Copyright Infringement on Music, Movie and Software in the Internet (Illegal File Sharing and Fair Use Practices in Indonesia, Japan and United States of America)

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要旨

インターネット技術は、インドネシア、日本、米国を含む世界中で広く利用されている。発展につれて、それら応用技術は人類の福祉にとって不法な行為を誘発する「両刃の剣」となった。デジタル化可能なほとんどの著作物は、インターネットを介した複製及び物理的侵害の蓋然性にさらされることとなった。違法ダウンロード、アップロード、ファイル共有が市民の間に広がったが、インドネシアの立法は、インターネット技術の進歩への反応が鈍かった。その結果、著作権産業がフラッシュ・ドライバ、スマートフォン、タブレットなどの高度モバイル技術というデジタル著作権侵害の新しい成長の問題に直面しているのにもかかわらず、対策は、違法コンテンツや海賊製品の普及に対してのみ行われている。いくつかの国では、これらのデバイスは、それらが販売される前から違法なコンテンツをインストールされている。政府によれば、彼らは物理的及びオンラインの海賊行為を停止するための解決法を探している。本論文は、日本、米国、インドネシアにおける著作権法のシステムを比較する。また、国際的な規制が、刑事罰と罰金の執行においてこれら各国にどのような影響を与えるかを説明する。著作権法に関する立法のみではインターネット上の課題には答えられないことを示す点でも有益である。技術的、手続的、社会的、制度的に効率的な執行システムの具体的な調和が必要とされている。

Abstract

The utilization of Internet technology is widely practiced by the entire population of the globe, including Indonesia, Japan and United States. During its development, applied technology became a “double-edged sword”, in addition to the mankind welfare; it is used for unlawful acts. Most copyrighted works that can be reformed to digitize have big probability to duplicate over the Internet and physical piracy. Illegal downloading, uploading and file sharing became common activities among the citizenry. Indonesian legislation was low respond to follow the advance of Internet technology. Consequently, legal enforcement is performed only among the spread of illegal contents and pirate products. While, copyright industries face new growing problems with digital piracy; flash drivers, smartphones, tablets and other high mobile technologies. In some countries, these devices are preloaded with illegal content even before they are sold. Accompanied by the government, they try to find the solutions to stop the physical and online piracy. The thesis examines the comparison copyright law system with the cases analysis among Japan, USA and Indonesia. This thesis also describes how international regulations give influence to the members in enforcing the criminal penalties and fines. It is also valuable that copyright legislation alone will not answer all the Internet’s challenges. A concrete harmonization both, efficient enforcement system, technology, procedurally, society and institutionally, is required.

Content

Chapter I

INTRODUCTION

1.1 Background

Accompanying with the improvement of digital technology in the universe, a major change occurs in the environment and people activity. Many forms of activity have been utilized in order to access data in many dissimilar ways. They could enjoy free/conventional facility of digital technology anytime and anyplace. However, the technology is currently becoming a “double-edged sword”, because of leads in improving the welfare, advancement of human civilization, but conversely, it also effective for unlawful acts.

Copyright also comes up into a new level of digital revolution; Regulation process, object production and file distribution (file sharing) had a substantial alteration. Therefore, frequently encountered that there is a difference of interest between copyright protection and technological improvements. Today, by the Interconnection-Networking (Internet), infringement of copyright contents has lasted numerous and bigger. The era of smart phones, streaming music online, movie, software and YouTube have definitely had an impact on media consumption. Digital copyright works are easy to reformed, duplicated, shared and be traded illegally. Net user that reach hundreds of millions people and spread all over the world arrives their activities difficult to monitor and detect because of the borderless Internet itself. Hence, governments are required to be able in creating a protection system for copyright holders on the Internet without losing a sense of justice for the Internet users.

Japan and United States are the model countries, which fought tightly against digital copyright infringer. Since 2010, Japan declare that Internet users who download copyright infringing files will dealing with two years in prison or fines up to two million yen. Hence, even there was protest about its policy by the cyber activist,[1] on 2012 Japan briefly amendment their copyright law regarding criminal enforcement of illegal downloading. The clause explains a person who intentionally/knowingly download illegally uploaded movie, music or copyrighted files will be penalized. However, even RIAJ (the Recording Industry Association in Japan) claimed that illegal file sharing decreased 40 percent on 2013-2014; selling and buying original product were still downward trend. The pirate in Japan or abroad use anonymous content sharing networks using Share, Winny and perfect Dark to cover origin name.[2] One famous case would be analyze on this thesis is winny case. Mr. Kaneko was suspected as a conspirator who commits copyright violations.[3] He was one of the first software programmers worldwide to fight such lawsuit.

According to RIAA (Recording Industry Association of America), MPAA (Motion Picture Association of America) and ESA (Entertainment Software of Association) just limited and poor people do not know about digital copyright, but many people do not understand the significant negative impact piracy on the

[1] Technology news,*Japan Introduces Piracy Penalties for Illegal Downloads,* October 1, 2012, *available at* http://www.bbc.com/news/technology-19767970, (last visited December 11, 2015)
[2] David Higgins, *File Sharing and Downloading Laws in Japan*, September 16, 2014, *available at* http://www.japanupdate.com/2014/09/file-sharing-and-downloading-laws-in-japan/, *see also* Recording Industry Association of Japan (RIAJ), Statistic Trends (2013 & 2014).
[3] Mr. Kaneko was accused of supporting and assisting the infringement of copyrighted works. Penal Code of Japan, Art 62 & 63, and Japanese Copyright Law, Art. 23.

copyright industries.[4] RIAA noted, since peer-to-peer (P2P) file sharing sites; Napster, aimster, share around 1999, music market in the U.S. throw down 53 percent from $14,6 billion to $ 7,0 billion in 2013.[5] 30 billion songs were illegally shared through file sharing networks. Digital files especially music theft has been a foremost reason behind the music market reduction over 15 years.[6] Increasing of technology also create other form of digital theft in the U.S.; unauthorized digital storage lockers operated to share copyright content, illegal file sharing software and smartphones application that might facilitate digital contents infringement.[7] Even though, most parties used fair use as a legal reason against plaintiff/prosecutor, the court has legal basis to analyze whether it meets condition or not. The fourth fair use factors codified in 17 U.S.C. § 107 permit fair use and reproduction of copyright content for critics, comment, news reporting, teaching, scholarship and research.

In the past five years, copyright legislation and trade negotiation had been proposed significantly. Starting with SOPA (Stop Online Piracy Act), the agreement highlights about penalties for not only sites or web which facilitate

[4] Information Technology Service, *Illegal Downloading and Piracy*: *What Student Need to Know*, *available at* https://www.calstatela.edu/sites/default/files/groups/Information%20Technology%20Services/security/illegaldownloading.pdf, (last visited December 11, 2015).
[5] Joshua P. Friedlander, *News and Notes on 2013 RIAA Music Industry Shipment and Revenue Statistics*, RIAA, *available at* http://riaa.com/media/2463566A-FF96-E0CA-2766-72779A364D01.pdf, (last visited December 11, 2015).
[6] *id.*
[7] *See, e.g.*, Playboy Enterprises, Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993)., MGM Studios v. Grokster, 545 U.S. 913 (2005)., BMG Music v. Gonzales, 430 F. 3d 888 (2005)., RIAa v. Verizon, 351 v. F.3d 1229 (D.C. Cir. 2003)., A&M Records v. Napster, Inc, 239 F.3d 1004 (2001) and UMG Records v. MP3.com, 92 F. Supp. 2d 349 (2000)

directly infringer but also those who help others.[8] Consequently, on January 18, 2012, technology companies; YouTube, Google, Dropbox, Yahoo, Flickr etc., launched a massive protest by shutdown their web. Google got seven million signatures on its websites for SOPA cancelation.[9] Congress deferred the legislation, but bill debate continued.[10] PIPA (Protect IP Act) also delivered the Attorney General could be suing an operator/owner of an Internet site due to copyright infringement.[11] The same as SOPA, PIPA intruded more specific requirement for implementation. Next, ACTA (Anti Counterfeiting Trade Agreement) were designed to international copyright problems, online copyright infringement, online trafficking counterfeiting goods including trademark enforcement measures. The new agreement is Trans-Pacific Partnership, Digital copyright and the Internet is one of the chapters on TPP. Like ACTA, TPP involves each participating nations to guarantee the criminal liability for encouraging and promoting exists under its law. The provision also strongly recommend to members for creating safe harbor at ISPs (Internet Service Provider).

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[8] Stop Online Piracy Act, H.R. 3261, 112th Cong. § 103(a)(1)(B) (1st Sess. 2011), *available at* http://www.gpo.gov/fdsys/pkg/BILLS-112hr3261ih/pdf/BILLS-112hr3261ih.pdf, (last visited December 11, 2015)

[9] Dara Kerr, *Millions sign Google's anti-SOPA petition*, Cnet News, January 18, 2012, *available at* http://www.cnet.com/news/millions-sign-googles-anti-sopa-petition/, (last visited December 11, 2015).

[10] Pamela McClintock, *MPAA Chief Christopher Dodd Says SOPA Debate Isn't Over, Defends Hosting Harvey Weinstein Even as He Attacked Over 'Bully'*
May 4, 2012, *available at* http://www.hollywoodreporter.com/node/308359, (last visited December 11, 2015).

[11] To prevent online threats to economic creativity and theft of Intellectual Property Act of 2011, *available at* https://www.gpo.gov/fdsys/pkg/BILLS-112s968rs/pdf/BILLS-112s968rs.pdf, (last visited December 12, 2015).

October 16, 2014, the Former President Yudhoyono signed Indonesia's new law regarding copyright amendment the prior of copyright law 2002. The new provision delivered some strength to possibly implement immediate relief against digital form and infringement of cyber networking, in accordance with the TRIPS Agreement, Berne Convention, The WCT and WPPT. Even though Indonesia is still not join the ACTA and TPP, the legislation had been stand up for change the copyright situation. Through dramatically moving due to diversification of digital copyright infringement, the government should explore the possibility of future law enforcement, technological measures and distribution of digital content. Furthermore, we should extra concern to build some projects and perception of society and market to respect more on digital copyright protection. However, innovative businesses of copyright industries were introduced, which sometimes it is not friendly with developing countries. Thus, stakeholders must be regulating the process and the result is accordance with the national interest.

1.2 Research Objectives

In 2014, Indonesia remained on the Priority Watch List of copyright infringement by United States Trade Representative (USTR).[12] They reported that Indonesia addressed high level of Intellectual Property Right (IPR) infringement. In fact, it takes places all over the world, developed and developing countries. One of the biggest issues in IPR infringement is Illegal file sharing and broadcast

[12] United States Trade Representative (USTR), 2014 Special 301 Report, at 45.

piracy on the Internet. USTR noted, there is online marketplace engaging in commercial-scale IPR infringement, including sited hosted operated by some parties located in China, Indonesia, Canada, United Kingdom, Netherland, Russia, and many more.[13]

The utilization of Internet technology is widely practiced by the entire population of the globe, including Indonesia. The demand for fast and efficient information makes the Internet as a major public space. During its development, applied technology in Indonesia became a "double-edged sword", in addition to the mankind welfare; it is used for unlawful acts. Copyright infringements on music, movies and software grow faster and take in a big range of spread in Indonesia. An original and common violation becomes undetected in this digital era. Illegal downloading, illegal uploading and file sharing became common activities among the citizenry. Legalization of Copyright Act 2014 and Information and Transaction Electronic 2008 has not shown optimal result for law enforcement.

Due to huge scope of copyright infringement, I try to make limitation issues on copyright infringement on music, movie and software files in the Internet. Hence, concerning with the some reports, interviews and regulation of copyright protection and copyright industries practices in Japan and United States of America and their protection system,[14] I would like to compared and analyzed

[13] See *id.* At 20-21.
[14] International Federation of the Phonographic Industry (IFPI), Digital Music Report (2014), *see also* International Intellectual Property Alliance (IIPA), Copyright Industries in the US Economy, the 2014 Report (2014), *see also* The Software Alliance (BSA), The Compliance Gap, BSA Global Software Survey (June 2014), *see also* Recording Industry Association of Japan (RIAJ), Statistic Trends, The Recording Industry in Japan (2014), *see also* Japan and International Motion

potential obstacles and challenges that could take place when applying their enforcement method in Indonesia. This thesis formulated essential distress within two research questions as follows:

1. What are the possibilities, obstacles, challenges and best solution that can be taken from the comparison of copyright protection on the Internet for the copyright enforcement in Indonesia?
2. How can copyright law construct and balance in creating "healthy internet environment" appropriate with government, private sectors and Internet user's interest?

The great number of copyright infringement on the Internet, lack of law enforcement in Indonesia and conflict interest between government and private sectors are several issues that will be discussed in-depth in chapter four.

1.3 Methodology

This section provides information on the research method of this thesis. The qualitative research has been chosen to rely and determine the problems, notions and solutions influencing copyright infringement on the Internet. Primary legal resource data is supported by secondary data, which obtained by conducting in-depth literatures review, on-line research and interviews using purposive sampling method.

Picture Copyright Association (JIMCA), Economic Consequences of Movie Piracy, Japan Report (2011), *see also* United States Trades Representatives (USTR), The Special 301 Report (2014). *See also* Association of Copyright for Computer Software *(*ACCS), ファイル共有ソフトの利用実態調査～クローリング調査～ (Utilization of file sharing software survey), (2014).

This research uses legal comparative approach and juridical study in analyzing the issues. It focuses on copyright infringement in file sharing (music, movies and software programs) through the Internet. Components that will be studied are copyright regulations, protection and copyright infringement practices. The entire element becomes comparing object between the countries (Japan, United States of America and Indonesia).

My hypotheses are; technology is always improving, therefore copyright regulation of cyberspace at developed or developing countries should be flexible with the era. Hence, every country has different enforcement protecting copyright along the digital era. I attempt to retrace Indonesian legal history to situate the contemporary practice of copyright protection in digital era and to analyze whether copyright infringement, technological advance impact and global digital sharing practices by Internet users. Based on this study, there is possibility of creating, harmonizing and implementing international regulation related to copyright protection on the Internet into national regulation nationally and regionally.

1.4 Structure of Chapters

In this thesis, we are discussing the current available research that sheds light on the effects of illegal file sharing, particularly in music, movie and software programs. It is divided into five chapters. We start by introducing the content and providing a brief framework of the thesis as a whole. Chapter two describes the basic of copyright infringement along its types. In this chapter, we

also discuss about Digital Right Management (DRM) as an artistic and corporate response to prevent illegal data sharing and protect files in business. Next chapter entails a discussion of network technologies implication towards digital copyright protection and offers comparative analyses between developed and developing countries. Components that will be discussed are digital copyright regulation, protection and illegal file sharing practices. Chapter four will be discuss potential problems globally and domestically in implementing copyright protection on the Internet. The concluding section offers policy harmonization, notion and program to create the health Internet environment.

Chapter II

COPYRIGHT INFRINGEMENT

2.1 Copyright Infringements and International Framework

Copyright infringement has traditionally been viewed as violation for production of creative works, scientific, artistic and profitable goods. A country created a legal right to protect copyright and granted the creator with an exclusive rights or economic rights [15] and moral rights [16] to its use and distribution, commonly for a limited time. Free information needed (less/without payment), simple and fast are some factors copyright infringement taken. The infringement model occurred randomly, rely on technological development, human culture, regulation and law enforcement itself. For instance, the great availability of Internet broadband connection around the world is producing huge utility, established work opportunity, expanded on-line business and even exchange information. Though, it is making Internet well organized for spreading copyright infringing products, data and replacing valid markets for rights holder. Canada is one of developed countries, was noted by USTR Watch List on 2011 because those phenomena. Hence, United States encourage working with the trading partner to enhance strong action against piracy over the Internet and digital piracy.[17] While, copyright piracy over the Internet threw over physical piracy in some places in the world, the production of, the distribution and trade in, pirated

[15] 17 U.S.C. § 106; *see also* Japan Copyright Law No. 48, 1970. Amend. No. 65, 2010. Art 26-38, 92 *bis*-95; *see also* Indonesia Copyright Law No. 28, 2014. Art 8-19.
[16] Japan Copyright Law No. 48, 1970. Art. 18-20: *see also* Indonesia Copyright Law No. 28, 2014. Art 8-19.
[17] United States Trade Representative (USTR), The Special 301 Report (2011)

optical discs still a major problem in many regions, especially developing countries.[18] Considering the issues, copyright infringement can be concluded as actions (free reproduction and easy available distribution technology) against copyright protection. In fact, the enforcement of technical measure (regulation) done for increasing the cost of economical transaction higher than open access and availability forms. Instead, users do not consent strict protection regulation and measure, and tend to turn to new products on the open markets or free file share and exchange services.[19]

Nevertheless, legal protection and international convention of intellectual property in the interest of copyright commercialization and digital sharing have been increasingly strengthened through the succeeding measures. Since September 1886, Berne Convention for Protection of Literary of Artistic Works (Berne Convention) started the recognition of International community about benefits and essential for establishing and synchronizing national copyright protection laws. Currently, one hundred sixty-eight countries have signed the Berne Convention.[20] As the first attempt to harmonize the copyright law at international scale, the convention offered a soft law level of copyright protection for the community to adopted the "national treatment policy" (member state has to perform same protection to copyrighted goods in other members as it gives to

[18] United States Trades Representatives (USTR), The Special 301 Report (2014)
[19] Ethics and Law of Intellectual Property, 217 (Christian Lenk, Nills Hope & Roberto Andono eds., Ashgate Publishing Limited 2007).
[20] http://www.wipo.int/treaties/en/StatsResults.jsp?treaty_id=15&lang=en (last visited Jan. 9, 2015).

material copyrighted under its national law).[21] Accordance with its development, social change and technological advance, the Berne Convention was modernized frequently; by the Act of Berlin on November 13, 1908; the Additional Protocol of Berne on March 20, 1914; at Rome on June 2, 1928; at Brussels on June 26, 1948; at Stockholm on July 14, 1967, laterally with the Protocol regarding Developing Countries; and at Paris on July 24, 1971, along with Appendix of developing countries.[22]

Following 1971 Paris Act, the international community already established a guide development to face the social and technological changing.[23] By the WIPO Convention on July 1967, World Intellectual Property Organization (WIPO) created. It is one of the sixteen specialized agencies of the United Nation system of organization and operates under Social and Economic Council.[24] WIPO is responsible for being administrator to promote, protect and facilitate creative intellectual activity, transfer technology and international coordination to industrial property to developing countries in order to establish their economic cultural and social development.[25] There were numerous bilateral, regional and multilateral agreements with general or partial application about Intellectual

[21] Olena Dmytrenko & James X. Dempsey, *Copyright & the Internet: Building Legislative Framework Based on International Copyrighted Law,* Global Internet National Policy Initiative (GIPI), Dec 2004, at 8.
[22] *id*, at 8; *see also* http://www.wipo.int/wipolex/en/wipo_treaties/details.jsp?treaty_id=15 (last visited Jan. 11, 2015)
[23] Guide development is like recommendation, guiding principles and model provision purposing to assist legislative in responding to technological changes. It mostly interpreted existing international norms and new standard; Mihally Fiscor, *The Law of Copyright and the Internet*, Oxford University Press, 2002, at 5.
[24] http://www.un.org/en/aboutun/structure/org_chart.shtml (last visited Jan. 11, 2015)
[25] G. Gregory Letterman, Basic of International Intellectual Property Law, 26-27, Transnational Publisher, Inc., (2001); *see also* Convention Establishing the World Intellectual Property Organization (WIPO Convention) 1967. Art 3-4.

Property (IP) with which WIPO just a supervisor or administrator, like as North American Free Trade Agreement (NAFTA) and World Trade Organization (WTO). Particular scheme of national IP law in any one country will not match entirely or even at all with the standard of the treaties and convention. Therefore, it can divide into three general groups; the first, treaties delineate internationally approval the IP protection basic standard in each member country. Next is a registration treaty. It has to warrant that an international registration will have outcome in any of the relevant signatory countries. The final group contains classification treaties regarding industrial design, invention, trademark, patent and geographical indication.[26]

By the end 1990s, the standard by WIPO were inadequate to counter highly increasing piracy and digital revolution. Internet has had revolutionary effects on commerce, culture and communication since the mid-1990s. Electronic mail, instant messaging, voice over Internet Protocol (VoIP) telephone calls, two-way interactive video calls, and the World Wide Web with its discussion forums, blogs, social networking, and online shopping sites were facilities that can be used on the Internet. On 1993 to 2000, the amounts of the data were transmitted at higher speed and fast connection over fiber optic networks and frequency. The Internet took over global communication landscape was almost instant in historical terms: it only communicated 1% of the information flowing through two-way telecommunications networks in 1993, already 51% by 2000, and more

[26] *id*, at 29.

than 97% of the telecommunicated information by 2007.[27] In fact, over twenty-two million Americans ages 18-39 own portable MP3 players (audio coding format) [28] or iPods. [29] They watched digitally recorded movies or television programs, Digital Video Recorder or Video Home System (VHS) tapes.[30] Hence, countless number or American have tape their favorite and television program on Betamax video recorder regularly since the United States of Supreme Court's Decision in Sony Corp. America v. Universal Studios, Inc.[31]

Thus, WIPO created new models to faced digital movement. The outcomes were in two documents, which are well known as Internet Treaties or WIPO Copyright Treaty (WCT)[32] and the WIPO Performance and Phonograms Treaty (WPPT)[33]. Those adopted in 1996 and respectively entered into force in March and May 2002. WCT mention two subject concerns to protected by copyright; (i) computer programs, whatever the mode or form of their expression and (ii) compilations of data or other material databases (where a database does not constitute such a creation, it is outside the scheme of this Treaty), in any form,

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[27] Martin Hilbert & Priscila Lopez, *The World's Technological Capacity to Store, Communicate and Compute Information*, Science Journal (2011), at 62-63.
[28] MP3 is an audio-specific format that was designed by the Moving Picture Experts Group (MPEG) as part of its MPEG-1 standard and later extended in the MPEG-2 standard. It is a common audio format for consumer audio streaming or storage, as well as a de facto standard of digital audio compression for the transfer and playback of music on most digital audio players.
[29] Lee Raine, *iPods and MP3 Players Storm to the Market*, Pew Research Center; Internet, Science & Tech, Feb 14, 2005, available at http://www.pewinternet.org/2005/02/14/ipods-and-mp3-players-storm-the-market/ (last visited Jan. 12, 2015)
[30] Jeffrey J. Escher, *Copyright, Technology & the Boston Strangler: the Seventh Circuit and the Future of Online Music Access*, I Seven Circuit Review, 74, Spring (2006)
[31] Sony Corporation v. Universal Studio. Inc., 464 U.S. 417 (1984)
[32] As of January 2015, ninety-three states had entered the WCT, http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=16 (last visited Jan. 11, 2015)
[33] Ninety-four countries had joined the WPPT, http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=20 (last visited Jan. 11, 2015)

by reason of the selection or arrangement of their contents, constitute intellectual creations.[34] Moreover, adapting previous concepts (reproduction and distribution) to the Interconnection Networking (Internet) environment, it offered two main notions concerning national legislature an obligation to provide liability; circumvention of technological protection standard, [35] rights management information and enforcement of rights on specific provision [36].

WPPT can be seen as an "Internetization" of related to sound recordings and performance right.[37] It was update from the Rome Convention 1961 to protect performing artist and phonograms producer's interest. The treaty grants performers moral right[38] to recognize any distortion, mutilation or modification that would be harmful their reputation. Additionally, it also protects performers' economic right for reproduction, distribution, rental and the right making available.[39] By the two international treaties WIPO and WTO established "joint WIPO-WTO project" in 1998 to ensure developing countries by preparing legislation, training, institution building, modernizing intellectual property systems and enforcement. [40] The technical assistance followed by forty-nine countries, thirty are members of the WTO and forty-one are members of WIPO.

[34] WIPO Copyright Treaty, Art.2, 4-5.
[35] *id*, Art. 11 & 12
[36] *See id*, Art. 14.
[37] Dmytrenko & Dempsey, *supra* note 21, at 9.
[38] WIPO Performance and Phonograms Treaty, Art. 5
[39] *id*, Art. 6-10.
[40] Sarah Henry, *The First International Challenge to U.S. Copyright Law: What Does the WTO Analysis of 17 U.S.C. § 110(5) Mean to the Future of International Harmonization of Copyright Laws Under the TRIPS Agreement?*, 20 Penn State International Law Review 301 (2001), at 7.

All developed countries can take part in the project without being member of WTO or WIPO.[41]

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which is produced by the Uruguay Round 1994, also regulated copyright, patent and trademark. It promotes bargain and reduction of tariff barrier to the international transaction goods.[42] It sets by two WIPO Treaties; the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works. The WTO members must amend their national law to appropriate with those conventions. However, TRIPS let the parties to not amend their domestic law concerning moral right comply with the Berne Convention Provision.[43] Additionally, the TRIPS agreement regulates the protection computer programs and compilation of databases.[44] The most important framework is TRIPS established intellectual property enforcement process in WTO members. It is the first time for enforcement procedures in IP have been subject to international standards.[45]

Within last few years, recommend digital copyright legislation and international trade agreements established significant concern. Critics have stressed to national legislation, a lack of due process, filtering, Internet security

[41] Archive of WTO News:2001 Press Release, 231, June 14, 2001, *available at* http://www.wto.org/english/news_e/pres01_e/pr231_e.htm (last visited Feb. 1, 2015)
[42] Trade-Related Aspect of Intellectual Property Rights (TRIPS) Agreement 1994, Part II.
[43] Moral right exception in Berne Convention Provision accommodate United States, whose copyright tradition do not recognize moral right, *available at* http://www.internetpolicy.net/ip/ (last visited Feb. 9, 2015)
[44] TRIPS Agreement Art. 10 & 12.
[45] Dmytrenko & Dempsey, *supra* note 21, at 9

and different of legal thinking due to copyright enforcement.[46] Some developed countries have secretly started and negotiated the Anti-Counterfeiting Trade Agreement (ACTA)[47], which designed to international copyright problems, online copyright infringement, online trafficking counterfeiting goods including trademark enforcement measures.[48] October 1, 2011, in Tokyo, ACTA was signed by the United States, Australia, Canada, Korea, Japan, Morocco, Singapore and New Zealand. [49] The European Union, Mexico and Switzerland were representatives of the remaining ACTA negotiating parties, attended the ceremony and confirmed to support for and preparation to sign the agreement as soon as practicable.

