

UNRAVELING THE BOTTLENECK: A TECHNOLEGAL APPROACH TO TRADEMARK DISPUTES IN THE ERA OF TECHNOLOGICAL DISRUPTION

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Abstract

One of the leading causes of business failure in Indonesia is the failure to protect intellectual property. Especially in the era of technological disruption where massive changes occur, or refer to considerable changes in how businesses are run caused by technological advances. These changes are accelerating and impacting all aspects of the business, from how products are designed, manufactured, and marketed to how customer service is provided. All businesses have intellectual property, especially new inventors who have emerged in the era of technological disruption. We may not own a patent for our inventions, but we all own a trademark for our business. Trademarks can be images, logos, or terms used to advertise and represent our products. A trademark is a kind of intellectual property right known as a trademark. Therefore legal protection in Indonesia for Mark must be realized. Because globally, the issue of Intellectual Property Rights (IPR) has received serious attention in terms of economic relations or domestic and international trade. Especially countries that have traded products based on Intellectual Property Rights because Intellectual Property Rights are essential because goods and services as trade products are permanently attached to a specific name or entity that differentiates one product from another. There is a "bottleneck" of intellectual property law against trademarks because there are still many trademark disputes. The same trademark or a trademark that resembles the same class with different owners can be a disaster for companies that cannot compete. A bottleneck in intellectual property law can become various legal issues, including trademark disputes. This will be counter-productive in the era of technological disruption, so it becomes an urgent need to make improvements starting with registering trademarks using technological assistance. This legal phenomenon is studied and analyzed using a technological approach known as technolegal. Technolegal, which etymologically comes from combining the words "technology" and "law." In technolegal studies, technology is used to increase legal effectiveness and efficiency. By combining technology and law, the expected output from technolegal studies is the development of a new and more effective model of legal regulation.

Keywords: Bottleneck, Intellectual Property, Technology, Law, Technolegal.

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INTRODUCTION

“A truly disruptive technology not only changes the way that people think but also the way they operate.” Wasserman, a CEO of a technology company at the World Economic Forum, stated this. Indeed, the era of technological disruption has brought rapid changes to human life.¹ Technology is becoming increasingly sophisticated in direct proportion to the ease of activities. Still, of course, these changes make us adapt. Of course, not only the creators, innovators, and authors of the users but also accompanied by legal instruments as protection.²

Intellectual Property Rights (IPR) law is a legal mechanism that protects creators, innovators, and authors from unlawful use by third parties while encouraging innovation and development. This legal instrument has maintained two goals, namely protecting creators and increasing innovation.³ In the era of the Industrial Revolution 4.0, innovative and disruptive terms are often used in the context of changes or improvements in business and technology, but both have different meanings. Innovative is about creating or introducing something new or better. Innovation can occur in a product, process or business model and usually aims to improve efficiency, productivity or the customer experience. So Innovative is an update or new creation. Meanwhile, disruption is changing or overhauling how the industry operates to leave the old ways. Disruptive usually refers to a new technology or business model that abandons or replaces a pre-existing business or model.⁴

The era of disruption is a time when creativity continues to increase, accompanied by new competitors entering a developing market by bringing about changes so that without transparent and fair rules, industrial competition in all sectors makes it inevitable that legal disputes will end.⁵

Technological disruptions include 3D printing, artificial intelligence (AI),

¹ Muhammad Reza Winata and Oly Viana Agustine, ‘Rekoneksi Hukum Dan Disrupsi Teknologi Melalui Tafsir Konstitusional Mendukung Pembangunan Ekonomi Berkelanjutan’, *Jurnal Legislasi Indonesia*, 16.4 (2019), 458–76.

² Dian Novita, ‘Hak Kekayaan Intelektual Bagi Pemegang Hak Merek Suatu Karya Intelektual’, *Jurnal Jendela Hukum* (Universitas Wiraraja, 2021), 35–40 <<https://doi.org/10.24929/fh.v7i1.1566>>.

³ Wizna Gania Balqis and Budi Santoso, ‘Arti Penting Perlindungan Merek Terdaftar Bagi Komunitas Penghasil Produk Ekonomi Kreatif’, *Jurnal Pembangunan Hukum Indonesia* (Institute of Research and Community Services Diponegoro University (LPPM UNDIP), 2020), 205–21 <<https://doi.org/10.14710/jphi.v2i2.205-221>>.

⁴ Rio Christiawan, *Aspek Hukum Startup* (Jakarta: Sinar Kartika, 2021), p. 3 <<https://books.google.com/books?hl=en&lr=&id=9ul4EAAAQBAJ&oi=fnd&pg=PP1&dq=kalkulator+pa+jak&ots=xWC3aKkY5n&sig=RDakUYBqCRo2U7SGXJGIsWaa-Vo>>.

