LEGAL PROTECTION AND UNDERSTANDING OF LAYOUT CIRCUITS INTEGRATED DESIGN RIGHTS

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Abstract

At present, there are seven objects of Intellectual Property Rights (IPR) in Indonesia that have been protected by law. One of them is the Integrated Circuit Layout Design (DTLST). In the legal system of IPR, DTLST is relatively new. In fact, even today there are still many Indonesians who do not know exactly what is meant by DTLST. How is the application of Law No. 32 of 2000 concerning Design of Integrated Circuit Layout in Indonesia? What is the object and what is the role of DTLST in the IPR legal system? This is understandable because the law on DTLST was only enacted in 2000 along with three other IPR laws, namely Law No. 29 of 2000 concerning Protection of Plant Varieties; Law No. 30 of 2000 concerning Trade Secrets; Law No. 31 of 2000 concerning Industrial Design; and Law No. 32 of 2000 concerning Integrated Circuit Layout Design.

The law above was born as a consequence of the signing of the Uruguay Round Final Act, which was one of the results of the negotiations: the establishment of a world trade institution known as the World Trade Organization (WTO). The approval of the establishment of a WTO institution was then ratified by Indonesia with Law No. 7 of 1994 concerning Ratification of the Establishing Agreement of the World Trade Organization (Agreement on the Establishment of a World Trade Organization).

Every WTO member must ratify all decisions of this institution including the Trade Related Aspect of Intellectual Property Rights (TRIPs) Agreement, or agreement on aspects of trade in Intellectual Property Rights that refers to the DTLST protection foundation namely the Treaty on Intellectual Property in Respect of Integrated Circuits (Washington Treaty). However, regarding the Layout Design of Integrated Circuits, each member country is given the freedom to regulate itself and adjust to the environmental conditions and technological advances in the country concerned.

Keywords: DTLST and IPR.

A. INTRODUCTION

1. Terms and Concepts of DTLST Protection Systems

In some developed countries there are different design layout terms. For example for example the United States calls a Semiconductor Chip; Australia calls Circuit Layout or Integrated Circuit, and Europe calls Silicon Chips; The TRIPs Agreement states that the Layout Design (Topographies) of the Integrated Circuit and Indonesia itself calls the Integrated Circuit Layout Design (DTLST). Protection of rights to DTLST can be provided by the state through the Department of Law and Human Rights c.q. Directorate General of Intellectual Property Rights if requested by a request by the designer or legal entity entitled to the design.

2. Definition of DTLST

Based on the provisions in Article 1 paragraph (1) and (2) Law No. 32 of 2000 concerning Integrated Circuit Layout Design about this can be understood two things, namely Integrated Circuits and Layout Designs.

a. Integrated Circuit is defined as an inner product

"Finished or semi-finished forms in which there are various elements and at least one of these elements are active elements which are partially or completely interrelated and are formed in an integrated manner in a semi-conductor material intended to produce electronic functions".

The integrated Integrated Circuits referred to here are those that are in the form of finished and semi-

finished with consideration that half-done can function electronically as well. The motherboard, VGA / RAM computer is an example of integrated circuits.

b. What is meant by Layout Design is: "Creation in the form of three-dimensional laying design of various elements, at least one of these elements is an active element and part or all interconnections in an integrated circuit and three-dimensional laying are intended for preparation of integrated circuits". The layout design in question is the pattern or art of laying down the elements on a material so that it becomes an integrated circuit.

3. Scope of Integrated Circuit Layout Design.

a. DTLST subject

The inventor of integrated circuit layout design is called the designer. The designer is a person or several people who produce the Integrated Circuit Layout Design. The Integrated Circuit Layout Design Right is an exclusive right granted by the state to the designer for his creation for a certain period of time implementing it himself, or giving approval to other parties to implement the right. Thus those who obtain the rights to a design other than the designer are those who receive the rights from the designer. Those who are entitled to receive DTLST rights are designers, or some designers in terms of working together (Article 5).

Article 6 explains that in terms of official relations, namely civil servants and related agencies are the agencies concerned. This is so that a design that

is made on order, for example a government agency, is still held by the institution as the customer, unless otherwise agreed. This provision does not reduce the right of the designer to claim his rights if DTLST is used for matters other than the official relationship. If DTLST is made on a working relationship, that is a relationship in the private environment, or an individual relationship with the designer, the person who makes it is the designer and right-holder, unless otherwise agreed.

b. DTLST Object

The protected DTLST object is original. What is meant by original is if the design is the work of the designer itself and is not an imitation of the work of other designers. This means that the design is the work of independent designers. And, when the design was made it was not a common thing for designers. In addition to the original design it must have economic value and can be applied in the industrial world commercially.

c. Exclusive Rights and Moral Rights

DTLST rights are granted on the basis of an Application (Article 9). The exclusive rights held are to exercise these rights themselves (Article 8 paragraph (1) and can:

- 1) prohibit other people without their consent to make, use, sell, import, export and or
- 2) circulating goods in which there are all or part of the designs that have been given the Integrated Circuit Layout Design Right,
- 3) except for research and education purposes insofar as it does not harm the interests of the Integrated Circuit Layout Design Rights holders.

