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국제학석사학위논문

**Protecting Intellectual Property Rights for
Industrial Designs under the WTO TRIPS
: A Comparative Study of
the Republic of Korea and the United States**

WTO TRIPS 협정 아래 한국과 미국의 지식재산권
보호: 산업디자인권 법제의 비교를 중심으로

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Master's Thesis of International Studies

**Protecting Intellectual Property Rights for
Industrial Designs under the WTO TRIPS**

**: A Comparative Study of
the Republic of Korea and the United States**

by

Youhyun Chung

**A thesis submitted in conformity with the requirements for
the degree of Master of International Studies (M.I.S.)**

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Abstract

Protecting Intellectual Property Rights for Industrial Designs under the WTO TRIPS: A Comparative Study of the Republic of Korea and the United States

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Intellectual Property Rights (IPRs) are exclusive legal rights endowed upon inventors or owners of creative works for a certain period of time. There has been a growing significance of international disputes pertinent to IPRs, often involving overseas IP application and registration procedures as well as litigations between parties of different nationals. Among these IP disputes are design litigations. This study particularly focuses on industrial designs, referring to the values attached to ornamental or aesthetic features of products, as defined by the World Intellectual Property Organization (WIPO). Industrial design rights are quintessential for securing products' commercial values and competitive strategies for businesses.

Notwithstanding the importance of industrial design protection and the existence of a number of treaties and systems (i.e., Hague System) to which major countries became Contracting Parties, there is no unified international consensus on the specific standards and methods in protecting design rights. Thus, the legal basis, method and scope of industrial design protection tend to vary inter-nationally, though the general rules under the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) are in effect. Considering such complexities, there is a relative lack of previous studies comparing industrial design protection of different countries. Thus, it is rendered crucial to carry out an in-depth

examination on industrial design rights and acknowledge differences between relevant IP laws of each country.

This study aims to focus on the comparative analysis of industrial design-related IP legal frameworks of the Republic of Korea and the United States. Addressing design right protection both domestically and internationally is essential for South Korea's IP competitiveness. As one of the leading countries in design filing activities worldwide, an industrial design sector is among the IP categories South Korea can continue development and advance, especially with regard to the Korean firms in electronic and IT industries who are major design applicants to the Hague System. Korean design protection policies are to be compared with those of the U.S., since the former's IP legislation is highly relevant to the KOR-US treaties. The U.S. being one of the most prominent trading partners of Korea, it is also the country that filed the most foreign design applications to the Korean Intellectual Property Office (KIPO). Most importantly, design disputes in *Apple, Inc. v. Samsung Electronics Co., Ltd.* emphasize the need for a comparative study between the two countries.

In this regard, this paper analyzes the major jurisprudential bases of IP protection for industrial designs in South Korea and the United States. Korea's design rights under the Design Protection Act are mainly compared to the U.S. design patent rights under the Patent Act, along with the trade dress system. This examination is furthered through the case study of *Apple v. Samsung*, where the major issues were the U.S. design patent infringement damages and the differences in design infringement determination by the Korean and the U.S. Courts. Finally, implications of the IP provisions in the USMCA on future KOR-US trade agreements are provided. The strengthened IPR protection tendencies of the U.S. would signify comprehensive and intensified protection of industrial designs in international trade and litigations. This accentuates the growing need for aligning domestic IPR protection regimes with global standards.

Keywords: Intellectual Property, IPR, Industrial Design, Design Patent,
Apple v. Samsung, TRIPS Agreement

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Chapter I. Introduction

1. Research Background

1-1. International Nature of Intellectual Property Rights Protection

Intellectual Property Rights (IPRs) allow creators or owners of patents, trademarks and copyrighted works to benefit from their work or investment in a creation.¹ IPR protection system is designed to offer rewards, incentives and certain advantages to inventors, authors or researchers of the creative and innovative works. Also outlined in the Article 27 of the United Nation's Universal Declaration of Human Rights (UDHR), intellectual property right secures the exclusive legal right of the creators in industrial, technical, scientific, literary and artistic fields, by protecting moral and material interests arising from the authorship of such productions,² within a fixed period of time.

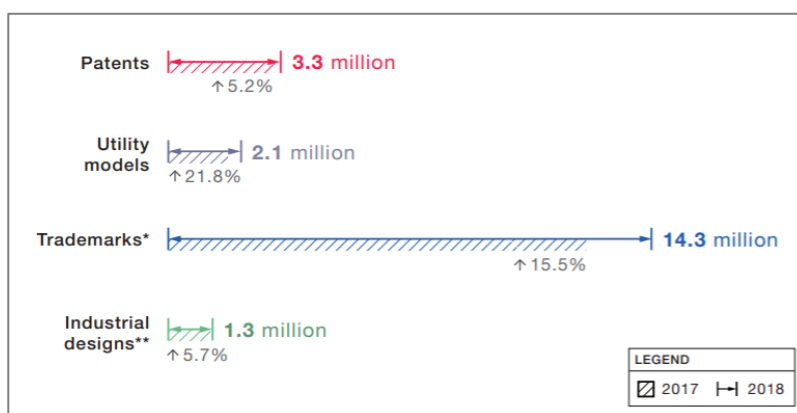
The World Intellectual Property Organization (WIPO) recognizes, in its publications, the industrial property – patent and utility models, trademarks, industrial designs, and geographical indications – along with the copyright as the major categories for Intellectual Property (IP). The Agreement on Trade-Related Aspects of Intellectual Property (TRIPS Agreement) also categorizes IP rights. The number of recent global IP applications or filings has continued demonstrating a yearly increase. Specifically, patent and trademark applications have increased for nine consecutive years. In 2018, about 3.3 million patent applications were filed, and

¹ World Intellectual Property Organization (WIPO). 2004. *What is Intellectual Property?* WIPO Publication No. 450. Geneva: WIPO, p.3.

² Article 27 of the UDHR: (1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. (2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

the trademark³ filing activity amounted to about 14.3 million, showing the annual growth rate of 5.2 percent and 15.5 percent, respectively. In terms of industrial designs⁴, the number of filing activity exceeded 1.3 million, with a 5.7 percent of growth compared to 2017,⁵ as can be seen in Figure 1.

Figure 1. Worldwide IP Filing Activity (Application) in 2018 ⁶



In this context, the worldwide IP filings have reached record heights in recent years. On a regional basis, Asia accounts for more than the two thirds of global IP filing activities. Approximately, 66.8 percent of patents, 97.7 percent of utility models, 70 percent of trademarks and 69.7 percent of industrial designs applications were filed in Asia in 2018.⁷ China, currently the main driver of worldwide IP filings,

³ It refers to ‘class count,’ the total number of goods and services classes specified in trademark applications.

⁴ It refers to ‘design count,’ the total number of designs contained in industrial design applications.

⁵ WIPO Statistics Database, March 2020.

⁶ Ibid.

⁷ Ibid.

accounts for about half of global patent (46.4 percent), trademark (51.4 percent) and industrial design (54 percent) filing activity.⁸

The significance of IPR protection can be delineated in two aspects: (i) enhancement of further innovation in culture and technology; and (ii) economic development. First, protection of new creations encourages further innovation and creative endeavors to take place. This progress, or expansion of human capacity, can be achieved through the contributions made by previous and additional resources. In general, intellectual property has been conducive to the progress of societies throughout the history, marking the world's evolution.⁹ Second, promoting and protecting intellectual property right is expected to spur economic growth, not only by providing inventors or investors with the benefits attached upon their creative works, but also by fostering the development of new jobs and industries. Economic implications of intellectual property are further accentuated with reference to the 'creative economy.'¹⁰ It recognizes cultural goods, services and the entire domain of research and development (R&D) as the core of "a powerful new economy,"¹¹ embracing both the processes and manifestations or products of creativity. John A. Howkins, who introduced and popularized this concept, states that intellectual property serves as the currency for creative economy through demonstrating the ways people assert ownership and controlling the usage and price-setting mechanisms.¹²

⁸ World Intellectual Property Indicators (WIPI), 2019.

⁹ Idris, Kamil. 2003. *Intellectual Property: A Powerful Tool for Economic Growth*. Geneva: WIPO Publication No. 888, pp.10-11.

¹⁰ Howkins, John. 2002. *The Creative Economy: How People Make Money from Ideas*. London: Penguin Books.

¹¹ United Nations Development Programme (UNDP), and United Nations Educational, Scientific and Cultural Organization (UNESCO). *Creative Economy Report 2013*, p.19-20.

¹² Luo, Sarah (China IP). 2011. "Innovation Economy: Wealth Embedded in Ideas— An Interview with John Howkins, Father of Creative Industry." China Intellectual Property Magazine, April 14. <http://www.chinaipmagazine.com/en/journal-show.asp?id=674>.

In this regard, intellectual property issues address beyond private ownership, also involving wider implications for both domestic and international societies. It is to be noted, therefore, that IPR systems seek to maintain an efficient and equitable balance between the interests of creators and those of the public.¹³ In other words, the intellectual property system tends to encourage the flourishing of creative and innovative works, along with public benefits.

That IPRs entail economic, political and societal values or concerns suggests a high likelihood of IP-related disputes arising from international trade. Indeed, there has been a recent trend of disputes over IPR increasing around the world.¹⁴ Although major countries have joined or acceded to a number of conventions and treaties related to IP, dating from the late nineteenth century, intellectual property rights are mainly governed and protected through domestic IPR regimes of individual nation states. Specific registration procedures and requirements concerning each nation's IP systems may differ, in accordance with national priorities, socio-political needs and government policies. The ever-widening magnitude and importance of international trade among governmental institutions or private companies of different nations signify the growing needs to settle on international disputes pertinent to intellectual property and cooperate globally. International IP-related issues involve overseas IPR application and registration processes as well as litigations in which the plaintiff and defendant parties are of different nationals.

Considering the need to come up with legally qualified, advantageous and timely actions and responses in such environment, the significance of IPR competitiveness is widely recognized among states. The Republic of Korea (South Korea) has outlined the mission of establishing the Korean Intellectual Property

¹³ World Intellectual Property Organization (WIPO), *op.cit.*, p.3.

¹⁴ Cho, Kyeong-Ran. 2020. *The Road: Patent Court of Korea Annual Activity 2019*. Daejeon: Patent Court of Korea.

Office (KIPO) as “to strengthen national competitiveness. ... [by] leading the growth of corporations with Intellectual Property.”¹⁵ Likewise, protection and enforcement of intellectual property rights are considered key international trade issues for the United States, in terms of their contributions to innovative economy and competitive advantage, in multilateral trade policy arena as well as in regional and bilateral free trade agreements (FTAs).¹⁶ Thus, in order to enhance IPR competitiveness, a comparative analysis of IPR regimes of different countries are certainly necessary, especially when the countries are actively engaged in trade and exchanges.

1-2. Intellectual Property Rights for Industrial Design

Industrial design is one of the intellectual property categories designated by the TRIPS Agreement and WIPO. Design rights are of great complexity to examine or classify, owing to the fact that design is usually entitled to the protection of a number of IP domains. In specific, industrial design as intellectual property is considerably related to the domains of copyright, trademark and patent. In this respect, existing literature reflecting the comparison of design protection systems from different countries is relatively limited.

Intellectual property application filings for the industrial design sector began in 1883, a year when the Paris Convention¹⁷ was concluded. Trends in industrial design rights can be examined on a country-by-country basis in terms of the total number of applications application and registration design counts¹⁸. The WIPO

¹⁵ Korean Intellectual Property Office (KIPO).

¹⁶ Congressional Research Service (CRS) Report. *Intellectual Property Rights and International Trade*. May 12, 2020.

¹⁷ Paris Convention for the Protection of Industrial Property (1883).

¹⁸ Some IP offices allow applications to contain more than one design for the same product or within the same class. Thus, comparing the design counts systems of national or regional IP offices are useful in capturing the differences in filing numbers across offices.

identifies application design counts, the number of designs contained in applications, with filing activity for industrial designs.

In 2018, the application design counts amounted to about 1.31 million.¹⁹ While IP offices located in Asia accounted for about 70 percent of design filing activity worldwide (Figure 2), the applications received by Chinese IP office amounted to 54 percent of the global total (Figure 3).

Figure 2. Application Design Counts by Region (2018)²⁰

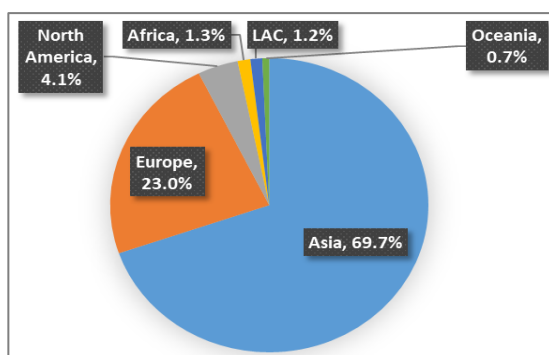
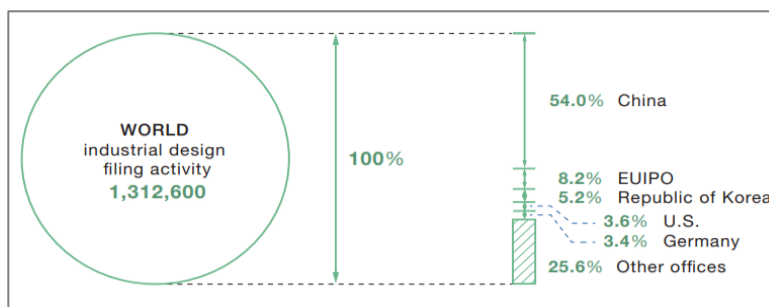


Figure 3. Percentage Shares of Application Design Counts (2018)²¹



¹⁹ WIPO Statistics Database, March 2020.

²⁰ Adapted from World Intellectual Property Indicators (WIPI), 2019.

²¹ WIPO Statistics Database, August 2019.

As for the registered design counts, the global counts exceeded 1 million for the first time in 2018.²² Based upon the WIPO Statistics Database (2019), approximately 4 million industrial design registrations were in force in 2018, with the number of registrations from China being the greatest, amounting to nearly 40.4 percent of the total industrial design registrations.²³

In addition, the historical trend for the number of industrial design applications can be reviewed as follows. Between 1883 and the early 1950s, Japan and the United States took lead of the filings for industrial design, showing similar numbers of applications submitted to the IP offices of both countries, rarely exceeding 10,000.²⁴ From the 1950s to the late 1990s, the office of Japan received the most filings, reaching about 50,000 applications at maximum.²⁵ From 2012, the U.S. moved ahead of Japan to receive the third-largest number of applications.²⁶ On the other hand, China and the Republic of Korea, both being the latecomers to the industrial design sector, have demonstrated rapid growth (Figure 4). Starting from 1985, the number of filings in China has increased at an unprecedented level: from 640 in 1985 to 660,000 in 2013.²⁷ The number of applications in South Korea surpassed that of Japan in 2004 and manifested steep growth, allowing for Korea to remain in the second-largest position since then.²⁸

²² World Intellectual Property Indicators (WIPI), 2019.

²³ WIPO Statistics Database, August 2019.

²⁴ World Intellectual Property Indicators (WIPI), 2019.

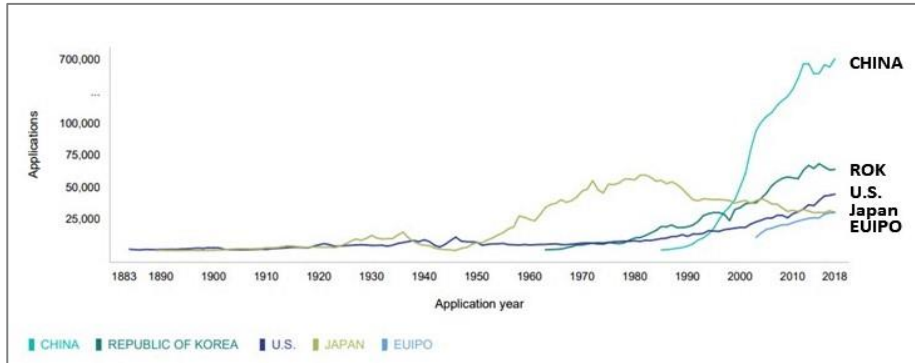
²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

Figure 4. Trend in Industrial Design Applications
for the Top Five Offices (1883-2018)²⁹



In quantitative terms, the percentage industrial design sector accounts for in total IP applications worldwide is not high. In 2018, an estimated 1.3 million numbers of industrial design applications were filed, which was fewer than the numbers of applications for patents (3.3 million), utility models (2.1 million) and trademarks (14.3 million),³⁰ as illustrated in Figure 1.

However, the significance of industrial design rights is not to be diminished. Design has become acknowledged as a crucial competitive tool as well as a factor that adds value to a product, contributing much to the success of the companies.³¹ In line with this is the fact that studying design involves the review of diverse fields, from art, consumer psychology, software engineering to service and technology innovation.³² In fact, the application and registration design counts as well as the

²⁹ Ibid.

³⁰ WIPO Statistics Database, March 2020.

³¹ Organisation for Economic Co-operation and Development (OECD). 2015. "Design and Design Frameworks: Investment in KBC and Economic Performance." In *Enquiries into Intellectual Property's Economic Impact*, pp.323-371. OECD.

³² Buchanan, R., and V. Margolin. 1995. *Discovering Design: Explorations in Design Studies*. Chicago: University of Chicago Press.

total industrial design applications and registrations worldwide demonstrate increasing trends.³³ Furthermore, the essence of intellectual property rights being attached to industrial design lies in the fact that a vast majority of industrial products and articles include ornamental or aesthetic aspects and that such values are crucial throughout the process of manufacture, commercialization and consumption in contemporary societies. Designs of industrial products (i.e., furnishing, packages and household goods) are one of the key factors in commercial value or marketability,³⁴ which would exert substantial influence on the exports and imports in international trade as well.

1-3. Intellectual Property and Design Litigations Concerning Korea

As a knowledge-based economy, Republic of Korea's economy is highly pertinent to intellectual property rights. The general structure of IP laws in South Korea shares similarities with IP regimes worldwide. The Korean Intellectual Property Office (KIPO) is among the IP5, the five largest IP offices of the world, along with the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Japan Patent Office (JPO) and China's National Intellectual Property Administration (CNIPA). The KIPO is mainly in charge of IP applications, examination and registration. It categorizes the intellectual property being examined into patents and utility models, industrial designs and trademarks.

³³ World Intellectual Property Indicators (WIPI), 2019.

³⁴ World Intellectual Property Organization (WIPO). 2004, *op.cit.*, pp.12-13.

Table 1. Applications and Registrations in KIPO by IPR Type (2018)³⁵

(unit: cases)

Category	Application	Registration
Patents	209,992	119,014
Utility Models	6,232	2,715
Designs	62,823 (65,434)	49,905
Trademarks	185,968 (232,109)	115,025
Total	465,015 (513,767)	286,659

Figures in parentheses include multiple applications.

The widely acknowledged notion that South Korea plays a major role in the patent sector is confirmed by the WIPO data,³⁶ as the fourth largest shares (6.3 percent) of patent applications worldwide were filed to the KIPO in 2018. In 2019, the total patent registrations through the KIPO surpassed 2 million.³⁷ The Patent Court of Korea, as an appellate-level court, exercises exclusive jurisdiction over particular matters prescribed by the Patent Act, the Utility Model Act, the Design Act, Trademark Act and other national laws. Appellate jurisdiction over civil actions on IP rights is exclusively given to this court as well.

On the other hand, South Korea holds a significant position with regard to the global filing activity of industrial design. Indeed, the IP office of Korea has ranked the third in the world for application design counts in 2018, next to China and the EUIPO (European Union Intellectual Property Office).³⁸ Notably, South Korea tops the industrial design counts ranking by origin, when adjusting for the gross domestic

³⁵ KIPO Annual Report, 2018.