⁵ Sholahuddin Al-Fatih, ‘Analisis Keterhubungan Konsep Merek Dengan Nama Domain: Kajian Kekayaan Intelektual Di Indonesia’, *Journal of Judicial Review* (Universitas Internasional Batam, 2021), 257 <<https://doi.org/10.37253/jjr.v23i2.4396>>.

connectivity/Internet of Things (IoT), big data and blockchain. These innovations have undoubtedly made life more straightforward. Still, the same cannot be said about protecting Intellectual Property Rights (IPR) from their use. Intellectual Property (IP) is essential in attracting new and innovative technologies and increasing the competitiveness of technology-based markets.⁶ Intellectual Property (IP) law has been controversial over the capacity to adapt to new technologies. Now is the time to speculate about IP and technology disruption together. This means that the innovation and economic value created have been acceptable.⁷

The need for IPR in an era of technological disruption where there is a combination of the results of different intellectual activities in one technology, and the formation of complex intellectual rights for that technology (patents, copyrights, trademarks, designs) leads to broader complexities, such as protecting robotics under Copyrights, Trademarks, Patents and Trade Secrets.⁸

As a result, protecting one comprehensive law is impractical. The entire protection process becomes expensive and time-consuming due to variations in protection modes. It is crucial to note that the laws governing these technologies should be flexible, as the kind of innovation and development that these technologies enable are meant to be driven by IP. Importance of Patents for Smartphone Technologies, drones, gene editing via Clustered Frequently Interspaced Short Palindromic Repeats (CRISPR), targeted biologic cancer drug immunotherapy, self-driving cars, and the Internet of things.⁹

In this era of technological disruption, it is crucial to implement innovative ideas, to increase efficiency, and to provide value-added services for new inventors. In this case, there is a need to check marks at the beginning of registration to apply artificial intelligence (AI) for initial screening to identify characters, pronunciations, words, letters, etc. Everything is done to avoid or reduce the recurrence of trademark disputes, especially trademark similarities in essence or their entirety. Artificial intelligence (AI) in the development of technology and computer systems can mimic human reasoning thanks to sophisticated algorithms, increased volume of data (databases), and increased

⁶ Sudjana Sudjana, 'Penegakan Hukum Merek Dalam Hukum Indonesia Terhadap Pemenuhan Ketentuan Trips- Wto', *Res Nullius Law Journal* (Universitas Komputer Indonesia, 2021), 136–51 <<https://doi.org/10.34010/rmlj.v3i2.4659>>.

⁷ Rina Shahriyani Shahrullah and others, 'Kepastian Hukum Merek Tiga Dimensi Dan Desain Industri : Studi Perbandingan Hukum Di Indonesia, Amerika Dan Australia', *University Of Bengkulu Law Journal* (UNIB Press, 2021), 60–81 <<https://doi.org/10.33369/ubelaj.6.1.60-81>>.

⁸ Ali Ismail Shaleh and Shabirah Trisnabilah, 'Perlindungan Hukum Terhadap Persamaan Merek Untuk Barang Atau Jasa Yang Sejenis: Studi Merek Bossini', *Journal of Judicial Review* (Universitas Internasional Batam, 2020), 291 <<https://doi.org/10.37253/jjr.v22i2.1494>>.

⁹ Riska Ariana, 'ERA DISRUPSI TEKNOLOGI 4.0 DAN ASPEK HUKUM PERLINDUNGAN DATA HAK PRIBADI', *PAJOUL (Pakuan Justice Journal Of Law)*, 01.01 (2016), 1–23.

computational power and storage.¹⁰

In the legislation in this country, the law on marks has been regulated in Law Number 20 of 2016 concerning Marks and Geographical Indications. Legally, trademarks receive protected rights if the owner of the mark registers the mark with the state at the Directorate General of Intellectual Property Rights under the Ministry of Law and Human Rights.¹¹

Trademark holders will receive juridical consequences if they follow the mechanism in registering their marks. This means that legal protection is not given to trademark holders who do not register their trademarks so that every individual or community is free to use a trademark without asking for permission from the first trademark owner.

Understanding of Intellectual Property Rights, especially trademark law, continues to receive attention from researchers. Some literature has examined this in table 1. The following will present several studies regarding Intellectual Property Rights, especially the legal protection of trademarks.

Table 1. Some Previous Research About Intellectual Property Rights

No	Researcher/ Writer	Title	Novelty	Conclusion
1.	Desy Salsa Biela, Abraham Ferry Rosando (2022)	Legal Consequences for Business Actors Violating Trademark Rights	Regulations regarding trademarks in Indonesia contained in Law Number 8 of 1999 concerning Consumer Protection and Law No. 20 of 2016 regarding Trademarks and Geographical Indications. However, although it has been protected, various trademark protections still occur and are mainly	Whereas the legal consequences of infringement of trademark rights, business actors can be prosecuted in court by the original trademark owner, not only through civil law but also criminal law.