Based on ACTA, all the parties shall provide criminal procedures and penalties in the cases copyright piracy and trademark counterfeiting on a commercial scale. [50] Currently, devices and electronic media are extremely

[46] Michael A. Carrier, *SOPA, PIPA, ACTA, TPP: An Alphabet Soup of Innovation-Stifling Copyright Legislation and Agreements,* 11 North Western Journal of Technology and Intellectual Property, January 2013, at 21.
[47] Miriam Bitton, *Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures,* 102 Journal of Criminal and Criminology, Winter 2012, at 67.
[48] David S. Levine, *Transparency Soup: The ACTA Negotiating Process and "Black box" Lawmaking,* PIJIP Research Paper Series, American Univ. Washington College of Law, August 2, 2011, at 1-2.
[49] Formal negotiations started in June 2008 with the participation of Australia, Canada, the European Union and its 27 member states, Japan, Mexico, Morocco, New Zealand, Republic of Korea, Singapore, Switzerland and the United States. The final Round of negotiations was held in Japan in October 2010. Following translation and technical work, the ACTA opened for signature on May 1, 2011. The Government of Japan will receive further signatures, as the Depositary of the ACTA. For those who have already signed, the next step in bringing the ACTA into force is the deposit of instruments of ratification, acceptance, or approval. *See*, Office of the United States Trade Representative (USTR), *Anti-Counterfeiting Trade Agreement (ACTA), available at* https://ustr.gov/acta/ (last visited March 13, 2015).
[50] Each Party shall treat willful importation or exportation of counterfeit trademark goods or pirated copyright goods on a commercial scale as unlawful activities subject to criminal penalties. A Party may comply with its obligation relating to importation and exportation of counterfeit trademark goods or pirated copyright goods by providing for distribution, sale or offer for sale of such goods on a commercial scale as unlawful activities subject to criminal penalties. *See* Anti-Counterfeiting Trade Agreement (ACTA), Art 23.

supporting copyright infringement in digital environment. Most scholars and judicial test determine if such things have infringing uses: if entity/party could play a role and has knowledge and materially contributed to contributory infringement, if they have a commercial interest and a right to control (vicarious liability) and if they have an intent to induce infringement.[51] Intellectual property infringement be criminalized still become legislative concern in most countries. However, copyright infringement is widespread, uncontrolled and extremely increase, some legal scholar and legislator have criticized the implementation of criminal sanctions for such activities.[52] While, the reasons for criminalizing copyright infringement on digital environment towards protecting creative innovation, employment and financial, the vast majority people argue that committing criminal action such as rape, murder, persecution and fraud. Even theft, it is not because they worry about the prison if they caught, but because they internalize the norms against such actions.[53]

Next international agreement related the digital copyright enforcement is Trans-Pacific Partnership Agreement (TPP). Twelve countries throughout Asia-Pacific region have participated in TPP's meeting.[54] The TPP negotiation has

[51] Each party's enforcement procedures shall apply to infringement of copyright or related rights over digital networks, which may include the unlawful use of means of widespread distribution for infringing purposes. These procedures shall be implemented in a manner that avoids the creation of barriers to legitimate activity, including electronic commerce, and, consistent with that Party's law, preserves fundamental principles such as freedom of expression, fair process, and privacy *Id*, Art 27, *see also* Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005); Sony v. Universal City Studios, Inc., 464 U.S. 417 (1984).
[52] Stuart P. Green, *Plagiarism, Norms, and the Limits of Theft Law: Some Observations on the Use of Criminal Sanctions in Enforcing Intellectual Property Rights*, 54 Hastings L.J. 167, 235-37 (2002).
[53] *id*, at 237-38.
[54] Inkyo Cheong, *Negotiation for the Trans-Pacific Partnership Agreement: Evaluation and Implications for East Asian Regionalism*, 428 ADBI Working Paper Series, July 2013, at 4-5.

been running nearly five years and over twenty chapters under discussion although several issues remain unresolved. Copyright and the Internet are one of the challenging issues on TPP. Like ACTA, TPP involves each participating nations to guarantee the criminal liability for encouraging and promoting exists under its law.[55]

TPP's Intellectual Property chapter protects trade secrets, trademarks, industrial designs, copyrights, patents, geographical indications, other forms of intellectual property, and enforcement of intellectual property rights and areas in which parties agree to collaborate. The provisions establish standards based on the TRIPS Agreement and international best practices.[56] In the Copyright chapter,[57] the agreement establishes commitment to protect the works, performances, phonograms (songs, movies, books, and software) and technological protection measures and rights management information. The chapter covers an obligation for members to continuously pursue to create balance in copyright schemes through exceptions, limitations for legitimate purposes, and health digital environment. It requires parties to set up and maintain a copyright safe arrangement for Internet Service Provider (ISPs). These regulations are not

[55] *Trans-Pacific Partnership Agreement (TPP): Intellectual Property Right Chapter*, Draft Feb. 2011, Art. 15 (4), *available at* http://keepthewebopen.com/tpp (last visited March 16, 2015).
[56] Beside copyright, TPP rules; Paten and trademarks provides protections of brand names and other marks of those businesses and individuals, which used to differentiate their products in the marketplace. The protection of geographical indication also covered by certain transparency and safeguard process including through international, regional agreement and understanding on the relationship between trademarks and other commonly used terms. Additionally, the chapter rules pharmaceutical related facilitate innovation, generic medicine, public health and new pharmaceutical or agriculture chemical products, *see also* Meredith Kolsky Lewis, *The Trans-Pacific Partnership: New Paradigm or Wolf in Sheep's Clothing?*, 34 B.C. Int'l & Comp. L. Rev. 27 (2011).
[57] Chapter 18 sections H, Trans-Pacific Partnership Agreement, 2015.

allowing the parties to make such safe harbors contingent on ISPs to monitoring their system for infringing activities.

Conclusively, TPP members agreed to provide strong enforcement systems by preparing and establishing provisional measures, civil procedures, criminal procedures, border measures and penalties for commercial-scale trademark counterfeiting and copyright or related rights piracy. They will provide the legal means to avoid the misappropriation from cyber theft and cam cording. The nations should provide criminal penalties for willful copyright infringement on a commercial scale: includes significant willful copyright or IP infringement, which have no direct or indirect reason of financial gain.[58] Financial gain can be described as the receipt or expectation of anything of value. This could be including the file sharing of single copyrighted content.[59]

2.2 Categorization of Copyright Infringement

2.2.1 Physical Copyright Infringement

Physical piracy remains a major problem in many markets around the world. Infringement on songs, movies and software occurred on illegal optical disc produce by unlicensed business and illegal market. In fact, the region with the highest rate of unlicensed Personal Computer (PC) installation was Asia

[58] *id*, at Art 15 (1), *see also* Michael A. Carrier, *SOPA, PIPA, ACTA, TPP: An Alphabet Soup of Innovation-Stifling Copyright Legislation and Agreements*, 11 North Western Journal of Technology and Intellectual Property, January 2013, at 25.
[59] *Id*, *see also*, Press Release, Congressman Darrell Issa, Issa Releases the Trans Pacific Partnership Intellectual Property Rights Chapter on KeepTheWebOPEN.com (May 15, 2012) http://issa.house.gov/press-releases/2012/05/issa-releases-the-trans-pacific-partnership-intellectual-property-rights-chapter-on-keepthewebopencom/ (last visited March 16, 2015)

Pacific, at 62 percent. It represented a two percentage-point increased from 2011.[60] Personally, the countries in the Asia Pacific made modest progress where Indonesia 84 percent of PC Software was installed without appropriate licensing in 2013, down two points from 86 percent in 2011.[61] Instead, Japan was the lowest country in the region with 19 percent in 2013, down two points from twenty-one percent in 2011.

Music, movie and software have been sold to consumers by recording or copying files in physical media such as Compact Disc (CDs), Digital Video Discs (DVDs) and cassettes. Historically, physical piracy or pirate product has strong connection with technology advanced. Copying machines, recording and multiplier machines create identical object with original copyrighted works. In America Copyright Act 1976, technological advancements and its impact brought revision on major part of "fair" definition in all previous copyright law.[62]

Since 2000, USTR noted that physical piracy markets extremely increase in many developing countries. They devoted to special attention reducing unlicensed copies physical media.[63] Aggressive enforcement had not been done by Ukraine, Indonesia, Thailand, Russia, and the Philippines to address existing and prevent piratical activity.[64] Nowadays, even some countries have ratified the

[60] The Software Alliance (BSA), *The Compliance Gap, BSA Global Software Survey* (June 2014), at 9-10.
[61] *id*, at 8.
[62] Association of Research Libraries, Washington D.C., *Copyright Timeline: A History of Copyright Law in the United States*, *available at* http://www.arl.org/focus-areas/copyright-ip/2486-copyright-timeline#Top (last visited Feb 12, 2015)
[63] United States Trades Representatives (USTR), The Special 301 Report (2003), at 1.
[64] *id*, at 3.

conventions into their national law, pirate product still can be found in some market.

Indonesia for sure, from three big cities; Jakarta, Semarang and Yogyakarta and one developing province; Lampung, piratical activity still exist and become hobby for junior, high, college students and workers enjoying music, movie and computer software.[65]Retail pirate also offer to load illegal copyrighted files and application on numerous mobile device, hand phone or carriers. The physical market for most industries, including pirate movies in Blu-ray format, computer software and video games touch to 90 percent.[66] Though, millions of illegal music CDs (Compact Disc), DVD and MP3 are still manufactured and sold in the United States.[67] Street Piracy can be manufactured by Company CD as well as in an underground operation engaged in the large-scale burning of files to blank CD-R that is the sold in flea markets, on street corner, even in local retail stores. The copying and trafficking of pirated music and movie are increasingly sophisticated trade used by savvy multi-state criminal operations that distribute illegal product designed to resemble authentic CDs and replace legitimate sales.[68] Hence, there are seventy-nine cases noted by Japan Ministry of Justice between

[65] Interview by some pirate sellers and users (Oct 2013), *see also* Pujiono & Dewi Suliastiningsih, *Latar Belakang Timbulnya Pembajakan Hak Cipta di Bidang Musik dalam Format Kaset dan Upaya Penanggulanngannya di Kota Semarang (*The Background of Music Copyright Infringement on Optical Media Form and Its Enforcement in Semarang City*)*, MMH, Vol. 3, Sept. 2008.
[66] International Intellectual Property Alliance (IIPA), *Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement*, Feb 6, 2015., at 37, *see also* Peggy Chaudry & Allan Zimmerman, Protecting Your Intellectual Property Rights; Understanding the Role of Management, Governments, Consumers and Pirates, 43, Springer, 2013
[67]Stephen E. Siwek, *The True Cost of Sound Recording Piracy to the U.S. Economy*, Institute For Policy Innovation, Policy Report 188, Aug 2007, at 4.
[68] *id.* At 4-5

2009-2011 regarding copyright infringement. This number is lower compare with another countries.[69]

Generally, pirate products can be produced and sold low-rated price than genuine products, but still bring pretty income for the infringer because they made usually with low-standard, no quality control, no authorization even safety and health guidance. There are to many factors that cause the piracy product transactions; culture, technology, regulation and its enforcement, economic, level of education and public policy.

2.2.2 Illegal File Sharing Phenomena

The era of modernization is now highly dependent on technological advances. It can create efficiency and effectiveness with a wide range of areas unhindered by national borders. One of technology that successfully addresses the needs is the Internet technology (Interconnection-networking).[70] Internet makes it easy for the public to access, acquire and transmit the required data anytime, anywhere and by anyone. By the Internet, there was new concept of good regulations, customs and activities within the scope of law, economics, politics and more specifically regarding intellectual property rights.

There are many types of piratical activity. Physical markets continuously decrease in some countries, while the number of copyright infringement on

[69] The General Secretariat of Japan Supreme Court, *Sentencing of Imprisonment with work for financial and economic offenses in a court of first instance (2009-2011),* Annual Report of Judicial Statistic, *available at* http://hakusyo1.moj.go.jp/en/61/nfm/n_61_3_1_6_0_0.html (last visited Feb 14, 2015)

[70] Saidin OK, *Aspek Hukum Hak Kekayaan Intelektua*l (Legal Aspect of Intellectual property), Raja Gravindo Persada Press, Jakarta, 2004, at 519.

entertainment (music and movie) and software extremely increases on the Internet. [71] The expansion of digital communication and Internet had revolutionized the system of file distribution. All digital files can be shared all over the world with no decay, slow and secret by the Internet. Therefore, there were many controversy and significant treatment to protect the files from the pirate.

Downloading, uploading, and distributing the files over the Internet by peer-to-peer network (P2P) are common activity. P2P activity can be define as when two or more Personal Computers (PCs) are connected and share resources without going through a separate server computer. A P2P network can be an ad hoc connection—a couple of computers connected via a Universal Serial Bus to transfer files. A P2P network also can be a permanent infrastructure that links half-dozen computers in a small office over copper wires. Or a P2P network can be a network on a much grander scale in which special protocols and applications set up direct relationships among users over the Internet.[72] Commercial Internet Service Provider (ISP) sometimes is obvious third party, which contribute copyright infringement. [73] In this situation, P2P networks do not run single-handed, moreover, there are few profitable servers/websites involved; because a P2P network stores files on user's device. The theory of secondary liability used

[71] USTR; The Special 301 Report (2014), at 20-22.
[72] James Cope, *Peer-to-Peer Network*, (Apr. 8, 2002), *available at* http://www.computerworld.com/article/2588287/networking/peer-to-peer-network.html (last visited Feb. 18, 2015)
[73] *See, e.g.*, Playboy Enterprises, Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993)., MGM Studios v. Grokster, 545 U.S. 913 (2005)., BMG Music v. Gonzales, 430 F. 3d 888 (2005)., RIAa v. Verizon, 351 v. F.3d 1229 (D.C. Cir. 2003)., A&M Records v. Napster, Inc, 239 F.3d 1004 (2001) and UMG Records v. MP3.com, 92 F. Supp. 2d 349 (2000)

in previous file sharing cases may not apply to ISP when their service do not infringing the content.[74] In U.S., the ability of ISP for control infringing content becomes limited; court appropriate to treat the ISP as a common carrier and limitation on liability. Since October 28, 1998, U.S. Digital Millennium Copyright Act created four categories based on the way alleged infringer network relates with the ISP's System. The categories are (a) transitory digital network communication, (b) system catching, (c) information residing on system or networks at direction of users and (d) information location tools.[75]

Today, copyright industries face new growing problems with piracy using flash drivers, smartphones, tablets and other high mobile technologies. In some countries, these devices are preloaded with illegal content even before they are sold.[76] U.S. copyright industries report growing problems about unauthorized retransmission of live sports, music and event telecast over the Internet among trading partners. Software sharing; such as games and computer program also exist over the Internet. Users can download the files and reduplicate into CD in large numbers and distribute to the market. This condition frequently happens in developing country. Instead, in U.S. and other developing countries, which had well Internet broadband, it can distribute by online. Japan as a developing

[74] RIAA v. Verizon, 351 v. F.3d 1229 (D.C. Cir. 2003), *see also* Martha M. Chiske, *For Now, ISPs Must Stand and Deliver: An Analysis of in re Recording Industry Association of America v. Verizon Internet Services,* 8, Virginia Journal of Law and Technology Association, Sept 2003, at 8, *see also* Aditya Gupta, *The Scope of Online Service Provider's Liability for Copyright Infringing Third Party Content Under the Indians Law-The Road Ahead,* 15, Journal of Intellectual Property Right, (Jan 2010), at 35-45.
[75] 17 U.S.C. § 512(a)-(d) (2002).
[76] USTR; The Special 301 Report (2014), at 21.

countries and known as high technology country,[77] also addressing similar issue. The research from Ipsos and Oxford Economic on behalf of Japan and International Motion Picture Copyright Association (JIMCA) on 2011 has indicated the scale of loss caused by movie piracy to the Japanese economy. One on six of the Japanese adult population (aged 15-64) is active in some of movie piratical activity (downloading, streaming, buying counterfeit, borrowing unofficial and burning). Digital piracy is the most productive method of piracy with high levels of movie streaming and burning movies into CD at home. Latterly, digital piracy accounts for two third pirated volume in Japan.[78]

Indonesia is fourth populous country in the world[79] and consists of seventeen thousand more of islands. With the geographical and the population, Indonesia is one of the biggest markets of pirate product. In the meantime, retail and physical piracy continue largely persistent, Internet piracy; peer-to-peer downloading, streaming and direct download-upload at pirate content site is increasing.[80] Estimates as a fourth Internet usage in Asia, with range between seventy-one million users[81] to one hundred-thirty nine million users,[82] Indonesian is now enjoying the broadband capability. More than half of Indonesian

[77] Based on the top tens website, *available at* http://www.thetoptens.com/high-tech-countries/ (last visited Feb. 19, 2015)
[78] Japan and International Motion Picture Copyright Association (JIMCA), *Economic Consequences of Movie Piracy*, Japan Report, Jan 2011, at 3-4, *see also* Recording Industry Association of Japan (RIAJ), *Statistic Trends; The Recording Industry in Japan*, (2014).
[79] Central Intelligence Agency (CIA), The World Fact Book; Population, July 2014, available at https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html?countryname=Indonesia&countrycode=id&regionCode=eas&rank=5#id (last visited Feb. 19, 2015)
[80] IIPA Report, Indonesia , at 37-38.
[81] Internet World Stats, http://www.internetworldstats.com/stats3.htm (last visited Feb. 19, 2015)
[82] Indonesia Internet Service Provider Association (APJII), http://www.apjii.or.id/v2/read/page/halaman-data/9/statistik.html (last visited Feb. 19, 2015)

population has mobile phone access due to utilize the application, which is enabling to do infringe activity. These numbers indicate that enormous market of legitimate market for copyright goods. Unfortunately, lack of law enforcement cause online and mobile piracy proliferates and legitimates service cannot compete rigged with piracy.

2.3 Digital Right Management Technologies

In the beginning of technology transformation, copyright law have same treatment between online and offline content, but step further there were many infringement on digital content.[83] There are basic differences between online and offline: (1) No physical carrier. Mostly, an object in digital form, no physical property protecting the work, no exclusivity and there is no big different about quality. (2) Local exploitation by the end-user. Technology transformation had turn out behavior of consumers and Internet user, from passive activities (reading a book, watching analog movie, and listening the music cassettes become active, by copying music, movie, software and exploiting copyrighted works from the internet. Nowadays, with less money and least facility: individual, production house and civilian competitor can do such things at their places. (3) No territorial borders/borderless. Copyrighted works can be distribute everywhere by the Internet, even only a pictures. Unfortunately, if those copyrighted works published in country with "worst" copyright regulation or enforcement, automatically, right holders get nothing.

[83] John Perry Barlow, *The Economy Ideas: Selling Wine without Bottles on The Global Net, available at* https://projects.eff.org/~barlow/EconomyOfIdeas.html (last visited Feb 21, 2015)

It is definitely clear that government alone cannot solve the piratical activity. Owners of intellectual property right and society as users must take action to protect their rights. As a process, copyright holders, industries and content providers have progressively trusted upon technological measure for enforcing their right, mainly by Digital Right Management (DRM). Even though, there are many definition of DRM, it will refer collectively these system to control access or exploitation digital copyright content as DRM technologies.

The term "Digital Right Management" has been presented and used in legal and technical professional terminology. However, in the WIPO Copyright Treaty (WCT), the WIPO Performances and Phonograms Treaty (WPPT) and Europe Union Directives, DRM is not appearing in the text of these provisions. The relevant expression is Technological Protection Measures (TPMs)[84] or Right Management Information (RMI).[85] DRM generally means the combination of TPMs and RMI, even though in the professional and journalistic discourse it is frequently used also as a reference just to TPMs, and sometimes just to RMI.[86]

DRM technologies can be described as a protection system consists of mathematics cryptography, encryption, watermark, metadata, languages and symbols (among the technologies) that greatly used to control access, exploitation

[84] Directive 2001/29/EC on Copyright and Related Rights in the Information Society, Art 6.2 & 7.2.
[85] WIPO Performances and Phonograms Treaty (WPPT), Art 18 & 19., WIPO Copyright Treaty (WCT), Art 11 & 12.
[86] Mihally Fiscor, *Digital Right Management (DRM) and Its Co-Existence with Copyright Exceptions*, Sub-Regional Seminar on the Protection of Computer Software and Databases, Mangalia Romania, (August 25-27, 2001) (power point work, on file with author)

and theft of digital copyright data.[87] Primarily systems allow copyright owner to control user's facility to view, listen, modify, copy, download or transfer the content appropriate by copyright law.[88] Furthermore, DRM can be seen as a technology, which is built varying grades certain authorization and restriction on access digital content.[89] Theoretically, the legal structure and technical means reinforce one another to support copyright protection. Copyright law role as counterbalance against violation in the technical protection mechanism, and the technical measure act as dynamic and first pioneer of defense against infringement.[90] This approach allows the holders, producers and industries sell their works to the public and protect their investment safely.

In practice, those combination are not running as well as good expectation, developing countries still improve their DRM to protect their property. The high-tech computers, large amount of storage media and all digital content that can be share have combined to create tremendously difficult for right holders. Most copyrighted works that can be reformed to digitize have big probability to duplicate illegally over the Internet. The condition has become critical for all kind of content industries, as their profit decline facing outspread content piracy.

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[87] Yuko Noguchi, Digital Copyright in the US and Japan, 100, VDM (2009), *see also* Bill Rosenblatt, Bill Trippe & Stephen Mooney, Digital Right Management, M&T Books, New York (2002).

[88] *Id*, the definition of DRM technologies in this thesis is not limited to the technologies that protect copyrighted works. On the Japanese Unfair Competition Prevention Law and Indonesian Information & Electronic Transaction Law protect technologies that are applied to non-copyrighted content/materials.

[89] Sabuj K. Chaudhuri, *Digital Right Management-a Technological Measure for Copyright Protection and its Possible Impacts on Libraries*, at 2-3, *available at* http://eprints.rclis.org/13110/1/Digital_Rights_Management-Impact_on_Libraries.pdf (last visited Feb. 20, 2015).

[90] Lei Sun, Li Zhao, Xin Thong & W. Knox Carey, *The Legal Environment for Copyright and Trust Management in China, available at* http://static1.squarespace.com/static/52461133e4b08b5021624df2/t/535ab0dbe4b0a24faf6b2f43/1398452443699/ccnc09.pdf (last visited Feb. 20, 2015)

Therefore, specifically copyrighted industries need DRM to keep their business successively.

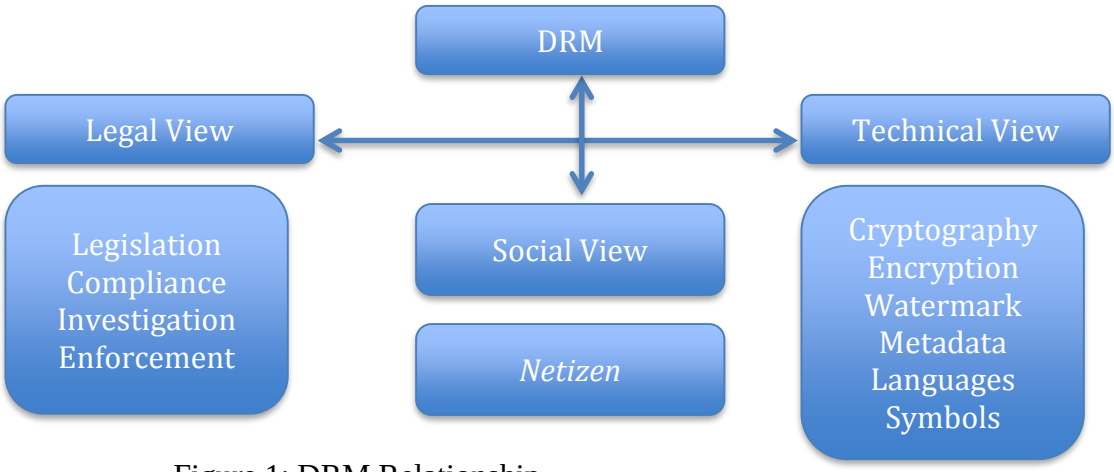

Figure 1: DRM Relationship

Finally, DRM can help the *netizen*[91] to create health Internet environment. By the specific software of DRM, it can be made to contain recognizing information through one content, original workers/goods, publisher, author, industries, users or even the name of credit card of the customers. Truly, this technology cannot prevent and guarantee the illegal distribution of intellectual property perfectly, but it does qualify to detection, identification and compliance for investigation and enforcement. The connection DRM and legal perspective of copyright protection at last will build social perspective involves culture, education, expectation, technology and economy.

As describes above, DRM is not only used to exploit and distributed digital content, but it is also using to control the usage of copyrighted works. For

[91] Netizens are also commonly referred to as cybercitizens, which has similar connotations. The term netizen is combination from "internet" and "citizen"

the examples, the famous of DRM utilization is Apple's iTunes Store[92] and Google Play Store.[93] Those applications are two types of personal entertains models, which can organize music, movies, games, streaming radio, TV program, books and application program. They are used to control and split which the application has high economic value and as free content. Therefore, they can manage the number of content distribution, instead in some places; there is agency or individual exploit the content by purchasing for one legal content and make huge number of copies into CD or any devices.[94]

2.4 DRM Businesses and Copyright Protection of Music, Movie and Software

Over three centuries, copyright was considered as an instrument to inspire the creativity. It has become the machine of varied media business. Without copyright (and related with intellectual property right), the media as we see today, while in entertainment, education, business, news and other objective information would not be existent.[95] Currently, the diversity and productivity of contents on the Internet are supported by physical contents in other distribution business. When the subsidy is no longer existing, or less significant, the digital contents business on the Internet would become gray and unexciting spot. Hence, how copyright still can be exist in the Internet environment without any infringement inside. One of the answers is by the technologies. Technical Protection Methods

[92] https://www.apple.com/itunes/ (last visited Feb 21, 2015)
[93] https://play.google.com/store?hl=en (last visited Feb 21, 2015)
[94] Jerry Brito, *Will "iTunes Match" Make Your Pirated Music Any Less Illegal?,* (June 9, 2011), *available at* http://techland.time.com/2011/06/09/will-itunes-match-make-your-pirated-music-any-less-illegal/ (last visited Feb 21, 2015)
[95] *The Answer of the Machine is in the Machine: A Big Idea for Digital Agenda*, European Publishers Council (EPC), 2013. (Manuscript, on file with author)

(TPMs) and Digital Right Management (DRM) may have take place in the management of copyright protection system on the Internet. The process is not only about technical enforcement, but also it is good managing data, giving right and permission, and business transactions.[96]

Creating DRM cannot separate from Trust Management (TM) contribution. TM delivers an essential bond between technical measure and legal approaches to intellectual property protection. Basis of TM is identities authentication for both digital system and human user whose identities and other elements need to be trusted upon for DRM system to function suitably.[97] Authentication becomes legal connection between TM and DRM. An object/content from DRM is examined and distributed after pass the authentication. For example, if a user tries to access protected content through DRM authentication and then the TM had compromised the process (especially in a way that can be traced to the authenticated user), the person, user or agency may be subject of legal liabilities. The user would not be anonymous user. These conditions had consequence to all level of copyright law (criminal enforcement and private compensation) from the investigation, prosecution and judgment for copyright infringement to compliance with the government regulation.[98] Furthermore, TM delivers a basis of evidence of DRM-protected content in legal proceeding if in commerce agreement: one party turn back to accomplish his obligation.