The moral right of a designer is the right of inclusion of the name of the designer in the certificate, General Register, DTLST Official News, even though his economic rights have been transferred all or partially to another party.

4. DTLST Protection Time

Protection of rights granted to designers of Integrated Circuit Layout is for 10 years (Article 4 paragraph (3) is calculated from the first time the design has been commercially exploited anywhere from the date of receipt (Article 4 Paragraph (1). Short protection period due to development technology is so fast that ten years is considered sufficient, in the case that the design has been commercially exploited, the application must be submitted no later than 2 (two) years from the date of exploitation. If the time of protection has been completed, the period cannot be extended and the consequences the design is public property. Anyone can use the design.

5. Transfer of Rights and Licenses

DTLST rights are exclusive rights granted by the state to the designer of their creations, which for a certain time implement themselves or give approval to other parties to implement these rights. Thus the transfer of rights is possible. Please note that the transfer of rights does not eliminate the right of the designer to keep his name and identity, both in certificates, official news and public lists.

There are several known ways of transferring, namely:

a. Transfer of Rights

The transfer of HDTLST must be accompanied by a document of transfer of rights and recorded on the DTST General Register of Rights. Like other IPRs, the Integrated Circuit Layout Design Rights can be switched or transferred by:

- 1) Inheritance
 - 2) Grants
 - 3) will
 - 4) Written agreement or
- Other reasons justified by the laws and regulations.

b. Licence

The rights to DTLST can be transferred to the license agreement in addition to the above method. The licensee's right holder can still exercise his own rights and still be able to give licenses to other parties unless agreed otherwise. License agreements must be made in writing and may not contain provisions that could harm the Indonesian economy or result in unfair business competition as stipulated in the applicable laws and regulations. License agreements such as rights transfer agreements must be registered with DTLST. License agreements that are not registered do not have legal consequences for third parties.

6. DTLST Application Registration and Cancellation

DTLST is protected when registered. Registration matters are regulated in Article 9 through Article 28 of Law No. 32 of 2000 concerning DTLST. Registration is done by request. In principle, the request can be carried out by the applicant himself. Specifically, for applicants who are required to live outside Indonesia, the application must be submitted by proxy. This right is to make it easier

for the applicant concerned, among others, to remember the application documents entirely in Indonesian. In addition, the domicile of the applicant must be in Indonesia. Thus this condition can be overcome by the presence of legal counsel from Indonesia. Requests are only for one design (Article 11). Applicants from outside Indonesia must submit an application through their attorney and choose legal domicile in Indonesia.

Cancellation of DTLST Registration can be done at the request of the right holder. This cancellation can only be done by the Directorate General at the written request of the right holder. Or, based on a lawsuit. Claims can be submitted by interested parties. As a result of the cancellation of registration of a design resulted in the removal of all legal consequences relating to DTLST Rights and other rights originating from DTLST.

7. Litigation and Dispute Resolution in Integrated Circuit Layout Design

DTLST rights holders can sue anyone who intentionally and without rights violates Article 8, namely making, using, selling, importing, exporting and or distributing goods in which there are all or part of the designs that have been granted DTLST Rights. The lawsuit is addressed to the Commercial Court (Article 38). In addition, it can be through arbitration, or alternative dispute resolution (negotiation, mediation, conciliation), and other ways chosen by the parties.

DTLST violations aside from being able to be sued civilly also do not rule out the possibility of being sued criminal. Criminal sanctions against DTLST violations according to Article

42 paragraph (1) are charged with a maximum of three (3) years imprisonment or a maximum fine of Rp. 300,000,000 (three hundred million rupiahs) Criminal acts regulated in Law No. 32 of 2000 concerning Layout Design of Integrated Circuits is an offense of complaint.

8. Problems with Integrated Circuit Layout Design

Descriptions of Integrated Circuit Layout are poorly understood and known by the public / less entrenched because not everyone is directly in contact with DTLST because of its nature as an exclusive right.

The general public has not felt the benefits and usefulness of the importance of DTLST protection.

Lack of socialization from the government.

Limited facilities and infrastructures for handling and permitting DTLST management.

The low level of public awareness to respect the Integrated Circuit Design Rights.

9. Example of a description of the layout of an integrated circuit

Examples of Integrated Circuit Layout Descriptions (DTLST) on the Integrated Circuit.

The components are printed in silicon chips called chips that are approximately 1mm square in size. In chips that are 1mm square in size there are thousands of components. If the chip is packaged and given a pin so that it becomes an electronic device, the device is called IC (integrated circuit).

Examples of Integrated Circuit Layout Designs (DTLST) on Motherboards
Motherboard / Mainboard is the main circuit board of the computer to install the processor, memory and other devices.

Examples of Processor Integrated Circuit Layout Designs

Processor is a very important part of a computer, and is likened to a computer brain. That is an electronic circuit that functions logically to respond and process (process) all instructions that turn on the computer.