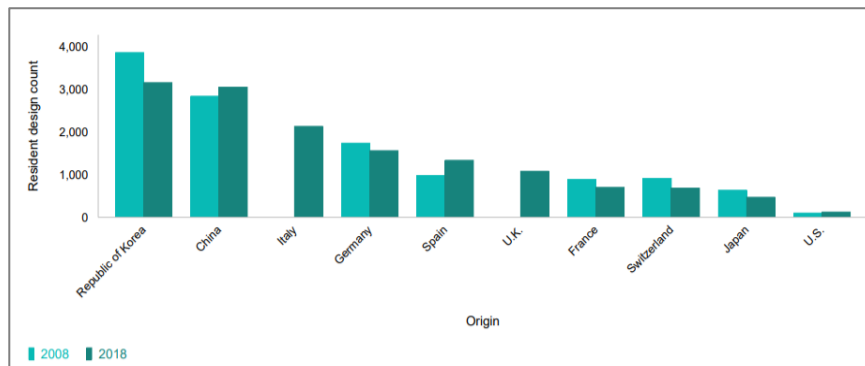
³⁶ WIPO Statistics Database, August 2019.

³⁷ Korean Intellectual Property Office (KIPO).

³⁸ WIPO Statistics Database, March 2020.

product (GDP) and residential population. It had the highest number of the resident application design count per 100 billion USD of GDP (Figure 5) as well as per million population in both 2008 and 2018.³⁹

Figure 5. Resident Application Design Count per USD 100 billion GDP by Origin (2008 and 2018)⁴⁰



That industrial design is one of the IP sectors South Korea can continue its development and advance becomes more manifest when considering at a corporate level. ‘Samsung Electronics Co., Ltd.’ (“Samsung Electronics”), a South Korean firm, was the top leading applicant of industrial designs under the Hague System⁴¹ for consecutive three years, from 2017 to 2019.⁴² Another Korean firm LG Electronics Inc. (LG Electronics) was the second in the rank in 2017 and 2018, taking the third place in 2019.⁴³ Hyundai Motor Company was also on the list of top Hague

³⁹ WIPO Statistics Database and World Bank, August 2019.

⁴⁰ Ibid.

⁴¹ The Hague System for the International Registration of Industrial Designs.

⁴² WIPO Statistics Database, March 2020.

⁴³ WIPO Statistics Database, March 2020.

applicants in 2018.⁴⁴ This is reasonably consistent with the fact that the top two industries for Hague design applications from Korea in 2019 were as follows: (i) Information and Communications technology (ICT) and audiovisual; and (ii) tools and machines, as in Table 2.⁴⁵

Table 2. Hague Top Three Industries for Design Applications from the Republic of Korea (2019)

Industry	Percentage Share (%) of Korea's 2019 Applications
<i>ICT and audiovisual</i>	62.9
<i>Tools and Machines</i>	10.1
<i>Construction</i>	4.6

Industrial design being a crucial domain for South Korea's intellectual property competitiveness, coping with international issues in design examinations and litigations has become ever more important for Korea. In consecutive five years (from 2014 to 2018), the ratio of foreign registrations to domestic ones in the KIPO continued to rise,⁴⁶ as in Table 3.

⁴⁴ WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*.

⁴⁵ WIPO Statistics Database, March 2020.

⁴⁶ KIPO Annual Report 2018, p.87.

Table 3. Comparison of Domestic and Foreign Design Registrations in KIPO (2014-2018)⁴⁷

Category			2014	2015	2016	2017	2018
Design	Domestic	Cases	49,856	49,933	50,242	44,052	44,150
		Ratio	92.3%	91.5%	90.4%	89.4%	88.5%
	Foreign	Cases	4,154	4,618	5,360	5,241	5,755
		Ratio	7.7%	8.5%	9.6%	10.6%	11.5%
	Total Cases		54,010	54,551	55,602	49,293	49,905

Above all, the most important country relevant to the Republic of Korea's industrial design right system is the United States on the following grounds. First, the statistical data presented by the KIPO (2018) suggest that total registrations of designs by U.S. residents were the highest compared to the design registrations by foreign residents to the office of Korea.⁴⁸ The foreign country that filed the most design applications to the KIPO was also the U.S.⁴⁹ Indeed, the U.S. filed the most foreign applications to South Korea in all IP categories – patent and utility models, designs and trademarks, followed by Japan and China.⁵⁰

Second, the U.S. is South Korea's one of the most influential trading partners. The likelihood of design litigations involving these two countries is definitely not negligible, since recent disputes or conflicts arising from international trade are often relevant to the IPRs. Companies in international business have been more and more concerned about the IP protection, and the two countries are highly cognizant of the

⁴⁷ Ibid.

⁴⁸ Ibid, pp.90-91.

⁴⁹ Ibid, pp.80-83.

⁵⁰ Ibid.

significance of resolving IP-related disputes.⁵¹ In fact, IP litigations requested by South Korean firms in the U.S. increased sharply between 2017 and 2018, from 21 to 104 cases.⁵² The U.S. is also at the top of the list for requesting many IP trials of foreign origin in South Korea. The Patent Court of Korea, in particular, presents evidence that among the cases in which at least one party was a foreigner, the total number of cases involving the U.S. entities was the largest in both 2018 and 2019.⁵³

Because the IP legal regime, and especially that relating to industrial design, of South Korea and the United States include discrepancies, certain difficulties are liable to occur in IP-related business and litigations between the two countries concerned. In particular, the problem could be more compounded for Korea's small and medium-sized enterprises, considering the relatively high cost of legal services in the U.S. Thus, it is rendered necessary to compare and analyze the differences and commonalities in the two countries' systems and principles on industrial design rights as IPR. However, given the complexities inherent in design rights, the scope of existing comparative studies on design protection systems of South Korea and the U.S. are rather limited.

⁵¹ Kim, Sung-Jin. 2015. "Effect of TRIPs Agreement and Measures to Improve Intellectual Property Rights in South Korea for Promotion of International Trade." *법학논총* 39(3):381-410.

⁵² 임소진. 2019. 『우리 기업의 해외 지재권 분쟁현황 및 시사점』. 서울: 한국지식재산연구원(KIIP).

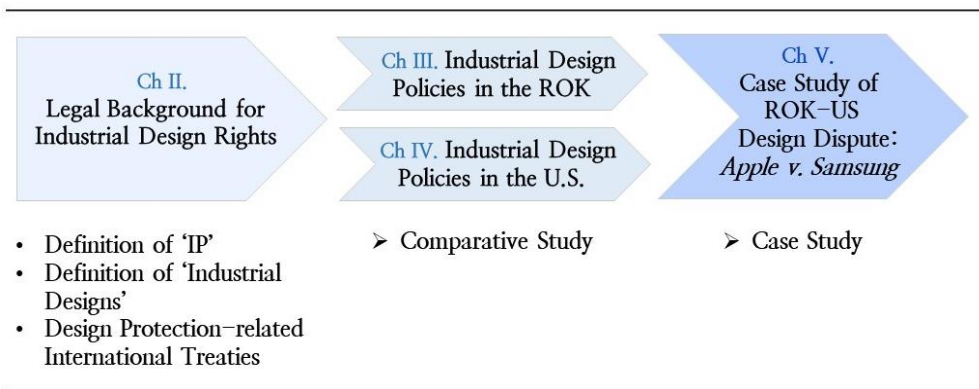
⁵³ Cho, Kyeong-Ran, *op.cit.*, p.24.

2. Research Question and Method of Study

This paper seeks to address the lacuna in the previous literature of the comparison of industrial design protection systems of different countries. Through the comparative analysis of design-related IPR legal frameworks of the Republic of Korea and the United States, this study aims to: (a) examine common and discrepant jurisprudential basis for determining the IP protection of industrial designs between the two countries; and (b) provide implications for the future IP issues and bilateral or multilateral agreements concerning the issue at hand.

In specific, the definition and scope of intellectual property and industrial designs will be clarified. The historical development of international treaties pertinent to design protection will be analyzed as well, centering around the WTO TRIPS Agreement. Based on the analysis of the treaties or conventions each country has been a Member to, an in-depth examination of the two countries' respective IP laws related to industrial design will be carried out. This study also observes the trans-national application or multi-national jurisdiction on design rights through the case study of *Apple Inc. v. Samsung Electronics Co., Ltd.* The study goes further to make attempt to suggest certain implications on IPR issues in future FTA or bilateral trade between South Korea and the U.S.

Figure 6. Analytical Framework



Chapter II. Legal Background for Industrial Design Rights

1. Definition of Intellectual Property (IP)

The World Intellectual Property Organization (WIPO) defines Intellectual Property (IP) in broad terms as “creations of the mind,” including “inventions, literary and artistic works, and symbols, names and images used in commerce.”⁵⁴ Intellectual Property Rights (IPRs) are legal rights given to a person’s IP, or intellectual creation, which is formally regarded worthy of receiving legal protection.⁵⁵ Though exclusive in principle, IPR given to a creator is not unconditionally absolute in reality. IPRs are subject to certain limitations and exceptions, depending on countries or jurisdictions, in order to counterbalance the legitimate interests of the right-holders and dissemination of IPs for the public use. The WIPO made a proclamation of the universal character and value of IPs since the concept and accumulation of intellectual properties have been existent and prevalent among peoples from all cultures and in all times.⁵⁶

The concept of IP can be understood in two categories: (i) industrial property; and (ii) copyright. The former includes patents, utility models, trademarks, industrial designs and geographical indications while the latter focuses on literary works, films, music, artistic works and architectural designs. Copyright-related rights include the rights endowed to producers of sound recordings in their recordings as well as the

⁵⁴ World Intellectual Property Organization (WIPO). 2004, *op.cit.*, p.2.

⁵⁵ Invest KOREA. 2017. “Intellectual Property Rights.” In *Doing Business in Korea*. Seoul: Korea Trade-Investment Promotion Agency (KOTRA), pp.164-173.

⁵⁶ Idris, Kamil, *op.cit.*, pp.9-10.

rights of broadcasters in radio and television programs.⁵⁷

At present times, the issues relating to New IPRs have gained much attention, partly as a result of cultural and technological advancements.⁵⁸ These newly-emerging IP rights are exemplified by trade secret, publicity right, genetic resource, geographical indication, traditional knowledge,⁵⁹ industrial copyright and information property right.

Table 4. Types of Intellectual Property Rights

		ENGLISH	KOREAN
INTELLECTUAL PROPERTY RIGHT (IPR) 지식·지적재산권	Industrial Property Right 산업재산권	Patent Right	특허권
		Utility model Right	실용신안권
		Design Right	디자인권
		Trademark Right	상표권
	Copyright 저작권	Copyright	저작권
		Neighboring Right	저작인접권
		Database	데이터베이스권
	New Intellectual Property Rights 신지식재산권	Trade Secret	영업비밀
		Publicity Right	퍼블리시티권
		Genetic Resource	유전자원
		Geographical Indication	지리적 표시
		Traditional Knowledge	전통지식

⁵⁷ Ibid.

⁵⁸ Invest KOREA, *op.cit.*, p.162.

⁵⁹ Korea Institute of Intellectual Property (KIIP). 2019. *Global IP Trend 2019*. Seoul: KIIP, p.171.

2. Definition of ‘Industrial Designs’

2-1. Designs

The term ‘design’ in itself designates a wide variety of activities and is broadly used in meanings which differ from context to context. Walsh (1996) exemplifies design through multifarious types of related activities such as fashion, interior, graphic, engineering and industrial design as well as architecture.⁶⁰ Other examples of designs include packaging of products, logos and ornamentation. In such aspect, industrial design is conceptualized as one of the specific category or representation of a broader concept of design as a whole. Besides the aesthetic aspects of the product, design is often understood in terms of a process and a philosophy. Though difficulty remains in forming a clear and universally-accepted definition of design, existing definitions of the term generally share commonalities.

Interpretations of design for legislative or regulatory purposes, on the other hand, can be presented in different facets. Certain international entities and governments⁶¹ have their own characterization of this concept, often in relation with design right or design protection. The European Union (EU) Council mainly regards design as appearance (i.e., lines, contours, colors, shape, texture, material and ornamentation) of a whole or part of a product.⁶² The Office for Harmonization in the Internal Market (OHIM) defines design in relation with human surroundings, as “surface of the man-made environment.”⁶³ To summarize, design can be assigned a number of meanings in which activities ranging from art to engineering are involved.

⁶⁰ Walsh, V. 1996. “Design, Innovation and the Boundaries of the Firm.” *Research Policy* 25(4):509-529.

⁶¹ The definitions of ‘(industrial) design’ in the national laws of the Republic of Korea and the United States will be analyzed in Chapters III and IV, respectively.

⁶² European Commission. 2002. *Council Regulation No.6/2002 of 12 December 2001 on Community Designs*. Official Journal of the European Communities.

⁶³ Organisation for Economic Co-operation and Development (OECD), *op.cit*, p.325.

2-2. Industrial Designs

The WIPO defines industrial design as the “ornamental or aesthetic aspects” of a useful article, which is applied to various “industrial products and handicrafts” ranging “from technical and medical instrument to watches, jewelry and other luxury items; from house wares and electrical appliances to vehicles and architectural structures; from textile designs to leisure goods.”⁶⁴ Industrial designs can also be relevant to logos, graphic symbols and graphical user interfaces (GUI).⁶⁵ Thus, the diversity and ubiquity of industrial designs are emphasized. Also, the ornamental or non-functional facet of an article is regarded as pivotal in determining the industrial design right. In this respect, industrial design differs from patent in principle, as the former protects the appearance or aesthetic features whereas the latter mainly protects technical functional properties of a product.⁶⁶ In general, industrial designs are concerned with creative activities that result in the appearance of a product.⁶⁷ Some of the common elements in defining industrial design can be summarized as: visibility, special/particular appearance, non-technical or aesthetic aspect, and embodiment in a utilitarian article.⁶⁸

Industrial designs are mostly protected under national laws and countries usually have a system of design registration under industrial design law.⁶⁹ Some

⁶⁴ World Intellectual Property Organization (WIPO). 2004, *op.cit.*, pp.12-14.

⁶⁵ World Intellectual Property Organization (WIPO).

⁶⁶ World Intellectual Property Organization (WIPO).

⁶⁷ Sharma, R., P. Jaiswal, and A. Adlakha. 2011. “Industrial Design and Its Importance in Success of a Product with Special Reference to Design Act, 2000.” *Pragyaan: Journal of Law* 1(1):17-22.

⁶⁸ WIPO. 2002. “Industrial Designs and their Relation with Works of Applied Art and Three-dimensional Marks.” Document prepared by the Secretariat for Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications – Ninth Session, Geneva, November 11-15.

⁶⁹ The Hague Agreement (1925) provides procedure of international design registration.

countries grant unregistered industrial designs with limited time and scope.⁷⁰ The registration process for a product oftentimes entails certain requirements, such as being new or original and non-functional. Since the aesthetic nature of a product is a determining factor in design registration, technical features are not usually protected under design right.⁷¹ Once a product passes the test and is registered, the term of protection is granted. The holder of a registered industrial design is endowed with exclusive rights “against unauthorized copying or imitation of the design by third parties” for a limited period,⁷² with the possibility of renewal in the future. And the term of protection is mostly 15 years, albeit differences in legislations of each jurisdiction.⁷³

The difficulty of categorizing the intellectual property as industrial design points to the fact that the medium or mechanism through which design is protected may differ, depending on particular national laws and IP protection regime as well as the kind of design. Specifically, industrial designs can also be protected under design law, unfair competition law, patent law as a design patent, or copyright law as a work of applied art, according to the legal regimes of countries in jurisdiction. Certain countries allow the protection of IP through multiple kinds of protection, including the industrial design protection, while the others deem industrial design and another IP realm as mutually exclusive.⁷⁴

⁷⁰ World Intellectual Property Organization (WIPO).

⁷¹ World Intellectual Property Organization (WIPO). 2004, *op.cit.*, pp.12-14.

⁷² WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*, p.67.

⁷³ Ibid.

⁷⁴ World Intellectual Property Organization (WIPO). 2004, *op.cit.*, pp.12-14.

3. International Treaties Relating to Design Protection

3-1. Pre-TRIPS Agreements and Conventions

3-1-1. Paris Convention (1883)

The Paris Convention for the Protection of Industrial Property (hereinafter, Paris Convention), signed on March 20, 1883, was the first major treaty ensuring the international IP protection. Administered by the WIPO, it remains as one of the most crucial international treaties on IP.⁷⁵ The Convention establishes general principles for a wide variety of IPRs, including the rights of patents, utility models, industrial designs, trademarks, service marks, trade names and geographical indications (“indications of source or appellations of origin”) as well as the repression of unfair competition, as stipulated in the Article 1(2) of the Paris Convention.⁷⁶ Both the Republic of Korea and the United States are in the Paris Union, the Contracting State parties to the Convention. South Korea joined the Stockholm Act (1967) of the Convention in 1980, whereas the U.S. first joined the Convention in 1887 and also later became a party to the Stockholm Act in 1970 and 1973.⁷⁷

The important principles of IP protection mentioned in the Convention are national treatment and right of priority. National treatment provisions mandate that contracting States grant the same protection to nationals of other contracting States as what is granted to its own nationals.⁷⁸ The right of priority, mainly provided in terms of patents, marks and industrial designs, enables an IP applicant to claim

⁷⁵ After it was concluded in 1883, several revisions took place: at Brussels in 1900, at Washington in 1911, at The Hague in 1925, at London in 1934, at Lisbon in 1958 and at Stockholm in 1967. And it was amended in 1979.

⁷⁶ World Intellectual Property Organization (WIPO). Official Translation of *Paris Convention for the Protection of Industrial Property (as amended on September 28, 1979)*.

⁷⁷ World Intellectual Property Organization (WIPO).

⁷⁸ Ibid.

priority of an earlier application within a certain grace period, when filing an application in Contracting States other than the original country of filing.⁷⁹

In specific to industrial designs, the Article 5^{quinquies} of the Convention provides that “industrial designs shall be protected in all the countries of the Union,”⁸⁰ leaving room for further specified rules of protection to individual Contracting State of the Paris Union. In Article 5B, forfeiture of industrial designs in protection is prohibited for countries under national laws “either by reason of failure to work or by reason of the importation of articles corresponding to those which are protected.”⁸¹

3-1-2. Berne Convention (1886)

The Berne Convention for the Protection of Literary and Artistic Works (hereinafter, Berne Convention), first adopted in 1886,⁸² governs the protection of works and the rights of authors.⁸³ Namely, the Convention deals with international legislation on copyright protection. It is stipulated in Article 2(1) of the Paris Act (1971) of the Berne Convention “literary and artistic works” shall include “every production in the literary, scientific and artistic domain,” regardless of the mode or form of the expression.⁸⁴ Works of drawing, painting, architecture, sculpture, engraving and lithography, photographic works, illustrations, maps, plans, sketches

⁷⁹ WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*, p.68.

⁸⁰ WIPO Lex Database. Official Translation of *Paris Convention for the Protection of Industrial Property* (as amended on September 28, 1979).

⁸¹ Ibid.

⁸² After the Berne Convention was concluded in 1886, it was completed at Paris (1896), revised at Berlin (1908), completed at Berne (1914), revised at Rome (1928), at Brussels (1948), at Stockholm (1967) and at Paris (1971). And it was amended in 1979.

⁸³ World Intellectual Property Organization (WIPO).

⁸⁴ WIPO Lex Database. The authentic text for *Berne Convention for the Protection of Literary and Artistic Works* (as amended on September 28, 1979).

and most notably, works of applied art are all covered by this Convention.⁸⁵

The Berne Convention endows each Contracting Party of the Berne Union with legislative autonomy in determining the specific extent of application of national laws to “works of applied art and industrial designs and models,” along with the conditions under which such works are protected as artistic works.⁸⁶ The term of protection in general would be the life of the author plus fifty years after death. But minimum term of protection for works of applied art and photographic works is set forth as twenty-five years from the creation of a work, based on Article 7(4).⁸⁷

Both the Republic of Korea and the United States are among the Berne Union. The former acceded to the Paris Act of the Convention in 1996, whereas the latter became party to the Convention in 1989. In addition, all World Trade Organization (WTO) Member States, including those who are not party to the Berne Convention, are obliged to comply with most of the substantive provisions of the Convention.