¹⁰ Rio Christiawan, *Op-Cit.*, p. 56-57

¹¹ Eko Noer Kristiyanto, 'Peranan Kementerian Hukum Dan HAM Dalam Melindungi Hak Eksklusif (Merek) Klub Sepak Bola Profesional Di Indonesia', *Jurnal Penelitian Hukum De Jure* (Badan Penelitian dan Pengembangan Hukum dan HAM, 2021), 75 <<https://doi.org/10.30641/dejure.2021.v21.75-90>>.

No	Researcher/ Writer	Title	Novelty	Conclusion
			carried out by business actors.	
2.	Ika Atikah, Ahmad Zaini, Iin Ratna Sumirat (2022)	Intellectual Property Rights As The Resource For Creative Economic In Indonesia	Intellectual Property has great economic value and can even be used as collateral for credit at bank and non-banking financial institutions.	Holders of intellectual property rights can receive great benefits apart from legal protection, but clear rules regarding the use of these rights have not been regulated in detail for workers in the creative industries.
3.	Jumardi, Hasbir Paserangi, Marwah (2022)	Legal Protection Of Intellectual Property Rights Of Aren Bone Sugar In The Perspective Of Geographic Indications	Efforts to protect the law by registering locally processed products can be carried out based on Law No. 20 of 2016 regarding Trademarks and Geographical Indications. In this case, palm sugar Bone.	There is no maximum effort to register bone sugar based on geographical indications by the local government. Understanding what is still lacking is alleged to be the reason for the obstacles to these legal efforts.

Desy Salsa et al.'s research on the legal consequences of trademark rights infringement is exciting.¹² Aside from being informational, this research can be educational for those who need help understanding protection for business trademark owners. New entrepreneurs often use uncommendable ways (piggyback on popularity) for products or services from trademark that have been registered and existed before. Then the following research conducted by Ika Atikah et al., that intellectual property

¹² Desy Salsa Biela and Abraham Ferry Rosando, 'Akibat Hukum Terhadap Pelaku Usaha Yang Melakukan Pelanggaran Hak Atas Merek', *Bureaucracy Journal: Indonesia Journal of Law and Social-Political Governance*, 2.1 (2022), 619–40 <<https://doi.org/10.53363/bureau.v2i1.157>>.

rights are an economic resource for workers in the creative industries.¹³ Even these intellectual property rights can be credit collateral for the right holders. However, the hope for prosperity is still constrained by the absence of detailed regulations regarding the mechanism for granting credit from the financial institution. Furthermore, research conducted by Jumardi et al., intellectual property rights based on geographical indications.¹⁴ Based on the statutory regulations, namely Law Number 20 of 2016, local governments can register trademark rights based on geographical identity; in this study regarding Bone palm sugar, which indeed has differences in taste, aroma and colour, this effort has not been carried out by the local government.

From several previous studies, it can be seen from the position of this research that the "bottleneck" of Intellectual Property Law still occurs. Not only because of violations by business actors against other registered trademarks, such as Salsa's research (2022) but also because of a lack of understanding of this matter which appears to be contained in Jumardi's research (2022). So, of course, an in-depth discussion is needed regarding the obstacles of Intellectual Property Law, especially trademark rights.

RESEARCH METHODS

This study uses normative legal research methods. Where this method uses an approach to legislation and a conceptual approach. The legal materials or materials used in this research are primary legal materials or materials and secondary legal materials. Literature books and articles relevant to this study's problems are used as support in analyzing the issues studied. The technique used in the data collection process uses normative legal materials or materials through literature studies on primary legal materials, secondary legal materials, tertiary legal materials, and other non-legal materials. The process of finding legal material is carried out in various ways, namely through reading, then viewing and tracking through online media or the internet. The next step after all the material collected is analyzed using descriptive techniques. The description technique is defined as a technique that outlines a description of the circumstances that occur from legal and non-legal propositions to get a factual, accurate and systematic stretch of the problem about the properties or facts of the phenomenon or issue under study.

RESULT AND DISCUSSION

The era of technological disruption is a time when technological growth is so revolutionary. Technological disruption in any industry has enormous potential to deliver previously unexplored opportunities, outcomes and possibilities, such as strategic partnerships and access to new markets. Such technological innovations usually change

¹³ Ika Atikah, Ahmad Zaini, and Iin Ratna Sumirat, 'Intellectual Property Rights as The Resource for Creative Economic in Indonesia', *Jurnal Penelitian Hukum De Jure*, 22.4 (2022), 451 <<https://doi.org/10.30641/dejure.2022.v22.451-464>>.

