- Intellectual Property Office of Singapore (IPOS). *IP Financing Scheme*. Singapore, 2020.
- World Intellectual Property Organization (WIPO). *Using Intellectual Property as Loan Collateral*. Geneva: WIPO, 2013.
- World Bank. *The Global Innovation Index 2023: Innovation in the Digital Age*. Washington D.C.: World Bank, 2023.