3-1-3. Hague Agreement (1925)

The Hague Agreement Concerning the International Deposit of Industrial Designs (hereinafter, Hague Agreement), first adopted in 1925,⁸⁸ governs the procedure for international registration of industrial designs.

As a WIPO-administered treaty, the Agreement establishes the Hague System for the International Registration of Industrial Designs (Hague System). The Hague

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ It was revised at London (1934) and at The Hague (1960) supplemented by the Additional Act of Monaco (1961), the Complementary Act of Stockholm (1967) and the Protocol of Geneva (1975). The Stockholm Act was amended in 1979, and the Geneva Act (1999) was further adopted.

System practically allows for the international protection of industrial design rights, with a minimum amount of formal procedures. That is, the System simplifies multinational registration by enabling a design applicant to file a single application with the International Bureau of WIPO, either directly or through the national or regional IP office of the Contracting Party to the Agreement.⁸⁹ An applicant can register up to a hundred industrial designs for international application in multiple jurisdictions. Then, the design would be protected in Member countries that the applicant has designated. The subsequent management procedures of the industrial design are also simplified.⁹⁰

The Hague Agreement comprises a number of treaties, and the most crucial international treaties in operation are the Hague Act of 1960 and the Geneva Act of 1999. Countries can become Hague Members through either one of these Acts or both. A State or Inter-Governmental Organization (IGO) which is a Party to either of or both of the Hague Act (1960) and Geneva Act (1999) is eligible to become a Member of the Hague System.⁹¹ In specific, the filing of an international application is entitled to the persons or legal entities with “a real and effective industrial or commercial establishment or a domicile ... in one of the Member countries” or a nationality of one of the Members.⁹² An application may also be filed based on habitual residence in the Member States, under the Geneva Act.⁹³

Both the Republic of Korea and the United States are Members of the Hague Union. Both countries became Party to the Geneva Act and not the Hague Act of the Agreement. While the U.S. joined the Geneva Act in 2015, South Korea joined the

⁸⁹ According to the WIPO, the vast majority of international applications are filed directly through the International Bureau of the WIPO in practice.

⁹⁰ WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*, p.67.

⁹¹ Ibid, p.66.

⁹² Ibid.

⁹³ Ibid.

Act in 2014. South Korea had the second-biggest number of users of the Hague System in 2019, next to Germany and followed by Switzerland.⁹⁴ South Korea's Hague applications filed in 2019 demonstrated a growth rate of 77.1 percent, compared to the previous year.⁹⁵

3-1-4. WIPO Convention (1967)

The Convention Establishing the World Intellectual Property Organization (hereinafter, WIPO Convention) is the treaty which established the World Intellectual Property Organization (WIPO) in 1967.⁹⁶ The WIPO serves as an essential intergovernmental organization on the IP protection regimes worldwide. It aims to promote innovation and creativity by means of an equitable and effective global IP system.⁹⁷

It became a specialized agency of the United Nations since 1974. The WIPO currently administers twenty-six international treaties, including the WIPO Convention. The crucial and fundamental IP-related treaties administered by the WIPO are Paris Convention (1883) and Berne Convention (1886).

Indeed, the development of the WIPO can be traced back to the unity of the International Bureaus established as a result of the Paris Convention and the Berne Convention. The two Conventions had been the major treaties for important branches of IP: industrial property, and works of authors and artists, respectively. The unification of the bureaus took place in 1893 and eventually, it was replaced by the WIPO.⁹⁸ Alongside the two Conventions, which are cornerstones of WIPO regimes,

⁹⁴ WIPO Statistics Database, March 2020.

⁹⁵ Ibid.

⁹⁶ The WIPO Convention entered into force in 1970 and was amended in 1979.

⁹⁷ WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*, p.68.

⁹⁸ World Intellectual Property Organization (WIPO).

further treaties have been administered to protect wider or deeper range of IPs and embrace recent issues and concerns such as technological changes.

The main objectives of the WIPO, inferred from the Article 3 of the WIPO Convention, are as follows: (i) promoting the global protection of IP through cooperation among States or other intergovernmental organizations; and (ii) ensuring administrative cooperation among the Members to the WIPO-administered treaties (“Unions”).⁹⁹

Article 2 of the Convention provides broad definition and scope for the intellectual property as to include rights arising from “intellectual activity in the industrial, scientific, literary or artistic fields.”¹⁰⁰ In specific, rights relating to “literary, artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial design; trademarks, service marks, and commercial names and designations” and “protection against unfair competition” are covered in the provision.¹⁰¹

Currently,¹⁰² 193 States are Members to the WIPO, including both the Republic of Korea and the United States. South Korea joined the WIPO in 1979 by acceding to the Convention, whereas the U.S. joined in 1970. Both countries are among the General Assembly, Conference, and the Coordination Committee, which are the three main organs of the WIPO.

3-1-5. Locarno Agreement (1968)

⁹⁹ WIPO Lex Database. The authentic text for *Locarno Agreement Establishing an International Classification for Industrial Designs* (as amended on September 28, 1979).

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² WIPO. Feb 11, 2020.

The Locarno Agreement Establishing an International Classification for Industrial Designs (hereinafter, Locarno Agreement), concluded in 1968 and amended in 1979, provides the international classification for industrial designs. The Locarno Classification used in registration of industrial designs does not have binding authority on the nature and scope of design protection, rather being “solely of an administrative character,” according to the Article 2(1) of the Locarno Agreement.¹⁰³ The Locarno Classification for Industrial Designs (hereinafter, Locarno Classification) mainly consists of: (i) the list of 32 classes and their respective subclasses, with explanatory notes; and (ii) the alphabetical list of goods which incorporate industrial designs, along with the indication of which classes and subclasses those goods are categorized into.¹⁰⁴ For instance, the Class 6 of Locarno Classification governs the Furnishing sector and the subclasses deal with more specific articles such as seats, beds and tapestries.¹⁰⁵ The IP offices of the Contracting States to the Agreement, therefore, are obliged to indicate the classes and subclasses of the Locarno Classification for the goods with industrial designs, in case of deposit or registration of designs.¹⁰⁶

The Locarno Agreement is open to the States which are party to the Paris Convention (1883). The Contracting States or Member States of the Locarno Union also becomes the Members of the Assembly, with each given the task to adopt the biennial program and budget for the Union.¹⁰⁷ The Union Members also has the task to periodically revise the Classification through a Committee of Experts.¹⁰⁸ The Republic of Korea became Party to the Locarno Agreement in 2011 and remains as

¹⁰³ WIPO Lex Database. The authentic text for *Locarno Agreement Establishing an International Classification for Industrial Designs* (as amended on September 28, 1979).

¹⁰⁴ WIPO. 2019. *Hague Yearly Review 2019 – International Registration of Industrial Designs*, p.67.

¹⁰⁵ WIPO IP Portal. 2020. *International Classification for Industrial Designs under the Locarno Agreement* (LOC 13th Edition).

¹⁰⁶ World Intellectual Property Organization (WIPO).

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

the Assembly of the Union. On the other hand, the United States is not Party to the Agreement.

3-2. TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights, 1995)

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (hereinafter, TRIPS Agreement) was an attempt to re-globalize the international IPR systems through the linkage of intellectual property protection and international trade. Moreover, it aimed to overcome the limitations or weaknesses underlying the Paris Convention (1883) and Berne Convention (1886).¹⁰⁹ For instance, these previous treaties on IPRs, mostly developed and revised in the nineteenth or twentieth centuries, could not reflect the recent changes including the intensified global connections, development of technologies and innovation (i.e., biomedicine, genetic resources, and internet). The previous IP-related treaties were regarded as not fully equipped to manage the growing needs for more systematic international IPR regimes.¹¹⁰ In addition, the application of national treatment principle and enforcement stipulated in the provisions of these Conventions is limited in terms of effectiveness; that is, national treatment principle cannot be of practical help to foreigners in countries that do not afford national IP protection.¹¹¹ The relative lack of international regulations and reliance on domestic laws of independent Member countries are also visible in provisions on the details of protection, seizure (enforcement), special agreements and the provisions.¹¹²

¹⁰⁹ Kim, Sung-Jin, *op.cit.*, p.386.

¹¹⁰ Ibid, p.385.

¹¹¹ Ibid.

¹¹² WIPO. Articles 9, 10, 19 of the *Paris Convention* (as amended in 1979), and Articles 5(2), 5(3), 6^{bis} (3), 10^{bis} (1), 13(3) and 16 of the *Berne Convention* (as amended in 1979).

Consequently, the countries began to discuss the strengthening of global IP regimes and international protection of IPRs within the scope of international trade, especially through the means of GATT¹¹³/WTO negotiations, instead of the WIPO. This was primarily based on the fact that the GATT/WTO system had more prompt and compulsory dispute settlement body (DSB), resolution and enforcement procedures for its Member nations.

3-2-1. Process of Negotiation

The TRIPS Agreement was negotiated during the Uruguay Round of the GATT between 1986 to 1994. The GATT system is a precursor to the World Trade Organization (WTO), the legal and institutional foundation governing trade relations between nations. The ‘trade rounds’ under the auspice of the GATT were aimed at furthering trade liberalization, involving tariff cuts and reinforced trade rules.¹¹⁴ The most comprehensive trade negotiation was the Uruguay Round, the eighth trade round.¹¹⁵ One of the prominent results of the Uruguay Round was extending the scope of international trade system as to include new areas, such as IP and trade in services. It also served as a momentum to create the WTO, a new administrative organization for international trade.¹¹⁶

Previously in the Tokyo Round (1973 to 1979) preceding the Uruguay Round, agenda on trade rules in counterfeit goods was proposed. This led to a draft Agreement on Measures to Discourage the Importation of Counterfeit Goods, where it failed to reach agreement. However, a revised version of the draft agreement and

¹¹³ General Agreement on Tariff and Trade (GATT), 1947.

¹¹⁴ Watal, J., H. Wager, and A. Taubman. 2012. *A Handbook on the WTO TRIPS Agreement*. Cambridge: Cambridge University Press, p.4.

¹¹⁵ Ibid.

¹¹⁶ *The Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement)* entered into force on January 1st, 1995.

the export report on Trade in Counterfeit Goods were submitted in the early 1980s.¹¹⁷ In 1986, the trade ministers adopted a decision on further negotiations including the mandate titled ‘Trade-related aspects of intellectual property rights, including trade in counterfeit goods.’ A negotiating group on this mandate, or TRIPS, was formed and discussed the scope of IPRs.

The United States played a major role in development and negotiation of the TRIPS Agreement. The trade deficits of the 1970s and the 1980s made the U.S. to be aware of the need to intensify IPR protection in order to revive its national competitiveness.¹¹⁸ Thus, the U.S. not only started strengthening its domestic laws on IPRs, but also established the Trade Negotiation Committee (TNC) to enhance the comprehensiveness of the IPR protection regime.¹¹⁹ In 1987, the U.S. suggested attainable objectives during the TRIPS negotiation and also submitted detailed proposals afterwards, along with the European Community (EC), Switzerland, Japan and a number of developing countries. Albeit the commonly-agreed parts at large, differences in terms of several issues and dispute settlement remained. In particular, a conflictual frame between the developed and developing countries was visible.¹²⁰

Despite the heated debates mainly surrounding the respective interests of the developed and developing countries, the negotiation results were summed up, as the Uruguay Round Agreement was adopted in the form of Single Undertaking. A draft of the Final Act, known as the Dunkel Text, was released in 1991; and only few changes were made to the 1993 Final Act of the TRIPS Agreement.¹²¹ The TRIPS Agreement is included in the WTO Agreement (1994) Annex 1C, which entered into force in 1995. In 2001, the Doha Declaration on the TRIPS Agreement and Public

¹¹⁷ Watal, J., H. Wager, and A. Taubman, *op.cit.*, p.6.

¹¹⁸ 정재환·이봉수. 2013. 「TRIPS 협정의 성립과정과 진전에 관한 연구」. 『무역학회지』 38(1):47-68, p.52.

¹¹⁹ Ibid, p.53.

¹²⁰ Ibid, p.54.

¹²¹ Watal, J., H. Wager, and A. Taubman, *op.cit.*, p.8.

Health (Doha Declaration) was additionally adopted. Essential to the WTO Agreement, the TRIPS Agreement has served as the most comprehensive multilateral treaty on IPRs up to date. Both the Republic of Korea and the United States are Member States of the WTO, and thus of the TRIPS Agreement.

3-2-2. Common-ground Rules

The TRIPS Agreement provides with the minimum standards of IP protection that each Member country should offer. These obligatory standards are mostly on the ground of major IP-related treaties of the WIPO, by incorporating the substantive provisions of the Paris and Berne Convention on its base.¹²² In specific, the TRIPS Agreement stipulates that Members shall comply with “Articles 1 through 12, and Article 19, of the Paris Convention” in Parts II, III and IV of the Agreement, and “Articles 1 through 21 of the Berne Convention and [its] Appendix” in terms of copyright.¹²³ Moreover, inadequate obligations posed in previous treaties are complemented or newly introduced in the TRIPS Agreement; therefore, the Agreement is referred to have adopted a “Berne and Paris-plus” approach.¹²⁴

The TRIPS Agreement also prescribes the definitions of IPs throughout the Sections 1 to 7 in Part II. The stipulated intellectual properties are mainly “trade-related” and the Agreement categorizes IPs into seven types: copyright and related rights, trademarks, geographical indications, industrial designs, patents, layout-designs (topographies of integrated circuits), and undisclosed information (trade secrets). With regard to dispute settlement, the Agreement prescribes Member States to abide by the TRIPS obligations and the WTO’s dispute settlement system.

¹²² Here, the most recent versions of the two Conventions are referenced: the *Paris Convention* (1967) and the *Berne Convention* (1971).

¹²³ WTO. Articles 2.1 and 9.1 of the *TRIPS Agreement*.

¹²⁴ World Trade Organization (WTO).

3-2-3. Basic Principles

Major principles provided by the TRIPS Agreement are National Treatment and Most-Favoured-Nation (MFN) Treatment. The national treatment principle, which had already been included in the Paris and Berne Conventions, obliges Members to offer “treatment no less favourable” to other Member countries than what is granted to its own nationals, with regard to IP protection.¹²⁵ The MFN treatment, on the other hand, prescribes the “immediate and unconditional” level of “advantage, favour, privilege or immunity granted by a Member” to nationals of other Members.¹²⁶ In other words, the TRIPS Agreement, in general, forbids discriminatory measures between a Member country’s own nationals and those of the other Members, as well as discrimination among the nationals of other Members.

The goals and objectives of the TRIPS Agreement are observed in the Preamble and Article 7 of the Agreement. As stated in the Uruguay Round declaration, the TRIPS Agreement aimed to “reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade.”¹²⁷ Likewise, the Article 7 states that objectives for the TRIPS Agreement lie in the protection and enforcement of IPRs, which should “contribute to the (a) promotion of technological innovation and transfer; (b) dissemination of technology, to the mutual advantage of producers and users of technological knowledge; and (c) in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”¹²⁸ Therefore, the TRIPS Agreement attempts to maintain the equitable

¹²⁵ WTO. Article 3.1 of the *TRIPS Agreement*.

¹²⁶ WTO. Article 4 of the *TRIPS Agreement*.

¹²⁷ WTO. Preamble of the *TRIPS Agreement*.

¹²⁸ WTO. Article 7 of the *TRIPS Agreement*.

protection of IPRs by seeking the three-way balance between invention/creativity and socio-technological benefits, between IPR protection and encouragement of inventors, and between private rights and social benefits.¹²⁹ Considerations for the social or public good is also delineated in the Article 8, entitled “Principles”; the Members are recommended to adopt measures that “promote the public interest in sectors of vital importance to their socio-economic and technological development” and “prevent the abuse of intellectual property rights by right holders.”¹³⁰

3-2-4. Industrial Designs in the Agreement

The Section 4 (Article 25 to 26) in Part II of the TRIPS Agreement is devoted to industrial designs. The concept of industrial design is understood in a manner congruent to provisions of previous treaties, as the ornamental or aesthetic feature of an article which differs from functional or technical aspects.¹³¹ The Agreement sets forth rules on details of industrial design protection, including requirements, scope, effect and duration of protection. First, Members are obliged to protect “independently created industrial designs that are new or original”; in contrast, protection may not be guaranteed to designs that “do not significantly differ from known designs or combinations of known design features,” and designs “dictated essentially by technical or functional considerations.”¹³²

Second, the owners of protected industrial designs are endowed with the rights to prevent third parties without consent from “making, selling or importing articles bearing or embodying a design which is a copy, or substantially a copy, of the

¹²⁹ WTO. *TRIPS and Pharmaceutical Patents*. WTO Fact Sheet September 2006.

¹³⁰ WTO. Article 8 of the *TRIPS Agreement*.

¹³¹ WTO.

¹³² WTO. Article 25.1 of the *TRIPS Agreement*.

protected design ... [in case of] commercial purposes.”¹³³ The duration for this protection would “amount to at least 10 years,” and dividing the term is also allowed (i.e., dividing ten years into two periods of five years).¹³⁴

Third, limited exceptions to the protection is also allowed to Members unless the exception unreasonably “conflict with the normal exploitation of protected industrial designs” and “prejudice the legitimate interests of the owner of the protected design.”¹³⁵ Members are supposed to consider the “legitimate interests of third parties” as well.¹³⁶

Additionally, the Agreement also has a special provision for textile (clothing) designs, considering the short life cycle and the substantial volume of new designs in this sector.¹³⁷ Member countries are to implement either industrial design law or copyright law which ensures that requirements for protection of textile designs do not “unreasonably impair” the possibility for seeking protection.¹³⁸

Compared to the relevant provision from the previous Paris Convention, in which the protection of industrial designs is mentioned in a simple manner, the TRIPS Agreement incorporates more detailed and substantive rules regarding industrial design protection, seeking to cover different approaches (i.e., patent and copyright approach) used in jurisdictions.¹³⁹

¹³³ WTO. Article 26.1 of the *TRIPS Agreement*.

¹³⁴ WTO. Article 26.3 of the *TRIPS Agreement*.

¹³⁵ WTO. Article 26.2 of the *TRIPS Agreement*.

¹³⁶ *Ibid.*

¹³⁷ WTO.

¹³⁸ WTO. Article 25.2 of the *TRIPS Agreement*.

¹³⁹ Japan Patent Office. 2008. *Introduction to TRIPs Agreement*. Asia-Pacific Industrial Property Center, Japan Institute of Invention and Innovation (JIPI).

4. Design Approaches in Major Countries

Though industrial design protection systems in different jurisdictions are not perfectly categorized into one approach, legislative and historical studies of design rights point to the fact that general directions of design policies often involve certain approaches – patent and copyright, in broad terms. In reality, national design policies would be located across a spectrum in which patent and copyright approaches are at opposite ends.¹⁴⁰

4-1. Patent Approach

Countries adopting patent approach for industrial design protection have registration systems for design similar to those for patent. As in patent registration, a design would be subject to registration application; and examination is performed, based on whether the design satisfies statutory requirements provided by the laws. If the requirements are met, industrial design right is granted to the applicant through registration. In this way, design is protected as an exclusive right, therefore potentially precluding the third parties from design infringement. Under patent approach, registration often mandates designs to have met the requirement of ‘novelty,’ signifying that a design should be considered new, compared with prior designs.¹⁴¹

In summary, patent approach for design protection can be characterized in the strictest sense as follows: (i) design rights require standard substantial examinations and are obtained through registrations; (ii) clear novelty is required, with no grace period; and (iii) rights are exclusively held.¹⁴² The advantage of this approach,

¹⁴⁰ 최영욱. 2006. 「디자인 보호방법과 법규 – 캐릭터를 중심으로」. 『한국디자인포럼』 제14호. pp.427-439.

