

# Juridical Overview of Legal Protection of Digital Work Copyrights

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**Abstract.** This research aims to conduct a juridical review of the legal protection of digital work copyright. Digital works are a form of intellectual expression that increasingly dominates in the era of information technology. However, with advances in technology, various legal challenges have also emerged regarding the copyright of digital works. Developments in copyright law in the digital era, including the implications of new technologies such as the internet, social media, and digital distribution platforms. It also examines controversial issues such as illegal copying and distribution, as well as the protection of works that do not have a traditionally recognizable physical form. It is also necessary to analyze various legal and policy efforts that have been carried out by the government and related institutions to protect digital work copyright. It contains restrictions, laws, and international agreements that are relevant in the context of copyright protection. So it is hoped that this journal can contribute to a deeper understanding of the legal challenges in protecting digital work copyright, as well as provide recommendations for improvement and development of more effective policies in this area.

**Keywords:** Protection; Copyright; Digital.

## 1 Introduction

The current time has also given rise to the development of human knowledge. At this time, science and technology have developed very rapidly. With the development of science and technology, it has a huge influence and has an impact on human activities in everyday life. One proof of the impact of this technological development is the discovery of the internet network in the digitalisation era.

In this digital era, various activities can be completed using the internet. The existence of internet technology has been able to increase efforts to disseminate ideas. With this internet network, multiple pieces of information and knowledge can be accessed by people in all corners of the world. The human ability to create something is the outcome of thought, effort,

and creativity, where the results of that thought completely belong to the creator, which is what is called intellectual property. Intellectual property is the result of ideas in the form of ideas or conceptions that are realized or expressed in inventions, literary and artistic works, designs, certain symbols/signs, making layouts of semiconductor components, and breeding varieties.[1]

In essence, humans can assemble things. The effort to use the mind and creativity is what makes humans capable of creating things. The results of this creation wrapped in the invention will then obtain full copyright. It is in line with what was stated by John Lock, namely in the theory formulated, namely Labor Theory, which explains that all people have the right to the results of their work. Things that can be taken into consideration are each stage of thought or creativity carried out to create something, namely the 3 principles below:[2]

1. Ownership rights must protect a person who creates or makes something. The reason that strengthens the consideration is due to the steps and processes for carrying out the creation of an item.
2. The work or design of work that the maker has proposed can increase the creation of several workers' rights, but this will also depend on the existence of a work agreement process that has been agreed upon and issued.
3. There is a process for claiming collective ownership rights which is subject to the same policies as other claims. Then all these things will be designed to bring about peace between the party who created it and other parties or a more global society.

The development of the times has an impact on the development of the form of work. The internet network and digital developments influence and change work that initially had a conventional form into digital formation. It is a work that makes it easier to disseminate and distribute using the internet network.

In the era of digitalization, digital forms of creation have become commonplace and cannot be avoided. Digital products have become a large market and have their consumers. Avoiding digital products can hinder growth. Digital products are more popular because of their efficiency and practicality factors compared to physical products which require special storage space. Apart from that, downloading digital products is also an added value because it takes time and is easy to obtain.

Utilizing internet technology has changed the form of creativity which previously only existed in physical or conventional form, now it has changed to digital form. It is known by several terms such as digital works, digital content, digital information, and digital copyright. Behind this convenience, some risks could occur. This convenience is exploited by parties who do not have the authority to disseminate or distribute without permission, in breach of the law. Creations can be easily changed, modified, and so on. The increasingly widespread internet in social life has led to an increase in copyright violations. Identifying perpetrators of violations is difficult, so protecting a digital form of copyright is not easy. If this violation is not handled immediately, this could damage the industry or the person who created it.

Many people are still unfamiliar with copyright violations, for example, we often find roadside stalls that use images found and taken haphazardly from the Internet. These images are used to promote their business. Apart from that, we often find online shops that use images taken from Pinterest for commercial purposes. It does not only transpire to images but also to works of music, films, photography, and many more. If these violations exist, it is necessary to develop

copyright law because previously only physical copyright protection was regulated, so now it is necessary to expand to digital copyright protection.