¹⁴ Hasbir Paserangi, 'View of Legal Protection Of Intellectual Property Rights Of Aren Bone Sugar In The Perspective Of Geographic Indications', 9, 19–35.

the pattern of competition between industries.¹⁵ New players can suddenly displace an industry that has dominated the market. So the protection of innovations or findings is essential because it is very prone to theft and plagiarism. For this, policies or regulations regarding Intellectual Property are important.¹⁶

Based on the economic aspect, the mark is part of the Intellectual Property Law, which has a significant value. Because in the world of trade, trademarks play an essential role; apart from being a differentiator, they can also guarantee the quality of a product or service. And for consumers, it is a guarantee of quality.¹⁷

So the unique nature attached to the trademark is given to the state exclusively, where the trademark owner can use the trademark himself or give permission if someone else uses the trademark.¹⁸ Identification of an industry is also attached to the trademark so that the origin of industrial products can be traced, and this is a differentiator from products from other industries (an indication of origin).¹⁹

The trademark is the front guard that can represent the "communication" of entrepreneurs with their customers in providing quality assurance. Of course, every entrepreneur will maintain the quality and quality of their product or service (a guarantee of quality); even unfair competition can be avoided where other entrepreneurs will piggyback on the trademark's reputation.²⁰

As an intellectual work produced by the processing and thinking of a trademark used in the world of commerce, the activities of these business actors have been regulated through Article 1 of Law Number 20 of 2016 concerning Trademarks and Geographical Indications, where it is stated that: A mark is a sign that can be displayed graphically in the form of images, logos, names, words, letters, numbers, colour arrangements, in the form of 2 (two) dimensions and/or 3 (three) dimensions, sounds, holograms, or a combination of 2 (two) or more of these elements to differentiate goods and/or services

¹⁵ Kevien Dicky Aldison, Sunarjo Sunarjo, and Hendra Djaja, 'Kajian Yuridis Tentang Merek Terkenal Dan Upaya Hukum Terhadap Pelanggarannya', *Jurnal Cakrawala Hukum* (Universitas Merdeka Malang, 2021) <<https://doi.org/10.26905/idjch.v12i1.5723>>.

¹⁶ Rahmi Jened, *Hukum Merek Dalam Era Global & Integrasi Ekonomi* (Jakarta: Kharisma Putra Utama, 2015).

¹⁷ Purwono Purwono and Universitas Harapan Bangsa, 'Perlindungan Aset Digital Pada Era Metaverse Dalam Perspektif', December, 2022, 27–39 <<https://doi.org/10.24843/KW.202>>.

¹⁸ Sudjana.

¹⁹ Ni Komang Monica Dewi Maheswari, I Nyoman Putu Budiatha, and Ni Made Puspasutari Ujianti, 'Perlindungan Hukum Terhadap Pemegang Desain Industri Yang Sama Dengan Merek Yang Berbeda', *Jurnal Preferensi Hukum* (Universitas Warmadewa, 2021), 39–44 <<https://doi.org/10.22225/jph.2.1.3049.39-44>>.

²⁰ Tommy Hendrix and others, 'Implementasi Kebijakan Perlindungan Kekayaan Intelektual Terhadap Efektivitas Produk Penelitian Dan Pengembangan', *Jurnal Borneo Administrator* (Puslatbang KDOD Lembaga Administrasi Negara, 2021), 41–64 <<https://doi.org/10.24258/jba.v17i1.754>>.

produced by persons or legal entities in trading activities of goods and/or services. The trademark is the identity of a product.²¹²²

Trademark rights law has used the principle of first to file (constitutive, first-time registration) with the registration mechanism for each country or internationally. In international rules, registration of trademark rights is regulated in two (2) international agreements,²³ namely:

1. The Madrid Agreement Concerning the International Registration of Marks, which was ratified in 1881 and then entered into force in 1892;
2. Protocol relating to the Madrid Agreement 1989 (Madrid Protocol), which came into force on 1 January 1996.

In general, to obtain trademark rights through registration or registration procedures, although in some countries, there are trademarks that are not registered but receive protection or legal rights. Unregistered trademarks that receive protection due to tradition are referred to as equity. To obtain legal protection for registered trademark rights, it must be based on the principle of good faith on the part of the trademark owner or the party who registers their mark. From this, it can be interpreted that the legal protection of trademarks against trademarks is only given to trademark registrants who have only good faith.²⁴²⁵

Trademark rights holders can receive at least 3 (three) awards: economic, social, and legal. Of course, these various protections can be given to countries whose statutory

²¹ Adi Arief Havinando, 'Konsekuensi Hukum Logo Yang Didaftarkan Sebagai Ciptaan Dan Merek Sebelum Berlakunya Undang-Undang Nomor 28 Tahun 2014 Tentang Hak Cipta', *Jurnal Bina Mulia Hukum* (Fakultas Hukum UNPAD (FHUNPAD), 2022), 310–22 <<https://doi.org/10.23920/jbmh.v6i2.305>>.