¹⁴¹ Ushiki, Riichi. 2001. “Legal Protection of Industrial Designs.” USHIKI International Patent Office, Japan Patent Office.

¹⁴² Kur, Annette. 1993. “The Green Paper’s ‘Design Approach’ – What’s Wrong With It?”

therefore, lies in the exclusivity and staunch claim of rights, as well as the possibility of public (official) notice on rights by means of registration. On the other hand, it would be inefficient for designs with short life cycle which require timely and prompt protection, due to time and cost needed for application and registration processes.¹⁴³

The design legislations in the Republic of Korea, United States, United Kingdom and Japan are considered to have patent approach in general.

4-2. Copyright Approach

Under copyright approach, derived from “*unité de l’art*” of the French Law,¹⁴⁴ the nature of design right is viewed similarly to that of copyright – protection of artistic work by a creator. The rights would take effect either automatically with the creation of an article or after the application and registration or deposit. The design rights are determined by the courts through registration without examination on requirement; and the determination of validity for granting rights is based on the “originality” of design, meaning that a design should be one’s physical and mental creation without imitation of prior works by others.¹⁴⁵ The copyright approach for industrial design does not endow the owner with the right to block infringement by others; design rights only have legitimate authority to prevent commercial use of a copied work or imitations in bad faith.¹⁴⁶

As one of the focal points of copyright protection is for the relationship between a creator and his or her work, copyright approach for design protection underscores the connection between design works and the public.¹⁴⁷ That is, this approach aims

10 European Intellectual Property Review (EIPR).

¹⁴³ 최영옥, *op.cit.*, p.430.

¹⁴⁴ Ushiki, Riichi, *op.cit.*, p.24.

¹⁴⁵ Ibid, p.19.

¹⁴⁶ 최영옥, *op.cit.*

¹⁴⁷ Ushiki, Riichi, *op.cit.*, p.29.

to apprise the public of the fact that industrial designs are also the products of creative activities.

The design legislations in the France, Germany and Spain are considered to have adopted copyright approach in general.

4-3. Design Approach

With the growing need to protect industrial designs in both technical and textile or fashion-related products, an alternative design approach has been an attempt to reflect different life cycles and market volatility of articles into design protection systems. There are two aspects of protection: unregistered and registered. The unregistered protection is provided for products with comparatively short life cycles, such as fashion-related articles, against unfair competition.¹⁴⁸ Though the protection may begin promptly, the scope of protection is limited and relative, as design rights can only prevent identical or nearly-identical imitation. On the other hand, registered protection allows for exclusive design rights to products with relatively longer life cycles; this process would entail application, registration and publication of industrial design.

Design approach is incorporated in the Copyright, Designs and Patent Act (CDPA, 1988) of the United Kingdom and the Regulation on the Community Design (2002) of the European Union.¹⁴⁹

¹⁴⁸ Ushiki, Riichi, *op.cit.*, p. 30.

¹⁴⁹ The EU's Community Design covers Unregistered Community Design (UCD) and Registered Community Design (RCD).

Chapter III. Analysis of Industrial Design Policies in the Republic of Korea

1. Scope of Industrial Designs

South Korea's Design Protection Act¹⁵⁰ and Industrial Design Promotion Act¹⁵¹ have stipulation on definitions of 'design' and 'industrial design,' respectively.

First, the term 'design' used in the Design Protection Act is meant to refer to "a shape, pattern, color [or combinations of these elements] of an article (including parts of an article¹⁵² and fonts), which invokes a sense of beauty through visual perception."¹⁵³

The KIPO also recognizes the broad dimension of design as a concept, by incorporating: (i) visual communication designs on products, advertisements and graphics; (ii) multimedia designs; as well as (iii) environmental designs, related to living space and environment.¹⁵⁴ While a design is defined mainly with regard to the appearance of goods in various formats, the Article 2 of the Design Protection Act is understood to have specified certain requirements for a design to fulfill its definition. The requirements are summarized as: visibility, merchantability, configuration and aesthetics. The 'visibility' requirement points to the fact that a

¹⁵⁰ Design Protection Act (디자인보호법). [The Most Recent Enforcement Date: 9 July, 2019]

¹⁵¹ Industrial Design Promotion Act (산업디자인진흥법). [The Most Recent Enforcement Date: 1 April, 2019]

¹⁵² Those defined under Article 42 of the Act are excluded from "parts of an article"; Article 42 (Design for a Set of Articles) (1) Where at least two articles are used together as a set of articles, a design for the set of products may be registered as one design, if the design for the set of articles is unitary.

¹⁵³ Article 2 (1) of the *Design Protection Act*, Republic of Korea.

¹⁵⁴ Korean Intellectual Property Office (KIPO).

design must be identifiable by the human eye, whereas ‘merchantability’ means a design should maintain an “indivisible relationship” with an article.¹⁵⁵ In other words, what is mainly protected under the Act is an article to which a design is applied, rather than a created work of designs per se. Being the most essential establishing requisite for designs under the Act, the merchantability requirement signifies that an abstract motif and a design included in an article without definite, concrete and specific application may not be considered a design.¹⁵⁶ The ‘configuration’ refers to the form – shape, pattern, color or combinations of these elements – in articles.¹⁵⁷ Lastly, the ‘aesthetics’ requirement indicates that a qualified design should invoke a certain level of aesthetic impression; however, since examination on aesthetic sense of an article may be contingent on subjective and inconsistent judgments, the KIPO acknowledges that the existence of “perceptible formative beauty” is sufficient enough, in reality, to satisfy the aesthetics requirement for designs in articles.

Furthermore, the Industrial Design Promotion Act defines industrial design as “any act of creation and improvement (including any act of technical development for creation and improvement) to satisfy physical and psychological needs of producers and consumers by optimizing the aesthetic, functional, and economic values of products, services, etc. and the output thereof.”¹⁵⁸ The Act also specifies product design, packaging design, environmental design, visual design and service design as illustrative cases of industrial designs.¹⁵⁹

¹⁵⁵ Ibid.

¹⁵⁶ 노태정·김병진. 2009. 『디자인보호법』. 서울: 세창출판사, p.217.

¹⁵⁷ Korean Intellectual Property Office (KIPO).

¹⁵⁸ Article 2 of the *Industrial Design Promotion Act*, Republic of Korea.

¹⁵⁹ Ibid.

2. General Approach

The Republic of Korea has participated in the international regime of design protection, mainly by joining the Geneva Act (1999) of the Hague Agreement in March, 2014. Therefore, a Korean entity, either individual or business, is eligible to file international design applications under the Hague System in either way: through the KIPO or directly with the WIPO.¹⁶⁰

Domestically, South Korea has independent legislation linked to design rights: Design Protection Act, Industrial Design Promotion Act and Public Design Promotion Act. Among these statutes, the first two Acts are more relevant to industrial design protection; and the Design Protection Act serves as the special legislation dedicated to official protection of design rights, providing the most specific guidelines, procedures and requirements for design application and registration. Designs can be also protected as registered trademarks (design as three-dimensional mark), under the Trademark Act. As for the protection of unregistered industrial designs, Copyright Act and Unfair Competition Prevention and Trade Secret Protection Act are considered as pertinent laws.¹⁶¹

The rules relating to industrial design rights arising from formal registration, governed mainly under the Design Protection Act, can be discussed in detail. A design right, given to an applicant upon the registration of a design after examination,¹⁶² continues to be in effect for twenty years from the filing date of the relevant design application.¹⁶³ The design right commences as an examiner

¹⁶⁰ Korean Intellectual Property Office (KIPO).

¹⁶¹ This general approach for South Korea's industrial design protection is similar to that of Japan.

¹⁶² Article 90 (1) of the *Design Protection Act*, Republic of Korea.

¹⁶³ Article 91 (1) of the *Design Protection Act*, Republic of Korea.

determines to accept application and grant registration of a design,¹⁶⁴ along with the applicant's payment of registration fees. The effect of a design right is the "exclusive right [upon the owner of a design] to work the registered design or any similar design commercially."¹⁶⁵ Here, the term "commercially," or 'industrially as business,' indicates designs repeatedly utilized for either profit or non-profit; thus, individual, temporary and one-time use of a design would not be considered.¹⁶⁶ The "working" of a design refers to all relevant actions, including production, use, assignment, lease, importation and exportation of articles; and the monopolistic right granted to an owner of design right precludes the registered design and its similar designs to be worked by others.¹⁶⁷ In addition, the scope of design right extends to "similar designs" of a registered design, so that the original objective of protecting designs rights by law is achieved through prevention of highly limited or narrow effects of the rights. The similarity is determined as "common homogeneity in its formative essence" to a registered design in an article, also with relation to seemingly comparable aesthetic elements evoked by designs.¹⁶⁸ On the other hand, the effects of design rights are restricted or limited in the following instances: (i) working of a design registered for research or experiment or any similar design; (ii) a ship, aircraft or vehicle merely passing through South Korea, or machines, instruments, equipment and other accessories used therein; (iii) identical products that have already existed in South Korea at the time application for design registration is filed; (iv) restriction on the extent of exclusive design rights by license¹⁶⁹; and (v) restriction by conflicting prior rights (i.e., rights upon another person's similar designs, patented invention, utility

¹⁶⁴ Article 65 of the *Design Protection Act*, Republic of Korea.

¹⁶⁵ Article 92 of the *Design Protection Act*, Republic of Korea.

¹⁶⁶ Korean Intellectual Property Office (KIPO).

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

model, or trademark) registered beforehand.¹⁷⁰ In the last instance, an owner of a design right's commercial or industrial use of the registered design may require for the consent of owners of prior rights in existence.¹⁷¹

Concerning the specific design system of South Korea, application procedures are divided into two categories: Substantive Examination System (SES) and the Partial-Substantive Examination System (PSES). The latter is applied to designs contained in articles with relatively short lifecycles and high sensitivity to fashion or trends. On the basis of the Locarno Classification, articles relating to clothing and haberdashery (Class 2), textile piecegoods, artificial and natural sheet material (Class 5), and stationery and office equipment, artists' and teaching materials (Class 19) would be examined under the PSES.¹⁷²

Furthermore, a number of characteristic systems aimed for design-specific IP protection exist in South Korea. First, the 'related design' system seeks to protect an owner's design similar to his or her previously registered designs or design being claimed in application pending for registration ("principal design").¹⁷³ In other words, the Design Protection Act recognizes the possibility of a principle design being continuously transformed and re-created into variations; a design transformed from the principle design of an applicant can be registered as a related design, if filed within one year from the filing date of the application for principle design.¹⁷⁴ Here, formal registration of a related design within the scope of similarity is needed for protection from infringement and imitation, since the concept of similarity in itself is abstract and indefinite.¹⁷⁵ A related design right expires at the end of the duration

¹⁷⁰ Articles 94 (1) and 95 of the *Design Protection Act*, Republic of Korea.

¹⁷¹ Korean Intellectual Property Office (KIPO).

¹⁷² Ibid.







¹⁷³ Article 35 (1) of the *Design Protection Act*, Republic of Korea.

¹⁷⁴ Ibid.

¹⁷⁵ Korean Intellectual Property Office (KIPO).

for a right granted to its basic or principle design.¹⁷⁶ It can be inferred that related design rights are usually established and extinguished in an “indivisible combination” with the principle design right, though there is a possibility of creating a similar design right by means of a trial (i.e., invalidation trial).¹⁷⁷

Figure 7. Examples of Related Designs Registered in South Korea¹⁷⁸

Principal Design	Related Design
 KR 30-0790744	 KR 30-0791111
 KR 30-0813851	 KR 30-0820198
 KR 30-0829317	 KR 30-0829319

Second, the ‘set item design’ system, which deviates from the doctrine of ‘one-design for one-registration application,’¹⁷⁹ enables a design used in a set of articles to be registered as one single design, in case where two or more articles are exceptionally used and coordinated together as the set of articles and the design used is unitary.¹⁸⁰

¹⁷⁶ Article 91 (2) of the *Design Protection Act*, Republic of Korea.




¹⁷⁷ Korean Intellectual Property Office (KIPO).

¹⁷⁸ Ibid.

¹⁷⁹ Article 40 of the *Design Protection Act*, Republic of Korea.

¹⁸⁰ Article 42 (1) of the *Design Protection Act*, Republic of Korea.

Figure 8. Examples of Registered Designs for a Set of Articles in South Korea¹⁸¹

		
KR 30-0778405	KR 30-0508336	KR 30-0704733
A Set of Spoon, Fork and Knife	A Set of Cup and Saucer	A Set of Jewelry

Third, the ‘secret design’ system also considers the characteristics of a design as IP: a design is easily copiable and sensitive to trends. An applicant may request that the design be kept in secrecy and confidentiality up to three years from the date of registration or commencement of a design right.¹⁸² The request is to be made between the filing date of application and the payment date of initial design registration fee.¹⁸³ This system can be of help to the owners of design rights whose preparation for business needs longer period of time or whose business/industry is highly susceptible to imitation by others.¹⁸⁴ In fact, a number of Korean IT and technology corporations have utilized the secret design registration system in order to secure the protection of their innovative product designs from the third parties. For instance, LG Electronics, Inc. have recently reinforced confidentiality measures for designs by filing all of its design applications, amounting to 500 cases, under the secret system in 2016.¹⁸⁵ Moreover, Samsung Display Co, Ltd., an affiliate of Samsung Electronics

¹⁸¹ Adapted from DESIGNMAP. 2016. “[디자인 보호 가이드북] 여러 디자인을 한번에 출원하는 방법.” Accessed September 24, 2020.

<https://www.designmap.or.kr:10443/ipf/IpDtFrD3.jsp?p=46&x=1.html>.

¹⁸² Article 43 (1) of the *Design Protection Act*, Republic of Korea.

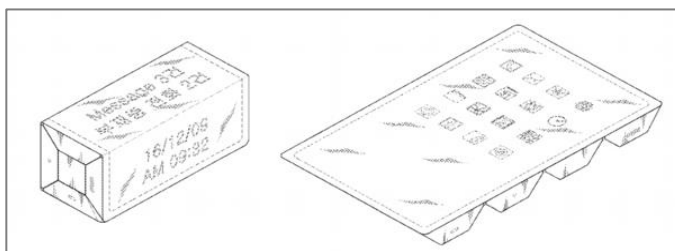
¹⁸³ Article 43 (2) of the *Design Protection Act*, Republic of Korea.

¹⁸⁴ Korean Intellectual Property Office (KIPO).

¹⁸⁵ 권동준. 2017. “디자인 비밀주의 LG전자... ‘기술보호’ vs ‘양날의 칼.’” iPnomics,

Co., Ltd., used the secret design system to register its display device foldable in a brick form in 2017, a year before it was openly registered as a design patent under the United States Patent and Trademark Office (USPTO).¹⁸⁶

Figure 9. Samsung Display Device Design
Registered under Secret Design System of South Korea¹⁸⁷



In terms penalties for design right infringement, both civil and criminal remedies are allowed under the Design Protection Act and Civil Act¹⁸⁸. According to Article 114 of the former law, acts such as “producing, transferring, leasing, exporting and importing any product used only for producing a product” relevant to a registered or similar design, as well as “offering the sale or rental of such product” are considered as infringement of a design right or exclusive license.¹⁸⁹ Moreover, the infringer of a design right of a third person is presumed to have been negligent in not committing infringement.¹⁹⁰

The civil remedy measures are: (i) injunction against an infringement; (ii) a

April 18. Accessed September 24, 2020. <http://www.ipnomics.co.kr/?p=61792.html>.

¹⁸⁶ 김준배. 2019. “삼성의 3번 접는 벽돌 모양 디스플레이, 지난해 비밀리에 국내 특허 등록.” IT Chosun, May 23. Accessed September 24, 2020.

http://it.chosun.com/site/data/html_dir/2019/05/23/2019052301233.html.

¹⁸⁷ United States Design Patent (Patent No.: US D847,814 S). May 7, 2019. USPTO.

¹⁸⁸ Civil Act (민법). [The Most Recent Enforcement Date: 20 December, 2016]

¹⁸⁹ Article 114 of the *Design Protection Act*, Republic of Korea.

¹⁹⁰ Article 116 (1) of the *Design Protection Act*, Republic of Korea.

claim of compensation for damages; (iii) a claim for recovery of reputation; and (iv) compensation for unfair profits gained by the infringer. On the other hand, criminal penalties may be claimed only when a criminal complaint is filed.¹⁹¹ A person who has infringed upon a design right or an exclusive license shall be liable to imprisonment with labor with maximum seven years, or by a fine not exceeding KRW 100 million.¹⁹²

Table 5. Design Right Infringement Remedies in South Korea¹⁹³

Remedy/Penalty		Relevant Provisions	
Civil	Injunction against Infringement (권리침해에 대한 금지청구권)	Design Protection Act, Art. 113 (1)	The owner of design rights or an exclusive licensee may request a person who is infringing or is likely to infringe the right to discontinue or refrain from such infringement.
	Claim of Compensation for Damages (손해액의 추정)	Design Protection Act, Art. 115 (1)	<p>The owner of design rights or an exclusive licensee may claim compensation for civil damages by a person who has intentionally or negligently infringed upon the rights.</p> <p>Here, the amount of damages may be calculated as follows: (the quantity of products transferred) × (profit per unit of the products that the right-holder or licensee could have sold, if not for the infringement)</p>

¹⁹¹ Article 220 (2) of the *Design Protection Act*, Republic of Korea.

¹⁹² Article 220 (1) of the *Design Protection Act*, Republic of Korea.

¹⁹³ Compiled by Author using information from the KIPO and provisions of the *Design Protection Act* and *Civil Act* of Republic of Korea.

		Civil Act, Art. 750 [Torts] (불법행위)	Any person who causes losses to or inflicts injuries on another person by an unlawful act, intentionally or negligently, shall be bound to make compensation for damages arising therefrom.
	Claim for Restoration of Reputation (디자인권자 등의 신용회복)	Design Protection Act, Art. 117	At the request of a design right-holder or an exclusive licensee, the court may order a person who degrades the business reputation of the right-holder or licensee by infringing the design right by intention or negligence, to take necessary measures to restore the business reputation in lieu of or in addition to damages.
	Compensation for Unfair Profits by Infringer	Civil Act, Art. 741 [Unjust Enrichment] (부당이득)	A person who without any legal ground derives a benefit from the property or services of another and thereby causes loss to the latter shall be bound to return such benefit.
Criminal	Penalty on Infringement (침해죄)	Design Protection Act, Art. 220 (1)	Any person who infringes a design right or an exclusive license shall be punished by imprisonment with labor for not more than seven years or by a fine not exceeding 100 million won.

3. Design Registration Requirements

In order to register a design and grant a design right, substantial registration requirements must be met, provided that the design in application has satisfied the prerequisites for establishing the definition of a design. The registration requirements for acquiring design rights include: (a) industrial usability; (b) novelty; and (c) creativity (difficulty in creation).

A design filed under the Partial-Substantive Examination System (PSES), on the other hand, is not examined based on these requirements; instead, formality check may be carried out, regarding formal requirements, industrial applicability and other unregistrable grounds for design registration.¹⁹⁴ With reference to the 2007 revision on the Design Protection Act, registration for a design easily created by widely-known domestic designs is to be rejected so as to guarantee the safe assignment of design rights through the PSES.¹⁹⁵

Even when the requirements are met, the following designs are ineligible for registration: (i) design identical to or similar to the national or military flag/emblem and decorations of South Korea or foreign countries, medal of public institutions, or wording/mark of international organizations; (ii) design which contravenes general morality, good customs of ordinary people and disturbs public order; (iii) design liable to cause confusion over articles of other person's business; and (iv) design with a shape merely essential for a function of the article.¹⁹⁶

3-1. Industrial Applicability

3-1-1. Concept

The Article 33 (1) of the Design Protection Act stipulates that a design eligible for registration is to be “usable for an industrial purpose.”¹⁹⁷ The ‘industrial applicability (or usability)’ requirement suggests that an article containing a design submitted for registration be reproducible in large quantities by industrial production methods.¹⁹⁸ These methods would include both mechanical and manual production

¹⁹⁴ Korean Intellectual Property Office (KIPO).