In Indonesian positive law, copyright protection can be implemented using security technology. The occurrence of copyright violations has become a worry for someone who creates and has become a scourge that needs to be overcome due to the rise in cases of copyright infringement in this digital world era which can cause losses for creators. This matter raises a big question regarding legal protection for someone who creates something against actions that are not by the Law of the Republic of Indonesia Number 28 of 2014 concerning Copyright (UUHC). The HC Law clearly emphasizes that a work is protected and its creator has exclusive rights by Article 4 of the HC Law which explains that exclusive rights are rights that can only be used by the person who created them so that other parties are not allowed to use these rights without permission from creators something. A person who holds a copyright who is not the person who created it only has economic rights as part of the exclusive rights.[3]

The natural right to control every work of creation belongs entirely to the creator, therefore, all published works need to be known by the creator. Currently, many books are found to be duplicated and published in digital form via electronic media without the author's knowledge. There are also quite an infrequent who pirate electronic books (e-books) and distribute them for free on the internet for commercial purposes. It has happened to numerous people to the point that people think that this is a normal and normal thing to happen.

Violations of digital copyright often occur in Indonesia, as recently happened with Angga Dwimas Sasongko's film entitled *Story of Kale: When Someone's in Love*. The film is broadcast in digital form via a platform called Bioskop Online. Even though platforms have been provided that make it easy to watch films, there are still individuals who pirate the films and distribute them through piracy sites.[4] Furthermore, the case of duplicating electronic books was experienced by writer Andrea Hirata. He suffered losses because the novel he created entitled *Laskar Pelangi* had been duplicated without permission in the form of an electronic book (e-book) by a site called <http://www.rajaebookgratis.com>. This site distributed electronic books of the novel *Laskar Pelangi* for free to the general public. The original novel that was published legally was duplicated in the form of an electronic book 4 times by this illegal site. The number of copies is more than the original novel. According to Andrea Hirata, he has never sold his creative works in the form of electronic books and has never distributed electronic books for free on the Internet. The difficulty of determining which parties have committed copyright infringement has resulted in the case of infringement of the electronic book novel *Laskar Pelangi* not being brought to justice by the author.

Based on this situation, it cannot be denied that the internet has created a significant new phenomenon in various aspects of human life. In a legal context, the internet phenomenon has a true consequence on the legal model that applies in cyberspace. However, in implementing the current rule there are still several obstacles that need to be considered. One of these weaknesses is jurisdictional limitations which affect the effectiveness of statute enforcement on the internet. Apart from that, the application of the law also relies heavily on formal procedures which can hinder the efficient resolution of cases.[5] Along with these developments, copyright law protection must also follow suit. Previously, copyright protection only applied to physical works, but now it must extend to safeguard digital pieces.

After the revolutionary period until 1982, Indonesia still used the Dutch Colonial Government Law Auteurswet 1912, until the realization of Law Number 6 of 1982 concerning Copyright which was ratified and promulgated in Jakarta on April 12, 1982, then amended by Law Number 7 1987 concerning Copyright which was ratified and promulgated in Jakarta on September 19, 1987, which was again amended by Law Number 12 of 1997 concerning Copyright which was ratified and promulgated in Jakarta on July 29, 2002, then changed to Law Number 19 of 2002 and amended by Law Number 28 of 2014 concerning Copyright (UUHC).

The word copyright is a compound word that includes 2 (two) syllables, namely privilege and copyright. The word "right" means "the power to do something because it has been determined by law". Meanwhile, the term "creation" concerns the inner ability (mind) to create something new, especially in the field of art.[6] Copyright recognizes two types of rights contained in creation, namely copyright and related rights (neighboring rights). These two types of rights are exclusive rights of an industrial economic nature for the owner of a creation.[7]

In the 2014 Copyright Law, there is a general definition of Copyright, which is an exclusive right of the person who created it which arises automatically after the creative work is realized in concrete form. Creators are individuals or groups who produce unique and personal creations by Article 1 paragraph (1) and (2) UUHC.