²² Yuliana Maulidda Hafsari, 'Hak Atas Kekayaan Intelektual, Hak Merek, Rahasia Dagang, Dan Pelanggaran Hak Merek Dan Rahasia Dagang Serta Hak Patent (Literatur Review Artikel', *Jurnal Ilmu Manajemen Terapan* (LPPM Universitas EKASAKTI, 2021), 733–43 <<https://doi.org/10.31933/jimt.v2i6.637>>.

²³ Dara Quthni Effida, 'Tinjauan Yuridis Penggunaan Merek Secara Tanpa Hak Menurut Undang-Undang Nomor 20 Tahun 2016 Tentang Merek Dan Indikasi Geografis', *Ius Civile: Refleksi Penegakan Hukum Dan Keadilan* (Universitas Teuku Umar, 2020) <<https://doi.org/10.35308/jic.v4i1.2001>>.

²⁴ Rendy Alexander, 'Penerapan Prinsip "First To File" Pada Konsep Pendaftaran Merek Di Indonesia', *Kertha Semaya: Journal Ilmu Hukum* (Universitas Udayana, 2022), 2110 <<https://doi.org/10.24843/ks.2022.v10.i09.p12>>.

²⁵ Widya Ananda and Simona Bustani, 'Prinsip Itikad Baik Dalam Pendaftaran Merek "Type R" Milik Honda Motor Co.Ltd (Studi Putusan Nomor 42/Pdt.Sus-Merek/2019/Pn.Niaga.Jkt.Pst)', *Reformasi Hukum Trisakti* (Universitas Trisakti, 2022), 71–80 <<https://doi.org/10.25105/refor.v4i1.13408>>.

system has created legal certainty for trademark rights holders,²⁶ so that the primary purpose of the law and its benefits can be felt by trademark holders and the community.

Judging from the discussion in the era of Technological Disruption, there was an acceleration and the emergence of new innovators in producing works. However, this has not been matched by the support from the state apparatus, in this case, the Director General of Intellectual Property Rights, as seen by the large number of trademark disputes that have occurred because there are similarities in principle and/or overall, both between corporations and individuals. If the trademark holders do not have the sufficient financial capacity to file a lawsuit against a competitor's trademark, what the trademark owner does is try to reach an agreement with the competitor's trademark owner, for example, through mediation or negotiation, to resolve the trademark dispute without having to incur high costs. Often, trademark owners with insufficient financial ability to sue competitors' trademarks do not take any action, even though the risk of losing their intellectual property rights is greater. In the long run, this can harm their business, including a loss of trademark value and a reduction in customer trust.

Intellectual Property Law Bottleneck Trademark Protection

Intellectual property includes several assets that are not conventionally owned, such as personal or real property, but which the law treats and recognizes as having many qualities as property. These assets can include inventions, works of literature and art, symbols, images, names, logos used in commerce, and others. This is what intellectual property rights are and how we can protect our trademark rights.²⁷

In Indonesia, the legal protection provided to trademark holders includes two lawful means, Protection of Preventive Legal Means and the opportunity given to legal subjects for their opinion before the government makes a definitive decision. Then Protection of Repressive Legal Means to settle if a legal dispute occurs.²⁸

On the Director General of Intellectual Property Rights website, we can find several trademarks in the same class but with different owners. As an example :

²⁶ Selvi Nurma Fitriani, Dyah Ochtorina Susanti, and A'an Efendi, 'Perlindungan Hukum Pemegang Hak Merek Yang Sesuai Dengan Karakteristik Hak Merek', *JURNAL RECHTENS* (Universitas Islam Jember, 2022), 239–56 <<https://doi.org/10.56013/rechtens.v11i2.1783>>.

²⁷ Septi Indrawati, 'Tinjauan Yuridis Penggunaan Sertifikat Merek Sebagai Jaminan Dalam Proses Pengajuan Kredit Perbankan', *Amnesti Jurnal Hukum* (Universitas Muhammadiyah Purworejo, 2021), 1–14 <<https://doi.org/10.37729/amnesti.v3i1.889>>.

²⁸ Nertivia Nertivia and others, 'Polemik Warkopi vs. Warkop DKI: Apa Yang Salah?', *Journal of Judicial Review*, 24.1 (2022), 149 <<https://doi.org/10.37253/jjr.v24i1.6736>>.