[96] *Id.*
[97] Lei Sun, Li Zhao, Xin Thong & W. Knox Carey, *supra note 90.*
[98] *id*

However, even DRM providers have different system, names and methods to lay down the content usage directions. DRM process has similar basic procedure with electronic-commerce (e-commerce), which is involves: content provider, the distributor, clearing house/financial authority and customer/user. In general, e-commerce has a significant contribution to support DRM system. It is integrate with the financial authority to legalize business payment between consumer and developer/provider.

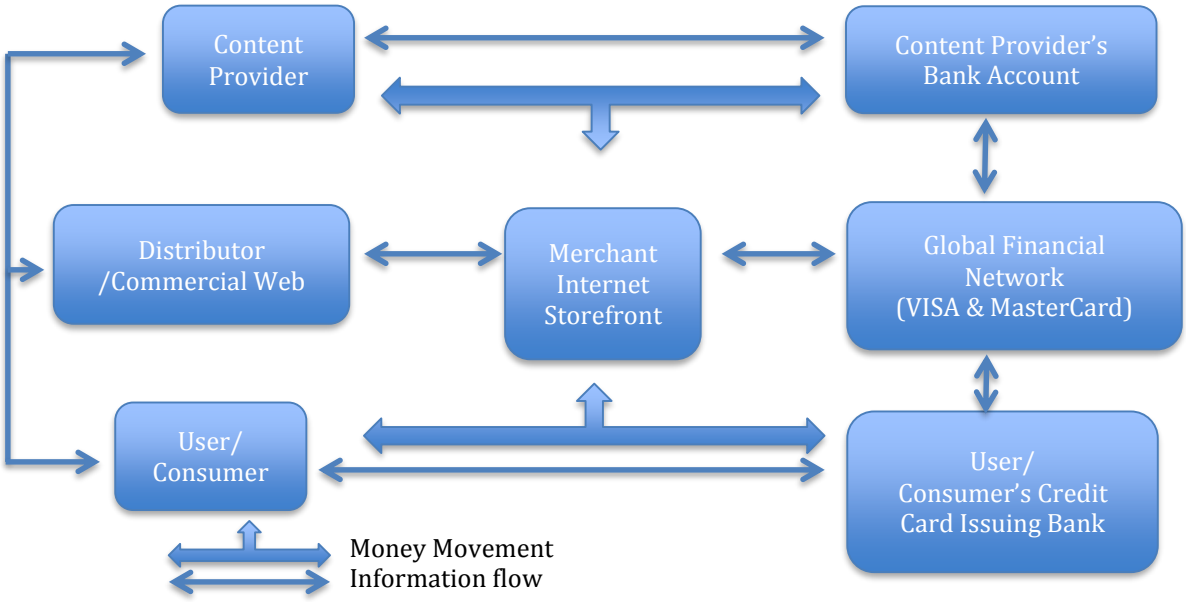

Figure 2: DRM Process

(1) Content provider is industries for instance entertains, media, electronics, automotive, etc., which is hold the digital right on the content and have willing to protect the rights. (2) The distributor/commercial web is a third party, which linking between contents providers to the consumers. It arranges for distribution channels to all goods, objects or digital contents such as online shop, commercial sites or web retailer. Usually, commercial web obtain goods catalogue

from the contents providers to help their promotion then, they will make agreement about their fee. (3) Consumers/users access the digital content to commercial web or digital content itself. They will pay or free to get the content license or goods directly. The payment process will associate with financial authority by credit card, debit card, bank transfer and web voucher. (4) Financial Authority or clearinghouse accordingly handle and authorize the financial transaction for distributing the licenses/goods to the consumers and pay royalty fees to the content provider and sharing fee to the distributor appropriately.

Even though in empirical situation there is still any crack on DRM business, there are four following aspects can be point out as positive impact of DRM technologies:

a. Protection of Content Owner

DRM technologies may be able to give protection for digital content's owner when they release to digital world, however these impression greatly depends upon how much the level of security network owners ask. Frequently, when the security network is very high, it will be make a lot of confusion and lost in the market of technology research and development.[99] Usually, DRM uses "cryptographic algorithm" or similar software packages that need a secret key; compilation of numbers, letters or phrases to encrypt the content.[100] Therefore, only the owner and consumers who already do payment can access the content completely. Herewith moral right and economic right the author can be

[99] Yuko Noguchi, *supra note 87*, at 107.
[100] Sabuj K. Chaudhuri, *supra note 89*, at 7.

guaranteed in public.[101] Bob Ohlweiler, Senior Vice-President of Business Development *MusicMatch*: an online Windows-based music store stated that without DRM, it would be very difficult to persuade all the right holders to give us the commercialization content access. Hence, we did part of the agreement that we have to keep it from the mass piracy.[102] Amanda Marks, Senior Vice President of eLabs at Universal Music Group, additional remarks that "we are not going to sell our content in an unprotected format.[103]

b. New Variety of Business

Different business models are one of the markets strategic. DRM technologies can provide the content owner create various business models for the similar content. For instance, the software industry uses contracts to deal about price-discrimination business content or create new business models that were not exist in the past.[104] By the iTunes Application, it is possible to distinguish the number of entertains (apps, games, songs and movies) that download frequently by the user. However, the use of increasingly sophisticated technologies and the level of consumer satisfaction will influence the industries to set the transaction cost.

[101] Tatsuhiro Ueno, Japanese Copyright Law, 43-49 (Peter Ganea, et al. eds., Kluwer Law International 2005).
[102] Yuko Noguchi, *supra note 87,* at 107.
[103] *id.*
[104] *id*, at 106, *see also* Digital Equipment Corp. v. Uniq Digital Tech. Inc. 73 F.3d 756 (1996)., Microsoft Corp v. Harmony Computers & Electronics Inc. 846 F.Supp. 208 (1994)., ProCD Inc. v. Zeidenberg. 86 F.3d 1447 (1996).

c. Reduce Transaction Cost

There are many business presented in the Internet, involves copyrighted contents. DRM technologies provide enable business by giving simple payment mechanism (direct license on-line). Generally, they have direct distribution system regarding monetary transaction from the right holder, commercial web and user without any intermediary. By design wisely and accurately, DRM-based content transaction can be low cost. (Japan Society for Right of Authors, Composers and Publisher) JASRAC, a right management organization for composition and music propose three online right clearance systems to its users: (1) J-TAKT, it is a use license application window when you use the music (JASRAC management music) on the Internet and mobile phones on the network. (2) J-OPUS, it is a license when we use the music for concert and various entertainment and (3) J-RAPP, it is a license for publications, recordings, musical works into media sheets, CDs or videos.[105]

d. Content Authenticity and Participation Identification

It is so simple to determine whom the participations in the real physical transaction. While, on the Internet we have to make sure that the web site addresses completely legitimate or not. DRM technologies deliver the facility to recognize and identify the participants. Generally, the technologies are known as digital certificates.[106] The function is much similar with social security number or

[105] http://www.jasrac.or.jp/sitemap/index.html (last visited March 1, 2015)
[106] Sabuj K. Chaudhuri, *supra note 89*, at 8.

security code like financial authority has.[107] Digital certificates commonly provide Secure Socket Layer (SSL)[108] from the owner, financial authority or consumer's bank to create SSL-encrypted connection with both and can access full range of contents and management options, and allowing them to prepare, accept, submit and authorize process electronic content and transaction status. A digital certificate also creates a person's identity with his/her public cryptographic key/pin. It is combining an individual key, identity information and one or more digital signatures.[109]

Digital content businesses make DRM become controversial and crucial issue that needs to be undertaken as soon as possible to stop massive bifurcation of DRM methods.[110] It is very important for computing industries, movies, games, software, music and financial security. The revelation of the National Security Agency (NSA) whistleblower Edward Snowden, [111] whistleblower website *WikiLeaks*[112] and the Sony Hack[113] have changed the global issue about privacy,

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[107] *Mobile Banking From A World Leader in Digital Security, available at* http://www.gemalto.com/brochures/download/mobile_banking.pdf (last visited, March 4, 2015), *see also* SafeNet, *Banking on Security: Alfa-Bank Use Two-Factor Authentication to Protect Customers' Identities Case Study,* (essay, on file with author)

[108] SSL is a security technology for establishing an encrypted links between a server and a client typically a web server (website) and a browser; or a mail server and a mail client (e.g., Outlook). SSL allows sensitive information such as credit card numbers, social security numbers, and login credentials to be transmitted securely. Normally, data sent between browsers and web servers is sent in plain text leaving you vulnerable to eavesdropping. If an attacker is able to intercept all data being sent between a browser and a web server they can see and use that information.

[109] Sabuj K. Chaudhuri, *id.*

[110] Cristhoper Andrews, et al., *Computer Security 06-17417 Digital Right Management Version 0.7*, (University of Birmingham, School of Computer Science, teaching Modules), *available at* http://www.cs.bham.ac.uk/search/?query=computer+06-17417&_searchbutton=Search&site=www.cs.bham.ac.uk (last visited March 5, 2015).

[111] http://www.biography.com/people/edward-snowden-21262897, *see also* http://www.dailymaverick.co.za/article/2013-08-02-russia-grants-snowden-a-years-asylum-summit-in-doubt/#.VPgRIlOUdex (last visited March 6, 2015).

[112] Charlie Savage, *U.S. Tries to Build Case for Conspiracy by WikiLeaks*, N.Y. Times, Dec 15, 2010, *available at* http://www.nytimes.com/2010/12/16/world/16wiki.html?_r=0 (last visited March 6, 2015)

security and copyright. Most of companies have tried many DRM methods to protect their contents. However, in proportion to technological advanced there is still find many holes to crack the technology protection system. Some of disadvantages will challenged the users[114] and the publisher[115] as follows:

a. Users Disadvantages

Implementing DRM Technologies for the content protection on the Internet in great scale, have a chance to make the Internet connectivity down or decelerated. One factor could be take place is multiple applications installed on million computers all over the world to support the protection system. It will also make slow down of data access. This signifies an inconvenience for home users, who have to wait longer for the content to be loaded due to intensify the resource consumption to decode encrypted content.[116] It could be more seriously for the business environment, where keys may be encrypted for all the documents and the contents each time accessed. This condition will make the industries less efficient than the competitors.

Some of developing countries that are not having huge capacity of broadband speed-connectivity will faced this problem. Next problem is application backup, not all DRM technologies provide backup service for their content. If the user then removes or they should restart or reset up their personal

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[113] Timoty B. Lee, *The Sony Hack: How It Happened, Who is Responsible and What We've Learned*, Vox, Dec 17, 2014, *available at* http://www.vox.com/2014/12/14/7387945/sony-hack-explained, *see also* Ben Kuchera, *PlayStation Network Hacked, Data Stolen: How Badly is Sony Hurt*, Apr 27, 2011, *available at* http://arstechnica.com/gaming/2011/04/sonys-black-eye-is-a-pr-problem-not-a-legal-one/ (last visited March 6, 2015)

[114] Users mean anyone who purchasing or using content provided by DRM system

[115] Publisher or producer means companies or third party who distributed the content with DRM system.

[116] Cristhoper Andrews, *supra note* 110, at 25.

computer, they will lose access to the content, which they paid for.[117] For the general of DRM technologies, it needs license when the contents record in the other media like CDs, DVD even TV in your house, but these issues must be heavily regulated if social habits think that it is complicated and costly. Therefore, most users think simply to do piracy.

b. Publisher Disadvantages

Free downloading of entertain contents are the biggest problem which should be confronted by the industries/publisher. Many people download illegal contents, just like music and movie due to try before they really buy the original content or they do because it is free and completely easy. Free downloading websites utilized by the web producer to get the profit for the commercials. Most of the websites do not get permission from the owner to sell or provide the contents. Moreover, file sharing getting worst on the Internet environment. These situations can be seen as beginning new markets that generate loss to industries.

Hence, producers have to spend extra budget for research and development of DRM system. They should conduct a survey of the technology

[117] There are essential differences between iTunes Music Store (Apple *FairPlay*) and Windows Media Player DRM (Microsoft), for *Fairplay*, all user keys belong to user already backup on Apple's servers. If the user lost his/her key-user, then he/she can do recovery from Apple's servers to register new computer as much as five computers. Cancellation of computers registration only can be done from its computer. If the computer is malfunction or re setup five times, then his/her key-user cannot be recovered again. Instead, users of Windows Media Player DRM cannot backup his/her license, if his/her loses his license, such as damage or restarting the computer setup, it is difficult for him to recover the license. Some stores are providing services for license recovery, but most stores do not provide this service. *see* Aulia Hakim, *Perbandingan DRM Audio Apple Fair Play dan Windows Media DRM* (Comparison of DRM Audio Apple *FairPlay* and Windows Media DRM), Informatics Engineering Programs, Institute Technology Bandung, (manuscript, on file with author), *see also* https://itunes.apple.com/us/artist/fair-play/id65563020 and http://windows.microsoft.com/en-us/windows/media-player-drm-faq#1TC=windows-7 (last visited March 8, 2015)

that will be used for the main attraction in the community, because people would be smart to choose a product, which is easier and cheaper to obtain. Publisher also can get bad image to over-pursuing DRM initiative. For instance, the Recording Industry Association of America (RIAA) and Motion Pictures Association of America (MPAA) has filed suit against companies offering unlicensed music on the Internet and the IFPI (International Federation of Phonographic Industry has worked globally to shutdown online music distributor. In some circumstances, the recording industry has been engaged against the large scale online piracy service likes; Napster,[118] MP3.com,[119] Grokster,[120] and Cecilia Gonzales.[121] Action also continues to be taken against cyber lockers and downloaded consumers that are providing a platform for music and movie piracy. Universal Music Group, EMI Music Publishing, Warner Brothers, BMG and Sony, under the umbrella of the RIAA filed thousand lawsuits around 2003-2004.[122]

At first, DRM technologies were created for the responsibility of digital media distributor to the copyright holders to ensure that copyrighted contents are not hijacked. But, at this time DRM technologies are the main requirement for copyright business. File sharing system has caused everyone with the Internet, being able to distribute large quantities of illegal content to other users. These circumstances made the industries that were previously single/group supplier of the content, must be compete with the pirates. Direct attacks and indirect attacks

[118] A&M Record v. Napster, 239 F.3d 1004 (9th Cir. 2001)
[119] UMG Recordings v. MP3.com, 92 F. Supp. 2d 349 (2000)
[120] Groakster, 545 U.S. 913, 125 S.Ct. 2764 at 1
[121] BMG Music v. Cecilia Gonzales, 430 F.3d 888 (2005)
[122] David Kravets, *Copyright Lawsuit Plummet in Aftermath of RIAA Campaign,* Wired, May. 18, 2010, *available at* http://www.wired.com/2010/05/riaa-bump/ (last visited March 9, 2015)

on DRM systems can hereafter be prevented with the help of system updates. One possibility to inhibit sound and video grabbing could be a closer linkage of the DRM systems and the operating system. Right management technologies are here to stand and available security update system will necessity to take place on DRM system and legislative requirements due to gratify the producers and consumers' demand.

2.5 Fair Use

Much has been discuss about the impacts of DRM and technologies have on fair use and creativity. In the following section, two legal principals will describe that are less frequently discussed. As this section will present: how technologies may and not truly obstruct of fair use [123] and innovation, and however, there are also some factors of technologies can be use as public or private use[124] to protect copyright content, promote openness and innovation.

Fair use and private copying doctrine are progressively significant for cumulative creativity in the Internet era. It has inspired everyone to share files to vast distribution channels. [125] Economic business participants, actors' even ordinary people do not need to go to through conventional gatekeepers, broadcaster, entertainer or publisher, they all can reach massive spectators over

[123] The term of "fair use" in this thesis is meant to cover a comprehensive scale of copyright limitation. It will include the U.S. concept of fair use and another definition of copyright limitation, which can be found in the copyright law on other countries.
[124] "Private use" term will refer to the Japanese Copyright Law definition; instead there will be another comprehension from other countries.
[125] Peter S. Menell, *This American Copyright Life: Reflection on Re-Equilibrating Copyright for the Internet Age*, 61 JCPS 235, Winter 2014, (Westlaw Document), at 51.

user-generated websites under the authority.[126] Thus, digital technology has great extended everyone's capacity to link with the copyrighted content in his or her daily lives. This condition is well known as public freedom access.

As author explained previously, file sharing is the biggest problem for the copyright protection on the Internet age. Public freedom access occasionally used as an excused to infringe the copyrighted content.[127] Theoretically, browsing a website including copyrighted work, copying the content into computer's random access memory (RAM) even in short-term, potentially infringe copyright's reproduction, distribution and public display rights.[128] If someone can claim "fair use" to avoid the copyright's criminal penalties, then the law has no control since suspected infringer. Contrariwise, if he/her failed for fair use's defense, that way is considered "willful" and the criminal penalties apply hinge on the courts' certainly consideration of fair use factors.[129] Though, some courts have admitted that while browsing and copying may, on its face, it will, in most conceivable cases, be fair use.[130] Anyhow, the low numbers of winning fair use claims, courts perform to be using the fair use consideration in a technological neutral manner as

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[126] *id.*, not only in America but mostly happen around the world, there are a lot of ordinary people become famous and rich because they upload their art into social medias like YouTube, vast, twitter, Facebook, etc., *see also* Michael Johnston, *25 Celebrities Who Got Rich and Famous through YouTube*, (May 6, 2014), *available at* http://monetizepros.com/blog/2014/25-celebrities-who-got-rich-famous-on-youtube/ (last visited March 25, 2014)

[127] *See*, Sony Corporation v. Universal Studio. Inc., 464 U.S. 417 (1984), A&M Record v. Napster, 239 F.3d 1004 (9th Cir. 2001), UMG Recordings v. MP3.com, 92 F. Supp. 2d 349 (2000), BMG Music v. Cecilia Gonzales, 430 F.3d 888 (2005) & Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

[128] Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc., 75 F. Supp. 2d 1290 (1999).

[129] Brian P. Heneghan, *The Net Act, Fair Use, and Willfulness-Is Congress Making a Scarecrow of the Law*, I Journal of High Technology Law, No. 1, 2002, at 35-36, *see also* U.S. v Richard Taxe et al., 380 F. Supp. 1010, 1017 (1974) & Acuff-Rose Music v Campbell et al., 972 F.2d 1429, 1439 (1992).

[130] *See*, Religious Technology Center v. Netcom On-Line Communication Services, 907 F. Supp. 1361, 1378 (1995)

a counteraction for the courts to abandon or significantly depart from traditional fair use analysis.[131]

The fourth fair use factors codified in 17 U.S.C. § 107 permit fair use and reproduction of copyright content for critics, comment, news reporting, teaching, scholarship and research. [132] This limited guidance does not give express instruction for considering each of criteria; nonetheless courts are more competent to expand further the substance of the fair use doctrine.[133] Implementing fair use doctrine on digital copyright conception and conventional copyright history has been difficult for the court to formulate what is the real concept and right path of fair use itself. Throughout its history, doctrine of fair use has proven to be basis of misconception and the most complex problem in copyright law advancement.[134] Furthermore, previous judges decisions noted that there were market failure rationale because of applying fair use.[135] Selling, licensing and other legitimate models transfer had been serious enough to be frustrated because free copying was permitted. Even though in the beginning of fair use implementation

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[131] Cristhoper A. Jennings, *Fair Use on the Internet*, Report for Congress, Congressional Research Service, Library of Congress, May 21, 2002, at 5.

[132] In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include;
(1) The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
(2) The nature of the copyrighted work;
(3) The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
(4) The effect of the use upon the potential market for or value of the copyrighted work.
The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

[133] Ben Depoorter & Francesco Parisi, *Fair Use and Copyright Protection: A Price Theory Explanation*, at 5. (Paper, on file with author)

[134] *Id*, at 6, *see also* Dellar v. Samuel Goldwyn Inc., 104 F.2d 661, 662 (2d Cir. 1939)

[135] See, Universal City Studios, Inc. v. Sony Corp. of America (Betamax), 659 F. 2d 963 (9th Cir. 1981), Williams & Wilkins Co. v. United States, 487 F. 2d 1345 (Ct. Cl. 1973) and 420 U.S. 376 (1975).

influenced the presence of transactional barriers, 17 U.S.C. § 107 gives four factors to the plaintiff or defendants to defense their fair use motive. Unanimous decision delivered by the court on MGM Studio v Grokster (2005),[136] affirmed that software company were liable the resulting acts of infringement by promoting and distributing software to delivered illegal copyrighted contents. The court argued, although the copyright act did not expressly make anyone liable for another's infringement, secondary liability doctrines applied at this point. Grokster and StreamCast, Ltd defended by invoking the substantial "non-infringing use" (fair use) decided by the U.S. Supreme Court regarding Sony Case.[137] Contradictory statement held by the Supreme Court of Chicago on Gonzales cases.[138] The Judges decided that downloading copyrighted songs and full copies of copyrighted contents without compensation to authors cannot be assumed as "fair use". They also thought, there was an increasing of free downloading copies has lead to decreasing of retail music sales. While, the cases were represent the basic violation of copyright laws against the reproduction right, digital performance right and distribution right, other software programs and file-sharing system may not be subject to such easy analysis. Even though digital entertainment users deploy the copyrighted content by fair use reason, the author should contemplate the effort of free transferring the copies via the Internet.

[136] MGM Studios v. Grokster, 545 U.S. 913 (2005).
[137] The court stated Sony's Betamax VCR was capable of substantial non-infringing uses, and was not contributory liable for copyright infringement by VCR owners when Sony recorded the copyrighted programs for impermissible uses, *see* Lori Ploeger, et al., *An Overview of MGM Studio Inc. v. Grokster, Ltd.*, 34, 9 Intellectual Property and Technology Law 89, 89-91 (September 2005).
[138] Gonzales used Kazza file-sharing software network to download the copyrighted materials. Kazza software was including as a subject who liable for contributory infringement and vicarious infringement like Napster case (2001) and Verizon case (2003). *See*, BMG v. Gonzales, *supra note* 109.

2.6. Private Use

Technological advance and social changes brought global phenomena of copyright practices: from the types of technology utilization, freedom of copyrighted content access, and creation of Internet environment culture. Unfortunately, the legal changes did not much happen in the same way in the U.S and Japan.[139] U.S. has a general doctrine of fair use to protect the areas of exemptions including private copyright,[140] and moreover judges have substantial discretion in analyzing the fair use principle. Instead, Japan has formulate of more specific statutory exemptions about private use/private copying [141] and its application by the judges were relative rigid.[142] Private use or private copying in Japan ruled at Art. 30 Japanese Copyright Law, which exempts exploitation made by (1) the user, (2) for the purpose of his personal use, family use, or other similar uses within a limited circle, (3) automatic reproducing machines for the use of the public, and (4) reproduction is made by a person who knows that such reproduction becomes possible by the circumvention of technological measures, and private copying made on digital recording medium should be compensated for by a levy system.[143]

Generally, legal system of common law in the U.S. and civil law in Japan become substantial differences in applying fair use for U.S. and exemption statues in Japan. Though, this section will not evaluate the general dissimilarity between

[139] Yuko Noguchi, *supra note* 87, at 71.
[140] 17 U.S.C. § 107
[141] Japanese Copyright Law, No.40, 1970, Amendment: Act No. 121, 2006, Art. 30.
[142] Yuko Noguchi, *supra note* 87, at 71.
[143] Japanese Copyright Law, *id,* Art 30 paragraph 2, *see also* Yuko Noguchi, at 77.

both of legal tradition, moreover it will study about private use in copyright exemption in Japan. Several specific statues regarding general exemptions of copyright as follows:[144]

1. Exceptions for exploitation of copyrighted work with relatively small damage (moral and economic right) to the copyright owners in order to privacy and freedom of the market; personal use, family use or other similar uses within a limited group are permissible to do reproduction, translation transformation and adaption;[145] non-commercial public performance, presentation and recital of published work;[146] exploitation of artistic or architectural works located in open spaces;[147] and transfer of ownership of copies made in accordance with the provision of limitation on reproduction rights.[148] Internal uses by enterprises or companies does not consider as private use/exception.[149]
2. Exception that require limitation on copyright based on the typical of exploitation; translation and reproduction in examination question due to keep question confidential;[150] translation and reproduction in Braille as well as reproduction and public transmission in audio recordings to inform the visually handicapped;[151] interactive transmission (uploading, broadcasting and downloading in the digital media or Internet) in order to inform the aurally

[144] Yoshiyuki Tamura, Copyright law, 2 ed, Yuhihaku (2001), at 195-196, *as quoted in* Yuko Noguchi, *supra note* 87, at 75-77.
[145] Japanese Copyright Law, *id*, Art 30 & 43.
[146] *id*, Art 38.
[147] *id*, Art 46
[148] *id*, Art 47 *quarter*.
[149] Tokyo District Court, 22 July 1977, 9-2 *Mutaishû* 534.
[150] Japanese Copyright Law, *id*, Art 36 & 43.
[151] *id*, Art 37 & 43.

handicapped;[152] and short-lived recording for the preparation of broadcast by broadcasting organization.[153]

3. Exception in resolving the conflict between property owners of tangible material/content and copyright owner; exhibition of photographic works or artistic works by the owner of original work;[154] reproduction of the artistic works into the pamphlets or brochures in order to explain or introduce them when the exhibition;[155] reproduction of computer programs by legitimate purchaser due to backing up;[156] and reproduction legal purchased content for the maintenance and repair.[157]
4. Exception in order to public interest purposes; education, reportage/journalism, legislative, administrative and judicial needs, non-commercial reproduction and translation in libraries in order to research development;[158] quotation (translation) compatible with fair practice and reasonable by purposed such as news reporting, criticism or research;[159] reproduction, translation and adaptation and transformation in school textbooks;[160] broadcasting of published work for school educational programs;[161] reproduction, translation and adaptation and transformation copyrighted works or published work in school and educational institution;[162] translation and reproduction of magazine,

[152] *id*, Art 37*bis.*
[153] *id*, Art 44.
[154] *id*, Art 45.
[155] *id*, Art 47.
[156] *id*, Art 47*bis.*
[157] *id*, Art 47*quarter.*
[158] *id*, Art 31 & 43
[159] *id*, Art 32 & 43.
[160] *id*, Art 33 & 43.
[161] *id*, Art 34 & 43.
[162] *id*, Art 35 & 43.

newspaper, article and bulletin on political issue, economic or social;[163] exploitation of political speeches and discourse in judicial proceedings (include translation when delivered by the government or local public entities);[164] reproduction and exploitation of work to report current events by means of photography, cinematography, broadcasting or otherwise;[165] reproduction and translation of judicial proceedings, patent and trademark examinations, pharmaceutical examinations for internal use by legislators and administrators;[166] and exploitation for disclosure by the Information Disclosure Law.[167]

Concerning the possibility of claiming the fair use doctrine in Japan, Tokyo District Court and Tokyo High Court stated that there was no space to confess a fair use defense in the Japanese copyright law.[168] Tokyo High Court held that there was limitation based on fair use, it should be formed on the coordination of confronting interest (copyright owner's interest and public interest), and it is necessary to addressed by statute to create clear condition about fair use. Under Japanese copyright law where such statute does not exist, it is not suitable to admit and apply fair use doctrine.[169] Hence, it is definitely clear that

[163] *id*, Art 39 & 43.
[164] *id*, Art 40 & 43.
[165] *id*, Art 41 & 43.
[166] *id*, Art 42 & 43.
[167] *id*, Art 42*bis.*
[168] *See* Tokyo High Court, October 27, 1994, *Intellectual Property Case* Vol. 26, No. 3, at 1151 (The Wall Street Journal Appeal case), Supreme Court, June 8, 1995, *Jurist Separate*, No. 157, at 140 (Last Massage in the Last Issue Case), Tokyo District Court, December 18, 1995, Intellectual Property Cases, Vol. 27, No. 4, at 787, as quoted in Yuko Noguchi, *supra note* 87, at 76-77.
[169] *Id*, *see also* Tokyo High Court, October 27, 1994, *Intellectual Property Case* Vol. 26, No. 3, at 1183 (The Wall Street Journal Appeal case).

statutory exemption (fair use and private use) for legitimate exploitation in the copyright law of Japan is different from U.S.