¹⁹⁵ Ibid.

¹⁹⁶ Article 34 of the *Design Protection Act*, Republic of Korea.

¹⁹⁷ Article 33 (1) of the *Design Protection Act*, Republic of Korea.

¹⁹⁸ Korean Intellectual Property Office (KIPO).

procedures; through either method of industrial production, an article with the design in application should be subject to mass reproduction intended from the beginning.¹⁹⁹ In determining whether the mass production of goods containing the same design is viable, the articles need not be completely identical in physical terms; rather, the extent of similarity required would measure up to the seemingly identical appearance of goods based on the reasonable interpretation of a person with ordinary skill in the art pertinent to the design at issue.²⁰⁰

Works of pure art as well as articles for which designs are used, and therefore without possibility of industrial production in quantity, are unlikely to fulfill the industrial usability requisite. In specific, designs usually considered as industrially inapplicable include: (i) pure artworks (i.e., painting/drawing and installation art); (ii) works mainly composed of natural objects and thus cannot be produced in quantities (i.e., flower arrangement and ornamental rocks); and (iii) service designs created during the course of commercialization of goods.²⁰¹

3-1-2. Case

The Patent Court of Korea ruled that a registered design of a sauna (“Han-jeung-mak”) was to be invalidated, as the sauna was considered to lack industrial applicability.²⁰² On the basis of material composition, structure, shape and patterns of a sauna, the Court concluded that the sauna would fall under the category of immovables, as opposed to corporeal movables which can be manufactured in the same design and transported via industrial production methods. Thus, the sauna was not considered as an “article” stipulated in the Design Protection Act as a definition

¹⁹⁹ Ibid.

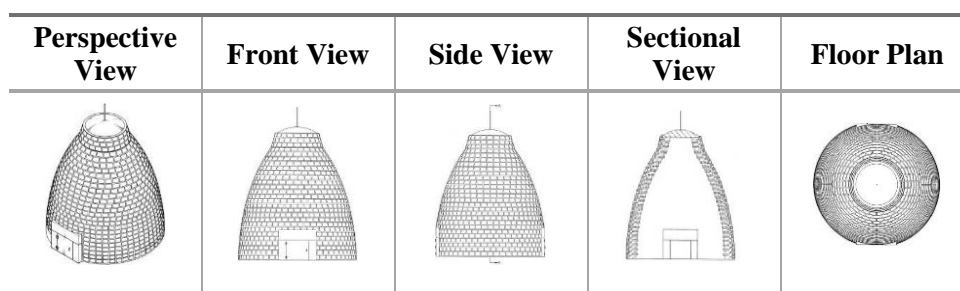
²⁰⁰ KIPO. 2020. 『디자인 심사기준』, p.87.

²⁰¹ Ibid.

²⁰² Patent Court of Korea, Decision of 4 October 2007, 2007Heo5260.

of a design. Accordingly, the Court denied industrial applicability of the sauna, ordering invalidation of the registered design right of the sauna.²⁰³

Figure 10. Drawing for the Registered Design of Sauna (“Han-jeung-mak”)²⁰⁴



3-2. Novelty

3-2-1. Concept

The ‘novelty’ requirement signifies that a design shall not be widely publicized, exposed or worked in either Korea or foreign countries, before application for registration. In addition, the design should neither be described in printed publications and catalogues nor be made available for public use via telecommunications.²⁰⁵ Since the identification of a submitted design with previously publicized or specified designs is detrimental to the satisfaction of the novelty requirement, judgment on the similarities between two designs often arises as the major issue. In fact, Article 33 (1) of the Design Protection Act also stipulates that design registration is ineligible for a design similar, if not identical, to the previously publicized designs.²⁰⁶

²⁰³ This judgment by Patent Court reversed the prior decision (2006Dang69) by IPTAB.

²⁰⁴ Design Registration Number: 233630 (Registered Date: 8 December 1998; *invalidated*.)

²⁰⁵ Article 33 (1) 1 and 2 of the *Design Protection Act*, Republic of Korea.

²⁰⁶ Article 33 (1) 3 of the *Design Protection Act*, Republic of Korea.

In weighing the similarities of designs, the shape, pattern, color, or the combinations of these elements of an article are considered in comparison; if a design is identical or similar to an existing design, the former is regarded as to lack novelty.²⁰⁷ In terms of criteria for determining similarity, the ‘principle of observation in entirety’ is to be noted. That is, determination of similarity of designs should be based on the observation of the overall appearance, not the comparison among individual and separate elements composing the design. The measurement of similarity aims to see if the designs exhibit different aesthetic senses in the perspective of an observer, provided that the overall appearances of designs are considered in comparison. The decisions made by Supreme Court of South Korea support this claim, as similarity in dominating characteristics of two designs led to the judgment that the two designs were similar, despite partial differences.²⁰⁸ Even in case where a challenged design includes a part which is publicly known, the judgment would be based on the aesthetic sense presented by the design observed in its entirety.²⁰⁹ Along with the principle of observation in entirety, the court also focuses on the complementary function of observation on major parts of a design, when determining the similarity of designs. The major parts, the parts of designs most likely to draw attention from an observer, are considered as a focal point in assessing whether the designs evoke different aesthetic senses to general consumers.²¹⁰

Furthermore, a design which is merely fundamental or functional form of an

²⁰⁷ In case where a design as well as an article materializing the design are identical or similar to the previously registered design and the article materializing that design, the infringing article may fall under the scope of protection for the registered design.

²⁰⁸ Supreme Court of Korea, Decision of 27 May 2010, 2010Hu722.

²⁰⁹ Supreme Court of Korea, Decision of 27 July 2006, 2005Hu2915.

²¹⁰ Jeong, Yun Hyung. 2019. “Design Litigation Practice.” Presented at the WIPO-KIPO-JRTI Continuing Education Course on Intellectual Property Dispute Settlement, Goyang-si, Republic of Korea, April 11-19.

article is unlikely to be registrable. Here, a fundamental form refers to a structure that enables an article to be identified and named as to having such a form, whereas a functional form refers to a structure that produces the technological effect in achieving the purpose and function of an article.²¹¹ It is stipulated in Article 34 of the Design Protection Act that “a design made only in a shape essential for a function of the relevant article” is ineligible for registration.²¹² It signifies that a form inevitably and characteristically constituted to secure the function of an article would be insufficient by itself to qualify for design registration. A functional form may serve as the dominant feature of a design of an article if it appeals to the aesthetic sense of purchasers; in order to do so, the functional form must attract the attention of an observer or best represent the characteristics of the shape of a design-applied article.²¹³ Additionally, in determining similarity between designs, a fundamental or functional form of an article may not be an important factor if such a form is regarded as essential or conventionally established to the article by general consumers.²¹⁴

There is an exception to the loss of novelty; if a design owner with the entitled right for registration files an application within twelve months from the period when a design was publicly known, worked or published, that design shall not be considered to lack novelty, unless the design application or registration was published under a treaty or an Act.²¹⁵

3-2-2. Case

The significance of the overall aesthetic values of articles when judging the similarities of designs is well established in a number of cases. In a trial to confirm

²¹¹ Ibid.

²¹² Article 34.4 of the *Design Protection Act*, Republic of Korea.

²¹³ Patent Court of Korea, Decision of 10 September 2015, 2015Heo3801.

²¹⁴ Supreme Court of Korea, Decision of 14 October 2005, 2003Hu1666.

²¹⁵ Article 36 (1) of the *Design Protection Act*, Republic of Korea.

scope of rights regarding the bunny-shaped hairband of the two companies – ‘Cool Enough Studio’ and ‘Dr. Jart+’ – the Intellectual Property Trial and Appeal Board (hereinafter, the IPTAB) based its decision mainly on the principle of observation in entirety.²¹⁶ The case first emerged in 2015 as Hur, an art director at Cool Enough Studio, claimed that the design of her company’s signature hairband had been copied and distributed by Dr. Jart+ as a gift to consumers who had purchased the company’s skin products at a domestic franchise drugstore ‘Olive Young.’ The hairband, which had been one of the most best-selling products of the petitioner, was primarily intended to be of use when cleansing the face; with rubber band in the middle and wires at each end, the hairband can take the form of bunny ears if the both sides of pointy ends are twisted together.²¹⁷ This characteristic of the hairband had been regarded as of essential aesthetic value to the product and the petitioner’s hairband was officially registered for a design right in July, 2015.²¹⁸ The infringing hairband of the defendant, Dr. Jart+ (manufactured by L Pos), with a color of light yellow, was also registered as a design in December, 2015.²¹⁹ The judgment on commonalities between the designs of the two hairbands was the main issue in confirmation trial for the scope of a design right. Here, similarities and differences on appearances of the hairbands were assessed. The IPTAB reaffirmed the principle of observation in entirety and determined the similarities on the basis of overall and holistic observation of the appearances of products, rather than a separate comparison of each design component. Even a difference in the shape of the hairbands (i.e., the petitioner’s design with a straight linear form, and the defendant’s

²¹⁶ Intellectual Property Trial and Appeal Board of Korea (IPTAB, 특허심판원), Decision of 25 March, 2016, 2015Dang5588.

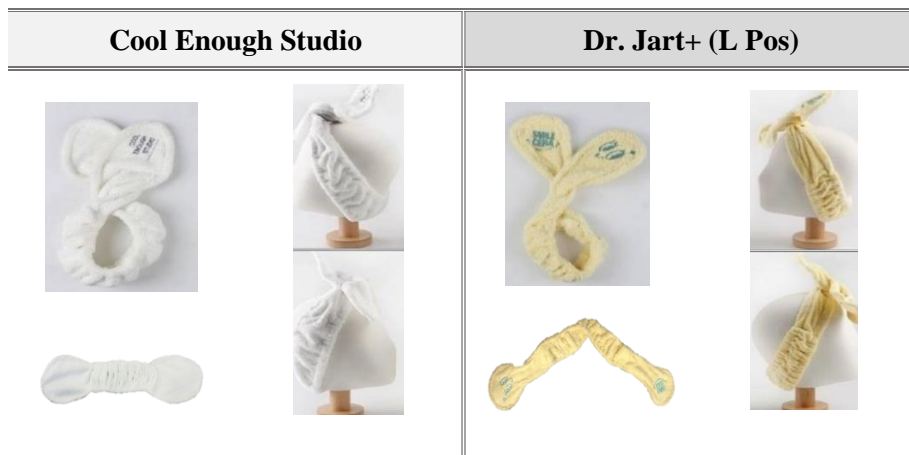
²¹⁷ Bae, Ji-sook. 2015. “Bunny-shaped Hairband Triggers Legal Dispute Over Design Right.” The Korean Herald, November 5. Accessed September 29, 2020. <http://www.koreaherald.com/view.php?ud=20151105001057.html>.

²¹⁸ Design Registration Number: 807273 (Registered Date: 17 July 2015).

²¹⁹ Design Registration Number: 830252 (Registered Date: 10 December 2015).

with a half-turned form of “V”) was regarded as an insignificant factor to the overall aesthetic sense; this difference was rather an inevitable or necessary modification in the shape owing to a property of a hairband’s wire and such difference was commonly expectable for general consumers or designers.²²⁰ In addition, a partial difference in the form of ends of the hairbands was deemed as a merely commercial/functional modification.²²¹ The IPTAB also considered the aesthetic sense of a design-containing article evoked both in usage and in purchase.²²² Consequently, since the designs of the two hairbands were concluded to share similar aesthetic values, the IPTAB declared invalidation of a design right for the defendant’s hairband.

Figure 11. The Hairband Designs in Dispute (IPTAB, 2015Dang5588)²²³



Furthermore, novelty was a major issue in the trials on design right infringement and invalidation for the registered designs of ‘Viagra’ pills from

²²⁰ 특허청 상표디자인심사국 (KIPO). 2019. 『산업별 디자인분쟁 사례집 100선』, p.27.





²²¹ Ibid.

²²² Ibid.

²²³ Cool Enough Studio and Dr. Jart+.

pharmaceutical companies of the U.S. and South Korea. The Viagra, a drug mainly used for cardiovascular disease or erectile dysfunction and widely known as the “blue diamond,” was developed by the U.S. pharmaceutical giant ‘Pfizer Inc.’ (‘Pfizer’) and released in the Korean market in 1998. A design of the pill was registered to the KIPO in 1998 and Pfizer further extended the IPR into trademark rights in Korea by registering the blue color and diamond-like shape of the pill as color mark and three-dimensional trademark, respectively, in 2003. After the relevant IPRs – patent rights – on Pfizer’s Viagra were all exhausted in Korea, a number of Korean pharmaceutical companies began to release the generic versions of Viagra, one of which was the generic ‘Palpal’ from the ‘Hanmi Pharmaceutical.’

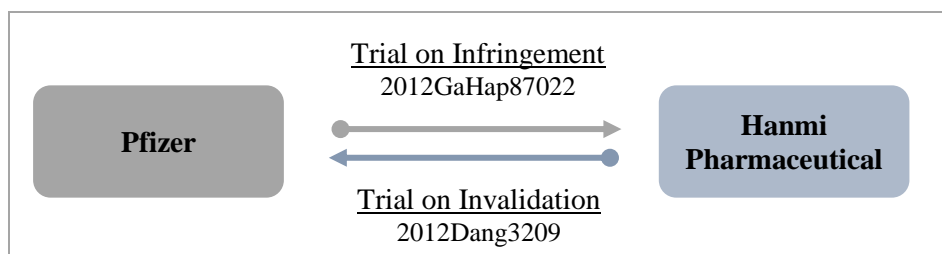
Figure 12. Designs of Viagra and Palpal Pills²²⁴

Pfizer, <i>Viagra</i>		Hanmi Pharmaceutical, <i>Palpal</i>
		
Design Right		
Trademark Right (Color/Three-dimensional)		

As the generic Palpal began to take the lead of domestic market share, Pfizer Pharmaceutical Korea filed a suit against Hanmi Pharmaceutical for design right and trademark right infringement as well as for an act of unfair competition in 2012. As opposed to this, Hanmi Pharmaceutical also requested invalidation trial for Viagra’s design right granted to Pfizer.

224 Adapted from 특허청 상표디자인심사국 (KIPO). 2019. 『산업별 디자인분쟁 사례집 100선』, p.325.

Figure 13. Litigations Relevant to Viagra’s Design Rights
between Pfizer and Hanmi Pharmaceutical²²⁵



In the design right infringement trial, the Seoul Central District Court compared the registered design of the Viagra pill with three existing tablet designs submitted by Hanmi Pharmaceutical.²²⁶ The Court judged that the Pfizer’s design for Viagra pills lacks novelty because it evokes similar aesthetic sense with the existing designs; thus, Pfizer’s design right was invalidated and the issue of design infringement by Hanmi Pharmaceutical not addressed further.

In the trial on invalidation of Pfizer’s design rights, the IPTAB regarded the existing tablet design published in the ‘Tableting Specification Manual (TSM) Fourth Edition’ – Exhibit D submitted by the petitioner – as consequential to the invalidation of the design right.²²⁷ The Pfizer’s registered design and the existing design of Exhibit D had commonalities in overall shape and the color was considered to have no influence on designs since the drawings for both designs were colored in a single color of grey; moreover, the Exhibit D was publicly known before the registration date of the Pfizer’s Viagra design.²²⁸ In such sense, Pfizer’s design was determined to lack novelty and was to be invalidated. Consequently, both the Seoul

²²⁵ Compiled by Author.

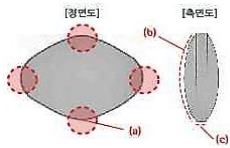
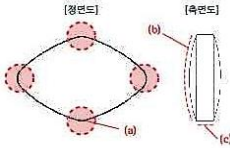
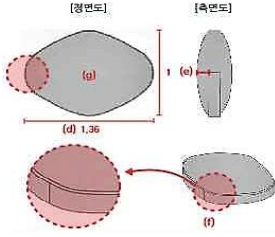
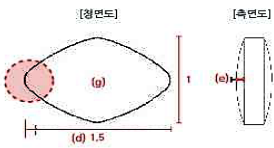
²²⁶ Seoul Central District Court of Korea, Decision of 29 March 2013, 2012GaHap87022.

²²⁷ IPTAB, Decision of 29 March 2013, 2012Dang3209.

²²⁸ 특허청 상표디자인심사국 (KIPO). 2019. 『산업별 디자인분쟁 사례집 100선』, p.328.

Central District Court and the IPTAB concluded on March 29th, 2013 that Pfizer did not have a design right on the pill with a blue color and diamond-like shape.

Table 6. Comparison of Drawings for Pfizer's Viagra and Exhibit D Submitted by Hanmi Pharmaceutical²²⁹

	Pfizer's Registered Viagra Design	Exhibit D
Similarities		
	<p>(a) Overall: diamond shape with round edges</p> <p>(b) Side: curved protrusion in top/bottom parts</p> <p>(c) Side: a width in the sides of top/bottom parts</p>	
Differences		
	<p>(d) Proportion of width/length: low</p> <p>(e) Degree of protrusion: high</p> <p>(f) Border: two lines</p> <p>(g) Color: grey</p>	<p>(d) Proportion of width/length: high</p> <p>(e) Degree of protrusion: low</p> <p>(f) Border: unidentifiable</p> <p>(g) Color: colorless</p>

3-3. Difficulty in Creation (Not-easy-to-create)

3-3-1. Concept

The requirement of 'difficulty in creation,' or creativity, implies that it is unregistrable for a design which could have been easily created by a person with

²²⁹ Ibid, pp.327-328.

ordinary skill in the art to which the design pertains, by applying: (i) a design publicly known, worked, printed or made available for public use in either Korea or a foreign country, or a combination of such designs; or (ii) a shape, pattern, or color, or a combination thereof, widely known in either domestically or internationally.²³⁰ Therefore, a design with a minimum level of creativity which almost imitated or appropriated the shape, pattern and color of a publicly known or widely known design is considered as easily creatable.

In terms of designs regarded as easily creatable by a publicly known design, a partial modification from a publicly recognized design cannot guarantee eligibility for registration. That is, when a modified part of a design is merely a commercial or functional change, or modified with a common creative method easily adoptable by an ordinary designer, the design shall not be registered.²³¹ Despite commercial and functional modifications in part, additional aesthetic value may not be acknowledged. Moreover, determining whether a design is easily created depends not on the existence of modifications, but on the uniqueness of the creative techniques or expressions used therein.

Some relevant types of recreated designs by a publicly known design are: conversion design, composite design, arrangement design, and design created by increasing the component units.²³² First, conversion design, which refers to the replacing a part of components of a design with other designs, is considered to lack creativity, and thus being ineligible for registration. Second, composite design refers to a combination of multiple designs; if a design is merely an addition of publicized designs with a technique easily adoptable for an ordinary designer, it is ineligible for registration. Third, a design that is merely an arrangement of components of a publicly known design modified with a technique easily adoptable for an ordinary

²³⁰ Article 33 (2) of the *Design Protection Act*, Republic of Korea.

²³¹ Jeong, Yun Hyung, *op.cit.*

²³² KIPO. 2020. 『디자인 심사기준』, pp.121-129.

designer is also ineligible for registration. Fourth, a design created merely by modifying the proportion of components or changing the quantity of components units of publicly known designs is ineligible for registration as well.