Creations are all creative works in terms of science, arts, and literature that are produced based on inspiration, competence, mindset, imagination, dexterity, skills, or expertise which are expressed in concrete form by Article 1 section (3) UUHC.

A Copyright Holder is a person who creates and owns a Copyright, a party who legally receives the rights from someone who created it, or another party who further receives the rights from a party who legally receives the rights by Article 1 paragraph (4) UUHC.

Related Rights are rights related to Copyright which are exclusive rights for someone who performs, produces phonograms, or broadcasts institutions under Article 1 section (5) UUHC.

In formal juridical terms, Indonesia was introduced to the issue of Copyright in 1912, namely when it was promulgated under the name Auteurswet, which came into effect on September 23, 1912. Even though at that time Indonesia had implemented the 1912 Auteurswet.[8] Balai Pustaka Publisher is a state-owned enterprise. The translations carried out by the Balai Pustaka publisher are carried out with good intentions, namely to enrich the library library for the Indonesian people, which does not yet have sufficient numbers. According to Auteurswet 1912, translation without permission from the author is a violation. When translations are carried out from books that have become public domain, mention of the author's name and original title must still be conducted, bearing in mind that there are still moral rights attached to the works in question.

After Indonesia's independence, the provisions of the 1912 Auteurswet were still declared valid by the transitional provisions of Article I of the 1945 Constitution, Amendment IV, namely that every existing legal regulation was still in effect as long as new ones had not been implemented according to the 1945 Constitution. In general, the realization of laws and regulations in the field of Copyright in Indonesia is based on the ratification of international agreements in the field of Copyright, some of these agreements are:

1. Bern Convention of 1886 About the Protection of Literary and Artistic Works.
2. Universal Copyright Convention 1995 or Universal Copyright Convention.

3. Rome Convention 1961.
4. Geneva Convention 1967.
5. TRIPs 1994 (Trade-Related Aspects on Intellectual Property Rights 1994).

Referring to the UUHC, copyright that requires legal protection is within the scope of arts, literature, and science. Of these three scopes, the UUHC further details them, such as those in the provisions of Article 40 of the UUHC, which contains shielded copyright, including creations in the fields of science, art, and literature.

### **Copyright Protection**

Copyright is the result of human thought in terms of science, art, and literature. Copyright arises automatically when a work is created. Copyright is a personal right inherent in the creator. Copyright is a private right. The reason is because a work is born from the creativity of the person who creates it. This creativity arises from the thoughts and intellect of the person who creates it. Copyright must originate from human creation and not be the result of activity or creativity that exists outside of humans.[9]

In Article 1 paragraph (1) UUHC, it is illustrated that copyright is an exclusive right that is given to the creator automatically after the work is realized in concrete form, by declarative principles, and does not violate applicable laws and regulations. Copyright is a natural right that is absolute and is given protection as long as the creator is still alive and for several years afterward. According to UUHC, the protection period after the death of the person who created it is 70 years. As an absolute right, copyright can be enforced against anyone who violates it, and the copyright holder has the right to sue for violations committed by anyone.[10] To receive copyright in the areas of arts, literature, and science, the work must fulfill several characteristics, such as originality and concrete existence.

Originality criteria are intended to determine copyright ownership or claims to a work/masterpiece. This shows that a work/work is truly created and comes from its creator. Originality does not require novelty in creation but rather requires that a creation/work is the result of the thought/creativity of its creator. Originality also does not include copyright for imitation of other people's creations or works that are in the public domain.[11] Copyright only protects ideas that have been expressed or realized. The copyright must be realized in a form and media that allows the work to be presented, reproduced, and communicated in a format that is more than just a temporary expression of material. An idea that has not been expressed or realized cannot be secured by copyright. In foreign literature, this requirement is often referred to as fixation.