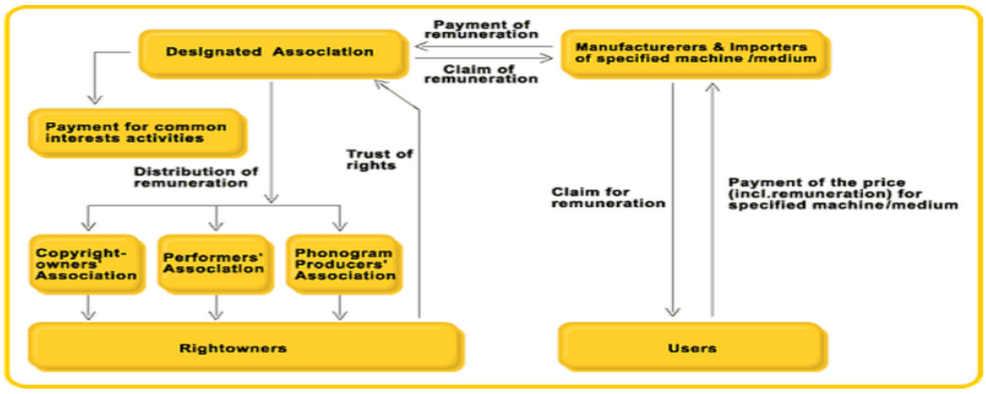
However, acts to download or upload copyrighted materials without the permission from the author except in exemption defined, such as special "replication or private use", it is illegal in principle. In addition, even for private use, such as author (copyright holder) music and video are being uploaded without permission will categorized as illegal action. Then, among the illegal download, criminal penalties have been established in the act of downloading while knowing that it is music and video works that are sold and distributed for a fee. When a copyright infringement, a fine of not more than, or both of these in prison or ten million yen might be imposed as criminal penalties (fine or both of these following punishment; prison for two years or two million yen in the case of illegal downloading of paid work). Hence, not only criminal penalties, it may be civil claim for compensation from the author or copyright holder.[170]

Levy system in Japan, which is ruled the compensation for digital recording medium was represented by Society for the Administration of Remuneration for Audio Home recording (SARAH)[171] and Society for the Administration of Remuneration for Video Home recording (SARAVH).[172] Private recording in the Japanese compensation system was announced by the copyright law amendment 1992, for audio recording has been implemented since

[170] Japanese Copyright Law, *id*, Art 112-118.
[171] http://www.sarah.or.jp/index.html, (last visited, May 18, 2015).
[172] http://www.sarvh.or.jp/dis/a_navi.html, (last visited, May 18, 2015), right's organization to receive compensation which is participate in the SARVH, are the following 15 bodies of neighboring right person (broadcasting, TV program, Japanese animation, video software, japan filmmaker, Society of Author, Composer and Publisher, Playwright, writers, orchestra, orchestra performers, Recording Industry, Music Carries and Publisher Association).

1993 and for visual recording since 1999.[173] The commissioner of the Agency of Cultural Affair designates the associations according to the copyright law. They have the authority to deal, on behalf of the right holder and its own name, with the juridical or non-juridical issue according to the right in claiming compensation for private recording.

THE REMUNERATION SYSTEM FOR HOME TAPING



Japanese Copyright Act allow for user to reproduce the subject of copyright content in order to his personal use, family use and other similar uses within a limited circle and anyone who, with the private use makes sound or visual recording on a medium digital recording as specified by Cabinet Order should pay a compensation to the copyright owners. Thus, copyright law permits to make private copy without approval from the holders. This clause means the limitation of the owner's right. Therefore, the Japanese compensation system of private recording was presented.[174] In this audio movement, the media/devices classified by Cabinet Order did not reflect the product being utilized for private

[173] World Intellectual Property Organization (WIPO), *International Survey on Private Copying: Law & Practice 2013*, at 83-91, *available at* http://www.wipo.int/edocs/pubdocs/en/copyright/1037/wipo_pub_1037_2013.pdf, (last visited, May 18, 2015).
[174] *Id*, at 84.

recording; consequently the compensation income is declining extremely.[175] In the case of video, the compensation system for private recording is not working properly, having practically crashed after SARVH lost the lawsuit with one of Japan manufacturer.[176]

[175] *Id*, at 88.

[176] *Id*, at 89. (Japan started the transition from analogue to digital broadcasting on July 2011. Toshiba has denied cooperation liability in 2009 for its recording devices dedicated to digital broadcasting, insisting that the provisions specified by Cabinet Order did not cover such devices. Other manufacturers, which create the same kind of devices, followed Toshiba's. SARVH negotiated with Toshiba, but they could not reach an agreement. Hence, SARVH sued Toshiba demanding cooperation and compensation. After the transition, all manufacturers of recording devices and media refused to compensate or cooperate. Consequently, SARVH has received no payment from manufacturers since July 2011, and the distribution to rights owners has stopped. Manufacturers insist that they cannot cooperate for a medium because Cabinet Order did not cover the devices. The legal and economic reason from the judgments were different between the first and the second step, but unfortunately SARVH lost in both cases, and the supreme court dismissed the petition for a final appeal. Finally, the Japanese compensation system for visual private recording is not functioning, having practically collapsed).

Chapter III

THE IMPACT OF DIGITAL AND NETWORK TECHNOLOGIES; ILLEGAL FILE SHARING AND PREVENTION POLICY

Copyright concept began with the invention of the printing press around 1400s.[177] This concept is used on the basis to make a copy or a work of art/writing, which required great effort and cost as most as of the original work. Therefore, some copyright regulations before 1710, the publisher was the one who asked for legal protection to the Kingdom or government. With the enactment of the Statue of Anne in England, copyright protection switched into the author or creator of copyright works, moreover it also set the validity period for the exclusive rights of copyright holders for 28 years and after that it will become public property.[178] In 1960s, technology was developed with the use of electronic computers as media of telecommunication. Internet was already known in the 1970s. Initial concepts of packet networking developed in several computer science laboratories in the United States, Great Britain, and France. However, because of the media was still relatively expensive, the media was only used in certain areas. The Internet was growing rapidly in the 1980s. It used in the fields of education, research, government and commercial Internet service providers (ISPs). Internet has had revolutionary effects on commerce, culture and communication since the mid-1995s. Electronic mail, instant messaging, voice over Internet Protocol (VoIP) telephone calls, two-way interactive video calls, and

[177] Grace R. Cooper, The Invention of Sewing Machine, Bulletin 254, The Smithsonian Institution Press (e-book 32677), Washington DC, (1968).
[178] Oren Bracha, *The Adventures of the Statute of Anne in the Land of Unlimited Possibilities: The Life of a Legal Transplant*, 25, Berkeley Technology Law Journal, United States, 2010, at 1435-1436.

the World Wide Web with its discussion forums, blogs, social networking, and online shopping sites were facilities that can be used on the Internet. On 1993 to 2000, the amounts of the data were transmitted at higher speed and fast connection over fiber optic networks and frequency. The Internet took over global communication landscape was almost instant in historical terms: it only communicated 1% of the information flowing through two-way telecommunications networks in 1993, already 51% by 2000, and more than 97% of the telecommunicated information by 2007.[179] Nowadays, the Internet grows rapidly, driven by ever-greater amounts of online information, commerce, entertainment and social networking.

3.1 United States of America

Copyright in the United States was started when the Congress agree to promote the progress of science and arts, by guaranteeing for a limited times to inventors, author and owners' exclusive right concerning their respective writings and discoveries. [180] The copyright provision of the U.S. Constitution was implemented in the first congress in 1790. The provision known as Copyright Act 1790, an act concerning for the encouragement of learning, by securing the copies of maps, charts and book to the authors and proprietors of such copies. [181] Foremost amendments to the act were applied in 1831, 1870, 1909, and 1976.

[179] Martin Hilbert & Priscila Lopez, *The World's Technological Capacity to Store, Communicate and Compute Information*; *Part 1 Result and Scope*, International Journal of Communication, 2012, at. 960-961.
[180] U.S. Const. Art. I, § 8, cl. 8.
[181] The act was modeled on Ann Statute (1710). Copyright Act 1790 allowed American authors for the right to print, re-print, or publish their work for fourteen years and for another fourteen to

3.1.1 The Movement of Digital Right

Major changes on digital right recognized in 1973, William and Wilkins, publisher of medical journals took legal action through the National Library of Medicine (NLM) and the National Institutes of Health (NIH).[182] NLM and NIH charged by making unauthorized photocopies of articles on plaintiff's medical journal and distributing them to medical researcher and physicians. The Court of Claims thought that medicine and medical research would be harmed if this were found to be infringement. In the result, Judge Davis stated:

"…Based on the type and context of use by NIH and NLM as shown by the record, that there has been no infringement, that the challenged use is "fair" in view of combination of all the factors involved in consideration of 'fair' or 'unfair' use enumerated in the opinion, that the record fails to show a significant damage to plaintiff but demonstrates injury to medical and scientific research if photocopying of this kind is held unlawful, and that there is a need for congressional treatment of the problems of photocopying."[183]

The "Fair" use was a major part of the revision included in the Copyright Act of 1976. The revision of the Act codified for two main reasons; first is technological advance and their impact on what might be copyrighted, how works might be copied, and what constituted to be addressed. Second is anticipation of Berne Convention devotion by the United States.[184] This amendment organized for the first time concerning fair use and copyright extension of unpublished

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renew. The law was meant to give an incentive to authors, artists, and scientists to create original works by providing creators with a monopoly. At the same time, the monopoly was limited due to stimulate creativity and the advancement of "science and the useful arts" through wide public access to works in the "public domain."

[182] Williams & Wilkins Co v. United States. 480 F. 2d 1345, (Court of Custom and Patent Appeal 1973).

[183] *Id.*

[184] Associations of Research Libraries, *available at* http://www.arl.org/focus-areas/copyright-ip/2486-copyright-timeline#.Vmv0-eOGSko, (last visited December 12, 2015). (The United States became a Berne Convention signatory in 1988).

works. Additionally, one section was added that allowed library, photocopying without permission due to scholarship, preservation, and interlibrary loan under certain circumstances.[185] Whether the use of a work (including reproduction in copies or digital records or by any means categorized in that section,[186] the four following aspects to be considered; purpose and character of exploitation, nature of the copyrighted works, the amount of the content and substantiality of the percentage used in relation to the whole, and the effect of exploitation to the market.[187]

3.1.2 Betamax Case

When Sony Corporation manufactured the "Betamax" home video tape recorder (VTR) to the market for the first time in 1975,[188] the advancement of technology in copyright reproduction and distribution had major change. The fair use doctrine will used to analyze the development of new technology through the copyright problems. Copyright owner and entertainment industries encounter worries because of it; consumers would be easy to copy and collected the programs from television. The producers opine; in the future, it will be reducing the demand of those programs.[189] Moreover, Jack Valenti, president of Motion

[185] *Id*, (section 108), *see also* (The National Commission on New Technological Uses of Copyrighted Works (CONTU) was agreed by Congress in 1976 to create guidelines for the "minimum standards of educational fair use" under the Copyright Act 1976. "The CONTU guidelines used to assist librarians and copyright proprietors in understanding the amount of photocopying for use in interlibrary loan arrangements permitted"), *available at* http://old.cni.org/docs/infopols/CONTU.html (last visited May. 21, 2015)
[186] 17 U.S.C. § 107
[187] *Id.*
[188] http://www.rewindmuseum.com/betamax.htm, (last visited May. 21, 2015)
[189] Fred Von Lohmann, *Ipods, Tivo and Fair Use as Innovation Policy*, Presented at the 2005 Fordham Intellectual Property Conference March 31-April 1, 2005, (a paper, on file with author).

Pictures Association said that VTR would have big influence to bother the potential market even made the industry decimated, shrunken and collapsed.[190]

The case started when copyright owners of television programs[191] brought copyright infringement action against Sony Corporation America. The United States District Court of California[192] refused all claim sought by copyright owners and entered judgment for manufacturer, thus the respondent appealed. The United States Court of Appeals for the Ninth Circuit[193] overturned district court's verdict on copyright privilege, and manufacturer petitioned for *writ of certiorari.*[194] The Supreme Court of the United States[195] held that manufactures of VTR confirm a significant and substantial number of copyright holders who licensed their programs for transmit on free television would not object to having their transmit time shifted by viewers and owners of copyrights on television programs failed to demonstrate that time shifting did not cause any likelihood of no minimal harm to the potential market for, or the value of, their copyrighted works and consequently, VTR was capable of substantial no infringing uses; thus,

[190] Jack Valenti. (Statement on Hearings Before the Subcommittee on Courts, Civil Liberties, and the Administration of Justice of the Committee on the Judiciary of the House of Representatives 97th Congress on H.R. 4783, H.R. 4794 H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705, Monday, April 12, 1982), *available at* http://cryptome.org/hrcw-hear.htm (last visited, May 24, 2015).
[191] Two respondents become representatives, Universal Studio. Inc. and Walt Disney Production.
[192] Sony Corp v. Universal Studio. Inc., 480 F. Supp. 429.
[193] Sony Corp v. Universal Studio. Inc., 659 F.2d 963.

[194] *Certiorari* is a Latin word; it means "to be informed of, or to be made certain in regard to". It is also the name given to certain appellate proceedings for re-examination of actions of a trial court, or inferior appeals court. The U.S. Supreme Court still uses the term *certiorari* in the context of appeals. Petition for *Writ of Certiorari*, informally called "*Cert Petition*" is a document, which a losing party files with the Supreme Court asking the Supreme Court to review the decision of a lower court. It includes a list of the parties, a statement of the facts of the case, the legal questions presented for review, and arguments as to why the Court should grant the *writ*, available at http://www.techlawjournal.com/glossary/legal/certiorari.htm, (last visited, May 24, 2015).

[195] Sony Corp v. Universal Studio. Inc., 464 U.S. 417, 104 S.Ct. 774.

manufacturers' sale of such equipment to general public did not constitute contributory infringement of respondents' copyrights.[196]

On the District Court process, the respondents stated that VTR upon the market has allow millions of Americans to make recording of television programs in their places/homes, for repeated and future viewing at their own convenience. Though, this activity has proved popular with owners of television sets and VTRs, it reasonably has been a problem concern for the holders of copyright in the recorded programs. Curiously, before Sony was filed, Universal Studios began promoting its products on pre-recorded discs and planned to announce the discs before and after the pictures were released. This condition perhaps made Universal Studios was concerned with Sony's entrance into the home-video market; claiming and showing the copyright infringement could have been a way to monopolize the market.[197] Sony held that none of the advertisement from the programs warned to the public that recording the copyrighted programs/shows could constitute the infringement. Hence, Sony made announcement at the Betamax's booklet that the television programs, videotapes, films, and other materials may be copyrighted; illegal recording of such material may be contrary to the provisions of United States of Copyright Law.[198]

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[196] *Id*.
[197] Jeffrey J. Escher, *Copyright, Technology & the Boston Strangler: the Seven Circuit and the Future of Online Music,* 1 SEVENTH CIRCUIT REV. 74 (2006), at 80, *available at* http://www.kentlaw.edu/7cr/v1-1/escher.pdf, (last visited December 12, 2015).
[198] Sony, *supra note* 195, at 436.

Even though both parties did surveys concerning the usage of VTR,[199] the respondent conceded that Sony had not damaged its business relationship nor caused any market harmed. Sony introduced as evidence showing television programs that could be copied without objection from any copyright holder, stress on sports, religious, and educational programming. Their survey showed that 7.3% of all Betamax used to record sports events, and representatives of baseball, football, basketball, and hockey testified that they had no objection to the recording of their televised events for home use.[200]

After a lengthy discussion, court found that the Amendment of Copyright Act 1971 permitted home use of audio recording.[201] Conclusively, District Court ruled that home VTR recording did not infringe the Studios' copyrights under either the Act of March 4, 1909 (1909 Act), 35 Stat. 1075, as amended (formerly codified as 17 U.S.C. § 1 *et seq.* (1976 ed.)), or the Copyright Revision Act of 1976 (1976 Act). District Court also concluded that non-commercial home use recording of material broadcast over the public airwaves was a fair use of copyrighted works and did not constitute copyright infringement. It emphasized the fact that the material was broadcast free to the public at large, the non-commercial character of the use, and the private character of the activity

[199] *Id*, at 438-439 (According to plaintiffs' survey, 75.4% of the VTR owners use their machines to record for time-shifting purposes half or most of the time. Defendants' survey showed that 96% of the Betamax owners had used the machine to record programs they otherwise would have missed. When plaintiffs asked interviewees how many cassettes were in their library, 55.8% said there were 10 or fewer. In defendants' survey, of the total programs viewed by interviewees in the past month, 70.4% had been viewed only that one time and for 57.9%, there were no plans for further viewing. 81.9% of the defendants' interviewees watched the same amount or more of regular television as they did before owning a Betamax. 83.2% reported their frequency of movie going was unaffected by Betamax.)
[200] Sony, *supra note* 195, at 424.
[201] Sony, *supra note* 192, at 444.

conducted entirely within the home. Moreover, the court found that the purpose of this use served the public interest in increasing access to television programming, an interest that is consistent with the First Amendment policy of providing the fullest possible access to information through the public airwaves. Even when an entire copyrighted work was recorded, the District Court regarded the copying as fair use because there is no accompanying reduction in the market for plaintiff's original work. The District Court also concluded that Sony could not be held liable as a contributory infringer even if the home use of a VTR was considered an in- fringing use. The District Court noted that Sony had no direct involvement with any Betamax purchasers who recorded copyrighted works off the air.[202]

The Court of Appeals reversed the District Court's judgment on respondents' copyright claim. It did not set aside any of the District Court's findings of fact. Rather, it concluded as a matter of law that the VTR was not a fair use because it was not a "productive use." Therefore it was unnecessary for plaintiffs to prove any damage to the potential market for the copyrighted works, however it seemed clear that the cumulative effect of mass reproduction made possible by VTR's would tend to reduce the potential market for respondents' activities.[203] The Court of Appeals concluded that VTR's were not suitable for any substantial non-infringing use even though some copyright owners were not chosen to impose their rights. Concerning of contributory infringement, the Court of Appeals rejected the analogy to main articles of commerce such as tape recorders or photocopying machines. VTR may have substantial benefit for some

[202] Sony, *supra note* 195, at 426.
[203] *Id*, at 428

purposes and do not even remotely raise copyright problems, it sold for the primary purpose of reproducing television programming and practically, almost the programs were copyrighted material.[204] The Court of Appeals also refused the District Court's reliance on Sony's lack of knowledge that home user constituted infringement. Assuming that the statutory provisions defining the remedies for infringement applied also to the non-statutory tort of contributory infringement, the court stated that a defendant's good faith would merely reduce his damages liability but would not excuse the infringing conduct. It held that Sony was chargeable with knowledge of the home users infringing activity because the reproduction of copyrighted materials was either "the most conspicuous use" or "the major use" of the VTR.[205]

From the beginning, the Sony case made the law of copyright has developed to answer the significant alteration in technology. Next, Supreme Court of United States accepted *certiorari*[206] from the Sony and heard the case.[207] In summary, the court responded two conclusions. Firstly, approximately Supreme Court support the District Court's Judgment and secondly, time shifting did by Sony was fair use activity.[208] Based on the reason above, we can find that Sony proved a significant likelihood that considerable numbers of copyright holders who license their creativity for broadcast on free television would not have objection to having their broadcast time-shifted by home/private user. Furthermore, the respondents failed to demonstrate that time shifting would cause

[204] *Id.*
[205] *Id.*
[206] *Certiorari*, *supra note* 194.
[207] Sony, *supra note* 195.
[208] *Id*, at 442-443.

of non-minimal harm to the potential market for or the value of their creativity. Moreover, the contributory copyright infringement was not well defined. Even though Sony sale the VTR to the general public, Sony had no direct participation with individual VTR user and did not involve in off air copying.

3.1.3 MP3.com Case

MP3 is the most popular form of downloading digital audio files from the Internet. The mp3 file format compresses data to a greater extent than previous file compressing technologies, allowing for more efficient storage and faster download times. Users make mp3 files and swap them over the Internet via e-mail, newsgroups, chat rooms, or other programs specially developed for mp3 trading.[209]

This case was between UMG Recordings as plaintiffs and MP3.com as defendant.[210] UMG Recordings composed of Sony Music Entertainment Inc., Warner Bros. Records Inc., Arista Records Inc., Atlantic Recordings Corp., and BMG Music d/b/a The RCA Records Label, Capitol Records, Inc., Elektra Entertainment Group, Inc., Interscope Records, and Sire Records Group Inc., sued internet company (MP3.com)[211] which produced MP3 files of recordings

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[209] Sara Steetle, *UMG Recordings, Inc. v. MP3.com, Inc.: Signaling the Need for a Deeper Analysis of Copyright Infringement of Digital Right,* 21 Loy. L.A. Ent. L. Rev. 31 (2000), at 34.

[210] UMG Records v. MP3.com, 92 F. Supp. 2d 349 (2000)

[211] *Id*. (MP3.com, around January 12, 2000, launched its "My.MP3.com" service, which is advertised as permitting subscribers to store, customize and listen to the recordings contained on their CDs. Specifically, a subscriber to MP3.com must either "prove" that he already owns the CD version of the recording by inserting his copy of the commercial CD into his computer CD–Rom drive for a few seconds (the "Beam-it Service") or must purchase the CD from one of defendant's cooperating online retailers (the "instant Listening Service"). Thereafter, however, the subscriber can access via the Internet from a computer anywhere in the world the copy of plaintiffs' recording

available to its subscribers in their websites for infringement. The case was not complex as same as Sony's, however, technology advance returned to the clash with the copyright law. MP3.com case presented that defendant's action of plaintiffs' copyrights was clear enough. Accordingly, on April 28, 2000, the United District Court granted defendant's motion for partial summary judgment holding defendant liable for copyright infringement.[212]

The Court analyzed the case considered four factors as a fair use for;[213] the first is "the purpose and character of the use". Defendant did not argue that its purpose is commercial, while subscribers to My.MP3.com were not currently charged a fee; defendant seeks to attract a sufficiently large advertising and otherwise make a profit. Second, "the nature of copyrighted work", the creative copied were close to the main of intended copyright protection.[214] Third, "the amount and substantiality of the portion (of copyrighted works) used (by the copier) in relation to the copyrighted work as a whole", it is undisputed that defendants copies, and replays, the entirety of these creativity was in issue, thus again negating any claim of fair use.[215] Fourth, "the effect of the use upon the potential market for or value of the copyrighted work", defendant's activities

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made by defendant.

[212] *Id*.
[213] 17 U.S.C. § 107
[214] UMG Records, *supra note* 210, at 352, *see also* Campbell v. Acuff Rose Music, Inc., 510 U.S. at 586, 114 S.Ct. 1164.

[215] UMG Records, *id*, *see also* infinity Broad- cast Corp. v. Kirkwood, 150 F.3d 104, 108 (2d Cir.1998), (rejecting the fair use defense by operator of a service that retransmitted copyrighted radio broadcasts over telephone lines)

invade the recording companies statutory right to licensed their copyrighted sound recordings to others for reproduction.

Finally, it concluded that MP3.com was providing a useful service to the consumers to be pirates. Moreover, as a practical, plaintiffs have indicated no objection in principle to licensing their recordings to companies like MP3.com; they simply want to make sure they get the remuneration the law reserves for them as holders of copyrights on creative works. The court also found that defendant failed to give evidence to support their affirmative defense.[216]

3.1.4 Napster and Aimster Case

Napster[217] and Aimster[218] cases were almost having same analysis from the copyright law point of view. The recording companies and music publisher sued them with brought contributory and vicarious infringement. They were Internet services that facilitated the transmission and retention of digital audio files by its user. Both of United States Court of Appeals affirmed the lower court judgment regarding the cases.

The Court of Appeals, Ninth Circuit for Napster litigation decided to affirm in part, reversed in part and remanded the District Court's Judgment, it held eight points in analyzing the cases: (1) plaintiffs established prima facie case of direct copyright infringement; (2) users' activities did not amount to fair use of the copyrighted works; (3) plaintiffs demonstrated likelihood of success on

[216] UMG Records, *id,* at 352-353.
[217] A & M Records, Inc., v. Napster Inc., 239 F.3d 1004 (2001)

[218] *In re:* Aimster, 334 F.3d 643 (2003)

merits of contributory infringement claim; (4) plaintiffs demonstrated likelihood of success on merits of vicarious infringement claim; (5) Audio Home Recording Act was inapplicable; (6) plaintiffs raised sufficiently serious questions, and established that balance of hardships tipped in its favor, as to service's claim that it was entitled to "safe harbor" under the Digital Millennium Copyright Act; (7) service did not establish defenses of waiver, implied license, or copyright misuse; (8) preliminary injunction was overbroad; (9) $5 million bond amount was sufficient; and (10) service was not entitled to imposition of compulsory royalties rather than preliminary injunction.[219] The Court of Appeals, Seven Circuits for Aimster affirmed that Aimster. Inc., was a contributory and vicarious infringer. The Courts held that: (1) evidence supported finding that plaintiffs were likely to prevail on merits and (2) balance of harms favored granting of preliminary injunction.[220]

In addressing the comprehensive arguments from the cases above, the Courts found that both Internet companies facilitated users to transmit audio files (MP3) between and among its users. Commonly called "peer-to-peer" (P2P) file sharing, Napster and Aimster allowed its users to: (1) make MP3 music files stored on individual computer drives/devices available for copying by other Napster users; (2) search for MP3 music files stored on other users' computers; and (3) transfer exact copies of the contents of other users' MP3 files from one computer to another via the Internet. These processes were made possible by Napster's MusicShare soft- ware and Aimster's Software by registering on those

[219] Napster, *supra note* 217.
[220] Aimster, *supra note* 218.

systems and entering a password and user name. Those software were available free of charge from Napster's and Aimster's Internet sites. They provided technical support for the indexing and searching of MP3 files, as well as for its other functions, including a "chat room," where users can communicate directly each other and discuss information about their activities.[221]

The Copyright Act provides for various sanctions for infringers.[222] These statutory sanctions represent a more than adequate legislative solution to the problem created by copyright infringement. Defendants would avoid penalties for any future violation of any injunction, statutory copyright harm and any possible criminal penalties for continuing infringement. The fee structure would grant Napster and Aimster of either choosing to continue and pay royalties or shut down. On the other hand, the wronged parties would be forced to do business with a recording company that profits from the wrongful use of copyright. In the case of Napster, plaintiffs would lose their intellectual property: they could not make a business decision, not to license their property to Napster, and, in the event they planned to do business with Napster, compulsory royalties would take away the copyright holders' ability to negotiate the terms of any contractual arrangement.[223]

[221] *Id*, at 646, *see also* Napster, *supra note* 217, at 1011.
[222] 17 U.S.C. § 502, 504 & 506, *see also* 18 U.S.C. § 2319A. (502 for injunctions, 504 for damages and 506 for criminal penalties; 18 U.S.C. § 2319A (criminal penalties for the unauthorized fixation of and trafficking in sound recordings and music videos of live musical performances)).
[223] Napster, *id* , at 1029.