Figure 1. "GLOBAL+" trademark certificate IDM000667795
 Source: Website of the Directorate General of Intellectual Property Rights

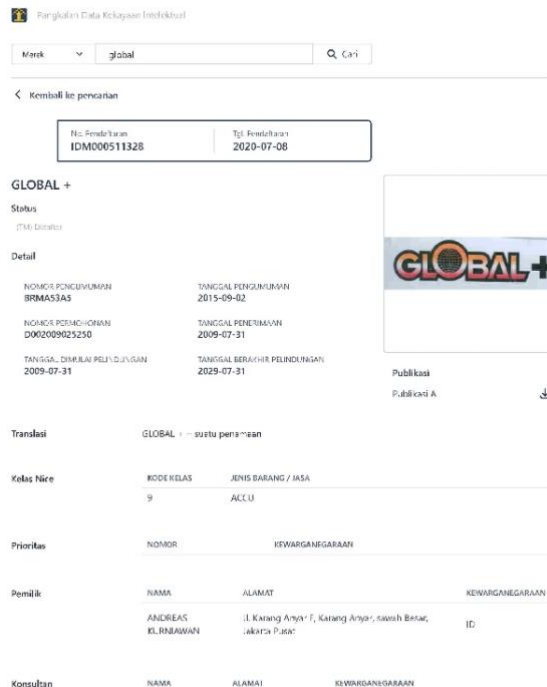


Figure 2. "GLOBAL+" trademark certificate IDM000511328
 Source: Website of the Directorate General of Intellectual Property Rights

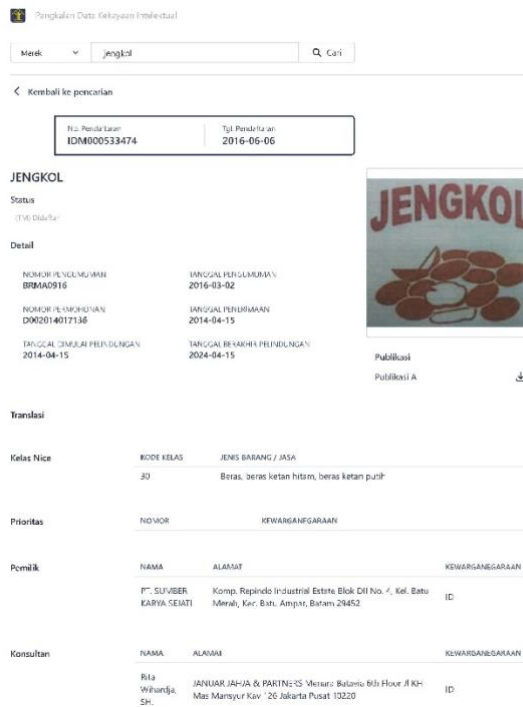


Figure 3. “JENGKOL” trademark certificate IDM000533474
 Source: Website of the Directorate General of Intellectual Property Rights

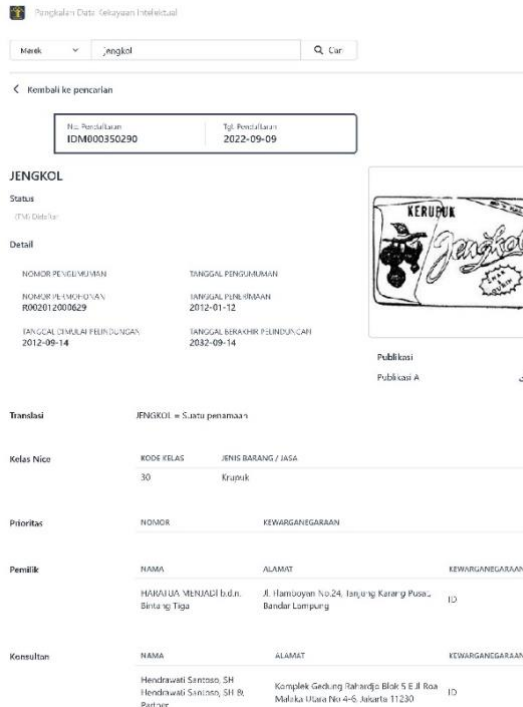


Figure 4. “JENGKOL” trademark certificate IDM000350290
 Source: Website of the Directorate General of Intellectual Property Rights



Figure 5. “JENGKOL” trademark certificate IDM000594180
Source: Website of the Directorate General of Intellectual Property Rights

1. GLOBAL+

In class 9 with 2 (two) different owners, namely:

- Yohan Solihin Hartana (Figure 1); And
- Andreas Kurniwan (Figure 2).

2. JENGKOL

In class 30 with 3 (three) different owners, namely :

- PT. Sumber Karya Sejati (Figure 3);
- Haratua to b.d.n. Bintang Tiga (Figure 4); and
- PT. Mekar Sukses Perkasa (Figure 5)

The potential for harm to a legitimate trademark owner and damage to the trademark's value arises from the Director General of Intellectual Property Rights negligence within the trademark equation. This can occur when the Director General of

Intellectual Property Rights needs to properly scrutinize the mark during the trademark application process, ensuring its distinction from other registered trademarks. Suppose this thorough examination needs to be addressed during the initial inspection or the substantial investigation involving examiners from the Director General of Intellectual Property Rights. In that case, it can lead to the emergence of similar trademarks, potentially causing harm to the rightful trademark owner.