Copyright consists of moral rights and economic rights that are exclusive. It means that this right can only be used by someone who creates it and prohibits other parties from using it without permission. A person who holds a copyright who is not the person who created it only has economic rights. Moral rights and economic rights have differences, where economic rights have economic value, while moral rights have no economic value. Moral rights are rights inherent in someone who creates. Moral rights cannot be extinguished even though the copyright protection period has been terminated. Moral rights cannot be transferred while the creator is still alive but can be transferred through a will or other reasons by statutes after the person who created it has died. Moral rights also include related rights (neighboring rights).

Economic rights are rights given to someone who creates or holds a copyright to obtain economic value from their work. Economic rights holders can carry out various activities,

including publishing works, duplicating works in various forms, translating works, adapting, arranging or transforming works, distributing works or copies, performing works, announcing works, communicating about works, and renting them out.

These rights not only provide benefits for individuals but also provide hope for the growth of the creative economy. To maintain the rapid development of the creative economy, legal protection is crucial because copyright is the primary basis of the national creative economy. Some of the doctrines contained in copyright protection include:

1. In the doctrine of utilitarianism, it is stated that limiting monopoly can encourage innovation. Thus, the innovation system must provide recognition of exclusive rights from the moment of creating intellectual property, which is limited in terms of period and scope and is balanced with the economic appreciation of the person holding it and its owner.[12] Incentives are needed for creators to be encouraged to spend time, energy, and thought in creating new works. Without this incentive, the creator's enthusiasm will be lost because there will be no commensurate reward. The aim of implementing laws influenced by the doctrine of utilitarianism is to promote maximum welfare with optimal economic efficiency.[13]
2. The Labor Doctrine is a doctrine developed by John Locke who said that rewarding someone for the results of their work is natural. This award is given in the form of intellectual property rights.
3. The Personality Doctrine is based on the assumption that personal property has a very crucial value in fulfilling several basic human needs. Therefore, legislators must make efforts to create and allocate rights to resources in a way that makes it possible for people to fulfill these needs. In the legal context, this doctrine affects determining moral rights for creators.
4. The Social Control Planning Doctrine is a doctrine that emphasizes the important role of intellectual property rights in society. Intellectual property rights should provide benefits to society. The doctrine of social control planning is the latest development in copyright protection, this principle is relevant as a basis for protecting copyright on the internet.

The UUHC regulates positive copyright law in Indonesia, implementing several doctrines in its regulations which are reflected in its compositions.

### **Legal Protection**

Legal protection is an action or effort to protect human rights that has caused harm to other people. The aim of this protection is so that people can feel the pleasure of every right that has been given and guaranteed by law. So legal defense is a sequence of legal procedures that law enforcement agencies must take to ensure security, both emotional and bodily, against disruptions or threats from any person or entity.

According to Setiono, legal protection also plays a role in protecting society from deviant actions by authorities that are not by statutory regulations. This desire to provide peace and tranquility to society so that each individual can enjoy the pleasure of their worth as a member of humanity.[14] In Muchsin's view, Legal Protection activities aim to defend individuals by integrating values or rules that are reflected in attitudes and actions to create order in social interactions between fellow humans.

Legal Protection is every effort to fulfil rights and provide assistance to provide security for witnesses and/or victims. Legal protection for crime victims is also part of the government's protection of society which can be provided in various forms, for example providing restitution, compensation, medical services, and legal assistance. Based on the Big Indonesian Dictionary (KBBI), legal protection is defined as a place of refuge and action to protect. This definition of the word protection has the same elements, such as safeguarding and ways of guarding. Thus, the word protect refers to the efforts of certain parties to use certain methods to provide protection.[15]

In Muchsin's view, Legal Protection is a mechanism that covers legal subjects through statutory regulations that are implemented and enforced with sanctions. There are two types of legal protection which include:

- a. Legal Protection Prevention is the government's effort to prevent unlawful actions from occurring. This is regulated in statutory regulations to provide guidance and limitations in carrying out obligations and preventing violations.
- b. Repressive Legal Protection is the final form of protection which includes sanctions such as fines, imprisonment, and additional penalties given after a dispute or violation occurs.