3.1.5 Verizon Case

In the early 1990s, copyright owners began suing to stop Internet infringement, targeting electronics bulletin in boards (BBSs) operated from personal computers connected to the Internet by ISPs.[224] In some cases, they sued both the person running the BBS and the ISP that linked the BBS to the Internet.[225] Early 1993, the Department of Justice prosecuted infringers who offered pirated software from BBSs operated from home computers.[226]

As technology has advanced, digital piracy has continued to grow. A new transformation digital format became the medium of choice for infringers. P2P systems like their technological predecessors BBS, File Transfer Protocol (FTP) and (Internet Relay Chat) IRC software allowed users, under the anonymity, to distributed files stored on their personal computers (and not on ISP's server) to other Internet users. Napster was the first and most notorious P2P system, until the courts shut it down. The Napster P2P system simply combined FTP software (which can turn a personal computer into a server that allowed Internet users to download files) and IRC software (which enables direct communication among Internet users).

Verizon case is the firs lawsuit, which sued the ISPs as a contributory infringer. The lawsuit between Verizon Internet Service and the Recording Industry Association of America (RIAA) started when a Verizon Internet user

[224] *See* Sega Enters. Ltd. v. MAPHIA, 857 F. Supp. 679, 682-83 (N.D. Cal. 1994) and Playboy Enters, Inc. v. Frena, 839 F. Supp. 1552, 1555-56 (M.D. Fla. 1993)
[225] *Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc.,* 907 F. Supp. 1361 (N.D. Cal. 1995)
[226] *United States v. Stowe,* No. 96C2702, 1996 WL 467238

downloaded over 600 copyrighted songs using *KaZaA* P2P software.[227] RIAA has moved to enforce a subpoena served on Verizon Internet Services under the Digital Millennium Copyright Act of 1998.[228] On behalf of copyright holders, RIAA pursued the identity of an anonymous user of Verizon's service. The copyright owners (and thus RIAA) can distinguished the Internet Protocol address, but not the identity, of the suspected infringer, only the service provider can identify the user. Verizon argued that the subpoena connected to material transmitted over Verizon's network, not stored on it, and thus falls outside the scope of the subpoena power authorized in the DMCA.[229]Based on the fact, text and structure of the Digital Millennium Copyright Act, as confirmed by the purpose and history of the Act, the Supreme Court concluded that the subpoena authority of section 512(h) applied to all service providers, including Verizon and other service providers falling within subsection. Therefore, the Court granted Write of Certiorari RIAA's motion to enforce its subpoena, and orders Verizon to obey the subpoena.[230]

The D.C. Circuit's decision was too far beyond the District of Columbia. The Supreme Court's judgment has effectively stopped the issuance of DMCA subpoenas in the context of peer-to-peer copyright infringement. A deep aspect of DMCA 512(h) is Congress' express and repeated direction that clerks issue

[227] RIAA v. Verizon Internet Service, 240 F.Supp.2d 24, 2003, at 26. (RIAA's subpoena to Verizon). *KaZaA* was a media desktop was generally used to exchange MP3 music files and other file types, such as videos, applications, and documents via Internet. The *KaZaA* Media Desktop user could be downloaded freely; however, it was bundled with adware (advertising supporter software) and for a period there were "No spyware" warnings found on *KaZaA's* website. It started as a P2P application using the Fast Track Protocol).
[228] 17 U.S.C. § 512
[229] Verizon, *id*.
[230] RIAA v. Verizon Internet Service, 2004 WL 1175134, at 29.

subpoenas expeditiously and ISPs respond obediently, so the copyright owners can protect their rights. In the wake of the D.C. Circuit's opinion, however, court clerks are unsure whether they can issue such subpoenas, and ISPs have made clear that they will not comply with them. Moreover, this important issue is likely to recur. Certainly, the issue already was recurring in other jurisdictions, including in courts in the Fourth and Eighth Circuits. This case presented a straight- forward question of legal construction, applied to a narrow set of material facts that are significantly the same in every case. The Court already has the benefit of thorough discussions (reaching opposite conclusions) by the district court and the D.C. Circuit, and it can obtain the considered views of the United States and the Copyright Office.[231]

3.1.6 Grokster Case

Following the previous case, Grokster case[232] was more like Napster and Aimster cases. In Grokster, copyright owners including songwriters, music publishers and motion picture studios sued the software distributor of peer-to-peer file sharing by computer networking software. Grokster distributed free software that allowed the public to download songs by P2P file sharing network. Grokster claimed based on Sony case that software was capable of non-infringing uses of copyright holders.[233] However, MGM's evidence gave important reason that the vast majority of users' downloads were acts of infringement, and because over 100

[231] *Id, at* 28
[232] Grokster, LTD., et al. v. Metro Goldwyn Mayer Studios Inc., 545 U.S. 913, 125 S.Ct. 2764 (2005).
[233] Id, at 2772

million copies of the software in question are known to have been downloaded, and billions of files are shared across the FastTrack and Gnutella networks each month, the probable scope of copyright infringement is incredible.[234]

The United States District Court of California held partial summary judgment[235] in favor of the distributor concerning contributory and vicarious infringement. Next, plaintiffs appealed to the Ninth Circuits and it was affirmed.[236] Finally, the Supreme Court granted *certiorari* considering that anyone who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.[237]

3.1.7 Gonzales Case

The Recording Industry Association of America sued randomly of more 260 American music user/fans for sharing files, specifically music by P2P file sharing networks in 2003.[238] The targets were not commercial copyright pirates, nevertheless children, grandparents, single mothers, college professors or workers. The industry shows lawsuit campaign, with the members of the Recording Industry Association of America (RIAA) by filing hundreds of new lawsuits in every month, including, mostly 400 per month targeted against college

[234] *Id*.
[235] Grokster, LTD., et al. v. Metro Goldwyn Mayer Studios Inc., 259 F.Supp.2d 1029
[236] Grokster, LTD., et al. v. Metro Goldwyn Mayer Studios Inc., 380 F.3d 1154
[237] Grokster, *supra note* 232.
[238] David Kravets, *Copyright Lawsuits Plummet in Aftermath of RIAA Campaign, available at* http://www.wired.com/2010/05/riaa-bump/, (last visited, May 31, 2015)

students.[239] However, the lawsuits were not working. Currently, downloading by P2P networks is well-liked common and continuously, despite the socialization public awareness of lawsuits. At the same time, the lawsuit campaign has enhanced only lawyers, rather than compensating artists for file sharing. One thing that we can conclude that: suing music fans is no answer to the P2P dilemma.[240]

P2P file sharing was responded by the music industries as they have often responded as disruptive innovation. Starting with 1999, they sued Napster, Aimster and followed by the P2P technology companies among others: Scour, Aimster, AudioGalaxy, Morpheus, Grokster, Kazaa, iMesh, and LimeWire.[241] Though, the fact the P2P technologies were also used for legal purpose, like sharing of authorized files. The legal action against P2P software industries did not make the recording industry got victories on the courts. It was true that Napster was shut down by the court but continuously new network software quickly showed; Aimster, AudioGalaxy which transformed to Morpheus and KaZaa and well known as eDonkey and BitTorrent.[242] Nowadays, in some countries has different system to enforce the illegal file sharing websites. BitTorrent is no longer the dominant file-sharing software on the Internet. Cyberlockers known as centralized file-hosting website services to swapping files

[239] Eliot Van Buskirk, *A Pen Poison From RIAA,* March 1, 2007, *available at* http://www.pp-international.net/node/165, (last visited, May 31, 2015)
[240] Electronic Frontier Foundation, *RIAA v the People, available at* https://www.eff.org/files/filenode/riaa_at_four.pdf, (last visited, May 31, 2015)
[241] Courtney Macavinta, *Recording Industry Sues Music Start-up, Cites Black Market,* CNET News, December 7, 1999., *available at* http://news.cnet.com/Recording-industry-sues-music-start-up,-cites-black-market/2100-1023_3-234092.html (last visited, May 31, 2015)
[242] John Borland, *Peer-to-Peer: As the Revolution Recedes,* December 31, 2001, *available at* http://news.cnet.com/Peer-to-peer-As-the-revolution-recedes/2100-1023_3-277478.html, (last visited, May 31, 2015)

are all related to. The Pirate Bay and Torrentz are the only BitTorrent sites that managed to secure a spot in the Internet.[243] The number of file sharers/internet users, as well as the number of P2P software applications, has kept increasing, in spite of the recording industry's early courtroom victories. Today, P2P networks that rely on open Internet protocols and open source software continue to flourish independently of any software vendor. Additionally, music fans have been turning to "darknet" solutions, such as swapping iPods, burning CD-Rs, modifying Apple's iTunes software to permit downloading of other users' libraries, spreading the Firefox Web browser and social medias like Facebook, YouTube, and twitter to facilitate file sharing.[244]

Back to the Gonzales case, owners of copyright in musical brought infringement action against Cecilia Gonzales of recordings through Internet file-sharing network. Cecilia Gonzalez was laid-off mother of five, who owed five major record companies $22,500 for illegally downloading through the Internet. Gonzalez mainly downloaded songs she already owned on CD, her purpose were to help her avoid the labor of manually loading the 250 CDs she owned onto her device. In fact, the record companies are going after a continual customer. Gonzalez spent about $30 per month on CDs. However, the RIAA claimed that it would not consider a settlement for less than $3000, a huge amount for the

[243] Ernesto, August 27, 2011., *Top 10 Largest File Sharing Sites, available at* https://torrentfreak.com/top-10-largest-file-sharing-sites-110828/, (last visited, May 31, 2015)
[244] Marry Madden & Lee Raine, *PEW Internet Project Data Memo*, Pew Internet & American Life Project, March 2005., *available at* http://www.pewinternet.org/files/old-media/Files/Reports/2005/PIP_Filesharing_March05.pdf.pdf, (last visited, May 31, 2015)

Gonzalez family.[245] Gonzalez's argumentation has relied on the doctrine of "fair use" preserved in the U.S. Copyright Act and she defense that she was an "innocent infringer" upon the record companies' copyright.

The United States District Court for the Northern District of Illinois granted summary judgment for owners. [246] Gonzales' lawyer appealed the summary judgment in the Seventh Circuit Court of Appeals, hoping to get the case brought before a jury; fair use consideration failed to save Napster, Aimster, and MP3.com, and there were no precedents including individual. None of the downloading suited against individuals has yet gone to court so far more than 1,800 defendants have settled and paid up the compensation without a trial. Many haven't even bothered to hire lawyers. [247] The Court of Appeals held 4 consideration through this case; (1) downloading was not "fair use" of copy-righted material, (2) downloader did not qualify for "innocent infringer" reduction in amount of statutory damages, (3) downloader was not entitled to jury trial on question of amount of statutory damages; and (4) award of injunctive relief was not abuse of discretion.

Addressing her fair use defense, the Seventh Circuit realized that because of the history and the circumstances of the case, the only avenue for Gonzalez was

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[245] Bob Mehr, *Gnat, Meet Canon*, February 3, 2005, *available at* http://www.chicagoreader.com/chicago/gnat-meet-cannon/Content?oid=917905, (last visited, May 31, 2015)

[246] Gonzales v RIAA, 430 F.3d 888, 2005 WL 106592.

[247] Bob Mehr, *id*. (Gonzalez's attorney saw the case as something bigger than a dispute over copyright law. A founding partner of the Oak Park firm Dowell Baker, which specializes in intellectual-property matters, he's working pro bono because he doesn't like the record companies' tactics. "In our view, Cecilia should have the right does have the right under the Seventh Amendment of the Constitution to have a jury decide whether or not she is an innocent infringer and to have a jury decide whether or not she should have to pay any damages whatsoever," he says. In issuing a summary judgment, "the judge took that right away from her")

argued that her use of the songs did not affect the potential market for or the value of the copyrighted works.[248] Gonzalez tried to prove that her action were beneficial to the recording industry because they served as advertising for the right holders.[249]Nevertheless, the court noted, "As file sharing has increased over the last four years, the sales of recorded music have dropped by almost 30%."[250] Based on the statistic, the court could not bring itself to believe that downloading copies of copyrighted music constituted fair use.[251]

3.1.8 Sega Case

Manufacturer and distributor of computer video games brought action against computer bulletin board companies and individual in control of bulletin board for copyright and trademark infringement and unfair competition.[252] On motion for preliminary injunction, the District Court stated that: (1) manufacturer was entitled to preliminary injunction accessing facilitation of copying of all copyrighted video games; (2) manufacturer's employee's access to computer bulletin board did not constitute violation of statute making it illegal to intentionally access without authorization facility through which electronic communication service is provided; and (3) seizure of copies of computer video

[248] Gonzales, *id,* at 890.
[249] *Id.*
[250] *Id.*
[251] *Id.*
[252] Sega Enterprises Ltd. And Sega of America, v. MAPHIA, 857 F.Supp. 679 (1994), (MAPHIA, a business of unknown structure; Parsac, a business of unknown structure; Psychosis, a business of unknown structure; Chad Scherman aka Chad Sherman aka "Brujjo Digital," and Does 2–6 aka "Operator," "Firehead," "Lion," "Hard Core," "Candyman," all individually and d/b/a Maphia and Parsac; Howard Silberg by his mother and next friend Ilene Silberg, aka "Caffeine," and Does 14–18 aka "Apache," "Maelstrom," "Gazzer," "Paranoid/Chryseis," "Doom" all individually and d/b/a Psychosis and Parsac; Does 7–12; Does 19–25, as defendants)

games in possession of defendants was appropriate procedure under Lanham Act. Therefore, United States District Court N.D. California granted for summary judgment and permanent injunction.

On the trial process, in establishing *prima facie* case of copyright infringement, plaintiffs have to prove ownership of valid copyright in infringed work and copying by defendants.[253] While, complaint for copyright infringement listed specific copyrights supposedly infringed by computer bulletin board company and individual in control of bulletin board, owner of copyrighted video games was entitled to preliminary injunction with respect to all of owner's copyrighted video games.[254] Purposing of preliminary injunction, copyrighted holder of computer video games established *prima facie* case of direct copyright infringement by computer bulletin board company and individual in control of bulletin board; illegal copies of video games were made when games were uploaded to bulletin board by unknown users and then downloaded by users to make extra copies, which reproducing was known and facilitated by defendants. One who, with knowledge of infringing activity, induces, causes or materially contributes to infringing conduct of another may be held liable as contributory infringer. [255] Even though defendants did not know precisely when games would be uploaded or downloaded from bulletin board by unidentified users, defendants role in the copying, including provision of facilities, direction, knowledge and

[253] 17 U.S.C.A. § 501.
[254] Lanham Trade-Mark Act, § 34, 15 U.S.C.A. § 1116.
[255] *Id*.

encouragement, amounted to contributory infringement, as did defendants' promoting, sale and distribution of video game copies.[256]

Hence, computer bulletin board company and individual in control of bulletin board failed in fair use defense with regard to unproven copyright infringement of computer video games by uploading and downloading games allowed users to avoid having to purchase games, defendants got commercial profit from illegal copying of entertainment games. On the other hand, computer video game company employee's access to computer bulletin board did not constitute violation of statute making it illegal to intentionally access without authorization facility through which electronic communication service is provided; bulletin board was open to public and normally accessed by use of code-named or pseudonym, and thus employee's pseudonym access was authorized, and statute contained exception for access authorized by user of service and employees access appeared to have been authorized directly or indirectly by authorized bulletin board user.[257]

3.1.9 Michael Perry Case

The State of Ohio sued Michael Perry[258] for unauthorized use of property, theft, and possession of criminal tools in connection with his use of computer software on his bulletin board moved to dismiss the indictment, alleging preemption by federal copyright law. The Hamilton County Court of Common Pleas denied the motion. After defendant pleaded no contest and was convicted of

[256] *Id.*
[257] 18 U.S.C.A. § 2701(a), (c)(2).
[258] The State of Ohio v. Michael Perry, 83 Ohio St.3d 41, 697 N.E.2d 624 (1998)

unauthorized use, he appealed from the denial of the motion. The Court of Appeals reversed, and the state was allowed a discretionary appeal. The Supreme Court held that federal copyright law preempted the prosecution.

Defendant's acts of "switching and moving" computer software through his bulletin board without the permission from the copyright holders was nothing more than "reproduction" and "distribution" by means of uploading and downloading; thus, federal copyright law preempted a state prosecution for unauthorized use of property based on the acts. [259] Federal copyright law preempted a state prosecution for unauthorized use of property based on defendant's unauthorized use of computer software to "let his bulletin board work," absent evidence that defendant without authorization used a disk, CD–ROM, or other tangible, physical manifestation of the software to set up his bulletin board.[260]

Michael Perry charged under R.C. 2913.04 on two counts of unauthorized use, two counts of theft, and one count of possession of criminal tools in connection with his operation of a computer bulletin board. Perry filed a motion to dismiss the charges, claiming that federal copyright laws preempt prosecution of a violation of the unauthorized use statute. The trial court denied the motion. Thus, Perry pled no contest to the indictment and was found guilty on both counts of unauthorized use and not guilty on the remaining charges.

The question was appeared, then, is what property is being used? The record in this case does not validate a finding that Perry used someone else's hard

[259] 17 U.S.C.A. §§ 106, 301(a); R.C. § 2913.04.
[260] *Id*.

copy of the software, so the property at issue could not be tangible property in the form of a disk or CD–ROM. If the state were relying on tangible property to fulfill this element, its claim would fail as a matter of law based on insufficiency of the evidence. Therefore, the property at issue must be the actual program that is contained on the disk or CD–ROM or whatever other tangible form of the software was discovered in Perry's home.[261]

Supposing that the property is the intangible program contained in the software, we have the next analogy, who owns the program? The answer is problematic. No one owns the program exclusively. Clark most likely owns a copyright on the program (though this was not established on the record), but no one owns the actual information. Copyright is a property right in an " 'original work of authorship' " that is fixed in a " 'tangible form.' ". A copyright holder does not have exclusive dominion over the thing owned. The property interest in copyrighted materials is purposefully limited in nature, conferred not to provide reward or profit to the owners of the copyright. While, to promote the Progress of Science and Useful Arts,[262] the United States Supreme Court has disapproved the imposition of criminal sanctions for claims of "unauthorized use" in the context of copyright infringement.

The Government's theory would make theft, conversion, or fraud equivalent to wrongful appropriation of statutorily protected rights in copyright. The copyright owner, however, holds no ordinary chattel. A copyright, like other

[261] The State of Ohio v. Michael Perry, *supra note* 258, at 49-50.
[262] *Id.*

intellectual property, comprises a series of carefully defined and carefully delimited interests to whom the law affords correspondingly exact protections.[263]

The only "property" at issue in Perry's case that has an owner and therefore could fulfill the elements of unauthorized use is the property right conferred by copyright law. Fatal to the state's argument, the federal copyright laws expressly preempt any state law actions, which govern "legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright."[264] Therefore, in the absence of any facts on the record that would indicate that Perry, without authorization, used a disk, CD–ROM, or other tangible, physical manifestation of the Clark software belonging to someone else in order to set up his bulletin board, there can be no "unauthorized use" in this case that is not preempted.

We acknowledge that there were factual situations where prosecution of "unauthorized use" under the state statute would not be preempted, but this case does not present those facts. It was important to recognize that preemption of Perry's criminal prosecution under the state statute does not leave without a remedy. They may pursue their rights under civil copyright law. Nor does preemption necessarily relieve Perry of criminal culpability. The federal copyright law includes a criminal cause of action, and charges could have been brought under that federal law.[265] For the previous reasons and consideration, Supreme

[263] *Id, see also* Dowling, 473 U.S. at 216, 105 S.Ct. at 3133, 87 L.Ed.2d at 160.
[264] *Id, see also* Section 301(a), Title 17, U.S. Code.
[265] *Id, see also* Section 506, Title 17, U.S. Code; Section 2319, Title 18, U.S.Code; No Electronic Theft (NET) Act, Section 2311 note, Title 18, U.S. Code, as amended by P.L. 105–147 (H.R. 2265) (Dec. 16, 1997), 111 Stat 2678.

Court held that federal copyright laws in this case preempt prosecution of the state charge of "unauthorized use". The judgment of the court of appeals is affirmed.

3.2 Japan

3.2.1 The Current Issue of Digital Sharing in Japan

Throughout 2000 period, RIAA active to do lawsuit against file sharers and file sharing programs. Instead, file-sharing scene in Japan was relatively quiet, while Japan boasted the fourth-highest share of world Internet users (behind the India and United States), its share of downloads was naturally less than that of the United States.[266] Japan's Copyright Law being principally harmonized with the States, and the same willingness of music, movie and software for copying and sharing as their American counterparts.[267]

As noted in previous discussion, Japan has prevented to sue large-number against alleged individual file sharer. Truthfully, copyright owners have not filed any lawsuit directly against individual, but put forward to Association for the best legal action. In spite of the fact showed file sharing extremely increased since the early 2000s.[268] According to statistics held by the RIAJ in 2014, Japan's file sharing of music software and audio increased from 89 percent on April 2014 to 91 percent expectation on 2015.[269] A 2008 survey on the status of file-sharing software users, shown by the Association of Copyright for Computer Software

[266] Ian Condry, *Cultures of Music Piracy: An Ethnographic Comparison of the US and* Japan, Intl Journal Cultural Studies 7, 3, Sept 2004, at 13-14.
[267] *Id, see also* Christopher Siebens, *Divergent Approaches to File-Sharing Enforcement in the United States and Japan*, Virginia Journal of International Law 52,1, 155-192, 164, (2011).
[268] Thomas Mennecke, *File-Sharing Surges in Japan*, Sylck News, July 26, 2006, *available at* http://www.slyck.com/story1249.html, (last visited, June 23, 2015)
[269] http://www.riaj.or.jp/e/data/monthly/2015/201504.html#list3 (last visited, June 23, 2015)

(ACCS) in Japan, revealed that 10.3% of all Japanese Internet users also utilized file-sharing software. But on 2014 survey file sharing showed slowly decreased. There are five file-sharing software program that most used by public to illegal copyright activity; Winny, Share, [270] PerfectDark, [271] Gnutella and Bittorent. Practically, those P2P software program had great number of files that exchange everyday. Winny was about 1,2 million units per day (2 million units in the January 2013 survey), Share was about 4,4 million units (59.000 units in the January 2013 survey), and PerfectDark was 24.000 units (34.000 units in the January 2013 survey). On September 27 to 28, NetAgent Co.Ltd with 21 prefectural police department made massive crack down upon child prostitution and pornography, 18 suspects were arrested with the consideration of distributing over P2P-network.[272] It showed that over 20,000 people were actually using Share network to exchange child pornography. It means over 20% out of the estimated total of 100,000 Share users are the collectors. The nature of anonymous P2P file sharing software, a user may unintentionally relay picture files or movie files which include child pornography. For the family member who is sharing the home PC may hold one responsible for the transmission of illegal files.

Separately from intensified of police enforcement and copyright association, the Diet targeting illegal downloads of copyrighted material was recently endorsed. Amendment to the Japanese Copyright Law went into force in January 2010, making it illegal to knowingly download copyrighted material

[270] http://eng.share.benri-tool.net/, (last visited, June 10, 2015)
[271] http://perfectdark.benri-tool.net/, (last visited, June 10, 2015)
[272] http://www.netagent.co.jp/news_eng.html, (last visited, June 23, 2015)

without permission.[152] The Diet approved the amendment in June 2009, stating two years of pressure by influential associations including the Motion Picture Producers Association of Japan (MPPAJ) and RIAJ. Japanese law previously accepted prosecution against those uploading copyrighted material without authorization, but downloading the same material for private use was legal.[273]

Additionally, on October 1st, 2012, copyright law amendment took place concerning criminal enforcement of illegal downloading.[274] Illegal downloading is also infringing a private use with the limitation. The provision penalizes person who intentionally/knowingly download illegally uploaded movie, music or copyrighted files. If we knew the contents are sold or getting paid-delivery online, and we still distributed illegally by downloading or uploading such things, we are subject to punishment.

Uploading illegal content into Internet had been illegal from before, the punishment was maximum ten years in prison and/or a fine up to ten million yen. Since January 2010, downloading illegal contents online was illegal without punishment. Moreover on October 2012, even for personal use, downloading illegal contents with consideration: 1) we knew the contents are sold or getting paid-delivery online, 2) we distributed illegally by downloading or uploading the contents, we are subject of criminal with two years limit in prison and/or a fine up

[273] Shirley Gene Field, Internet Piracy in Japan; Lessig's Modalities of Constraint and Japanese File Sharing (May 2010) (unpublished thesis, Texas University) (on file with author), *see also*, Kazuaki Nagata, *(Near) Death of Salesman*, Japan Times, December 11, 2009, *available at* http://www.japantimes.co.jp/culture/2009/12/11/music/near-death-of-a-salesman/#.VYjGLBOqqkp (last visited June 23, 2015).
[274] http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/online.html, (last visited, June 10, 2015)

to two million yen.[275] Most stakeholders are curious the effectiveness of new provision. Even though unauthorized downloading of copyrighted content is now illegal, users should be aware that the content were uploading illegally, the amendment still open the opportunities any fine or jail for infringement.[276] The other phenomenon that is so attention is streaming. It is not appear to be illegal either, such as YouTube, Vevo and other free stream web. However, copyright industry greeted the amendment, which does provide for claiming damages in civil suits.

ISPs and other the major interest groups are also take place in decreasing illegal file sharing. Japanese ISPs are thought to reduce the available downstream bandwidth for customers who they believe are heavily engaged in file sharing.[277] Applying an automatic reduction to a user's download speed is method for changing their customers' behavior due to minimize file sharing. RIAJ, MPAA, and other associations intensified their efforts to decrease illegal download by spreading the message that file sharing is wrong. Concretely, December 2009, RIAJ Chairman Keiichi Ishizaka gave speech at a Tokyo midtown gathering that illegal downloads is financially hurting musicians and may prevent them from

[275] Summary Q&A through copyright content on the internet by Agency for Cultural Affair; 1) Viewing or listening illegal contents like video or music is not illegal, unless you record the content, 2) viewing and caching made from video sharing sites like YouTube, are not illegal, 3) downloading online photos or copying and pasting text are not illegal as it is for private use, 4) it is illegal download even TV programs were broadcasted free and if we knew it was illegal distribution, moreover if the TV programs sold (either as online or disc), we are subject to punishment.
http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/download_qa/index.html, (last visited, June 10, 2015)

[276] Kazuaki Nagata, *supra note* 273.