In case of an easily created design by widely known forms, a copying or appropriation of such existing designs is considered as an imitation. When there is a slight modification applicable by a person of ordinary skill in the art, the design may be regarded as easily created.

3-3-2. Case






There was a trial on invalidation filed to the IPTAB on the design right of ‘crystal water bottle’ of ‘Komax Industrial Co., Ltd.’ (“Komax”).²³³ The Komax, a Korean kitchenware brand that first introduced airtight food containers with four-sided locking lids, released and continued selling the crystal water bottle after the design of which had been registered under the KIPO.²³⁴ A few months later, the petitioner – ‘Lock&Lock Co., Ltd.’ (“LocknLock”) – also released water bottles with similar designs in Korea and requested design right invalidation trial for the product of Komax. The petitioner mainly claimed that a registered design for the Komax water bottle was easily creatable by a person with ordinary skill in the art to such design and submitted lists of similar designs publicly known before application, thus alleging that the product of Komax did not fulfill the novelty and creativity requirement stipulated in the Design Protection Act. On the contrary, Komax – the respondent – claimed that general characteristics of their design were creative and dissimilar to the evidence submitted by the LocknLock, as the bottle had a distinctive body form of a streamlined pentagonal pillar and screw-like top part for the cap. However, the IPTAB determined that the water bottle design of the Komax could be

²³³ IPTAB, Decision of 4 February 2013, 2012Dang2748.

²³⁴ Design Registration Number: 492306 (Registered Date: 21 May 2008; *Extinguished*.)

easily created by combining the design components from the publicly known designs, thus invalidating the registered design of the respondent.²³⁵




Figure 14. Water Bottle Designs in Dispute (IPTAB, 2012Dang2748)²³⁶

Design Registrar		Photos/Drawings of Water Bottle Designs	
Komax			
LocknLock²³⁷			
Publicly Known Designs Submitted by LocknLock	#1	Water bottle design published in a Korean Blog “생활의 지혜(꿀과, 식료품)” on February 3, 2005	
	#6	Designs of drinking glasses, carafes and pots registered to the EUIPO in 2007 (653829-0011)	

²³⁵ Komax sought revocation action of administrative decision to the Patent Court (2013HeoDang1689); but it was dismissed. On the other hand, Komax also claimed for damages to Seoul Central District Court (2012GaHap529007) under the Unfair Competition Prevention and Trade Secret Protection Act.

²³⁶ Adapted from 특허청 상표디자인심사국 (KIPO). 2019. 『산업별 디자인분쟁 사례집 100선』, pp.110-112.

²³⁷ 정상문. 2016. “[비즈칼럼] 정상문교수의 산업디자인을 말한다.” 시사주간 (SISA weekly), December 8. Accessed September 30, 2020. <http://www.sisaweekly.com/news/articleView.html?idxno=12820>.

	#7	Water container design registered to the KIPO in 2005 (389123)	
	#8	Water bottle design registered to the KIPO in 2007 (440798)	
	#9	Water bottle design registered to the KIPO in 2003 (320762)	

4. Alternative Design Protection Policies

4-1. Trademark Act

Various designs of articles are recently recognized and protected as registered marks in South Korea.²³⁸ A ‘trademark’ is defined in the Article 2 (1) of the Trademark Act²³⁹ as “a mark used to distinguish goods ... of one business from those of others.”²⁴⁰ Here, the term “mark” implies “all indications used to identify the source of goods, irrespective of the composition or methods of the expression thereof, which include any sign, letter, figure, sound, smell, three-dimensional shape, hologram, movement, color, etc.”²⁴¹ The additional amendments to the Trademark Act were enforced on March 15, 2012, following the ROK-US FTA, extending the scope of eligible trademarks as to include non-visual marks such as sounds and smells. The crucial element required in trademark registration is distinctiveness of

²³⁸ Jeong, Yun Hyung, *op. cit.*, p.148.

²³⁹ Trademark Act (상표법). [The Most Recent Enforcement Date: 24 October, 2019]

²⁴⁰ Article 2 (1) 1 of the *Trademark Act*, Republic of Korea.

²⁴¹ Article 2 (1) 2 of the *Trademark Act*, Republic of Korea.

an article. Common slogans, catchwords, expressions used in greetings,²⁴² and a trademark consisting solely of a mark indicating, in a common manner, the common name of the goods cannot be registered.²⁴³ In other words, a trademark of an article should be recognizable for consumers to identify and distinguish whose business the article is related to.

The purpose of a trademark system, as indicated in the Act, is for the “industrial development” and protection of “the interests of consumers,” mainly by protecting the “maintenance of the business reputation of persons using trademarks.”²⁴⁴ Though the term of a trademark right lasts for ten years from the time of registration, it can be extended for every ten years by filing an application for the renewal of the duration.²⁴⁵ This signifies that a trademark right in use can be protected in semi-permanent terms through consecutive renewals. The concept and purpose of trademark rights differ from those of other industrial property rights. As one of the industrial property rights aimed for industrial development, trademark rights tend to be protected under the patent approach; that is, exclusive rights are given by means of registration, which is different from the protection provided by the Unfair Competition Prevention and Trade Secret Protection Act.²⁴⁶

The typical design-related trademarks are color marks and three-dimensional marks. The three-dimensional trademark system, introduced in 1998, acknowledges a design of a product (e.g., clothes, furniture, product, packages, and dolls) as a trademark in itself. The distinctiveness element is also important for three-dimensional trademark rights.²⁴⁷

²⁴² Korean Intellectual Property Office (KIPO).

²⁴³ Article 33 (1) 1 of the *Trademark Act*, Republic of Korea.

²⁴⁴ Article 1 of the *Trademark Act*, Republic of Korea.

²⁴⁵ Article 83 of the *Trademark Act*, Republic of Korea.

²⁴⁶ 최영옥, *op. cit.*, pp.431-432.

²⁴⁷ The Trademark Act provides both personal and substantive (positive and passive)

With respect to the distinctiveness in three-dimensional marks, distinctive shape and contour of a company's packaging bottle for the beverage may serve as trademarks. In 2005, the 'Binggrae Co., Ltd.' ("Binggrae") requested petition for preliminary injunction against trademark infringement by 'Haitai Dairy Co., Ltd.' ("Haitai Dairy") regarding the characteristic pot-shaped bottle design for banana flavored milk beverage. Binggrae's banana flavored milk product, first released in the Korean market in 1974, continued taking the lead in the Korean domestic dairy product market for thirty years. Having finished registering the pot-shaped bottle of the beverage as a three-dimensional mark in 2003, Binggrae accused the Haitai Dairy of trademark infringement, based on the similar design – hexagonal pot-shaped bottle and transparent packaging through which the color of banana flavored milk is visible – of the latter's product. The Seoul Central District Court of Korea ruled in favor of Binggrae, the petitioner, and ordered the prohibition of sale of the Haitai Dairy's banana flavored milk in a bottle whose design is similar to the former's. The Court emphasized the fact that Binggrae had exclusively used the concerned beverage container design for thirty years for its banana flavored milk product and that this product had occupied large portion of the domestic dairy product market; thus, a general Korean consumer would naturally associate the pot-shaped milk bottle with the Binggrae products. Here, the bottle design for Binggrae's banana flavored milk was regarded to have distinctiveness, since the design had already been well-known²⁴⁸ and famous²⁴⁹ among the general public as to be related with the company Binggrae. Therefore, the protection of a design with distinctiveness would

requirements for registration; among the passive ones is a non-functionality requirement. A trademark consisting solely of the three-dimensional shape, color, sound, or smell, which is essential to secure the 'function' of goods is illegible for registration as well (Article 34 (1) 15 of the *Trademark Act*).

²⁴⁸ Well-known mark (주지 상표).

²⁴⁹ Famous trademark (저명 상표): a mark widely known to the consumers of the designated good and has gained an impression of high quality among the general public due to its superior quality, thus serving as a source indicator for the business.

be extended from a design right, the term of which is twenty years, to a trademark right, where the renewal for another ten years is possible semi-permanently.

Figure 15. Designs of Banana Flavored Milk by Binggrae and Haitai Dairy²⁵⁰

Binggrae's Registered Trademark Design	Binggrae's Product Design	Haitai Dairy's Product Design
 <p>Registered in 1993, 2003 (40-0256870)</p>		

On the other hand, in the previously-mentioned Viagra design trials between the Hanmi Pharmaceutical and Pfizer,²⁵¹ the Supreme Court of Korea denied the Pfizer's argument that the Hanmi Pharmaceutical's generic drug design had infringed upon the trademark of its Viagra pill design.²⁵² Here, the Court ruled that there is no likelihood of confusion arising with respect to the marks of the two companies' pills; as these pills are prescription-based medicine and their respective product names are inscribed in the pills, consumers are likely to distinguish the sources/producers of the two pills, despite similar designs. Therefore, the product by Hanmi Pharmaceutical was not regarded as an infringement of Pfizer's trademark attached to its Viagra pills. Under such grounds, the Court also denied the allegation of an act of unfair competition in this case.

²⁵⁰ 정 상문, *op. cit.*

²⁵¹ This case was mentioned in the Chapter III. 3-2-2 of this paper.

²⁵² Supreme Court of Korea, Decision of 15 October, 2015, 2013Da84568.

4-2. Copyright Act

Certain designs may be protected under the Copyright Act²⁵³, besides the protection as a design right. The copyright protection in South Korea is governed under the Ministry of Culture, Sports and Tourism, being different from the IP protection provided by the Design Protection Act, Trademark Act and Unfair Competition Prevention and Trade Secret Protection Act, all of which are governed by the KIPO. Another difference is that the copyright does not require registration process for protection, though the registration of a work to the Copyright Commission is possible. Copyright automatically emerges as the creation of a work by an author is finished. The term of protection given to an author of a copyrighted work subsists during the lifetime of the author plus seventy years after the death of the author.²⁵⁴ This duration of copyright protection is comparatively long and is quite universal or internationally common among the countries, including the U.S.

The purpose of the Copyright Act is to “protect the rights of author sand the rights neighboring on them” as well as to “promote fair use of works,” thus being expected to “contribute to the improvement and development of culture and related industries.”²⁵⁵ The scope of a protected work is defined in broad terms as “a creative production that expresses human thoughts and emotions.”²⁵⁶ Among the protected works are “paintings, calligraphic works, sculptures, printmaking, crafts, works of applied art, and other works of art.”²⁵⁷

Korean companies seeking for design right protection in certain European countries may be of advantage when referencing to the copyright system.²⁵⁸ In

²⁵³ Copyright Act (저작권법). [The Most Recent Enforcement Date: 5 August, 2020]

²⁵⁴ Article 39 (1) of the *Copyright Act*, Republic of Korea.

²⁵⁵ Article 1 of the *Copyright Act*, Republic of Korea.

²⁵⁶ Article 2.1 of the *Copyright Act*, Republic of Korea.

²⁵⁷ Article 4 (1) 4 of the *Copyright Act*, Republic of Korea.

²⁵⁸ 김종균. 2017. 「디자인 지식재산권의 법적 보호 비교 연구」. 『디자인과 법』:64-81. pp.77-78.

France and Germany, designs are usually protected as copyrights; in Greece and Turkey, copyright is the only means through which a design can be protected. On the other hand, there are not many design dispute cases under the Copyright Act in Korea. This may stem from the ambiguity inherent in specifying the scope of a copyrighted ‘work.’ A copyright is also a relative right; even if an author’s design is imitated by others, the imitated work may not be considered copyright infringement of the original work unless the design in question is exactly the same.²⁵⁹ Additionally, as copyright emerges automatically without the registration process and official certification, the right in itself contains some degree of risk of disputes.

4-3. Unfair Competition Prevention Act

The Unfair Competition Prevention and Trade Secret Protection Act²⁶⁰ (“The Unfair Competition Prevention Act (UCPA)”) was established to “maintain orderly trade by preventing acts of unfair competition such as improper use of domestically well-known trademarks and trade names, and by preventing infringement of trade secrets.”²⁶¹ Therefore, well-known designs can be protected as trademarks, or trade dress, under the UCPA, in addition to the Trademark Act. The acts of unfair competition related to design protection would be: (a) an act of causing confusion with another person’s goods by using identical or similar marks; (b) an act of causing confusion with another person’s commercial facilities or activities by using identical or similar marks; (c) an act of doing damage to distinctiveness or reputation attached to another person’s mark by using the identical or similar marks; and (i) an act of transferring/lending, exhibiting for transfer or lending, or importing/exporting goods

²⁵⁹ Ibid.

²⁶⁰ Unfair Competition Prevention and Trade Secret Protection Act (부정경쟁방지 및 영업비밀보호에 관한 법률). [The Most Recent Enforcement Date: 9 July, 2019]

²⁶¹ Article 1 of the *Unfair Competition Prevention Act*, Republic of Korea.

whose shape has been copied (i.e., form, image, color, gloss, or any combination thereof) from the goods manufactured by any other person.²⁶² Since the amendment in 2004, the scope of substantial protection of designs under the UCPA has been more inclusive; the ‘shape/form of goods’ – or unregistered designs – can also be protected under the Article 2.1 (i) of the Act. The term of protection for design, or the form of goods, is limited to three years from the date a product’s shape is completed (i.e., production of the prototype). In 2013, the scope of acts prevented by the UCPA was further extended to include “an act of unfairly using information which includes another person’s technical or business ideas with economic value in the process of negotiating or conducting transactions.”²⁶³ Thus, the shape/form of goods which are unregistered to the KIPO by the Design Protection Act have become more likely to be legally protected under the UCPA. Furthermore, in case where the interior design is appropriated, the design is protected by the UCPA, not the Design Protection Act.²⁶⁴

A person who is, or likely to be, injured by unfair competition acts can bring a civil action before the Court to seek for an injunctive relief, monetary damage and restoration of the injured business reputation; the UCPA also sets forth provisions on criminal penalties.²⁶⁵ The plaintiff has the burden of proof substantiating that the infringement of his or her design by the other party has been detrimental to the maintenance of orderly trade. The amount of “reasonable” damages is determined by the Court based on the sufficiency of proof, similarity of designs, and intention by the accused party. Despite the three-year limit of protection and the cost and time required in trials, the amount of compensation under the UCPA often turns out to be

²⁶² Article 2.1 Items (a), (b), (c) and (i) of the *Unfair Competition Prevention Act*, Republic of Korea.

²⁶³ Article 2.1 (j) of the *Unfair Competition Prevention Act*, Republic of Korea.

²⁶⁴ Jeong, Yun Hyung, *op.cit.*, p.153.

²⁶⁵ Korean Intellectual Property Office (KIPO).

lower than expected.²⁶⁶

In the previously-mentioned design trial involving the water bottle products of Komax and LocknLock, the Komax additionally filed a suit for damages after its crystal water bottle design was invalidated. The Seoul Central District Court declared that the LocknLock was liable for damages amounting to 20 million KRW (approximately 20,000 USD), as the company's water bottle design had imitated the form of the Komax's product design.²⁶⁷ Here, the Court regarded the design imitation by LocknLock as an act of unfair competition, which goes against the provisions of the UCPA. The court also mentioned that imitating the shape of goods under the UCPA does not require as much creativity as what is required in the Design Protection Act. Therefore, the scope of the 'creativity' requirement of a design is more broadly recognized in the UCPA when compared to the Design Protection Act; goods with the shape/form identical or similar to the previously manufactured products by other persons are more likely to be considered design infringement as well as an act of unfair competition under the UCPA.

Moreover, Binggrae's banana flavored milk packaging design was also protected under the UCPA against the banana-flavored jelly snack product design. The Seoul Central District Court granted injunction against the 'Dae Food Inc.' ('Dae') for the sale of banana-flavored jelly snacks with packaging design similar to that of Binggrae's banana flavored milk product. Though the defendant's products did not infringe upon the plaintiff's registered trademarks, Binggrae claimed on a dilution theory under the UCPA Article 2.1, Item (c). The Court considered the characteristic pot-shaped beverage bottle design as the well-known source identifier of Binggrae's milk products; the appearance of the Dae's product design was highly similar to that of Binggrae's and this imitation was likely to damage the credibility



²⁶⁶ 특허청 상표디자인심사국 (KIPO). 2019. 『산업별 디자인분쟁 사례집 100선』, pp.114-115.

²⁶⁷ Seoul Central District Court, Decision of 16 January 2014, 2012GaHap529007.

and reputation of Binggrae’s famous trademark, which had continued to exist since 1974. In this case, the plaintiff could not claim for its packaging design protection either as a patent right or as a design right, since the term of protection was already expired in 2017-18, almost forty years after the release of the product and IP registration. But Binggrae was able to protect its design through the UCPA.

The Court even confirmed that Binggrae had legitimate rights to the same design for non-milk products as well, since this packaging design was regarded an “intrinsic asset” of the company.²⁶⁸

Figure 16. Packaging Designs for Binggrae and Dae’s Products²⁶⁹

Binggrae’s Banana Flavored Milk	Dae’s Banana-flavored Jelly Snack
	

²⁶⁸ Park, Seong-Soo, Angela Kim, and Won-Joong Kim. 2017. “Copycat Packaging Enjoined for Unfair Competition on Dilution Grounds.” Kim & Chang IP Newsletter, Spring/Summer 2017. Accessed October 15, 2020.

https://www.kimchang.com/newsletter/2017newsletter/ip/eng/newsletter_ip_en_spring_summer2017_article06.html.

²⁶⁹ Ibid.

Chapter IV. Analysis of Industrial Design Policies in the United States

1. Scope of Industrial Designs

The United States does not have an independent legislation for protecting designs per se, unlike the Design Protection Act in South Korea. Instead, the industrial design protection in the U.S. has long been relevant to the patent system through which registered designs are protected as design patents – a type of patents. Likewise, the definition on designs or industrial designs is stipulated under the Patent Act, unlike Korea where the relevant definitions on designs are separately provided in the Design Protection Act. The Chapter 16 of the U.S. Patents Act (35 U.S.C. § 171-173) has provisions of ‘patents for designs.’ It is stated that “whoever invents any new, original and ornamental design for an article of manufacture” is eligible to obtain a (design) patent.²⁷⁰ It can be inferred that the design patent system protects mainly designs embodied in or applied to industrial articles or manufactured products, not the article itself. The importance of merchantability and ornamental facet of a design is also mentioned in the Manual of Patent Examining Procedure (MPEP).²⁷¹ A design, consisting of visual characteristics manifested in appearance of an article, is inseparable from the article and cannot exist alone as “surface ornamentation”; it must be definite, preconceived and capable of reproduction.²⁷²

²⁷⁰ 35 U.S.C. § 171(a) (2020).

²⁷¹ USPTO. Chapter 1502 of the Manual of Patent Examining Procedure (MPEP). (June 2020)

²⁷² USPTO. This definition is in line with the ‘visibility,’ ‘merchantability’ and ‘configuration’ requirement for a design definition as well as the ‘industrial applicability’ requirement of design registration in Korea.

The USPTO also articulates the distinction between design and utility patents: the former protects the ornamental appearance of an article – “the way an article looks” – while the latter protects the way an article functions and is utilized.²⁷³ Though the both patents can be obtained on one single article and it may be difficult to separate the functional/utility and ornamental/design appearance of the article, patents for designs and utility patents provide legally separate IP protections.

2. General Approach

The United States became a Contracting Party to the Hague Agreement in February 2015, which took effect on May 13, 2015. Therefore, an international design application can be filed directly with the International Bureau of the WIPO or indirectly through the USPTO.²⁷⁴

In general, the IP regime of the United States is classified into the systems of patent, trademark and unfair competition prevention, copyright, and trade secret. This differs from Korea’s IP regime which is usually classified into the systems of patent, utility model, design, trademark, and copyright. The U.S. industrial design protection methods can be categorized largely into three branches: (a) design patent; (b) copyright; and (c) trade dress system.