The two trademarks, GLOBAL+ and JENGKOL, despite having similarities in their class of goods or services, may not necessarily provoke lawsuits from trademark owners against other competing trademarks possessing similar trademarks. This could be due to a variety of reasons:

1. Evading Legal Disputes

Trademark owners might opt to sidestep legal disputes that could be detrimental to all involved parties. They may perceive legal actions as draining in time, money, and business focus.

2. Shifting Market Conditions

With ever-changing market conditions, previously perceived similar trademarks may no longer pose a threat to the original trademark owners. In such situations, owners may observe the circumstances before initiating legal actions.

3. Prior Trademark Ownership

In cases where the owners have no inherent interest in their trademarks or have acquired similar trademarks through acquisitions, mergers, or strategic alliances, the owners may refrain from filing lawsuits.

4. Willingness to Collaborate

There might be instances where the owners are open to collaborating with others with similar trademarks, such as through licensing, co-trademarking, or other mutually beneficial associations.

Before proceeding with a trademark lawsuit, trademark owners, whether individuals or companies, carefully deliberate on its necessity. In many cases, owners seek alternate resolutions like negotiation or registering another trademark, considering it more cost-effective than a lawsuit. Another strategy involves using efficient marketing techniques to enhance their trademark recognition and elevate their brand awareness among consumers.

The first consideration, Avoiding Legal Disputes, is the essential consideration for why trademark owners do not sue competing trademark owners. This is because it will take up a lot of time and costs, disrupting the focus on developing their business. It will be different if the trademark owner has solid financial capital and is supported by a legal team ready to be deployed to carry out a trademark lawsuit, like the trademark dispute in class 36 that occurred between PT Astra Sedaya Finance as the owner of the **ACC** trademark and PT Aman Cermat Fast as the owner of **KlikACC**. PT Astra Sedaya

Finance, a subsidiary of PT Astra Internasional Tbk, has financial support that will significantly assist trademark owners in financing the legal process. In contrast, an expert legal team will assist in preparing the evidence and documents needed and provide suggestions and recommendations regarding the correct legal strategy to handle the trademark lawsuit case.

Then, there was a trademark dispute in class 30 between Aliuyanto, the owner of the **Solaria** trademark, and Erwin Munandar, the owner of the **Solaris** trademark. There is also Putra Siregar, the owner of the **PS Glow** trademark, and Shandy Purnamasari, the owner of the **MS Glow** trademark. Lawsuits are filed for various reasons, including not having good faith, phonetic similarities, sound similarities, or there are similarities in substance. This means there is a dominant resemblance between the trademark owner and competing trademarks, giving rise to similarities in shape, placement, writing, or a combination of elements such as speech sounds, colors, and fonts.

When discussing obstacles to intellectual property law, trademark protection is first law enforcement if there are problems with trademark misuse, plagiarism, or trademark disputes. The long and convoluted process of proof or settlement will prevent the protection of trademark holders from materializing. Second, in the era of technological disruption, information technology, and trade speed is so fast that it is necessary to continue to carry out juridical reform and reconstruction so that trademark disputes can be carried out quickly, accurately, and efficiently.

When examining various trademark disputes and registrations with the same trademark name in the same class with different trademark owners. It has become urgent to use a technological approach in this case, one of which is Artificial Intelligence (AI) in trademark registration, because since the early 1970s, the dispute over the trademarks **TANCHO** for hair oil and **YKK** for zippers. Until now, it has shown no significant progress and even looks like a setback. The registration of the **TANCHO** and **YKK** marks in Indonesia by an Indonesian company, which a Japanese company owns, and finally, the ownership of the **TANCHO** and **YKK** marks was annulled by a Supreme Court decision, even as the first user in Indonesia. The Supreme Court puts forward the principle or theory of "good faith," thereby providing reasonable protection to foreign trademark owners.