In Philipus M. Hadjon's view, legal protection is an effort to protect the value and dignity of humans, as well as recognize the human rights possessed by individuals based on applicable regulations. Meanwhile, in Satjipto Raharjo's view, Legal Protection is an action taken to protect human rights that have been harmed by other parties, to authorize society to enjoy all the rights that have been granted by law.

## **2 Method**

The techniques used in this research is a normative legal approach and comparative law. The data collection method in this writing was carried out by studying relevant documents and library materials, such as collecting regulations related to intellectual property rights law, as well as searching literature, articles, and books as sources of information related to this topic. The types of legal materials used include primary, secondary, and tertiary legal materials. This research is descriptive research that aspires to collect data that is as accurate as possible regarding individuals, conditions, symptoms, or certain groups, as well as to determine the frequency of a symptom. Apart from that, this investigation desires to find mere facts (fact-finding), which is then continued with research that aims to find problems (problem-finding), to then identify the problem (problem-identification), and finally solve the problem or problem solution.

## **3 Result and Discussion**

### **3.1 Data on Law Violation Cases in Indonesia**

The state must protect copyright owners and supply certainty regarding copyright violations so that the constitutional rights of citizens can be guaranteed. Copyright infringement is a violation of copyright (known as piracy) is the use of material that is still protected by copyright without the permission of the creator or right holder, in this case violating certain exclusive rights granted to someone who holds the copyright such as duplicating, reproducing,

performing distribution, displaying or displaying the work, or creating derivative works. A person who holds a copyright is the creator, publisher, or other party who is mandated to hold the work. Copyright holders usually use certain technological and legal standards to prevent and punish copyright infringers.

The crisis can usually be resolved amicably, through the withdrawal and destruction of the bootleg, or taken to court. Large-scale piracy, especially involving counterfeiting, can be prosecuted through the criminal justice system. Shifting public expectations, advances in digital technology, and the growing reach of the Internet have led to widespread anonymous violations. It makes it difficult for the creative industry to focus on catching up with people who search for and share copyrighted content online and freely. Even the creative industry wants to expand this law to punish service providers and software distributors who facilitate piracy as indirect pirates.

Estimates of the economic impact of copyright infringement vary widely and depend on many factors. Nevertheless, copyright holders, industry representatives, and legislators have long characterized copyright infringement as piracy or theft – language that some US courts now consider pejorative or controversial. Copyright protection is crucial to provide legal protection for someone who creates or holds a copyright. On the other hand, copyright protection encourages the growth of a conducive ecosystem for assembling creation, especially in the creative industries. According to data from the National Police's Criminal Investigation Agency (Bareskrim), there were 958 cases of intellectual property rights violations during 2016-2021. This figure includes, among other things, trademark infringement (650 cases), copyright (243 cases), and patents (18 cases).[16]

With the large number of cases related to copyright infringement, legal defense for copyright in the digital era is weakening. Law enforcement is difficult because copyrighted works in digital format are cross-border. Determining jurisdiction and legal provisions is also difficult. In addition, quite a few copyright violators hide behind anonymity. Violators' social media accounts can be anonymous or fake, making them challenging to trace.

There needs to be an integrated copyright system and data center because one of the obstacles to copyright protection is the lack of data. Parties who want to use creative works also have difficulty paying royalties. It is recommended that the government build an integrated system to access and request permission to use copyright. This system also serves royalty payments for various types of copyrighted works.

### **3.1 Comparison of Copyright Arrangements in America and Japan**

#### **Rules in America**

One of the countries implementing harmonization with the WIPO Internet Treaties is the United States. The United States can be said to be a country that pays attention to copyright provisions, which can be seen from the placement of copyright provisions in the country's basic law, namely in Article 1 Section 8 Clause 8.