B. CONCLUSION

Violations of Design rights Layout of Integrated Circuits will have a detrimental effect on the development of science, technology, art and literature. Without adequate legal protection for the rights of a person's Integrated Circuit Layout Design, the designer's creativity and creativity will decrease sharply which can harm all parties. It makes sense in the thinking of the Despirators, for why designing or creativity in science, literature and art, if the results of their desires are always hijacked by irresponsible parties. It has become an obligation of the state through the authorized agency to be able to protect the DTLST results by enforcing the law against the violators.

On the contrary, the law enforcement of the Declaration of Integrated Circuit layout rights must be careful in sorting out the forms of violations committed and it is expected that law enforcement officers can truly understand the meaning of DTLST rights actually without generalizing just an DTLST

violation of rights ordinary people or people. Legal sanctions are expected to reduce or ensnare pirates without permission and legal procedures (illegal) using DTLST other people with a specific intention to make maximum profits. The provision of legal sanctions in the provisions of the DTLST Act will not guarantee violations of DTLST rights can be reduced, insofar as community legal awareness is still low and does not appreciate the work of other people or nations. Appreciating this copyrighted work needs to be improved considering international sanctions for every nation that hijacks DTLST other people without permission or through proper legal procedures.

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D. REFERENCE (Based ISO 690)

- [1] A. S. Putra And O. M. Febriani, "Knowledge Management Online Application In Pdam Lampung Province," In *Prosiding International Conference On Information Technology And Business (Icitb)*, 2018, Pp. 181–187.
- [2] A. S. Putra, O. M. Febriani, And B. Bachry, "Implementasi Genetic Fuzzy System Untuk Mengidentifikasi Hasil Curian Kendaraan Bermotor Di Polda Lampung," *J. Sist. Inf. Dan*

Manaj. Basis Data, Vol. 1, No. 1, Pp. 21–30, 2018.

- [3] O. M. Febriani And A. S. Putra, "Sistem Informasi Monitoring Inventori Barang Pada Balai Riset Standardisasi Industri Bandar Lampung," *J. Inform.*, Vol. 13, No. 1, Pp. 90–98, 2014.
- [4] Putra, Arie Setya. "2018 Artikel Struktur Data, Audit Dan Jaringan Komputer." (2018).
- [5] Putra, A. S. (2018, July 17). Paperplain Fundamental Create Application With Borland Delphi 7.0 University Of Mitra Indonesia. Retrieved From [Osf.Io/Pbrn9](https://osf.io/Pbrn9).

E. REFERENCE (Based APA)

Putra, A. S., Aryanti, D. R., & Hartati, I. (2018, November). Metode SAW (Simple Additive Weighting) sebagai Sistem Pendukung Keputusan Guru Berprestasi (Studi Kasus: SMK Global Surya). In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 85-97).

Sari, D. P., Febriani, O. M., & Putra, A. S. (2018, November). Perancangan Sistem Informasi SDM Berprestasi pada SD Global Surya. In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 289-294).

Putra, A. S. (2018). Paperplain: Execution Fundamental Create Application With Borland Delphi 7.0 University Of Mitra Indonesia.

Putra, A. S., Sukri, H., & Zuhri, K. Sistem Monitoring Realtime Jaringan Irigasi Desa (JIDES) Dengan Konsep Jaringan Sensor Nirkabel. *IJEIS*

(*Indonesian Journal of Electronics and Instrumentation Systems*), 8(2), 221-232.

Darmawan, A., Yuliawati, D., Marcella, O., & Firmandala, R. (2016). Sistem Absensi dan Pelaporan Berbasis Fingerprint dan SMS Gateway. *EXPLORE*, 7(1).

Febriani, O. M., Wahyuni, T., & Yusuf, S. (2017). DESIGN OF WEBSITE-BASED INFORMATION SYSTEM FOR EDOCUMENT ADMINISTRASI IN THE COMMUNITY SERVICE UNIT (A Case Study at Rajabasa District). *INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY*, 16(7), 7010-7020.

Febriani, O. M., & Wahyuni, T. (2017, October). PERANCANGAN SISTEM E-DOCUMENT ADMINISTRASI LOGBOOK PENELITIAN PADA UNIT LAYANAN DI BANDAR LAMPUNG. In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 187-194).

Febriani, O. M., & Permadi, A. B. (2017). Implementasi Sistem Aplikasi Data Bimbingan dan Pelanggaran Siswa pada Sekolah Menengah Atas di Lampung Tengah dengan Metode Analisis dan Desain Sistem Terdistribusi (SSAD). *EXPERT*, 7(1).

Febriani, O. M., & Ambarwati, L. (2015). PERANCANGAN APLIKASI PENGOLAHAN DATA PENJUALAN UKM KELANTING KHAS TELO DESA SIDOHARJO KECAMATAN JATI AGUNG

KABUPATEN LAMPUNG SELATAN. *Jurnal Teknologi Informasi dan Bisnis Pengabdian Masyarakat Darmajaya*, 1(1), 77-95.

Febriani, O. M. (2015). Rancang Bangun Aplikasi E-commerce menggunakan Freewebstore pada UKM Kelanting di Desa Sidoharjo Lampung Selatan. *Prosiding Sembistek 2014*, 1(02), 446-458.