First and foremost, designs can be registered and protected as patents. Design patents require applications to be filed to the USPTO which grants design patent rights after it reviews the fulfillment of the registration requirements by submitted designs. The design patents, which protect the novel, non-functional or ornamental aspects of a product, provide fifteen years of protection from the date of the patent

²⁷³ Ibid.

²⁷⁴ USPTO.

registration/issuance,²⁷⁵ regardless of the time taken in the application process. This is different from the term of protection for utility patents, which is twenty years from the date of filing of the application. For business entities, the design patent protection period may serve as a cornerstone for a protectable trademark – trade dress – in the future; the continuation practice also allows for related designs with distinct patentability to be protected, being an important long-term business strategy in terms of product designs.²⁷⁶ In addition, design patents can be of relatively less burden in terms of application process and maintenance, when compared to utility patents. As a design patent usually constitutes of a single claim, the costs for application are lower than those for a utility patent; the former also has had a higher allowance rate by the USPTO and the time taken for examination is shorter than the latter, typically examined and granted a patent right within 12 to 18 months.²⁷⁷

For the 15-year period of protection, an owner of a design patent is endowed with strong exclusive rights in using the design. This protection and enforcement of patents are at the federal level. And during the term of a patent, an infringer of a patented design shall be liable to the owner to the extent of the total profit.²⁷⁸

3. Design Registration Requirements

Because registered designs in the U.S. are protected as patents under general provisions of the patent law, the requirements for design registration are also stipulated in the U.S. Patent Act (35 U.S.C.) as ‘requirements for the grant of patent

²⁷⁵ 35 U.S.C. § 173 (2020). The term of design patent has been extended from fourteen years to fifteen years since the 2012 amendment.

²⁷⁶ Copeland, Trevor K., and Mary LaFleur. 2020. “Design Patents – Fundamental Additions to Cannabis Intellectual Property Portfolios.” Brinks IP Alert, February 14. Brinks Gilson & Lione.

²⁷⁷ Ibid.

²⁷⁸ 35 U.S.C. § 289 (2020).

rights’: (a) patentable subject matter; (b) novelty; and (c) non-obviousness. In conjunction with the “new, original and ornamental” elements of an article needed to satisfy the definition of a design provided by the Patent Act 35 U.S.C. § 171, these requirements must be met to qualify for the grant of design patents.

The U.S. patent application is composed of two categories: non-provisional and provisional.²⁷⁹ A non-provisional process is a standard method of filing a utility, design or plant patent application; the USPTO examines and issues patents based on the fulfilment of requirements for patentability. In contrast, a provisional application for patent, a low-cost way to establish a priority date with fewer formalities but not with the immediate issuance of a patent, provides a 12-month period after which a corresponding non-provisional application filing to the USPTO is expected. Design patent applications can only be filed through the non-provisional process, while utility and plant patent applications can be filed in either way.

In specific to the non-provisional design application, independent and distinct designs must be filed in separate applications and not by a single claim. According to the USPTO, designs without apparent relationship between a number of articles are deemed as independent; even if the articles are related to each other, different shapes and appearances of the articles render the designs to be distinct. Modified forms or embodiments of a single design, however, may be filed in a single application.²⁸⁰ The application should contain a disclosure/specification of the invention’s design, including the title, description for the feature and figures, a single claim, and “clear” and “complete” drawings showing the entire visual disclosure of the claim.²⁸¹

²⁷⁹ The U.S. patent system also allows for continuation, continuation-in-part and divisional patent applications.

²⁸⁰ USPTO.

²⁸¹ Ibid.

3-1. Subject Matter for Designs

In order for a design to be registered as a patent, it has to be regarded as patentable in the first place. The patentability of an article is determined on the basis of the statutory definition of a design.²⁸² The “new, original and ornamental design” in an article of manufacture has been interpreted by the case laws to include: (i) a design for an ornament, impression, print, or picture applied to or embodied in an article; (ii) a design for the shape/configuration of an article; and (iii) a combination of these categories.²⁸³

The ornamentality, or non-functionality, of a design in an article of manufacture is one of the most essential requirements for a design patent. The non-functionality requirement is stipulated as voluntary in the TRIPS Agreement.²⁸⁴ The ornamental feature is defined as “created for the purpose of ornamenting,” not a by-product or result of functional/mechanical features.²⁸⁵ The decorative facet of a design is primarily considered here; a design for an article lacking ornamentality – on the contrary to the functional aspects corresponding to utility patents – is regarded as an improper subject matter for a design patent. According to the USPTO, the ornamentality is not analyzed in quantitative terms (i.e., size of ornamental features); rather, the ornamental contribution to the design as a whole is considered in determination.²⁸⁶ Also, the case law indicates that a distinction is made between the functionality of an article and that of the design; an article of manufacture which

²⁸² 35 U.S.C. § 171 (2020). (a) IN GENERAL. —Whoever invents any new, original, and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.

²⁸³ USPTO.

²⁸⁴ WTO. Article 25.1 of the *TRIPS Agreement*.

“... Members may provide that such protection shall not extend to designs dictated essentially by technical or functional.”

²⁸⁵ USPTO.

²⁸⁶ Ibid.

seems to be primarily functional does not mean that the relevant design lacks ornamentality. This functionality doctrine issue remains partly unclear in cases,²⁸⁷ often stirring up the debate ‘functionality vs. ornamentality.’

3-2. Novelty

‘Novelty,’ being one of the conditions for patentability, is considered to be lacking in the following cases: (i) a case where the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public, either domestically in the U.S. or internationally, before the filing date; and (ii) a case where the claimed invention was described in an already-issued patent, or in a patent application published or deemed published before the filing date.²⁸⁸ Here, disclosures made a year or less before the filing date of the claimed invention are not considered as the prior art.²⁸⁹

There are two methods in determining novelty of designs in patent infringement cases: the ordinary observer test (Gorham’s test) developed by case laws and the point of novelty test. The former is determining similarities between two designs in perspective of an ordinary observer,²⁹⁰ whereas in the latter novelty is recognized if the prior art’s partial designs with novelty are not appropriated in the design claimed in application.²⁹¹ In recent years, these two tests are used in conjunction with one another, rather than as separate stages, since consideration of the prior art is combined with the ordinary observer test when comparing the designs in application and in the prior art.

²⁸⁷ Lee, Won Bok. 2018. “Functionality Doctrine Under U.S. Design Patent Law as Applied in Medical Device Design Dispute.” *Korea Journal of Industrial Property* (한국산업재산권법학회논문집) 55:181-222.

²⁸⁸ 35 U.S.C. § 102(a) (2020).

²⁸⁹ 35 U.S.C. § 102(b) (2020). It is relevant to the one-year (12 months) grace period for novelty in the U.S.

²⁹⁰ *Gorham Mfg. Co. v. White*, 81 U.S. 517, 528 (1871).

²⁹¹ *Litton Systems, Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1444 (1984).

3-3. Non-obviousness

Even though a claimed design passes the novelty test, it may still not be patentable if it is not regarded as ‘non-obvious’ subject matter. Based on the difference between the claimed invention/design and the prior art, if the former would have been obvious before the effective filing date to a person with ordinary skill in the art to which the design pertains, the claimed design would be unpatentable.²⁹² Though the standards for non-obviousness could be dependent on subjective judgments to a certain degree, the scope of design protection of the prior art, the scope of a claimed design and the level of technology at the time of a creation of the claimed design are considered, with reference to the level of imitation and commercial success in some cases.²⁹³

4. Alternative Design Protection Policies

4-1. Trade Dress System

4-1-1. Concept

Being a part of trademarks, the U.S. trade dress system aims to protect the overall ‘look and feel’ of an article. The term “trade dress” is a combination of ‘trade’ – commercial transaction – and ‘dress’ – overall appearance/exterior of an article, thus meaning the appearance of an article relevant to commercial transactions.²⁹⁴ The trade dress has long been used to indicate industrial designs, such as the

²⁹² 35 U.S.C. § 103 (2020).

²⁹³ 한국저작권위원회. 2012. 『디자인의 보호범위 확대와 그 한계에 관한 연구』, p.36.

²⁹⁴ Jeong, Yun Hyung, *op.cit.*, p.155.

packaging, container or label of products; recently, however, its meaning has gradually expanded to encompass the overall images or design elements surrounding the exterior of products, including the interior decorations and menus in a restaurant.²⁹⁵ Therefore, general or total aspects of product designs (i.e., packaging, shape, color, patterns or other distinguishing non-functional element of appearance as well as sales strategy) are all covered by the trade dress system. Specifying the scope of design elements protected as the trade dress is rendered difficult, as “almost anything at all that is capable of carrying meaning” may be regarded as a “symbol” or “device” which constitute the trade dress, as a source identifier of a product.²⁹⁶ The use of the trade dress route for design protection has become increasingly popular and, at the same time, controversial because the period of protection it provides can be potentially limitless.²⁹⁷

The trade dress is governed by the U.S. Trademark Act of 1946 (“Lanham Act”). Registered trademarks are protected in the Section 32(1) while unregistered marks are protected under the Section 43(a) of the Lanham Act. In the past, the U.S. had long been protecting trademarks through the common law; before the enactment of the Lanham Act (1946), non-functional and distinctive trade dress was protected as a type of a trademark under the state statutes on unfair competition.²⁹⁸ The 1988 and 1999 amendments to the Lanham Act provided explicit legal basis reflecting the precedent cases and Court decisions on trade dress system, codifying them on a federal level. The Section 43 of the Lanham Act stipulates civil actions on trademark infringement: a person who is likely to confuse, mistake, deceive the origin,

²⁹⁵ Ibid.

²⁹⁶ USPTO. Trademark Manual of Examining Procedure (TMEP) 1202.02. (October 2018)

²⁹⁷ Afori, Orit Fischman. 2010. “The Role of the Non-Functionality Requirement in Design Law.” *Fordham Intellectual Property, Media & Entertainment Law Journal* 20(1):847-874, p.855.

²⁹⁸ 특허청·한국지식재산보호협회. 2013. 『해외지식재산권보호 가이드북 - 미국편』, p.95.

sponsorship or approval of goods, services and commercial activities by another person, or misrepresent the nature, characteristics, qualities or geographic origin of goods, services and commercial activities shall be liable in a civil action by the victim of such acts.²⁹⁹ The new clause added in the 1999 amendment has enabled the protection for unregistered trade dress as well; here, the person who seeks for trade dress protection has the burden of proving that his or her design/invention is not functional.³⁰⁰

There are requirements for trade dress protection, based on the U.S Supreme Court's holdings. The requirements are: (a) non-functionality; (b) distinctiveness or secondary meaning; and (c) likelihood of confusion.

First, 'non-functionality' indicates that in order to serve as a trademark, the feature of an article is not supposed to be essential to the use/purpose, or affect the cost or quality of the article, according to the Supreme Court's holdings.³⁰¹ The purpose of the functionality doctrine is to encourage legitimate competition by maintaining a "a proper balance between trademark law and patent law."³⁰² Considering this principle of competition preservation, some courts have interpreted functionality in terms of a "competitive need," thus finding a particular feature functional only when competitors needed to copy that design to compete effectively.³⁰³ Likewise to the ambiguity of the functionality doctrine in terms of the patent requirement, there are complexities inherent in this functionality concept of the trade dress system as well. The complications stem from the facts that the term "functionality" or "non-functionality" is defined equivocally and that the industrial

²⁹⁹ § 43(a)(1) of the *Lanham (Trademark) Act of 1946* (15 U.S.C. § 1125) (2020).

³⁰⁰ § 43(a)(3) of the *Lanham (Trademark) Act of 1946* (15 U.S.C. § 1125) (2020).

By comparison, South Korea's *Trademark Act* offers protection for registered trademarks.

³⁰¹ USPTO. Trademark Manual of Examining Procedure (TMEP) 1202.02(a). (October 2018)

³⁰² *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 164-165 (1995).

³⁰³ USPTO. Trademark Manual of Examining Procedure (TMEP) 1202.02(a)(iii). (October 2018)

design in its nature is often an integrated entity of function and aesthetics.

Second, a trade dress must be “distinctive” as a source identifier of a product. Though Section 43(a) of the Lanham Act does not explicitly require distinctiveness, the Courts have universally imposed such prerequisite since a trade dress without distinctiveness would not “cause confusion ... as to origin, sponsorship, or approval of goods,” as stipulated in this provision.³⁰⁴ The distinctiveness is determined by whether a product feature is inherently distinctive or has acquired the secondary meaning from consumers on the market. The U.S. Supreme Court distinguished the two types of trade dress – product packaging and product design – with regard to this.³⁰⁵ Unlike the product packaging which may be of inherent distinctiveness, the Court ruled that trade dress in a product design can never be inherently distinctive. A mark is considered as inherently distinctive if “[its] intrinsic nature serves to identify a particular source.”³⁰⁶ Contrarily, a product design should acquire distinctiveness by ‘secondary meaning’³⁰⁷ through the product use in market where the association between the trade dress feature and the source of the product has been developed in the minds of the public or consumers. In order to claim trademark infringement of a product design, a plaintiff has to prove that a design (trade dress) is unique or noticeable, conceptually separable from the product, and plays a role of a product’s source indicator. Hence, there is a higher possibility for product packaging to be protected as a trade dress. This is because design for the packaging,

³⁰⁴ Wal-Mart Stores, Inc. v. Samara Bros., 529 U.S. 205, 215, 120 S.Ct. 1339 (2000).

³⁰⁵ Ibid.

³⁰⁶ Ibid.

³⁰⁷ Secondary meaning is acquired when the general public or consumers have established a “cognitive link between the mark and a particular source”; therefore, the existence of secondary meaning is a psychological/sociological phenomenon and a matter of fact. (VerSteeg, Russ. 2013. “Reexamining Two Pesos, Qualitex, & Wal-Mart: A Different Approach...Or Perhaps Just Old Abercrombie Wine in a New Bottle?” *Fordham Intellectual Property, Media and Entertainment Law Journal* 23(4):1249-1310, p.1251.)

not for the product itself, is often regarded as to explicitly identify the product source.

Third, ‘likelihood of confusion’ is required in a trade dress infringement case. It signifies that a defendant’s use of trade dress should cause confusion on the source of the infringing product to consumers. It may be determined by reviewing the similarities between the products and their trade dress features, besides the defendants’ intent and actual confusion caused on the market among consumers.

Among the legal basis for trade dress infringement is the dilution theory.³⁰⁸ Trademark dilution by both blurring and tarnishment are forbidden under the federal statute,³⁰⁹ in which the owner of a famous and distinctive mark is entitled to an injunction against the infringer who has caused dilution. Dilution by blurring refers to an association of a mark with a famous mark with similarity, which “impairs the distinctiveness” of the latter, whereas dilution by tarnishment is an association of a mark with a famous mark with similarity that “harms the reputation” of the latter.³¹⁰

Though the U.S. trade dress system seems to resemble South Korea’s design protection under the Trademark Act and especially the three-dimensional trademarks, the trade dress aims to protect the overall image and totality of a featured product’s appearance, rather than individual and separate elements. The U.S. trade dress system especially became an issue in the *Apple, Inc. v. Samsung Electronics Co., Ltd.*, since the trade dress protection of ‘iPhone 3G’ product was a major point in the case in U.S. Courts. The trade dress could extensively include designs unprotectable from Korea’s Trademark Act or Design Protection.

³⁰⁸ Trade dress dilution was one of the major issues in *Apple v. Samsung* case.

³⁰⁹ § 43(c) of the *Lanham (Trademark) Act of 1946* (15 U.S.C. § 1125) (2020).

³¹⁰ *Ibid.*

Table 7. Comparison of the U.S. Trade Dress and South Korea's Three-Dimensional Trademark³¹¹

	Trade Dress (U.S.)	Three-Dimensional Trademarks (ROK)
Legislation	Trademark Act of 1946 (Lanham Act)	Trademark Act
Enforcement Year	-sustained under common law. -relevant Court decisions were codified as federal law in 1988 amendment to the Lanham Act.	-codified in 1998 amendment to the Trademark Act. ³¹²
Concept	-overall/total image embodied in a product or service	-(i) a mark consisting of a three-dimensional (3D) shape -(ii) a mark combining a dimensional shape with other elements (i.e., word, sign or symbol)
Requirements for Protection	Non-functionality, Distinctiveness/ secondary meaning, Likelihood of confusion	Non-functionality, Distinctiveness Identicalness/similarity

4-1-2. Case

In *Wal-Mart Stores, Inc., v. Samara Brothers, Inc.* (2000), the U.S. Supreme Court had to decide the cases in which a design of a product is regarded as distinctive and therefore protectible in an action for infringement of trade dress. Here, the Court laid down a rule that in terms of a design protection as trade dress, the product design

³¹¹ Compiled by Author with reference to 김종균, *op.cit.*, pp.72-73.

³¹² Before this amendment, trade dress in South Korea was rather dealt in terms of unfair competition prevention. The three-dimensional trademarks are protected as non-traditional trademarks.

– as opposed to product packaging – can never be inherently distinctive; instead, it can acquire a trademark right only when it has achieved secondary meaning.³¹³ In other words, the Court established that product design and packaging, which are both relevant to the trade dress, are to be treated differently for trademark purposes.³¹⁴ It was suggested that the major purpose of attaching a distinctive packaging, or a word mark, to a product often lies in source identification in the minds of consumers; on the other hand, the main objective of a product design, such as color, is to make a product more appealing or useful and therefore, consumers are not inclined to identify the feature with the source.³¹⁵

Given the unlikelihood of source-identifying role of a product design, the Court goes further on to note that application of the inherent-distinctiveness principle can have anticompetitive effects on the market, depriving the consumers of the benefits of competition. Therefore, by affixing the requirement that a plaintiff in an infringement lawsuit must demonstrate the acquired ‘secondary meaning’ of trade dress, the Court aims to diminish the plausibility of “successful” infringement suits in which the plaintiff may deter a newcomer to the industry from using a product design that resembles the plaintiff’s existing design.³¹⁶

In this case, the Supreme Court reversed the previous decisions by the U.S. District Court for the Southern District of New York and the Second Circuit where the jury awarded ‘Samara Brothers, Inc.’ (“Samara”) damages, interest, costs and fees, all amounting to \$1.6 million, along with injunctive relief. A well-known U.S. domestic retailer ‘Wal-Mart Stores, Inc.’ (“Wal-Mart”) – the petitioner – was

³¹³ Wal-Mart Stores, Inc. v Samara Bros., 529 U.S. 205, 215, 120 S.Ct. 1339 (2000).

³¹⁴ Ibid. The U.S. Supreme Court held that this judicial differentiation between marks has “solid foundation in the statute [§ 2 of the *Lanham Act*].”

³¹⁵ Ibid.

³¹⁶ Ibid.

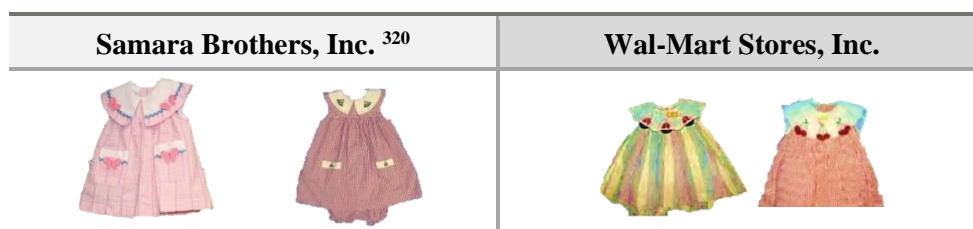
originally sued by Samara for copying designs of Samara's outfits³¹⁷ and selling knockoffs on the market.³¹⁸ Based on Section 43(a) of the Lanham Act which gives a producer cause of action for trade dress infringement, the Supreme Court reviewed whether the trade dress of Samara's garment designs was distinctive and protectible in legal terms. The Court concluded that garment design – product design – is not inherently distinctive to be protected as trademark, and highlighted that market competition should not be discouraged by product design infringement suits. Promotion of competition and preservation of competitive economy were viewed as significant purposes of protecting trade dress. The case was remanded and sent back to the lower Courts for further proceedings where Samara was supposed to demonstrate that its garment designs had acquired secondary meaning among the public. The case, however, was settled without further proceedings.