In 1998, Congress took significant steps by enacting the Digital Millennium Copyrights Act, which contained aspects of circumvention of technology protection.[17] Increasing copyright protection in the United States has made significant progress, including in dealing with security technology that can be used to provide copyright protection.[17]



Several types of security technologies are implemented in United States copyright law. A variety of security technologies include:[18]

1. Anti-Copy Tool  
This tool prevents the formation of copies or works by making them difficult to duplicate. Examples are SCMS (Serial Copy Management Systems), and DVD Video Standard which prevents copying in any form or only allows copying at lower quality.
2. Password with encryption system  
Providing access control in digital works that are protected through encryption, with a password system or set-top-boxes. A concrete example is a digital envelope or a place to store data containing information related to the identification and use of content. By working like an envelope to wrap digital objects that have been encrypted and have the meaning of a kind of abstraction of the content, identification of someone who owns the copyright, or terms of use of the copyrighted work.
3. Proprietary viewer  
Software that protects digital objects is always under control, including only allowing use with permission from someone who owns the copyright.
4. Watermark or fingerprint  
The technique of adding an invisible digital sign in the digital code of a copyrighted work forms it can identify a copyrighted work and the person who holds the copyright and clarify the originality of the copyrighted work.
5. Metering Systems (metering system)  
A system that provides the possibility of a record that stores all uses related to a particular creative work.
6. Electronic Copyright Management Systems (ECMS) (Electronic Copyright Management System)  
A system that is possible to identify copyright material, monitor its use, and provide appropriate remuneration to someone who holds copyright. This software integrates different technical features as mentioned above combined with an automatic licensing system and electronic system.

In DMCA Chapter 1204, provisions are provided for parties who damage security technology which is included in criminal offenses. Parties who intentionally and commercially damage security technology for financial benefit to themselves will face a fine of US\$ 500,00 or confinement for 5 (five) years for the first offense, and a fine of US\$ 1,000,000 or confinement for 10 (ten) years for subsequent misconduct. However, there are exceptions if the destruction is carried out for non-profit libraries, archives, and educational institutions, where the party will be exempt from criminal or civil prosecution.

### **Rules in Japan**

In Japanese law, doing something that damages monitoring and access is not considered a violation of copyright. The prohibition against tampering with security technology only applies in Japan if the copyrighted work whose security technology has been tampered with has been used or reproduced without permission from the person who owns the work.[17] Damage done for personal earnings will not be subject to sanctions, but if the damage is an act of piracy carried out to seek profit, then the destructive act is considered illegal and will be subject to sanctions.[19]

### **3.2 Security Technology in Indonesian Law Law No. 28 of 2014 concerning Copyright**

The Indonesian Copyright Law has paid attention to safety technology in its provisions by the provisions contained in the UUHC. However, despite this, the use and methods of security technology have not been explained explicitly in the law.[20] Exclusive protection of rights by someone who creates moral rights and economic rights is sufficiently included in the concept of security technology according to Indonesian law.

In using security technology to protect copyright and moral rights, regulations are provided in Articles 6 and 7 of the UUHC. Article 6 UUHC states that to protect moral rights as explained in Article 5 paragraph (1) UUHC, a person who creates can have information on managing Copyright and/or electronic Copyright information. Furthermore, Article 7 UUHC states:

- 1) Information in managing Copyright by what is controlled in Article 6 letter a UUHC includes information related to:
  - a. method or system that can identify the originality of the substance of a creative work and the person who created it; and
  - b. information code and access code.
- 2) Copyright electronic information by Article 6 letter b UUHC includes information related to:
  - a. copyrighted work that arises and is embedded electronically in connection with the activity of announcing the copyrighted work;
  - b. the name of a person who creates either an alias or pseudonym;
  - c. someone who creates as someone who holds copyright;
  - d. the period and situation in using his invention;
  - e. number; and
  - f. information code.
- 3) Copyright management information by Article 6 section (1) and electronic Copyright information by Article 6 section (2) which is owned by the person who created it is prohibited, removed, changed, or destroyed.