[277] Christopher Siebens, *supra note* 267, at 180-181 (The ISPs were triggering the reduction in download speed for anonymous downloader. it seems that mobile phone service companies such as Softbank, au (KDDI), and NTT Docomo had implement a capacity limit between 1 to 2 GB/day. Users reportedly experience slow download speeds on their connection, effectively preventing them from further downloading at one day)

continuing their line of work.[278] The MPAA more recently emphasized the Japanese government to adopt a three-strikes policy, similar to ones implemented in France and South Korea.[279] The policy would let ISPs to ban repeated file-sharing offenders. Japanese ISPs previously attempted in 2006 to ban Winny P2P users, but the government rejected to ban the users.[280]

3.2.2 Brief History Analytical Problems of File-Sharing Case

3.2.2.1 Winny Case

Copyright infringement in Japan is not much different with U.S. and Indonesia. There was infringement addressing to copyrighted works on the Internet. Started with the famous file-sharing case by "winny" on November 2003, two Japanese used of "winny"[281] and arrested by the Kyoto Prefectural Police. They eventually found guilty of violating copyright law. However, winny case were not stop to the users, on May 10, 2004, the High-Tech Crime Taskforce arrested Isamu Kaneko, a 33 years old, an assistant professor at the University of Tokyo and the inventor of Winny Program.[282] He was suspected as a conspirator

[278] Kazuaki Nagata, *supra note* 273.
[279] http://www.myce.com/news/mpaa-pressures-japan-for-a-3-strikes-internet-disconnect-policy-35714/ (last visited, June 23, 2015)
[280] *Id*.
[281] Winny or WinNY is a Japanese peer-to-peer (P2P) file-sharing program. It was claimed as loosely inspired by the design principles behind the Freenet network, which makes user identities undetectable. While Freenet was implemented in Java, Winny was implemented as a Windows C++application, *see* Jun Hongo, *File-Sharing: Handle Winny at Your Own Risk*, The Japan Times, October 27, 2009, *available at* http://www.japantimes.co.jp/news/2009/10/27/reference/file-sharing-handle-winny-at-your-own-risk/#.VXE4n1yeDGc, (last visited Jun 5, 2015)
[282] Takato Natsui, *Winny Case* (*a P2P Software Copyright Case in Japan-Impact on the Information Society and Legal Analysis*), CILS (Center for International Legal Studies) Conference 2004, Sunshine Coast, Australia, (a paper, on file with author), *see also* John Leyden, *Japanese P2P founder arrested, Copyright rap for Winny P2P software author*, The Register, May

who commits copyright violations.[283] He was one of the first software programmers worldwide to fight such lawsuit. The Kyoto District Court held that P2P Programs were value-neutral and a legitimate, meaningful use, simply developing and publicly accessible does not essential qualify as supporting copyright infringement. However, promoting such technologies to the public, whether Kaneko did for research or intentionally offering the software. District court gave four considerations that Kaneko made Winny available on his website with knowledge and acceptance; (1) almost the files on exchanged on the Internet were copyrighted, (2) winny software program was generally used to infringe copyright, (3) winny was the save program for doing copyright violation, and (4) it used for many helpful and efficient features. Therefore, District Court stated that winny was a part to copyright infringement. Kaneko was guilty and were fined ￥1,5 million.[284]

On Appealed process, Osaka High Court overturned Kyoto District Court's decision, and decided Kaneko was not guilty. High Court held that winny program was a value-neutral technology with numerous applications. Winny made by Kaneko for general public, not for specific individual. Kaneko did not unbearable who downloaded winny and how their performance and intention, whether good purpose or had intent to infringe the copyright. Programming winny was not solely for the sake of crimes, however, users individually in choosing

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10, 2004, available at http://www.theregister.co.uk/2004/05/10/winny_founder_arrested/, (last visited Jun 5, 2015)

[283] Mr. Kaneko was accused of supporting and assisting the infringement of copyrighted works. Penal Code of Japan, Art 62 & 63, and Japanese Copyright Law, Art. 23.

[284] Ridwan Khan, *Pure Software in an Impure world?, WINNY, Japan's First P2P Case,* 8 University of Pennsylvania East Asia Law Review, 20, 24-25, 2013.

their purpose. High courts' consideration on Kaneko's case got appreciation for other software programmer concerning to copyrighted works. It stated that even if a provider value neutral technology (software programs) and recognized the probability for public would use it for illegal purposes, it was prejudicial for the programmer/provider as an accessory to users' infringements. The provider or programmer was only carrying a punishment if they offering their program, advocating their usage for primarily illegal purposes. Finally, High Court held that the provider was free from the lawsuit.

October 21, 2009, Osaka High Public Prosecutor appealed to Japanese Supreme Court.[285] Supreme Court affirmed the Osaka High court of Japan by voted 4-1 to endorse the exoneration, and dissenting opinion from Justice Otani.[286] Based on the facts, Supreme Court was focus on the character of the program and the probability of winny's utilization by users. While, Kaneko known that an increasing number of users used Winny for copyright infringement, Kaneko could not be legally responsible as a subject of law. The truth was not enough to prove that Kaneko had intention to facilitate copyright violation, because he had already announced and released Winny as experiment to confirm

[285] Hideki Mitsuyanagi, *Osaka High Public Prosecutor Appeals Winny Decision to the Court*, Internet Watch, October 21, 2009, *available at* http://internet.watch.impress.co.jp/docs/news/20091021_323296.html?mode=pc;%20see%20also%20Press%20Release,%20Japan%20and%20International%20Motion%20Picture%20Copyright%20Association,%20Inc.,%20JIMCA%20Welcomes%20Appeal%20Against%20Acquittal%20Of%20Winny%20Developer%20(Oct.%2022,%202009),%20http://www.mpalibrary.org/assets/Japan_WinnyCase_Oct09.pdf%20(welcoming%20the%20Osaka%20High%20Public%20Prosecutors%E2%80%99%20Office%E2%80%99s%20decision%20to%20appeal%20the%20acquittal), (last visited June 8, 2015)

[286] 5 Saikō Saibansho [Sup. Ct.] Dec. 19, 2011, 2009 (A) No. 1900, 65 SAIKŌ SAIBANSHO KEIJI HANREISHŪ [KEISHŪ]1,1, *available at* http://www.courts.go.jp/app/files/hanrei_jp/846/081846_hanrei.pdf, (last visited June 8, 2015)

whether Freenet P2P can be take place in practical application. Moreover, Kaneko posted important warning to the users, not to share/trade copyrighted files.

Countering the prosecutors' charge, the Supreme Court noted that even though Kaneko used Winny to download files that were probably copyrighted, his usage would not give rise to a claim that Kaneko knew the number of infringement taking place on the Winny network. He did such files downloading just to ensure that the software functioning smoothly. Thus, it would be mistaken to reversed the Osaka High Court's Judgments because he have not known that the misappropriation of Winny software had increased that he could be stated liable for its usage.[287] Therefore, the majority judges agreed that Kaneko did not have any required intent and he interested in establishing a P2P network than distributing of copyrighted files.[288]

On the contrary, Judge Otani stated that Kaneko was guilty. Otani was no doubt to the majority's legal framework, but emphasized that Kaneko would knew and recognized that more than a few people would use Winny for copyright violation. Otani agreed that Kaneko did not have intention for his program to be largely used for infringement, nor did he inspire the public to use Winny unlawfully. However, Otani highlight that Kaneko had continued to establish Winny without restraining the illegal copyrighted usage. Therefore, Kaneko must have had knowledge of copyright infringement.[289]

In my view, winny case will become good precedent for other P2P cases. Regardless of the evidence, I just want to make point of view from technology

[287] *Id, see also* Ridwan Khan, *supra note* 284, at 28-29.
[288] *Id.*
[289] *Id.*

and intellectual property sides. Kaneko as a researcher at University and naturally his works are creating new research, making innovation, building method and resulting a product (scientific paper or goods). Creating a machine, tech goods and other object could be aimed for good or bad (value-neutral). In Kaneko's case, he already answered that he was not intentionally creating and developing winny software with bad purpose. He stated in his defense that even the winny software used for sharing content, he suggest and warn to all the users "do not exchange illegal files". From the warn statement above, clearly conclude that Kaneko known the legal consequence if do illegal file sharing. This interpretation also gave by Osaka High Court. Even Japan already adopted contributory infringement; Kaneko was not proven use winny for profit oriented and the manufacturer did not utilize substantial infringing-uses. If we compare with the contributory infringement case in U.S. between Napster with A&M Recording Studio, Napster was judged as a contributory infringer. It was because Napster was a control system between users and websites. Napster gave the facility and agreement access for infringing activities for the user. It will be different judgment if Napster give warn and shutdown or stop the user activities whose known illegal file sharing. Conversely, Kaneko was not the person to control its situation.

Based on survey and investigation of Illegal Trade Measures Council the General Association of Copyright for Computer Software on May 2014, file users

sharing continued decrease from 2011.[290] There are five file-sharing software program that most used by public to illegal copyright activity; Winny, Share,[291] PerfectDark,[292] Gnutella and Bittorent. Practically, those P2P software program had great number of files that exchange everyday. Winny was about 1,2 million units per day (2 million units in the January 2013 survey), Share was about 4,4 million units (59.000 units in the January 2013 survey), and PerfectDark was 24.000 units (34.000 units in the January 2013 survey). The Anti-Counterfeiting Association (ACA) and Consortium against Copyright Infringement via File-sharing (CCIF) cooperated with commercial fraud measures council from the NPA with 38 prefectural police nationwide was carried out simultaneous crackdown for copyright law violations such as; business software, file-sharing infringement through the internet (etc. movies, music, manga, anime and games) since February 2015. They searched 133 places and 40 people were arrested.[293]

Japanese Society for Rights of Authors, Composers and Publishers (JASRAC) with ACA, CCIF and other related organizations will continue that effective enforcement by working closely with related ministries and agencies of the National Police Agency. They active to send enlightenment mail to each group of ACA and CCIF members to carried out and participate by promoting to the public for not infringe the copyright, and intellectual property.[294] Additionally, on

[290] Association of Copyright for Computer Software (ACCS), *File Sharing Users Continued Decrease, Result of Crawling Survey of File-Sharing Software*, May 2014, (original text in Japanese), *available at* http://www2.accsjp.or.jp/research/reserch13.php, (last visited, June 9, 2015)
[291] http://eng.share.benri-tool.net/, (last visited, June 10, 2015)
[292] http://perfectdark.benri-tool.net/, (last visited, June 10, 2015)
[293] *See* http://www.aca.gr.jp/, (last visited, June 10, 2015)
[294] CCIF gives guidance to delete the file and the software program, *see* http://www.ccif-j.jp/activity.html, (last visited, June 10, 2015)

October 1st, 2012, copyright law amendment took place concerning criminal enforcement of illegal downloading.[295] Illegal downloading is also infringing a private use with the limitation. The provision penalizes person who intentionally/knowingly download illegally uploaded movie, music or copyrighted files. If we knew the contents are sold or getting paid-delivery online, and we still distributed illegally by downloading or uploading such things, we are subject to punishment.

Uploading illegal content into Internet had been illegal from before, the punishment was maximum ten years in prison and/or a fine up to ten million yen. Since January 2010, downloading illegal contents online was illegal without punishment. Moreover on October 2012, even for personal use, downloading illegal contents with consideration: 1) we knew the contents are sold or getting paid-delivery online, 2) we distributed illegally by downloading or uploading the contents, we are subject of criminal with two years limit in prison and/or a fine up to two million yen.[296]

3.2.2.2 *File Rogue* and *StarDigio* Case

These cases were having common or less similar with the Sony and Napster cases in the United States. The two proceeding cases were about private

[295] http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/online.html, (last visited, June 10, 2015)
[296] Summary Q&A through copyright content on the internet by Agency for Cultural Affair; 1) Viewing or listening illegal contents like video or music is not illegal, unless you record the content, 2) viewing and caching made from video sharing sites like YouTube, are not illegal, 3) downloading online photos or copying and pasting text are not illegal as it is for private use, 4) it is illegal download even TV programs were broadcasted free and if we knew it was illegal distribution, moreover if the TV programs sold (either as online or disc), we are subject to punishment.
http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/download_qa/index.html, (last visited, June 10, 2015)

copying, but the court resulted opposite decision. The *StarDigio* case showed guarantee freedom by the private copying exemption provision and *File Rogue* case demonstrated that the court followed legislative judgment that private copying in order to digital distribution should not be excused.[297]

StarDigio case started in 1998 and settled in 2000 by Tokyo District Court. Plaintiffs (Victor and eight famous labels in Japan) sued Daiichi Koushou, a provider of satellite digital radio programs (*StarDigio* 100) for alleged as a contributory infringement by letting audience made private copies from the radio stream. The Defendant provide a pay satellite radio program (*StarDigio* 100) which composed more than one hundred channels to broadcast variety of music in digital form. However, he collected the music by purchasing legally song sold in the market, re-recording the analog format into digital music format. He put the digital music compilation on the radio server for three months. By this arrangement, the digital music compilation was stream via a pay satellite broadcasting service named *SkyperfecTV*.[298] Most of the *SkyperfecTV'*s audiences have receiver facility, which can plug in a mini disc (MD) recorder to reproduce the music compilation. *StarDigio* 100 provided some features to assist the audience made private copies: (1) the radio was providing the full length of album; from popular hits to old songs, (2) every week the radio repeated the same set of music, (3) the radio gave pause in every 60 minutes, (4) there was no the radio broadcaster like such as radio in common.[299]

[297] Yuko Noguchi, *supra note* 87, at 85.
[298] *Id*, at 86.
[299] *Id*.

The fact from this case showed that recording company did not have exclusive right for broadcast. Phone records are subject of neighboring rights; therefore, it does not include a right to manage the broadcast,[300] because it is under compulsory licensing system.[301] Plaintiff claimed that the secondary use fee from the broadcasting companies was not enough as compensation at market loss.[302] The interesting point influenced the copyright law from this case was about the absence of secondary liability like in the U.S. and winny case.[303] Hence, court found basic difficulty to formulate an injunction and damages against broadcasting companies based on authorization reproduction by the radio's audience. Next, plaintiff also claims about permissible of private use.[304] Reproduction can be allowed if "such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interest of the author".[305] Plaintiff thought by providing the feature, which is made the audience easy to reproduce music compilation into CD, it was substantially regarded as infringement of reproduction.[306]

Tokyo District Court stated held that private copying by public or audiences was regulated by article 30 about private copying exemption and denied

[300] *Id*, at 87, *see* Art 96 (the neighboring rights for recording companies are the following; reproduction right), Art *96bis* (right to make the work transmittable), Art 97 (Record companies only have a right a receive a certain fees for broadcasting use "secondary use fees", Art 97*bis* (right to transfer ownership of the copies for), Art 97*ter* (right of lending)

[301] *Id*, at 88, *see* Art 95 Paragraph 5-13 and Art 97 Paragraph 4 (the process of secondary use fees decision), broadcasting companies do not need to ask permission or licenses to use phone records in their program. They just have to pay secondary use fees, whose amount is settled by agreement between broadcasting companies and recording companies or the settlement from the Commissioner of the Agency for Cultural Affair.

[302] Art 30, Paragraphs 2.

[303] Kaneko was suspected as a conspirator who commits copyright violations based on Penal Code Art 62-63.

[304] Art 30, Paragraph 1 Japanese Copyright Law.

[305] Berne Convention, Art 9 Paragraph 2.

[306] Yuko Noguchi, *supra note* 87, at 89.

the liability of Daiichi because it is legal and it just helped the legal reproduction of their users. Berne Convention article 2 give discretion to the members to how implemented the provision into their own legislation. The court concluded that private copying conducting by the audiences should not be influenced or changed by the manner of broadcasting of the music they were record.[307]

File Rogue case well known as Japanese Napster case. It started when the service provider of file rogue belongs to MMO Japan Ltd gave features to the users for file sharing and distributed software, which can be used for share files through the index site. To use the service, users had to download and install the File Rouge software from the MMO's website on the user's computer. Then, a user name and a password registered without providing the actual description. User was also needed to agree to MMO's user agreement including the provisions that we would not illegally share copyrighted files. The user agreement provided that if another user claims infringement of a file, MMO's notice and take down procedure provisions in the user agreement would apply. Despite JASRAC request to the owner for deleting the feature, the provider did not delete the linked listed files shared without authorization. JASRAC with 19 record companies, most of them are RIAJ's members sued copyright infringement against the Japan MMO Ltd. as a direct infringer and requested for an injunction order.[308] In fact, more than seventy thousands of MP3 files have been shared via "File Rogue"

[307] *Id*, at 90.
[308] Takashi B. Yamamoto, *Legal Liability for Indirect Infringement of Copyright in Japan,* Comparative Law Year Book of International Business 35, 2013, at 13.

index server. Almost MP3 files in it were copyright-infringed ones, which have been copied from commercial music CDs etc. without authorization.[309]

The court held that users' infringed the neighboring rights of the plaintiffs, namely reproduction rights and their rights to make works transmissible.[310] Moreover, Tokyo court determine the criteria for contributory infringement determine whether the defendant MMO's conduct infringed plaintiff's transmissibility rights; (1) the contents and nature of the MMO conduct, (2) the degree of MMO's control/supervision over the users' conduct to make works transmissible, and (3) MMO's profits through its conduct had to be taken into consideration by assessing the overall situation. In the result, the Court held that MMO provided its service although it expected such infringements and it also had control over those conducts. The Court found that defendants were aware of the nature of the files shared based on the names and song titles, and that they had excursive control and supervision over their users' because they were in a position to rollover the necessary steps to prevent copyright infringement, even impossible to detect all infringements. On that legal framework, the court held that the provider had contributory infringed the music right holders' right.

[309] *See* RIAJ news, *available at* http://www.riaj.or.jp/e/whatsnew/20020129.html, (last visited June 22, 2015)
[310] Japanese Copyright Act 1970, Art 92*bis* (1)

Chapter IV

POTENTIAL PROBLEMS AND CHALLENGES OF IMPLEMENTING COPYRIGHT PROTECTION ON THE INTERCONNECTION NETWORKING

4.1 Possibilities, Obstacles and Challenges of Implementing Copyright Law on the Internet

4.1.1 Copyright System in Indonesia (History, Regulation and Purpose)

Copyright in Indonesia is regulated in Copyright Act No. 28, 2014. It was first amendment since legalized on 2012. Copyright defines as people's rights as a person over the invention in the form of writings, paintings and other works protected by the law.[311] It is also accordance with the understanding in the Berne Convention and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), which states that copyright, is an exclusive right, which has moral rights and economic rights of the owner who should be protected by law and authority.

Generally, an invention has to meet the minimum standards to be able to get the protection from an authority. Every country apply different requirements issuing a copyright work. For example, British implements; that an invention must contain a factor of skill, originality and effort.[312] On a systems that are also applicable under the Berne Convention, a copyright on a work obtained without the need to go through the official registration in advance: if the idea of creation

[311] Pipin Syarifin & Daedah Jubaedah, "*Peraturan Hak Kekayaan Intelektual Di Indonesia*" (The Rules of Intellectual Property in Indonesia), Pustaka Bani Quraisy Press, Bandung, 2004, at 207.
[312] http://www.copyrightservice.co.uk/copyright/p02_protecting_copyright, (last visited June 24, 2015)

has been realized in particular form, for example; (painting, song drafts, photographs, video tape, or letter), the copyright holder has been entitled to the copyright.

Copyright works which are protected in Indonesia, such as; books, computer programs pamphlets, layout of published works, speeches, lectures, props made for education and science, songs or music with or without text, drama, musical, dance, choreography, puppetry, mime, art in all its forms (such as painting, drawing, sculpture, calligraphy, sculpture, collage, and the applied arts), architecture, maps, art batik (and other traditional works of art such as *songket* and *ikat* art), photography, cinematography, and does not include industrial design (those are protected as intellectual property of its own). Creation resulting from adaptations such as translations, interpretations, adaptations, anthologies (e.g., a book which contains a collection of papers, the set of tracks recorded in a single medium, as well as the composition of various works of dance options), and databases are protected as its own creation without prejudice to the copyright in the original creation.[313]

Registration of copyright works in Indonesia is not a necessity for the creator or copyright holder. The emergence of copyright protection is begun since the work was created, not because of enrollment proficiency. However, the registration letter of creation can be used as evidence in the court if a dispute

[313] Indonesia Copyright Law No 28, 2014, art 40.

arises in the future.[314] Copyright registration organized by the Directorate General of Intellectual Property, under the Indonesian Ministry of Law and Human Rights.

Copyright exceptions and limitations are considered to not violate copyright such as;[315] the use of a copyrighted work is not an infringement if the creators of the sources mentioned or stated clearly and used for definite purpose of non-commercial activities, social, education and research. The most important thing is not to cause harm to the creators either their moral right or economic rights.

On October 16, 2014, the Former President Yudhoyono signed Indonesia's new law regarding copyright replaced the prior of copyright law 2002. The new law brought some strength clauses to possibly implement immediate relief against digital form and infringement of cyber networking, in accordance with the TRIPS Agreement, Berne Convention, The WCT and WPPT.[316] Hence, those provisions had serious concern, while other provisions need further policy in implementing the regulations. In some cases, needed changes were omitted. Concerning enforcement against copyright infringement on the Internet, articles 54 to 56 of the Law hold workable approach to addressing Internet-based infringements in Indonesia. Copyright holders believe, this combination of administrative and judicial assistance, when fully executed, will let the government to take effective action to stop online infringements. A new requirement in article 55 was inserted

[314] *Id*, chapter X.
[315] *Id*, chapter VI.
[316] Indonesia had joined the WIPO Copyright Treaty (WCT) on June 5, 1997 (in force March 6, 2002) and the WPPT on February 15, 2005.

between the prior drafts and the final law, namely, that for any act involving an "entire" website, it shall be referred to a court for review within 14 days.

Nevertheless, under this law, criminal lawsuit are now complaint-based. Copyright holders analyze this as additional obstacles to establish effective enforcement; essentially, criminal cases should be prosecuted on an *ex officio* basis. Additionally, the criminal enforcement takes step backward from the previous law, in that they no longer provide minimum mandatory statutory criminal penalties. Without a minimum fine, right holder is concerned warning sentences will not be forthcoming. Specifically, some of the criminal penalties may be too weak to be avoided. Finally, Article 95 of the new Law creates "mediation" before a piracy case can be prosecuted. The purpose and operation of this provision in practice is still unclear to divide between civil or criminal penalties.

Reduction efforts of copyright infringement to the criminal law in Indonesia have been exist since *Auteurswet* 1912 until now with Copyright Law No. 28, 2014. Before 1982, tendency toward resolution problem of copyright infringement conducted by the Criminal Code.[317] Various cases are classified as counterfeiting (Article 263 of the Criminal Code) and theft (Article 362 of the Criminal Code), and starting in 2002 has been enforced with clear laws that specifically regulate copyright issues.

Criminal provisions that protected copyright changes and growth significantly. The factors were from economic side, because basically the

[317] "Criminal code" in Indonesia is called "KUHP" (*Kitab Undang-Undang Hukum Pidana*) which adopted from Netherland Law Codification.

copyright criminals can increase great financial benefits, especially if criminals act is piracy. Copyright crime prevention efforts in addition to raising the threat of criminal *delict* complaint (report -based) also change the reference to a common *delict.*[318]

In the Criminal Code, the criminal types who threatened to the actors of copyright violations are: imprisonment or criminal fines and an additional form of seizure of goods owned by the proceeds of crime if convicted. Criminals of copyright against the Criminal Code are categorized as a crime and imprisonment for up to 2 years. Criminals contained in the Criminal Code are classified as a crime and imprisonment up to 2 years and 8 months or a maximum fine of five thousand Rupiahs.

Hence, in article 380 of the Criminal Code formulates: "Punishable by imprisonment for a maximum two years and eight months or a fine of five thousand rupiahs". In this case, the judge was given a chance to drop any imprisonment or fine only. Discussing about the length of a criminal offense can be interpreted as the length and duration imposed criminal law contained in the articles containing criminal threats. Two things above can affect crime prevention effort of copyright violations. High criminal threat is one of psychological effect against the maker and potential makers in committing a crime, but if it was not followed by long punishment or at least close to the maximum criminal threats, the special and general preference would be difficult to achieve.

[318] "*Delict*"; this words in Indonesia, has means "types of complaints principle" in Criminal Code. There are three types of "*delict*" types of; Regular *delict*, Complaint/report *delict* and special *delict*.

On the Indonesian copyright law no 28, 2014; any person without the right to do such activity against the copyright law for the commercial purpose, shall be punished with imprisonment of two years and/or a maximum fine of three hundred million rupiahs.[319] Compared with American and Japanese, copyright law of Indonesia is more focused on copyright exemptions like in Japan.[320] The principle of fair use is not listed clearly in the new amendment, but practically copyright exemptions created as guidance in implementing the fair use doctrine itself. In addition, copyright protection on the Internet also set in Indonesian Information and Electronic Transaction Law or more known by Indonesian Cyber Law.[321] The punishment ruled for six years maximum of prison and/or fined maximum one hundred million.[322]

4.1.2 Recent Technological Changes through the Copyright Infringement

Digital transformation of copyright infringement in Indonesia were set out 1990-1994, when Microsoft succeeds to build Windows for Workgroup 3.11 and added peer-to-peer system, networking domain support and created Personal Computers become an entire component of the emerging client/server computing evolution.[323] In summer 1995, the first version of Internet Explorer is released. The browser has joined those already competing for space on the World Wide

[319] Indonesian Copyright Law No 28, 2014, art 112.
[320] *Id*, Chapter 6.
[321] Indonesian Information and Electronic Transaction Law No 11, 2008, Chapter VI-VII.
[322] *Id*, Art 45.
[323] http://windows.microsoft.com/en-us/windows/history#T1=era3 (last visited June 29, 2015)

Web (www).[324] This is the era of fax/modems, email, the new online world, multimedia games and educational software. Windows 95 has built-in Internet support, dial-up networking, and new Plug and Play capabilities that make it easy to install hardware and software. The 32-bit operating system also offers enhanced multimedia capabilities, more powerful features for mobile computing, and integrated networking. Nowadays with Windows 8.1, and version 10 that will be launching in this year, there are to many improvement, new features and great apps, which enable to connect with other devices.