In this case, Artificial Intelligence (AI) can make a significant contribution to the mark registration process, for example, by conducting data analysis and processing complex information in a relatively short time, so that it can help speed up the registration process and improve accuracy in determining the eligibility of a mark for trademark registered. Especially in the initial screening of trademark inspection, to find out the similarity of words, pronunciation, colors, logos, and characters. As depicted in the following flowchart:

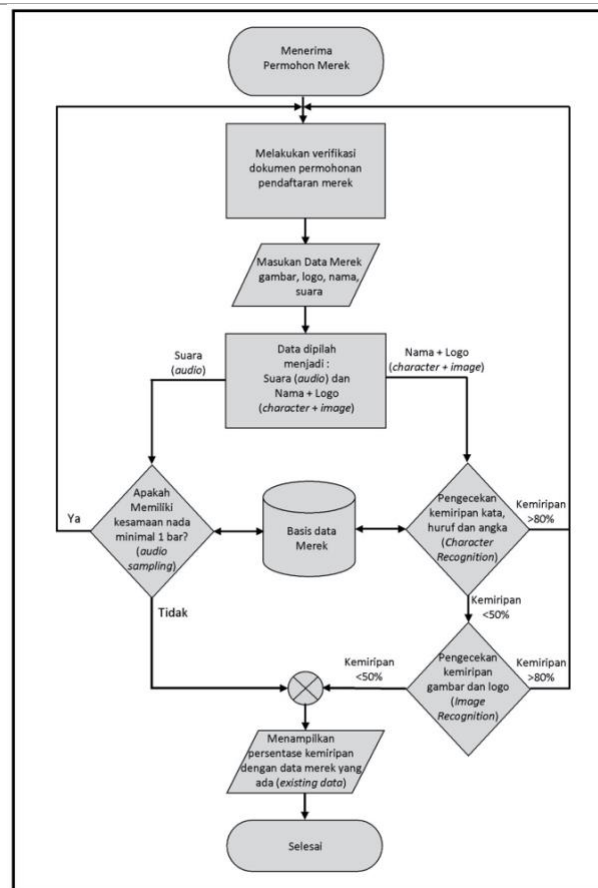


Figure 6. Artificial Intelligence (AI) Process Flowchart in trademark inspection screening

Thus figure 6 is a flowchart of the screening of trademarks using artificial intelligence (AI) to find out the similarity of words, pronunciation, colors, and characters. Using this flowchart scheme, the trademark inspection process can be carried out in a structured and systematic manner to minimize errors in the assessment and speed up the trademark inspection process. Through screening trade trademark inspection using artificial intelligence (AI), the trademark is examined in the same or different categories and classes with existing trade trademark data (existing data). Then it will be seen whether the trade trademark has phonetic, pronunciation, orthographic, color, and character similarities with the existing trade trademark and what percentage of similarity is a parameter of similarity in principle or its entirety with the registered trademark.

Being an essential issue in the era of technological disruption, it examines the phenomena that occur in Intellectual Property Rights, in this case, trade trademark registration through technological aspects. This is an essential matter because this concerns the integrity and credibility of the Indonesian nation, which is at stake; violations and disorderly administration of trademarks that often occur in Indonesia can harm the investment climate, including foreign investment. This can reduce investor confidence in protecting intellectual property rights, in this case, trade trademarks in Indonesia, and affect their decision to invest in Indonesia. However, more than that will extinguish the spirit of creativity and innovation of new inventors in Indonesia who continue to emerge in the era of technological disruption.

Using a technological approach through artificial intelligence (AI) in law will further strengthen the protection of trade trademarks and intellectual property rights, enabling Indonesia to build a more positive image in the international trade market and improve the investment climate, including foreign investment. This technological study, known as Technolegal, is not used to replace *sui generis* legal discussions insofar as Technolegal studies are used to find novel concepts in reconstructing law and setting up new legal models; this is what Technolegal will achieve as its output.

CONCLUSION

In the era of technological disruption, the rapid advancement of creativity and innovation necessitates enhancing our understanding, knowledge, and awareness of intellectual property derived from our creative and innovative capabilities. Protection of intellectual property must become the horizon of everyone's concern. Besides the understanding of protecting intellectual property assets by registering them with the state, the state should be present and earnest in realizing intellectual property law so that the growth and development of innovative and creative activities with technology mastery become inevitable.

Trademark registration is crucial in business and industry, as a brand is one of the most critical assets for a company to distinguish its products from competitors. Hence, legal protection for trademarks is essential to safeguard the company's interests and prevent violations of intellectual property rights. In this regard, the use of technology, namely artificial intelligence (AI), in the era of technological disruption can contribute significantly to the trademark registration process, particularly in screening trademark registrations by analyzing data and processing complex information like audio and names with logos (characters, images), in relatively short times. This can help expedite the registration process and enhance accuracy in determining a trademark's eligibility for registration.

Technolegal is not intended to replace *sui generis* legal discussions but as a new approach combining technology and law to achieve more effective objectives in reconstructing law and establishing new legal models. In Technolegal studies, technology is used as a tool to enhance the effectiveness and efficiency of law. Technological approaches such as artificial intelligence, algorithms, and databases can produce more accurate and faster data and information, leading to a better understanding of how law can be applied more effectively and efficiently. Furthermore, it assists in making more accurate, swift, and appropriate legal decisions, thereby presenting novel concepts in the development of future law.

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