The use of security technology as copyright protection is regulated in Articles 52 and 53 UUHC. Article 52 of the UUHC prohibits any person from destroying, destroying, eliminating, or creating something that does not have a function as a means of monitoring technology used for copyright protection or rights products related to protecting copyright or related rights, except for defense and security purposes. state security by statutory regulations or by other agreements.

Using technological monitoring means is interpreted to prevent or limit actions outside the permits granted by someone who creates, holds, and owns copyright and which are prohibited by statutory regulations. Article 53 UUHC states this:

- 1) Copyrighted works or Related Rights products that use production facilities and/or store data based on information technology and/or high technology, must comply with regulations containing permits and production conditions that have been stipulated by authorized institutions.
- 2) Further rules regarding production facilities and/or storing data based on information technology and/or high technology.

In Article 53 UUHC, an explanation is given regarding production facilities and/or storing data based on information technology and/or high technology which includes optical discs, servers, cloud computing, secret codes, passwords, barcodes, serial numbers, description technology (description), as well as encryption. A person who violates copyright and damages security technology may be subject to criminal sanctions by the provisions contained in Article 112 UUHC. In this case, any individual who carries out these actions without rights, as explained in Article 7 paragraph (3) and/or Article 52 UUHC for commercial use, can be convicted to the highest penitentiary sentence of 2 (two) years and/or the highest penalty of Rp300,000,000.00 (three hundred million rupiah).

Even though there are criminal sanctions for someone who violates copyright related to security technology, this is deemed to be a complaint that does not provide adequate protection for security technology. However, the collaboration between security technology and legal regulations in the UUHC has provided broad and adequate protection. Rules related to using security technology also include protection of the moral rights and economic rights of a copyrighted work.

Using security technology to protect digital copyrighted works is regulated in the UUHC. However, using this security technology can limit access to digital copyrighted works, which can be detrimental to users. However, good faith access should be permitted to access the copyrighted work. Restrictions on protection are only permitted in the interests of national defence and security, whereas in Article 26 UUHC, the provision of protection limits covers the needs of education, teaching, and scientific research. In the current digital era, access restrictions can cause backwardness and lack of scientific development. Therefore, for users with educational and scientific purposes, access to copyrighted works must be permitted to enable better development.

The legal rules that protect security technology between America and Indonesia have several things in common. Both countries have legal provisions that cover aspects of the public interest. One of them is a prohibition on the use of security technology to damage a creation. Apart from that, there are also criminal law provisions for perpetrators who damage security technology. However, these regulations are balanced by the existence of clear rules regarding limitations and exceptions in damaging security technology.

Differences in legal regulations between Japan and Indonesia regarding the protection of security technology need to be considered. In Japan, tampering with security technology for a copyrighted work is not a problem as long as it is not used or reproduced without the permission of the copyright holder. However, in Indonesia, this prohibition applies from the moment the security technology is damaged.

#### **4 Conclusion**

The development of science and technology has resulted in many changes, including the emergence of internet technology which has had a significant impact on the digital world.

With the development of digitalization, human actions have changed and various works of art that previously only existed in traditional form can be transformed into digital form. This digital creative work can use the internet to make it easier to publish and disseminate information. However, behind the easy things offered, there are also negative impacts by making it easier and wider to violate copyright in digital copyrighted works by parties who do not have the rights. Collaboration between law and security technology is a solution to overcome this problem. WIPO has issued 2 (two) international conventions called the WIPO Internet Treaties, which regulate copyright protection in the era of digitalization. This convention has been adopted by many countries, including Indonesia, which has included safety technology provisions in the UUHC. Regulations regarding security technology in this law protect moral rights and economic rights.