The development of Internet technology in Indonesia is growing slightly slower compared with European countries, American or Japanese. In the late of 1990s, some as government agencies and big corporations could perceive computer technology. This media was fairly expensive which unable to be used by peoples due to its expensive equipment used in assembling a media. Internet began to be used by general public as a new communication media started in 1998.[325] It was characterized by the inclusion of computer education in the world of education and the emergence of internet cafes (*warung internet*) in various region. With the emergence of the cafe, the general public can use this media as a tools of communication. However, providing Internet access to the whole of Indonesia, though, is still a lot of problems of long distances and access to the populations in remote areas and mountainous terrain. Recent statistics on Internet users in Indonesia, revealed a merely 10 percent of the entire population.

[324] Bill Gates delivers a memo titled "The Internet Tidal Wave," and declares the Internet as "the most important development since the advent of the PC."
[325] Jennifer Yang Hui, *The Internet in Indonesia: Development and Impact Radical Websites*, Journal of Conflict and Terrorism, 2010, at 173.

Indonesia is a country that consists of more than 17,000 islands. The distance between any two islands is a considerable big. Even within an island, cities can be some distance apart. Therefore, providing Internet accessibility in remote and lesser-populated areas is a significant challenge in Indonesia.[326]

Illegal digital sharing practices in Indonesia are almost the same with United States. While, in America, digital illegal sharing through the Internet is highest than street piracy, Indonesia is opposite. From three big cities; Jakarta, Semarang and Yogyakarta and one developing province; Lampung, piratical activity still exist and become habit for junior, high, college students and workers in enjoying music, movie and computer software.[327] Retail pirate also offer to load illegal copyrighted files and application on numerous mobile device, hand phone or carriers. The physical market for most industries, including pirate movies in Blu-ray format, computer software and video games touch to 90 percent.[328] Though, millions of illegal music CDs (Compact Disc), DVD and MP3 are still manufactured and sold in the United States.[329] Street Piracy can be manufactured by Company CD as well as in an underground operation engaged in the large-scale burning of files to blank CD-R that is the sold in flea markets, on street corner, even in local retail stores. The copying and trafficking of pirated

[326] *Id.*
[327] Interview by some pirate sellers and users (Oct 2013), *see also* Pujiono & Dewi Suliastiningsih, *Latar Belakang Timbulnya Pembajakan Hak Cipta di Bidang Musik dalam Format Kaset dan Upaya Penanggulanngannya di Kota Semarang (*The Background of Music Copyright Infringement on Optical Media Form and Its Enforcement in Semarang City*)*, MMH, Vol. 3, Sept. 2008.
[328] International Intellectual Property Alliance (IIPA), *Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement*, Feb 6, 2015., at 37, *see also* Peggy Chaudry & Allan Zimmerman, Protecting Your Intellectual Property Rights; Understanding the Role of Management, Governments, Consumers and Pirates, 43, Springer, 2013
[329]Stephen E. Siwek, *The True Cost of Sound Recording Piracy to the U.S. Economy*, Institute For Policy Innovation, Policy Report 188, Aug 2007, at 4.

music and movie are increasingly sophisticated trade used by savvy multi-state criminal operations that distribute illegal product designed to resemble authentic CDs and replace legitimate sales.[330] Hence, there are seventy-nine cases noted by Japan Ministry of Justice between 2009-2011 regarding copyright infringement. This number is lower compare with another countries.[331]

Physical piracy remains a major problem in many markets around the world. Infringement on songs, movies and software occurred on illegal optical disc produce by unlicensed business and illegal market. In fact, the region with the highest rate of unlicensed Personal Computer (PC) installation was Asia Pacific, at 62 percent. It represented a two percentage-point increased from 2011.[332] Personally, the countries in the Asia Pacific made modest progress where Indonesia 84 percent of PC Software was installed without appropriate licensing in 2013, down two points from 86 percent in 2011.[333] Instead, Japan was the lowest country in the region with 19 percent in 2013, down two points from twenty-one percent in 2011.

Music, movie and software have been sold to consumers by recording or copying files in physical media such as Compact Disc (CDs), Digital Video Discs (DVDs) and cassettes. Historically, physical piracy or pirate product has strong connection with technology advanced. Copying machines, recording and

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[330] *id.* At 4-5

[331] The General Secretariat of Japan Supreme Court, *Sentencing of Imprisonment with work for financial and economic offenses in a court of first instance (2009-2011),* Annual Report of Judicial Statistic, *available at* http://hakusyo1.moj.go.jp/en/61/nfm/n_61_3_1_6_0_0.html (last visited Feb 14, 2015)

[332] The Software Alliance (BSA), *The Compliance Gap, BSA Global Software Survey* (June 2014), at 9-10.

[333] *id,* at 8.

multiplier machines create identical object with original copyrighted works. In America Copyright Act 1976, technological advancements and its impact brought revision on major part of "fair" definition in all previous copyright law.[334]

Since 2000, USTR noted that physical piracy markets extremely increase in many developing countries. They devoted to special attention reducing unlicensed copies physical media.[335] Aggressive enforcement had not been done by Ukraine, Indonesia, Thailand, Russia, and the Philippines to address existing and prevent piratical activity.[336] Nowadays, even some countries have ratified the conventions into their national law, pirate product still can be found in some market. PT. Aquarius Musikindo as one of the biggest music companies in Indonesia surely felt the impact of the digital innovation and online infringement. They have to close two largest shop branches because of minus income from selling the original music. The availability of single and full track album of its artists easy downloaded via Internet has dropped the sales.[337] Indonesia for sure, from three big cities; Jakarta, Semarang and Yogyakarta and one developing province; Lampung, piratical activity still exist and become hobby for junior, high, college students and workers enjoying music, movie and computer software.[338]Retail pirate also offer to load illegal copyrighted files and application

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[334] Association of Research Libraries, Washington D.C., *Copyright Timeline: A History of Copyright Law in the United States*, *available at* http://www.arl.org/focus-areas/copyright-ip/2486-copyright-timeline#Top (last visited Feb 12, 2015)
[335] United States Trades Representatives (USTR), The Special 301 Report (2003), at 1.
[336] *id*, at 3.
[337] http://www.djarumcoklat.com/publicjournalism/kemajuan-teknologi-pembajakan-musik-amp-kebangkrutan-aquarius-musikindo, *see also* http://issuu.com/thebeatjakarta/docs/thebeatjak_23/43, (last visited June 12, 2015)
[338] Interview by some pirate sellers and users (Oct 2013), *see also* Pujiono & Dewi Suliastiningsih, *Latar Belakang Timbulnya Pembajakan Hak Cipta di Bidang Musik dalam Format Kaset dan Upaya Penanggulanngannya di Kota Semarang (*The Background of Music Copyright

on numerous mobile device, hand phone or carriers. The physical market for most industries, including pirate movies in Blu-ray format, computer software and video games touch to 90 percent.[339] Street Piracy can be manufactured by Company CD as well as in an underground operation engaged in the large-scale burning of files to blank CD-R that is the sold in flea markets, on street corner, even in local retail stores. The copying and trafficking of pirated music and movie are increasingly sophisticated trade used by savvy multi-state criminal operations that distribute illegal product designed to resemble authentic CDs and replace legitimate sales.[340] Hence, there are seventy-nine cases noted by Japan Ministry of Justice between 2009-2011 regarding copyright infringement. This number is lower compare with another countries.[341]

Pirate products can be produced and sold low-rated price than genuine products, but still bring pretty income for the infringer because they made usually with low-standard, no quality control, no authorization even safety and health guidance. There are to many factors that cause the piracy product transactions; culture, technology, regulation and its enforcement, economic, level of education and public policy. There are some steps of pirate do their action:

Infringement on Optical Media Form and Its Enforcement in Semarang City*)*, MMH, Vol. 3, Sept. 2008.

[339] International Intellectual Property Alliance (IIPA), *Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement*, Feb 6, 2015., at 37, *see also* Peggy Chaudry & Allan Zimmerman, Protecting Your Intellectual Property Rights; Understanding the Role of Management, Governments, Consumers and Pirates, 43, Springer, 2013

[340] *id.* At 4-5

[341] The General Secretariat of Japan Supreme Court, *Sentencing of Imprisonment with work for financial and economic offenses in a court of first instance (2009-2011),* Annual Report of Judicial Statistic, *available at* http://hakusyo1.moj.go.jp/en/61/nfm/n_61_3_1_6_0_0.html (last visited Feb 14, 2015)

1. Data Retrieval

Collecting file is work to be done. It is obtained either through Internet or conventional ways by copying and burning onto CD. The perpetrators usually got electronic data, by downloading the files from unlicensed website. At least, there are more than 70 websites in Indonesia that offer pirated content or data freely. Through search engines, we can find the links locally or internationally, depend on data that we need.[342] Indirectly, the development of unlicensed websites that facilitate illegal downloading makes potential losses on the domestic music industry. The universal characteristics of websites that facilitate illegal downloading and illegal uploading are; there is no complete description of mentioned songs, only the song title and artist/band, no name music association or a recording company, the release of the album/song, and the album cover looks are not understood. The website does not try to get permission from the artist or the music company directly. Eventhough, they do not get direct revenue from electronic data distribution, but by the number of visitors to the website, they will get income by the number of supply, installation and advertisement at the site.

2. Announcements of New Creation (New Collection or Program)

Regarding to the issue of piracy publication of electronic data through the Internet, copyright law in the Indonesian defines announcement of the new creation as; recitation, propagation, exhibitions, sale and deployment of a creation

[342] Hatta, *Pembajakan Musik: Lebih dari 70 Website Tawarkan konten Bajakan* (Music Pirate: More than 70 Websites offering Pirate Content), Rubrik Digital Economy, Aug. 5, 2012, a*vailable* at http://wartaekonomi.co.id/berita4470/pembajakan-musik-lebih-dari-70-website-tawarkan-konten-bajakan-ii.html (last visited Feb 14, 2015).

by using any tools, including Internet media. Thus, an electronic data/creation can be read, heard or examine by others.[343] The placement of a creation without permission from the creator or copyright holder into a website, is violating copyright. Such actions can be categorized as a form of creation announcements. Because by being placed in a website, everyone can access the content and will possibly gain economic benefit from such actions.

3. Data Multiplication

The perpetrators of piracy usually organize the data, such as songs, picture shows and software through search engines on the internet and collect them in a particular folder in a computer memory which will then be picked out according to their class. As with copyright infringement on the strain, the actors gather various songs according to type and then upload the collection of song types into a new folder in a web site, so the net user can simplify by choosing one type of music and found the large number of strains. The next step performed by the hijackers is inserting songs into the disc or known as MP3 (Moving Pictures Expert Group). The discs are having mass production both in domestic region and neighboring country such as Malaysia and Singapore, then illegally distributed in domestic and regional marketplaces. In Indonesia, many MP3s, movies and software are sold on the corners of the market, street without any permission from the record, movie and computer companies as official reseller.[344]

[343] Indonesian Copyright Act, No. 19, Art. 1, Sub 5, (2002)
[344] International Intellectual Property Alliance (IIPA), 301 Special Report on Copyright Protection and Enforcement (2014), at 51-52.

The new copyright law 2014 brought some strength clauses to possibly implement immediate relief against digital form and infringement of cyber networking, in accordance with the TRIPS Agreement, Berne Convention, The WCT and WPPT.[345] Those provisions had serious issues, while other provisions need further policy in implementing the regulations. In some cases, needed changes were omitted. Concerning enforcement against copyright infringement on the Internet, articles 54 to 56 of the Law hold workable approach to addressing Internet-based infringements in Indonesia. Stakeholders believe, this arrangement of administrative and judicial assistance, will let the government have effective method to stop online infringements. A new requirement in article 55 was inserted between the prior drafts and the final law, namely, that for any act involving an "entire" website, it shall be referred to a court for review within 14 days.

Nevertheless, under this law, criminal lawsuit are now complaint-based. Copyright holders analyze this as additional obstacles to establish effective enforcement; essentially, criminal cases should be prosecuted on an *ex officio* basis. Additionally, the criminal enforcement takes step backward from the previous law, in that they no longer provide minimum mandatory statutory criminal penalties. Without a minimum fine, right holder is concerned warning sentences will not be forthcoming. Specifically, some of the criminal penalties may be too weak to be avoided. Finally, Article 95 of the new Law creates "mediation" before a piracy case can be prosecuted. The purpose and operation of

[345] Indonesia had joined the WIPO Copyright Treaty (WCT) on June 5, 1997 (in force March 6, 2002) and the WPPT on February 15, 2005.

this provision in practice is still unclear to divide between civil or criminal penalties.

4.2 Bridging and Harmonizing Legal Business File Sharing, Internet User and Public Policy within Digital Copyright

The sophisticatedly mobile technology and Internet connectivity around the world are producing substantial advantages; extending new business model on economic purposes and necessity of information access. Though, the advancement of these technologies have also created an efficient machines for distributing unlicensed content on-line and harm the copyright holders as a legitimate person whose deliver licensed content. While, optical disc piracy is still continuing in some countries including China, India, Paraguay, Indonesia and Vietnam. Piracy market over the Internet has become the priority enforcement issue in many trading markets. In some countries and regions, the unauthorized broadcasting and streaming of live sports, movies and live music programming by the Internet increase significantly. Websites and pirate servers, which allow users to play illegal types of cloud-based entertainment software and huge number of online distribution by mobile devices including game copiers and mod chips present intense enforcement for right holders and stake holders.[346]

The United States endures to work with other governments to establish strategies to address global IPR issues. The United States persuades trading partners to adopt measures against these challenges by implementing the WIPO

[346] United States Trade Representative (USTR), 2015 Special 301 Report, at 17-18.

Internet Treaties, which include certain exclusive rights, legal protection and effective legal solutions against the circumvention of technological measures. Increasing number of trading partners are applying the provisions of the WIPO Internet Treaties to create a conducive legal environment, investment and growth in legitimate Internet-related businesses, services, and technologies.[347]

Due to the occurrence of digital copyright violation, which seriously damages economic business prosperity and harms copyright holders' interest, the concept of intellectual property enforcement has progressed from economic and civil issue to criminal paradigm. In the last period, some countries have implemented their digital copyright legislation to complement the civil remedies by deliver strict penalties. Nonetheless, statistical data presents digital copyright infringement is still increase.[348] Hence, it starts to consider on progressive approach to copyright enforcement.

Over one hundred years copyright law in the United States did not cover criminal provisions till Congress added criminal authorization in 1897,[349] even it initially performed to limited issues of copyright infringement. The Provisions ruled criminal sanction for unlawful public performances and representation of dramatic or musical compositions.[350] Congress approved the Piracy and Counterfeiting Amendments Act in 1982, which rearranged criminal sanctions

[347] *Id.* at 18.
[348] Santanee Ditsayabut, *International Harmonization of National Laws and Policies for Effective Prevention and Suppression of Intellectual Property Violation*, IIP Bulletin 2010, at 1.
[349] Lydia Pallas Loren, *Digitization, Commodification, and Criminalization: The Evolution of Criminal Copyright Infringement and the Importance of the Willfulness Requirement*, 77 Wash. U. L. Q. 835, 840 (1999).
[350] *Id.*

under title 17 and 18.[351] Next, in 1992 by introducing additional criminal sanction on Copyright Felony Act, the bill provided the software piracy, sound recordings and movies.[352] In 1997, a federal law passed No Electronic Theft Act (NET Act) provided for criminal sanctions for person who engages in copyright infringement under certain conditions. However, the amendment stated that there was no subject of criminal liability for non-commercial or non-profit copyright infringement no matter how big a loss the copyright holder hurt.[353] The controversial issue held between The WIPO Copyright and Performance and Phonograms Treaties Implementation Act of 1998[354] and DMCA[355] concerning prohibited the circumvention of copyright protection system were not only civil measure but also criminal sanctions.[356] Criminal penalties for the illegal recording of motion pictures in theaters also provided by The Artists' Rights and Theft Prevention Act of 2005.[357] In 2008, the Enforcement of Intellectual Property Rights Act reinforced criminal sanctions for repeat copyright infringer with eighteen months in prison for selling pirated software worth more than $250,000.[358]

Amendment to the Japanese Copyright Law forced in January 2010, stated it illegal to knowingly download copyrighted material without permission. It was

[351] Pub. L. No. 97-180, 96 Stat. 91 (1982).
[352] Pub. L. No. 102-561, § 1, 106 Stat. 4233, 4233 (1992) (amending 18 U.S.C. § 2319(b) (2006 & Supp. II 2008)).
[353] *See* United States v. LaMacchia, 871 F. Supp. 535, 545 (D. Mass. 1994).
[354] Pub. L. No. 105-304, tit. I, 112 Stat. 2860, 2861–77.
[355] Pub. L. No. 105-304, 112 Stat. 2860 (1998).
[356] *See id*. § 103, 112 Stat. at 2876., *see also*, Jacqueline Lipton, *The Law of Unintended Consequences: The Digital Millennium Copyright Act and Interoperability*, 62 WASH. & LEE L. REV. 487 (2005).
[357] Pub. L. No. 109-9, tit. I, 119 Stat. 218, 218–23.
[358] *See id*. tit. II, 122 Stat. at 4260–64.

stating two years of pressure by influential associations including the Motion Picture Producers Association of Japan (MPPAJ) and RIAJ. Japanese law previously accepted prosecution against those uploading copyrighted material without authorization, but downloading the same material for private use was legal.[359] October 1st, 2012, copyright law amendment took place regarding criminal enforcement of illegal downloading.[360] Illegal downloading is also infringing a private use with the limitation. The provision penalizes person who intentionally/knowingly download illegally uploaded movie, music or copyrighted files. If we knew the contents are sold or getting paid-delivery online, and we still distributed illegally by downloading or uploading such things, we are subject to punishment. Uploading illegal content into Internet had been illegal from before, the punishment was maximum ten years in prison and/or a fine up to ten million yen. Since January 2010, downloading illegal contents online was illegal without punishment. Moreover on October 2012, even for personal use, downloading illegal contents with consideration: 1) we knew the contents are sold or getting paid-delivery online, 2) we distributed illegally by downloading or uploading the contents, we are subject of criminal with two years limit in prison and/or a fine up to two million yen.[361] As for difference of criminal enforcement between Japan, USA and Indonesia can be seen on table below:

[359] Shirley Gene Field, Internet Piracy in Japan; Lessig's Modalities of Constraint and Japanese File Sharing (May 2010) (unpublished thesis, Texas University) (on file with author), *see also*, Kazuaki Nagata, *(Near) Death of Salesman*, Japan Times, December 11, 2009, *available at* http://www.japantimes.co.jp/culture/2009/12/11/music/near-death-of-a-salesman/#.VYjGLBOqqkp (last visited June 23, 2015).
[360] http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/online.html, (last visited, June 10, 2015)
[361] Summary Q&A through copyright content on the internet by Agency for Cultural Affair; 1) Viewing or listening illegal contents like video or music is not illegal, unless you record the content, 2) viewing and caching made from video sharing sites like YouTube, are not illegal, 3)

Countries	Criminal Punishment/Sanction
USA	18 U.S. Code § 2319 - Criminal infringement of a copyright • Any person who commits an offense under section 506(a)(1)(A) of title 17 1. Shall be imprisoned not more than 5 years, or fined in the amount set forth in this title, or both, if the offense consists of the reproduction or distribution, including by electronic means, during any 180-day period, of at least 10 copies or phone records, of 1 or more copyrighted works, which have a total retail value of more than $2,500; 2. Shall be imprisoned not more than 10 years, or fined in the amount set forth in this title, or both, if the offense is a felony and is a second or subsequent offense under subsection (a); and 3. Shall be imprisoned not more than 1 year, or fined in the amount set forth in this title, or both, in any other case. • Any person who commits an offense under section 506(a)(1)(B) of title 17 1. Shall be imprisoned not more than 3 years, or fined in the amount set forth in this title, or both, if the offense consists of the reproduction or distribution of 10 or more copies or phone records of 1 or more copyrighted works, which have a total retail value of $2,500 or more; 2. Shall be imprisoned not more than 6 years, or fined in the amount set forth in this title, or both, if the offense is a felony and is a second or subsequent offense under subsection (a); and 3. Shall be imprisoned not more than 1 year, or fined in the amount set forth in this title, or both, if the offense consists of the reproduction or distribution of 1 or more copies or phone records of 1 or more copyrighted works, which have a total retail value of more than $1,000. • Any person who commits an offense under section 506(a)(1)(C) of title 17 1. Shall be imprisoned not more than 3 years, fined under

downloading online photos or copying and pasting text are not illegal as it is for private use, 4) it is illegal download even TV programs were broadcasted free and if we knew it was illegal distribution, moreover if the TV programs sold (either as online or disc), we are subject to punishment.
http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/download_qa/index.html, (last visited, June 10, 2015)

	this title, or both; 2. Shall be imprisoned not more than 5 years, fined under this title, or both, if the offense was committed for purposes of commercial advantage or private financial gain; 3. Shall be imprisoned not more than 6 years, fined under this title, or both, if the offense is a felony and is a second or subsequent offense under subsection (a); and 4. Shall be imprisoned not more than 10 years, fined under this title, or both, if the offense is a felony and is a second or subsequent offense under paragraph (2).
Japan	Japan Copyright Law No.35, of May 14, 2014. (Penal Provision 119-124) • Imprisonment up to 10 years or fine up to 10 million yen, or both will be charged to penal sanctions against ordinary infringements (exempt reproduction for private use and exempt acts considered to be infringement (Art.113)): only upon the complaint of the injured person. • Imprisonment up to 5 years, fine up to 5 million yen well be charged to infringement of moral rights of authors and performers, importation for distribution of goods made by an act infringing copyright, right of publication and neighboring rights, distribution or possession for distribution of them by a person who is aware of such infringement exportation or possession for exportation of them repeatedly, the act of using illegal copies of computer program on a computer and providing automatic reproducing machines to the public for profit-making • Fine up to 5 million yen will be charged to: infringement of moral rights after the author's death • Imprisonment up to 3 years or fine up to 3 million yen, or both will be charged to: transferring to the public the ownership of, and manufacture, etc. of, a device having a principal function for the circumvention of technological protection measures. Removing or altering intentionally rights management information attached to the work etc. which identifies such as the name of the work and the right holder: • Imprisonment up to 1 year or fine up to 1 million yen, or both will be charged to: distribution of copies with false name • Fine up to 500 thousand yen will be charged to: violation of the compulsory indication of sources • Imprisonment up to 5 years or fine up to 5 million yen will be charged to: violation against obligation to keep the secret • Fine up to 300 million yen will be charged to the legal person in addition to the infringer.

Indonesia	Indonesian Copyright Law No 28, 2014. (Penalty Provision 112-119) Art. 112 • Any person who without rights commits acts as referred to in Article 7 paragraph (3) and / or Article 52 for use Commercially, shall be punished with imprisonment of 2 (two) years and / or a maximum fine of Rp300,000,000.00 (three hundred million rupiah). Art. 113 • Any person who with no economic right infringement referred to in Article 9 paragraph (1) letter i to use Commercially shall be punished with imprisonment of 1 (one) year and / or a maximum fine of 100,000,000 (one hundred million rupiah). • Any person who with no rights and / or without permission of the Author or holders Copyright infringement Creator economy as referred to in Article 9 paragraph (1) letter c, d, f, and / or h to Use It Commercial shall be punished with imprisonment of three (3) years and / or a fine of Rp 500,000,000.00 (five hundred million rupiah). • Any person who with no rights and / or without permission of the Author or holders Copyright infringement Creator economy as referred to in Article 9 paragraph (1) letter a, b, e, and / or the letter g to Use It Commercial shall be punished with imprisonment of 4 (four) years and / or a maximum fine of 1,000,000,000.00 (one billion rupiah). • Any person who meets the elements referred to in paragraph (3) are carried out in the form of piracy, shall be punished with imprisonment of ten (10) years and / or a maximum fine of Rp4.000.000.000,00 (four billion rupiah). Art.114 • Every person who manages the place of trade in all its forms deliberately and knowing letting sales and /or duplication of infringing goods Copyright and / or related rights in a trade under its management as referred to in Article 10, shall be punished by a fine of 100,000,000 , 00 (one hundred million rupiah) Art. 115 • Any person who without the consent of the person portrayed or their heirs do use Commercially, Multiplication, Announcements, distribution, or communication of a portrait as referred to in Article 12 for the benefit of advertising billboards or to use Commercially both in electronic and non-electronic media, shall be punished with a maximum fine of Rp 500,000,000.00 (five hundred million rupiah). Art. 116 • (1) Any person who with no economic rights infringement referred to in Article 23 paragraph (2) letter e to use

	Commercially shall be punished with imprisonment of 1 (one) year and / or a maximum fine of 100,000,000 (one hundred million rupiah) • Any person who with no economic rights infringement referred to in Article 23 paragraph (2) letters a, b, and / or f, to use Commercially shall be punished with imprisonment of three (3) years and / or a maximum fine of Rp 500,000,000.00 (five hundred million rupiah). • Any person who with no economic rights infringement referred to in Article 23 paragraph (2) c, and / or the letter d for use Commercially shall be punished with imprisonment of 4 (four) years and / or fined at most 1,000,000,000.00 (one billion rupiah). • Any person who meets the elements referred to in paragraph (3) are carried out in the form of piracy liable to a penalty of 10 (ten) years and / or a maximum fine of Rp4.000.000.000,00 (four billion rupiah). Art. 117 • Any person who intentionally and without right of economic rights violations referred to in Article 24 paragraph (2) letter c to use Commercially shall be punished with imprisonment of 1 (one) year and / or a maximum fine of Rp 100. 000,000 (one hundred million rupiah). • Any person who intentionally and without right of economic rights violations referred to in Article 24 paragraph (2) letters a, b, and / or the letter d for use Commercially, shall be punished with imprisonment of 4 (four) years and / or a maximum fine of 1,000,000,000.00 (one billion rupiah). • Any person who meets the elements referred to in paragraph (2) are carried out in the form of piracy shall be punished with imprisonment of ten (10) years and / or a maximum fine of Rp4.000.000.000,00 (four billion rupiah) . Art. 118 • Any person who intentionally and without right of economic rights violations referred to in Article 25 paragraph (2) letters a, b, c, and / or the letter d for use Commercially, shall be punished with imprisonment of 4 (four) years and / or a maximum fine of 1,000,000,000.00 (one billion rupiah). • Every person who meets the elements referred to in Article 25 paragraph (2) d is done with the intention of hijacking shall be punished with imprisonment of ten (10) years and / or a maximum fine of Rp4.000.000.000,00 (four billion rupiah). Art. 119 • Each Collective Management Organization that has no operating license from the Minister referred to in Article 88 paragraph (3) and withdrawal activities Royalties shall be

	punished with imprisonment of 4 (four) years and / or a maximum fine of Rp1,000,000,000.00 (one billion rupiah).

Basically, the concept of digital copyright protection is already sufficient by implementing international copyright regulations, which is then ratified by every member. However, harmonization undertaken by some countries was inconsistent with their practice. Indonesia for instance, the number of digital copyright infringement and conventional market piracy are increasing every year. Local government and copyright association are less able to participate active to decrease the copyright infringement. Conversely, in Japan and United States, cooperating between the stakeholders and non-governmental organization can reduce the number of copyright infringements. RIAA movements and "Doe Lawsuits" against the file-sharer in the United States were active role from the copyright non-governmental organization concerning on copyright enforcement. In Japan, ISPs and the interest groups are also playing a part in reducing illegal file sharing on the Internet. Another strategies to change the users' behavior on illegal file sharing, RIAJ and MPAA and other organizations have intensified their efforts to socialize that illegal file sharing is wrong. They also cooperate with the police department to reduce the number of copyright infringement on digital technology.