## References

- [1] K. M. Simatupang, "Tinjauan Yuridis Perlindungan Hak Cipta dalam Ranah Digital," *J. Ilm. Kebijak. Huk.*, vol. 15, no. 1, p. 67, 2021, doi: 10.30641/kebijakan.2021.v15.67-80.
- [2] R. P. Merges, "Locke for the Masses: Property Rights and the Products of Collective Creativity," *SSRN Electron. J.*, vol. 36, no. 4, 2011, doi: 10.2139/ssrn.1323408.
- [3] R. Aulia, "PERLINDUNGAN HUKUM TERHADAP PENCIPTA KARYA FOTOGRAFI DALAM BENTUK WATERMARK MENURUT UNDANG-UNDANG HAK CIPTA NO. 28 TAHUN 2014 (Analisis Putusan Mahkamah Agung No. 013k/N/HAKI/2006)," Universitas Muhammadiyah Sumatera Utara, 2017. [Online]. Available: <http://repository.umsu.ac.id/handle/123456789/12483>
- [4] A. P. Taher and M. Bernie, "Kala Sineas Lokal Harus Hadapi Pembajakan di Negeri Sendiri," *tirto.id*, 2020. <https://tirto.id/kala-sineas-lokal-harus-hadapi-pembajakan-di-negeri-sendiri-f6vS> (accessed Nov. 03, 2023).
- [5] S. Mertokusumo, *Hukum Acara Perdata Indonesia*. Yogyakarta: Libertya, 2000.
- [6] *Kamus Besar Bahasa Indonesia*. Jakarta: Balai Pustaka, 1988.
- [7] E. R. Ginting, *Hukum Hak Cipta Indonesia Analisis Teori dan Praktik*. Bandung: PT Citra Aditya Bakti, 2012.
- [8] E. Damian, *Hukum Hak Cipta*. Bandung: PT Alumni, 2009.
- [9] Saidin, *Aspek Hukum Hak Kekayaan Intelektual*. Jakarta: PT RajaGrafindo Persada, 2015.
- [10] B. A. Riswandi, *Doktrin Perlindungan Hak Cipta di Era Digital*. Yogyakarta: FH UII Press, 2016.
- [11] K. Hidayah, *Hukum Hak Kekayaan Intelektual*. Malang: Setara Press, 2017.
- [12] R. Ahmad M, *Hak Cipta, Disrupsi Digital Ekonomi Kreatif*. Bandung: PT. Alumni, 2018.

- [13] L. Zemer, "The Making of A New Copyright Lockean," *Harv. J. Law Public Policy*, vol. 29, no. 3, pp. 891–947, 2006.
- [14] Setiono, *Rule of Law (Supremasi Hukum)*. Surakarta: Magister Ilmu. Hukum Program Pascasarjana Universitas Sebelas Maret, 2004.
- [15] *Kamus Besar Bahasa Indonesia (KBBI)*, Kedua. Jakarta: Balai Pustaka.
- [16] S. Gandhawangi, "Pelanggaran Hak Cipta Kian Mudah Terjadi," *kompas.id*, 2022. <https://www.kompas.id/baca/dikbud/2022/05/18/pelanggaran-hak-cipta-kian-mudah-terjadi> (accessed Nov. 02, 2023).
- [17] R. A. Gorman, *Copyright Law: Second Edition*. Federal Judicial Center, 2006.
- [18] S. Dusollier, "Electrifying The Fence: The Legal Protection of Technological Measures for Protecting Copyright," *Eur. Intellect. Prop. Rev.*, pp. 1–17, 1999.
- [19] D. L. Burk, *E-books and Technical Protection Measures Comparing the situation in the United States and Japan Munich Intellectual Property Law Center Ana Carolina da Motta Perin Technical Protection of Author ' s Rights*. Munich Intellectual Property Law Center, 2007.
- [20] B. A. Riswandi *et al.*, *Pembatasan dan Pengecualian Hak Cipta di Era Digital*. Bandung: PT Citra Aditya Bakti, 2017.