Moreover, fighting the threat of digital copyright crime entails the intensive actions from all the countries. Appropriated regulation has to be in place and in line with international practice. Yet, the situations between countries are not always similar, economic, and politic and harmonization itself sometimes

bring the obstacles to implement. International community and other countries cannot intervene too hard to follow the provision, because every country has sovereignty to manage their home. The objective way is always promote and attract users globally to stop the piracy.

4.3 How TPP Regulate the Digital Copyright

Due to the TPP implementation, twelve countries including Japan and USA agreed to create strong enforcement on digital copyright infringement including penalties procedures and provisional measures. While, TPP focused on promoting economic expansion, getting adequate agreement for farmers and workers and reducing barriers to trade market. Twelve countries expect this understanding will construct digital freedoms, civil liberties and copyright law.[362]

Regardless of TPP's closed negotiation, the text has been classified[363] and the members prepared the document supervision to be implemented. One of the controversial chapters of the agreement is the intellectual property chapter.[364] It contains the draft to intensify the patents term, medical patents, aggressive

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[362] Claire Reilly, *Digital Rights and the TPP: All You Need to Know about the Big Trade-Off*, October 29th, 2014, Cnet.com, *available at* http://www.cnet.com/au/news/digital-rights-and-the-tpp-the-big-trade-off/, (last visited December 1, 2015).

[363] WikiLeaks has announced the TPP's draft agreement which being closed negotiation by twelve Asia-Pacific nations on November 2013 and October 16, 2014, *available at* https://wikileaks.org/tpp/, http://keionline.org/tpp/11may2015-ip-text and https://wikileaks.org/tpp-ip2/, *see also* Alex Hern and Dominic Rushe, *WikiLeaks Publishes Secret Draft Chapter of Trans-Pacific Partnership*, the Guardian.com, November 13, 2013, *available at* http://www.theguardian.com/media/2013/nov/13/wikileaks-trans-pacific-partnership-chapter-secret, TPP negotiations held in secret are "inconsistent with core United States democratic values; the process should be changed," the summary of letter protest from Law Professors and academic Scholar to the President Obama, Congress and USTR, *available at* http://infojustice.org/wp-content/uploads/2013/11/Law-Professors-TPP-11142013.pdf, (last visited December 1, 2015).

[364] Chapter 18 Trans Pacific Partnership Agreement, *available at* http://www.globalresearch.ca/the-full-text-of-the-trans-pacific-partnership-tpp/5486887, (last visited December 2, 2015)

measure to prevent digital copyright contents, criminal procedures and penalties for trade secret theft, including by means of cyber theft and for cam cording. Reacting of TPP itself, generally there are two points of view that we can evaluates. Most of the government of the parties supports the agreement, it following by copyright holders, security companies (DRM technology businesses) and Internet Service Provider (ISPs) companies. Conversely, commercial web companies, bloggers, illegal website owner and user are worries about the TPP implementation due to TPP is the first Free Trade Agreement which clarify that IPR enforcement ought to digital enforcement physical piracy.

Addressing TPP, United States of America stated that it would help the Americans take advantage individually and widely in promoting trade and innovation together with scientific, technological and artistic exchange throughout the region.[365] The provisions could be combine and consistent with existing U.S. law to create and balance protection.[366] TPP will promote high standards of protection, safeguard of States' exports and customers against IP counterfeiting, physical piracy and trademark infringement. It also covers commitments to prevent digital trade secret theft, digital piracy, and illegal file sharing of creative and commercial contents. Collaborating with ISPs companies, the agreement strongly recommends to the government for establishing safe harbor. It allows legitimate ISPs to expand their business and address the digital copyright infringement effectively. Safe harbors have to contribute to support the Internet, e-commerce industries, entertainment and information to the world. TPP and safe

[365] USTR, IP chapter summary of TPP, *available at* https://medium.com/the-trans-pacific-partnership/intellectual-property-3479efdc7adf#.41bgjvfkf, (last visited December 3, 2015)
[366] *id.*

harbors do not require any obligations ISPs to monitor content on their networks or systems, but provides for safeguards against abuse of such safe harbor regimes.[367]

On the other side, many parties have certain thought that TPP is not new model of trade agreement, but more exactly about expansion of NAFTA model plus additional chapter likes; financial service, e commerce, technology and intellectual property.[368] Thus, it more likes "binding international governance system", where the provision merely is changed if all the members agree by conform its domestic policies first. So, TPP could enforce the permanent boundaries on domestic and state policymaking.[369] The establishment of safe harbor for ISPs, TPP is considered as continuation of SOPA and ACTA. IP's professors and academics scholar in the US also challenged this issue by sending letter protest to President Obama, Congress and USTR Michael Forman.[370] They also thought that TPP negotiation held in secret was inconsistent with the US democratic values. While, since the ISPs could be considered for copyright infringement, they are responsible to monitor their network itself and strive for infringing activity by subscriber service termination and blocking content.[371] TPP also propose that all copyright contents would apply to temporary copies as they

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[367] TPP Agreement, Chapter 18, Annex 18 E & F.
[368] Lori Wallach, *Washington Joint Legislative Oversight Committee on Trade Policy*, Public Citizen's Global Trade Watch, November 2012, *available at* http://leg.wa.gov/JointCommittees/LOCTP/Documents/2012Nov14/TPP%20Presentation.pdf, (last visited December 7, 2015).
[369] *id.*
[370] Darlene Storm, *Secret TPP agreement, SOPA on steroids, may be the end of the Internet as we know it*, computer world web, November 18, 2013, *available at* http://www.computerworld.com/article/2475496/internet/secret-tpp-agreement--sopa-on-steroids--may-be-the-end-of-the-internet-as-we-know-it.html, *see also* http://infojustice.org/wp-content/uploads/2013/11/Law-Professors-TPP-11142013.pdf, (last visited December 7, 2015).
[371] Michael Geist, *the Trans Pacific Partnership IP Chapter Leaks: the Battle Over Internet Service Provider Liability*, November 14, 2013, *available at* http://www.michaelgeist.ca/2013/11/tpp-leak-isp-liability/, (last visited December 7, 2015).

pass through the Internet, disk or devices. It means that anyone have to get permission from copyright owners to download or even view any copyright work. More over, it is trying to make the Internet activity like a permission-based system. TPP also specify that the members have to regulate fines, criminal penalties and civil remedies for infringer. US own self pushed criminalization to other members even for private activities. While, they have "fair use" doctrine, which has more flexibility and adaptability defending minor action or non-financially violence. For that reason, US is not too focus in expanding criminal penalties.[372]

Japan Prime Minister, Shinzo Abe addressed the TPP accomplishment by saying that "TPP was significant achievement not only for Japan, but also for the future in Asia Pacific Region."[373] He also appreciated; it was a visionary policy, which distributed the progressive values by creating a free and fair economic region. Japan thought that the agreement would reduce tariffs includes forty percent the economic field. It also brings new standards for other participating nations.[374] Hence, the deal was intent to improve trade between the members and counter China's economic expansion. Most goods and services will be operated duty-free and tariffs reduction among the countries. Japanese government with the

[372] Not all the parties have fair use doctrine in their domestic law. Applying criminal penalties for private activities is complicated issue between law, legal culture, technology and user. TPP member who already use this provision under this law is Japan, *see also* David Higgins, *File Sharing and Downloading Laws in Japan*, September 16, 2014, *available at* http://www.japanupdate.com/2014/09/file-sharing-and-downloading-laws-in-japan/ and BBC news, *Japan Introduces Piracy Penalties for Illegal Downloads*, October 1, 2012, *available at* http://www.bbc.com/news/technology-19767970, (last visited December 8, 2015)

[373] Mina Pollman, *What the TPP Means for Japan*, Japan Times web, October 8, 2015, *available at* http://thediplomat.com/2015/10/what-the-tpp-means-for-japan/, (last visited December 8, 2015).

[374] *id*, *see also* wire report update of the Asahi Shimbun, *U.S., and 11 other Pacific Rim Countries Reach Sweeping Trade Deal*, October 6, 2015, *available at* http://ajw.asahi.com/article/behind_news/politics/AJ201510060012, (last visited December 8, 2015).

TPP Policy Paper have purpose to become a new export superpower.[375] Japan plans to increase export proactively industrial product including auto industry and agricultural products and foods. The paper also gave written strategy by selling broadcast programming worth ￥20 billion in 2018 fiscal and ￥1 trillion of agricultural exports in 2020.[376]

Relating with the TPP and digital copyright infringement, The Cultural Affairs Agency was considering revising the copyright law. The plan revisions under the consideration were made including; investigation of copyright infringement can be done by authorities and bring charges against offenders, even if copyright owner have not filled lawsuit/complaint.[377] If these circumstances are running well, export marketplace for Japanese copyrighted works, contents, and physic or digital like songs, *manga*,[378] video games and movie could be estimate as $13.8 billion.[379] Industry group especially copyright associations, Japanese Society for Rights of Authors, Composers and Publishers (JASRAC), Association of Copyright for Computer Software (ACCS), Recording Industry Association of Japan (RIAJ) and Anti-Piracy Council to exploit File-sharing Software or Consortium against Copyright Infringement via File-sharing Software (CCIF) welcome and support the copyright law revision.

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[375] Kazuaki Nagata, *Japan Government Releases TPP Policy Paper in attempt to Quell Unease,* Japan Times, November 25, 2015, *available at* http://www.japantimes.co.jp/news/2015/11/25/business/japan-government-releases-tpp-policy-paper-attempt-quell-unease/#.VmZdXBOqqkp, (last visited December 8, 2015).

[376] *id*.

[377] Authorities can bring charges as well as allowing rights holders to seek statutory damages for infringements.

[378] Manga is a Japanese cartoon, usually from the comic characters/actor.

[379] Jiji, *Japan to Strengthen Copyright Protections in Light of TPP*, Japan Times Web, November 15, 2015, *available at* http://www.japantimes.co.jp/news/2015/11/15/business/japan-strengthen-copyright-protections-light-tpp/#.Vk0zNBOqqkp, (last visited December 9, 2015).

Due to the ratifications of TPP, Japan had concluded the pact by legislative session on this November.[380] Next, the draft could be signature and ratified by each members. However, because of U.S. Congress has ninety days reviewing the draft, Japanese Diet does not really have ratification debate until at least January. So, could be concluding that the result of the final acceptance from each member would appear on January 2016. The government stated that the legal revision would be created polished, so it will not seriously impact people's interest.[381]

Previously, Japan was already did what TPP formulated about digital copyright infringement. Japan is one of those members where downloading copyrighted contents are prosecutable. In October 2012, it officially started sue the individual and organization whose pirated music, movie and software. Moreover, twenty-two cases caught by the police under this law throughout 2015.[382] RIAJ stated that there was forty percent decline in peer-to peer and illegal file sharing practices when the legislative introducing the enforcement act. Digital music sales increased five percent to 43,7 billion yen in 2015 and the subscription market expanded every year.[383] Cooperating with the ISPs industries, government gives inflexible for Internet activities. ISPs now are more aggressive stance towards P2P and illegal file sharing. They have limitation for utilizing the Internet quota (Packet Filtering). Most providers give sharing capacity from 10gb to 30gb a day for PC

[380] Mina Pollman, *supra note* 373.
[381] *id, see also* Nikkei, *With deal's details still a mystery, Japan parliament unlikely to meet,* October 7, 2015, *available at* http://asia.nikkei.com/Politics-Economy/Policy-Politics/With-deal-s-details-still-a-mystery-Japan-parliament-unlikely-to-meet, (last visited December 9, 2015).
[382] ACCS, criminal case report, *available at* http://www2.accsjp.or.jp/fileshare/criminal/index.php, (last visited December 9, 2015)
[383] RIAJ Year Book 2015, *Statistic Trend*, at 1.

and commercial Internet industries and 5gb to 10gb a for smartphone users.[384] Providers may monitor the port for seeing the user activities, but this action is depending on how strict their policies. Generally speaking, Providers are proactive with or without instruction the police department to combat the illegal file sharing. They will send the first warning "*keikokujo 警告状*" to the user for erasing illegal content and sign a form letter to not do again, moreover they will send your address to the police if they pointed out the infringement was to huge and material loss *"shokanjo 召喚状"*.

While the TPP is liberalizing market across the region, not all the business zones engaged will surplus as well as others. Based on the final draft, we can predict which industries will get the big advantages because of tax and tariff deduction/deletion: Automotive industries, like Toyota and Honda. They will get low priced access to bring huge export to U.S. and other members. Japan also could create cheap automotive spare part in Vietnam, and the production cost will be reduced. Next is farm and livestock business. However, the local farmer and business must be careful against the import product and quality. By reduction or elimination of tariffs, the import and the local price will compete. Following point is local job market business, the developing countries, like Vietnam will get some advantages if they employ the foreign workers. They will get lower wages seemly with the local worker or be adapted to strict labor laws. Next advantages will be obtained by drugs maker companies/business. The deal stated pharmaceutical

[384] http://isp.oshietekun.net/, (last visited December 9, 2015)

companies have protection up to eight years for new biotech drugs.[385] The activist claim, the prescription will more expensive for society in developing countries.[386] Lastly, the Technology and Information businesses, they have to build green technology (environmental friendly) for decreasing global warming and local infrastructure. Thus, those results could increase competition among tech giants industries.

For Indonesia, TPP is still debatable issue in legislative. General speaking, there are some aspect that we could summarize from this issue. When President of Indonesia, Joko Widodo, domestically known as Jokowi, declare to Barrack Obama about Indonesia intend to join the TPP,[387] many industries, stakeholders, legal observers, and academics highlight it with pros and cons. In my understanding, when Indonesia wants to join this agreement, first ting that we have to do is make comprehensive analysis about the advantages and disadvantages. In terms of profit, definitely Indonesia has open market with a population more than 250 million; Indonesia has huge consumers and the largest economy in Southeast Asia. Consequently, consumers are those who get the greatest benefit. Product prices are cheaper and there will be many choices with best quality. Producers will get more connection for international production. Raw material and component could be gain easily, low-priced and sold with the favorable price. However, keep in mind, there are some obstacles to be faced. Competition will be stricter;

[385] Chapter 18, TPP agreement (biotech drugs are expensive medicines produced in living cells).
[386] Rajeshi Naidu-Ghelani, *TPP Trade Deal: Who are the Winners and Losers?*, BBC News, October 6, 2015, *available at* http://www.bbc.com/news/business-34451423, (last visited December 10, 2015).
[387] President of Indonesia, Joko Widodo was meeting with the US President, Barrack Obama at White House, *available at* http://www.theguardian.com/world/2015/oct/27/indonesia-will-join-trans-pacific-partnership-jokowi-tells-obama, (last visited December 10, 2015)

subsequently some of the producers will not be able to compete and forced to turn down. Next point is, Indonesia has to evaluate the expansion other developing countries like Vietnam rapidly. Regarding with the merging Vietnam into TPP, it will diminish access market product on developed countries like US and Japan. For instance, for five years back, Vietnam can increase 300% of textile export to US and Japan, while Indonesia was just able to add 100% in the similar product. Accompanying various threats arising could be reasonable if President Joko Widodo intend to be apart of the agreement. Next problem is TPP ruled about intellectual property strictly, expansion of investment term and its protection, amazingly, TPP lined up for dispute settlement with ISDS (Investor-State Dispute Settlement). For developing countries, it could be rather detrimental. Medical side and local farmer also received threats over free distribution/circulation of goods. Finally, TPP asked to every member to amendment and make the domestic regulation appropriate with businesses interest, especially for taxes and export-import. Consequently, private companies will have similar special right with National companies in its operation.

Intellectual Property Chapter	**Australia**	**NZ**	**US**	**Peru**	**Chile**	**Mexico**	**Canada**	**Singapore**	**Brunei**	**Malaysia**	**Vietnam**	**Japan**
Patents: Patentability criteria	A	R	A	A	R	R	R	R	R	R	R	R/P
Patents: Supplementary protection	R	R	A	R	R	R	R	R	R	R	R	R
Patents: Extend Protection to new uses (plants, animals, surgical	R	R	A	R	R	R	R	A	R	R	R	R/P

procedures)												
Pharmaceuticals: linkage	R	R	A	R	R	R	R	R	R	R	R	R
Pharmaceuticals: Data protection	R	R	A	R	R	R	R	R	R	R	R	R
Copyright: TPM	A	R/P	A	A	R	A	R/P	A	R	R	R	R
Copyright: Term of protection (US proposal)	R	R	A	R	R	R	R	R	R	R	R	R
Copyright: Parallel important	R	R	A	R	R	R	R	R	R	R	R	R
Copyright: ISPs (CL proposal)	R	A	R	A	A	A	A	A	A	A	A	R/P
Observations: New elements of Penal System: Establishment of criminal offenses for unintentional infringements of copyright, related rights and trademarks (QQ.H.7.3)	R	R	A	R	R	R	R	R	R	R	R	R
Observations: New elements of criminal code: Obligations to establish criminal penalties and fines for recordings of public works (camcording) (QQ.H.7.5)	A	R	R	R	R	R	A	R	R	A	R	R
Inclusion of agreements that parties should ratify and implement	A	R	A	R	R	R	R	R/P	R	R	R	R
National treatment: maintain TRIPS	R	A	R	A	A	R/P	R/P	A	A	A	A	A

- A: Accept, R: Reject, R/P: Reserved Position.
- TPP Country Positions (6 November 2013) **Source : United States Trade Representative (USTR)**

4.4 The Forthcoming of Digital Copyright Protection

It is now recognized that copyright law and technology influence each other.[388] As the digital ecosystem continues to change rapidly, since 2000 digital media may belong to the public of information, entertainment, devices and smartphones we used to consume it. Likewise, books, scholarly paper written today, music and movies created will eventually be presented in digital form. The rising globalization of the copyright content industry pushed it into new digital land. While, the conventional markets are still placing up resistance, they will soon adapt to the new framework. Stakeholders, businessman and user need to reconsider their purposes and confirm synchronization between regulation, their measures, consumers of digital copyright content and the protection of the content itself.

Nowadays, technology environment and Internet situation between developed and developing country are mostly similar. Most countries around the world practice the Internet in their daily lives, possibly dissimilar on implementation. Regarding to digital content protection, net user might be choose the free content, paid content or illegal content. Consequently, in the future: net users do not too worry about breaking the digital content right. They could be easily to choose the free content on the various webs. The party who should be

[388] Niva Elkin-Koren, *Making Technology Visible: Liability of Internet Service Provider for Peer-to-Peer Traffic*, 9, N.Y.U. J. Legis, & Pub. Pol, Y, 15, 15-16, 2006

worry is digital copyright content owner. They have to be work extra to protect their content on the Internet. Increasingly sophisticated technology will always be coupled with the crime, especially hacker for bad purposes. In my view, only major cases which affected huge loss will be proceed by legal action. Copyright industries and government might not be concerned with petty mistake or crime by limited users likes: downloading free contents and distributing them into their personality use. Therefore, the industries should be proactive by cooperating with association for protect their contents from illegal exploitation.

Based on information law point of view, digital content is a part of the information system, which should be distributed freely from limitation. Moreover, if it has to be controlled, the content, scope and protection should regulate by the relevant laws, standard technology measures and good enforcement.[389] Sometime, the government, especially Indonesia gave no specific laws and regulations, consequently, the policy suffered by the criticism and it would be tough to be recognized by the public. For instance, in 2008, the Ministry of Telecommunication launched the Transaction and Electronic Information Law; the official claimed that this regulation would prevent the cybercrime on the Internet. Unfortunately, this regulation and Copyright Law 2002 gave no clear explanation about what is digital content abuse and copyright infringement on the Internet; additionally those laws were lack of implementation because particularly, there were a lot of cases of digital copyright infringement on the

[389] Zhou Lin, *Facing The Future, The Distribution of Digital Content and the New Issues of Intellectual Property System,* Journal of Intellectual Property Association of Japan〈日本知財学会誌〉 Vol.5 No.3 ― 2009: 31 ― 35, at 32.

Internet along 2002-2014.[390] Criminal enforcement and fines practices by the Police Department on physical market and infringement on the Internet did not towards better movement. The seller and pirates will return with the new strategies; sell secretly and change the web address become trend between them and consumers.

Nearly, government provides the strategies and mechanism to block the web addresses which provide the illegal content and software. Learning from Japan, U.S., and China, I personally wish Indonesia would adopt "safe harbor" for Internet Service Provider, which controlled networking condition for exemption infringement. As well as government did for phonographic content on the net. Even though, not all phonographic web could be blocked, but it will reduce the infringement itself. Following the implementation of new Copyright Law amendment on 2014, infringement digital copyright on the Internet and physical market would be significantly decreased. However, government should be creative to establish various approaches for decreasing the infringement. I strongly believed, the criminal and fines enforcement are the last option to be implemented for Indonesia.

As for the further steps to be taken by the government for defeating the infringement; the manufactures' control of retail price on an original content or software is permitted by the national authority. Hence, government could be control the market price as one of the exception for anti-monopoly law. This approach was already taken by Japan since 2007 to prevent the price competition

[390] International Intellectual Property Alliance (IIPA), Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement, Feb 6, 2015.

and increasing the CD music sales.[391] Next steps is DRM software is not desirable to the consumers because the limitation of the contents and complicated process. Even though it is legal to make copy for private or personality use, DRM also depends on the manufactures or copyright industries. Other reason is, if a content is downloaded from the Internet, it might be disappear or useless in case device or software incapability. Therefore, online content distributors are projected to prefer build standard of DRM or DRM free distribution. Last approach is creating less price or special price for students or companies or to ordinary people (low-medium welfare) for original goods or online content. Thus, society still can purchase without do such illegal action. To summarize the methods, reasonable price, less obstacle and constrain, and more selection of regulation are the key factors of digital copyright content protection. The alteration of online content distribution has established enormous demand. Government and copyright industries should realize that information is a right of every person and business opportunity.

[391] Tatsuhiro Shukunami, *The Transformation and The Future Challenges of Content Distribution in Japan,* Keio Communication Review No. 32, 2010, at 27.

Chapter V

CONCLUSION

There are possibly measures to completely control file-sharing movement through networks. So far, just limited countries has successfully decreasing illegal file sharing network. Law and technology could be utilized to support file-sharing performance. Establishing huge devices and PC with high connection speeds had made file sharer distribute the content easily through the net. Many people access the Internet mostly by their devices or smartphones and those are able to save and distribute the content with huge storage space.

Somehow, attempting to reduce the Internet piracy, both countries; Japan, United States and Indonesia commit to create health Internet environment. Japanese Copyright Law enforcement has been increasing struggle in recent years, amendment the copyright law to make downloading for private use illegal was a big step for digital copyright enforcement. Even United States and Indonesia are not ready yet to take that path. Copyright Association and Japanese Cyber Police in NPA have broadened method to catch their targets, tracking illegal file sharer from various demographic and resulting in arrest nationwide. In the United States, the large number of lawsuit from RIAA and other movie and recording association to illegal random users were took place as a concrete action form the government to educate people and stop the illegal download. Unluckily, the number of illegal file sharer quickly rocketed in some years. The Copyright law amendment and broadened the international regulation for digital copyright are always promoted and informed to all the nations by their reports in every year.

The legal challenges against the law firms who represent the (recording and movies companies), and mass lawsuit (illegal file sharer) are keep occur as a dilemmatic business and copyright enforcement. On the other hand, Indonesia had more serious problem both digital piracy and physical piracy. Enforcing the illegal digital file sharing and physical piracy, Indonesia already harmonized the international copyright regulation into national provision. The amendment of Copyright Law on 2014 took place as a phase to adjust the current situation, though it was slightly late. However, the important changes of regulation are not followed by the practices and market condition. The massive number of illegal web and link, which provide free and illegal content, still exist in the Internet, deteriorated by physical piracy market in some areas.

In the end of 2015, 12 countries agreed to sign the TPP agreement. Chapter 18 ruled about intellectual property, term and its practices. Regarding with the enforcement of digital copyright, TPP gives new breakthrough. It contains the draft to intensify the patents term, medical patents, aggressive measure to prevent digital copyright contents, criminal procedures and penalties for trade secret theft, including by means of cyber theft and for cam cording. In October 2012, it officially started sue the individual and organization whose pirated music, movie and software. Moreover, twenty-two cases caught by the police under this law throughout 2015. U.S. itself pushed criminalization to other members even for private activities. While, they have "fair use" doctrine, which has more flexibility and adaptability defending minor action or non-financially violence. For that reason, US is not too focus in expanding criminal penalties. TPP

is still debatable issue in Indonesian legislative. In terms of profit, definitely Indonesia has open market with a population more than 250 million; Indonesia has huge consumers and the largest economy in Southeast Asia. Consequently, consumers are those who get the greatest benefit. However, Competition will be stricter; subsequently, some of the producers will not be able to compete and forced to turn down. Many parties afraid that local business/product could not compete with imports additionally, jobless will increase. TPP also intervene the members to legalize criminal penalties for illegal digital copyright infringement and build safe harbor for ISPs to track down the infringer. They also have control to dismiss/block the content if its considered infringe. Based on the economic condition, politic, law and social culture, Indonesia is not ready yet to face the Asian Pacific liberalization. Development of economic facilities, poverty alleviation, education and enforcement of law should be priority in the government agenda. Following the new amendment of Indonesian Copyright Law 2014, government would be able to slowly create good enforcement with proactive give socialization and punishment. Those actions could be build deterrent effect for other infringer and society. Blocking the websites which do copyright infringement are good step for Indonesia to decrease the number of digital piracy. Even in some cases, the website owner and user complain the policy, there is no cases brought to the court.

The improvement of the intellectual property enforcement obliges various approaches. Though, this thesis attaches deeper on criminal enforcement, it establish that whole method should be developed to undertake the problem

effectively. Civil enforcement to grant suitable remedies to the rights holders and administrative enforcement, specifically border control on copyrighted goods in violation should not be neglected. Policy makers should be careful to adopt the copyright-technology provision that may be soon being outdated. The most principal point of copyright enforcement is afford the same protection for online content and off-line. Additionally, as developing country, criminal enforcement should be the last option to be taken for reduces copyright infringement. The government has to give various approaches for decreasing physical market and illegal file sharing expansion. Controlling the content price and give specialty price for groups of education, companies or even less-wealthy people could be solutions.

Finally, legislation reform have to conserve the current harmonize among stakeholders', industries' and users' interest. Through the effective actions and strong political wills from all the countries to compete with intellectual property violation, the goal of copyright enforcement will not be impossible to achieve. It is also valuable that copyright legislation alone will not answer all the Internet's challenges. A concrete harmonization both, efficient enforcement system, technology, procedurally and institutionally, is required. Finally, it is not as a merely as a copyright legal issue, but also as a social environment too.

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