Consequently, the Supreme Court confirmed that an unregistered trade dress can be protected under the Lanham Act, but in case of an infringement trial on product-design trade dress, distinctiveness and protection of the design are guaranteed only when the plaintiff has shown the secondary meaning of the design.

³¹⁷ Samara's primary product lines were spring/summer one-piece outfits decorated with appliques of flowers, fruits, hearts, butterflies, etc.

³¹⁸ In 1995, Wal-Mart sent its supplier, Judy-Philippine, photographs of Samara's garments and the latter duly copied 16 of Samara products with minor modifications; here, many of the copied garments included copyrighted elements. In 1996, Wal-Mart sold these knockoffs and generated gross profits exceeding \$1.15 million.

Figure 17. Examples of Children’s Clothing at Issue in *Wal-Mart v. Samara*³¹⁹



A year after the *Wal-Mart v. Samara* case, the U.S. Supreme Court recapitulated and emphasized the importance of non-functionality requirement for trade dress protection. In *TrafFix Devices, Inc., v. Marketing Displays, Inc.*, a functional feature in a product could not serve as a trademark so as not to deter competitors or newcomers from using that functional or useful feature.³²¹ Moreover, if the product feature was included in the claims of a “successful” patent application, it is deemed functional; even after the patents have expired, the existence of an expired patent plays up the presumption that the features are functional, rendering it difficult to claim the trade dress protection.

‘Marketing Displays, Inc.’ (“MDI”), a renowned manufacturer of road sign stands and a holder of the expired utility patent on the dual-spring design, filed a suit against the ‘TrafFix Devices, Inc.’ (“TrafFix”) for trade dress infringement under the Section 43(a) of the Lanham Act. While the District Court ruled against MDI, the Court of Appeals for the Six Circuit reversed the ruling and held that TrafFix had to avoid infringing upon MDI’s trade dress on dual-spring design. The Supreme Court

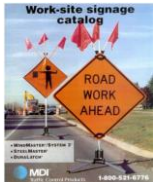



³¹⁹ Finguerra-DuCharme, Dyan. 2019. “Non-Traditional Trademarks.” Pryor Cashman LLP, February 8. Accessed October 20, 2020. <https://www.fedbar.org/wp-content/uploads/2019/12/Panel-II-Materials-pdf-3.pdf>.

³²⁰ Beebe, Barton. 2020. *Trademark Law: An Open-Source Casebook (Version 7.0 Digital Edition)*, p.113.

³²¹ *TrafFix Devices, Inc., v. Marketing Displays, Inc.*, 532 U.S. 23, 121 S.Ct. 1255 (2001).

again reversed the judgment by the Court of Appeals, making two critical points about the non-functionality principle. First, the dual-spring design was considered functional, as it serves a crucial purpose of keeping the sign upright in various weather conditions (i.e., heavy winds) through a unique and useful manner, as confirmed in the claims of the expired utility patents.³²² Second, the Court interpreted the history of a previously expired patent on the relevant product feature as a strong evidence of functionality. The dual-spring design whose patent had expired was essential to the trade dress MDI was seeking to establish. Therefore, disclosure of this feature in the utility patent statements was construed to show the presumable functionality of the design. Accordingly, the Supreme Court remanded for further proceedings, noting that a cautious approach is needed to avoid misuse or overextension of the trade dress.³²³

Figure 18. Designs of Sign-stands at Issue in *TraFFix v. MDI*³²⁴

Marketing Displays, Inc.	TraFFix Devices, Inc.
 	 

³²² Ibid.

³²³ Ibid.

³²⁴ Atkins, Michael. 2008. "Trademark Law." Graham & Dunn PC, March 5. Accessed October 20, 2020.
<http://static1.1.sqspcdn.com/static/f/106093/1392078/1204769298593/Trade+Dress+Class+Presentation.pdf?token=VBt%2Fz%2BWg8hSzyUeemHeC8jrTK%2Fo%3D>.

4-2. Copyright Act

4-2-1. Concept

The Section 101 of the U.S. Constitution clearly states that “pictorial, graphic, and sculptural works” – works of art – can be copyrighted for IP protection.³²⁵ In detail, the artistic works include “two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings (i.e., architectural plans).”³²⁶ The United States had long been requiring artworks to be ‘fine arts’ in order for the copyright protection since 1870, when copyright protection for works of art was first codified in the Copyright Act. The Copyright Act of 1909 expanded the scope of protection beyond fine arts to ‘works of art,’ which may have opened the possibility for industrial designs to be copyrighted.³²⁷ However, it was the *Mazer v. Stein* (1954) case through which the substantial protection of applied arts as copyrights became actualized. Here, the U.S. Supreme Court judged that a work of art used for practical purposes in a manufactured article could still be protected against copyright infringement, even if the work is eligible to be patented for design.³²⁸

Similar to South Korea, copyright in the United States automatically arises when a (design) work is “fixed” in a tangible medium of expression and the term of protection for works created/published after January 1, 1978 generally lasts for author’s life plus seventy years after the last surviving author’s death.

Given the scope of protection for works of art, the U.S. Constitution also points out the important condition for copyright protection: the design, or parts of design,

³²⁵ 17 U.S.C. § 101 (2020).

³²⁶ Ibid.

³²⁷ The Harvard Law Review Association. 1953. “Protecting the Artistic Aspects of Articles of Utility: Copyright or Design Patent?” *Harvard Law Review* 66(5):877-886.

³²⁸ *Mazer et al. v. Stein et al.*, 347 U.S. 201, 74 S. Ct. 460 (1954).

of a useful article should be “identified separately from, and capable of existing independently of, the utilitarian aspects of the article.”³²⁹ Thus, in order for an art or design to be copyrighted, it has to satisfy the ‘separability’ and ‘independence’ requirements from the utilitarian/practical aspects of the article to which it is applied.

Copyright registration is rendered voluntary; however, in order to file a lawsuit on infringement, registration to the U.S. Copyright Office is required.³³⁰ In copyright registration, the Office would assess whether the statutory requirements for copyrightable subjects are satisfied.

4-2-2. Case

The U.S. Supreme Court has recently provided a test to distinguish between copyrightable artistic elements and non-copyrightable useful/utilitarian aspects of a manufactured article, in *Star Athletica, L.L.C., v. Varsity Brands, Inc., et al.* (2017).³³¹ Based on the Section 101 of the Copyright Act (17 U.S.C. § 101), the Court recapitulated two requirements for copyright protection: (a) separate identification; and (b) independent-existence. The former indicates whether a copyrightable design, 2D or 3D feature with pictorial, graphic or sculptural qualities, can be observed separately from the utilitarian aspects of an article. And the latter means that a feature in question should be able to qualify as its own copyrightable work of art (“pictorial, graphic, or sculptural work”) when imagined to be separated apart from the useful article and applied in other tangible mediums.

In this case, ‘Varsity Brands, Inc., et al.’ (“Varsity Brands”) sued ‘Star Athletica, L.L.C.’ (“Star Athletica”) for infringing copyrights in five of its registered design features in cheerleading uniform products. Regarding that cheerleading

³²⁹ 17 U.S.C. § 101 (2020).

³³⁰ The U.S. Copyright Office.

³³¹ *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S.Ct. 1002 (2017).

uniforms had both artistic and useful features in terms of clothing, the Court applied the above-mentioned test to determine whether the uniforms are eligible to be copyrighted. The Court finally ruled in favor of the Varsity Brands and judged that the defendant had a valid ownership of copyright on the following reasons: first, decorations of the uniforms possess pictorial, graphic, or sculptural qualities and second, the design arrangements of the uniforms can be separated and applied in another medium, thus the uniforms' design features being eligible for copyright protection.

Figure 19. Designs of Cheerleading Uniforms at Issue
in *Star Athletica v. Varsity Brands*³³²



³³² Ibid. Adapted from Appendix to Opinion of the Court.

Chapter V. Case Study of ROK-US Design Dispute: *Apple Inc. v. Samsung Electronics Co., Ltd. (2011-2018)*

1. Factual Aspects

1-1. Background

The long-held international dispute on industrial design infringement between two major IT powerhouses in rivalry – Apple and Samsung – began on April 15, 2011, as ‘Apple, Inc’ (“Apple”) filed a lawsuit against ‘Samsung Electronics Co., Ltd.’ (“Samsung”) ³³³ in the U.S. District Court for the Northern District of California. ³³⁴ Apple argued that Samsung’s Android smartphones (i.e., Galaxy S 4G and Infuse 4G) and tablet (i.e., Galaxy Tab) devices had infringed upon its design and utility patents, trademarks and trade dress rights for its ‘iPhone’ and ‘iPad’ products. ³³⁵ Specifically, the plaintiff accused the defendant of IP infringement on 3 design patents, 7 utility patents, 8 trademarks and trade dress rights. With Samsung’s institution of a counter-lawsuit on patent infringement by Apple, the scope of the trials expanded to encompass more than 10 jurisdictions over 4 continents, including

³³³ Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (collectively, “Samsung”).

³³⁴ This trial is referred to as the ‘first U.S. trial’ in *Apple v. Samsung*. Apple had also filed a suit for the ‘second U.S. trial’ against Samsung in February 2012, which was finalized in 2017 with Samsung’s liability for \$119.6 million in damages. This paper aims to focus on the first U.S. trial, as the second trial involves utility patent infringement issues.

³³⁵ Apple’s first-generation iPhones were released in 2007, whereas Samsung’s Galaxy S models were introduced to the market in 2010. In 2011, Apple also sought for preliminary injunctions against the sales and imports of Samsung’s Galaxy products in various Courts (i.e., U.S. Courts, Düsseldorf Regional Court of Germany, Hague District Court of the Netherlands, and Australian Federal Court in Sydney).

Courts from South Korea, Japan, Australia, Italy, Germany, the Netherlands, France and the United Kingdom. This landmark IP trial is not described as unprecedented, considering the ongoing patent application trends for the two companies in a decade. From 2007 – the year when iPhone was released – to 2011, Apple’s design patent applications increased 9 times than the past five years; unlike Apple’s devotion to securing design patent rights, Samsung was more focused on applying for utility/technology patents especially related to wireless telecommunications networks.³³⁶

On August 24, 2012, the first jury reached a verdict that Samsung had infringed upon Apple’s utility patents, design patents for iPhone and diluted trade dress for iPhone as well, awarding over \$1 billion of damages. On the same date, however, Seoul Central District Court of South Korea came up with a different judgment, especially in terms of design infringement: the Court dismissed the allegation of design infringement by Samsung.

On March 6, 2014, the U.S. District Court for the Northern District of California rejected Apple’s motion for a permanent injunction of Samsung products. Mainly owing to the enormous amount of damages, Samsung appealed to the U.S. Court of Appeals for the Federal Circuit (CAFC). On the other hand, in August 2014, the both parties agreed to dismiss all the trials in process from the Courts outside the U.S. Thus, from thence, the focus of IP infringement suits between Apple and Samsung would be narrowed down to the U.S. trials.

After the ruling by the CAFC, the scope of trials was mainly reduced to patents and Samsung petitioned for certiorari. The U.S. Supreme Court agreed to review the case and the judgment was made on December 6, 2016. Though the Court judged in

³³⁶ 권동준. 2012. “삼성 ‘무선통신’, 애플 ‘디자인’ 특허 분쟁 지속될 듯.” 전자신문 (Korea IT News), August 29. Accessed October 30, 2020. <https://www.etnews.com/201208290502>.

favor of Samsung for marking the possibility of limiting the damages, it did not provide explicit ruling on the patent damages itself; instead, the Court remanded the case to the lower Court. It was the first case in more than a century where the U.S. Supreme Court judged on design patent issues since the previous ruling in 1894. In June 2018, the two parties – Apple and Samsung – announced to settle the ongoing infringement trials for undisclosed terms.

1-2. Issues

1-2-1. Design Patent Infringement³³⁷

The three design patents at issue pertain to the parts of external configuration of smartphone designs. In specific, relevant U.S. design patents Apple accused Samsung of infringement were a black rectangular frontal design with round-cornered edges of a device in early iPhone and iPhone 3G models (D’677),³³⁸ a bezel or rim surrounding the frontal edge of a device (D’087), the ‘ornamental design for a graphic user interface (GUI) for a display screen or portion thereof’ in which 16 icons in various colors are displayed as a grid pattern on a screen of a device (D’305), and a tablet computer design for iPad products (D’889).³³⁹ Among the Apple’s registered design patents are quite inclusive or generic features (i.e., round edges and rectangular shaped front face in D’677) of an article, which happened to account for the majority of the damages Samsung was liable for in the verdict by the first jury.³⁴⁰

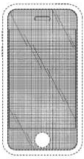






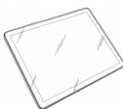
³³⁷ Apple also sued Samsung for utility patent infringement; the relevant patents include “bounce-back,” “pinch-to-zoom” and “tab-to-zoom” effects in iPhone’s user interface. This paper will focus on design-related aspects – design patent and trade dress – in trials between Apple and Samsung.

³³⁸ Apple’s design patent D’677 was later invalidated by the USPTO in 2015.

³³⁹ A claim on D’889 Patent infringement was dismissed in the first jury verdict.

³⁴⁰ 박정현. 2013. “美특허청, 애플 ‘디자인 특허’ 재심사...무효판 삼성에 유리.” 조선

Figure 20. Design Patents Cited by Apple as Being Infringed
by Samsung in *Apple v. Samsung*³⁴¹

U.S. Patent No.	D618, 677 (D'677)	D593, 087 (D'087)	D604, 305 (D'305)	D504, 889 (D'889)
Figures	  	  		

1-2-2. Trade Dress Infringement

In addition to the patent infringement, Apple claimed Samsung's infringement of trademark and trade dress rights attached to the external designs of iPhone. The diluted trade dresses included a registered trademark ('983 trade dress³⁴²) relevant to the designs of sixteen icons on the iPhone's home screen which indicate the applications in iPhone devices. Moreover, the unregistered trade dress rights asserted by Apple were associated with the general shape/configuration and packaging of the iPhone 3G and 3GS products (i.e., a rectangular product with four evenly-rounded corners; a flat, clear surface covering the front of the device; a display screen; black borders above and below the display screen; an unchanging bottom dock of colorful square icons, etc.).

비즈(Chosun Biz), August 22. Accessed October 25, 2020.

https://biz.chosun.com/site/data/html_dir/2013/08/22/2013082202976.html.

³⁴¹ Adapted from USPTO, and Apple Inc. v. Samsung Electronics Co., Ltd., 786 F.3d 983 (Fed. Cir. 2015).

³⁴² U.S. Trademark Registration No. 3,470,983 ("983 trade dress").

1-3. Claims of the Parties

1-3-1. Apple

Accusing Samsung of design infringement in terms of patents and trade dress, Apple's argument is mainly geared towards demonstration of similarity in designs of its iPhone and iPad models with designs of Samsung's smartphones and tablet devices. Apple also pointed out that Samsung's smartphone designs had become similar to those of Apple's after the release of iPhone models.

In terms of the trade dress protection, Apple tried to show the non-functionality of its unregistered trade dress features (i.e., exterior design of iPhone 3G). In a trial in South Korea, Apple claimed that Samsung's sales of smartphones and tablet devices were likely to cause confusion on the source of the products, which goes against the UCPA. In such sense, the plaintiff argued that Samsung's design infringement had diluted Apple's legitimate trade dress rights.

As for the damages awarded, Apple asked the Courts to affirm the total profits award – damages based on Samsung's total profits gained by selling the relevant smartphone products, asserting that the patented design features play a pivotal role in adding distinctiveness and uniqueness to the appearance of iPhone.

1-3-2. Samsung Electronics

Challenging the Apple's claim on design infringement, Samsung focused on proving that Apple's designs were ineligible to be registered or protectable under the patent and trade dress systems. It also filed countersuits against Apple mainly on utility patent infringement in various Courts (i.e., Courts in South Korea, Japan and Germany), though the both companies agreed to withdraw all the lawsuits in jurisdictions outside the U.S. in 2014.

In order to prove that iPhone designs are ineligible for patent protection, Samsung claimed that the purported designs lack novelty – a requirement for design patent protection in the U.S., as stipulated in the U.S. Patent Act.³⁴³ The geometric shapes of iPhone – a rectangular form with rounded corners – are publicly known designs and similar to the existing or already-publicized designs of smartphones released before iPhone, such as Samsung ‘Ultra Smart F700’ and LG ‘Prada Phone’ models.³⁴⁴ Thus, Samsung sought to claim that the rectangular device design with rounded corners was not newly created by Apple and that such design in public domain was not to be monopolized by one company.

Against the allegation of trade dress infringement, Samsung argued that the product packaging design at issue is extremely functional or conceptual to be protected as trade dress and is unlikely to cause actual deception or confusion in the minds of consumers.

The CAFC overturned Apple’s claim and the first jury’s verdict that Samsung had infringed on Apple’s trade dress. Citing this judgment by CAFC, Samsung further claimed that just as Apple’s products designs are regarded as too functional for trade dress protection, the same features are also ineligible to be protected by design patents, if not by utility patents.

Though the damages were lowered in the CAFC ruling, Samsung still thought the amount of damages for design patent infringement was excessive since it represented: (i) all the profits the company had made through the smartphones sales; and (ii) all parts of a smartphone device, which is comprised of multiple component parts including those irrelevant to the three patented designs. Thus, Samsung asked for the certiorari to the CAFC for the Supreme Court’s review.

³⁴³ 35 U.S.C. § 102 (2020).

³⁴⁴ 이은민. 2012. 「글로벌 IT 특허경쟁의 의미와 시사점」. 『정보통신방송정책』 24권 22호:26-54.

2. Findings of the Korean Court

On August 24, 2012, Seoul Central District Court ruled mostly in favor of Samsung, especially in terms of design infringement, as it dismissed all of the design infringement allegations by Apple. The Court found that Samsung had infringed upon one patent for ‘bounce-back’ technology by Apple and awarded 25 million KRW damages to the defendant.³⁴⁵ On the other hand, in a patent infringement trial filed by Samsung, Apple was found to have infringed upon two utility patents of Samsung, with 40 million KRW damages being awarded.³⁴⁶

As regards design infringement, the Court ruled that Apple’s designs lack novelty and thus unprotectable as design rights in South Korea. Considering the publicized prior arts (i.e., Japanese design ‘JP1241638,’ ‘LG Prada Phone’ design and European Community Design ‘RCD000569157’) that are similar to Apple’s iPhone design, the Court judged that the fact that both companies’ smartphone designs share common features does not come to conclusion that the designs are similar or identical to one another; even if Apple’s designs are registered, exclusive rights cannot be granted to the publicized or published design features.³⁴⁷ In determining similarities between designs, the Court regarded the novel and differing features included in Samsung’s product designs (i.e., the number of buttons at the bottom, borders for camera, and shape of the curve/edge resembling Korean traditional hairpin ‘binyeo’) relatively more significant than the published features. Moreover, the frontal designs of smartphones including touchscreen have little room for changes in design; and even minor design modifications in frontal design of a device can arouse completely different aesthetic sense or impressions in the minds

³⁴⁵ Seoul Central District Court of Korea, Decision of 24 August 2012, 2011GaHap63647.

³⁴⁶ Seoul Central District Court of Korea, Decision of 24 August, 2012, 2011GaHap39552.

³⁴⁷ 김종균·이철남·강민정. 2017. 「애플사의 특허권에 비추어 본 미니멀리즘 디자인의 법적 보호」. 『디자인과 법』:534-562, p.548.

of general consumers. These facts considered, the Court determined that though Samsung's product designs have commonalities with Apple's designs, the former provides different aesthetic sense from the latter's minimalism designs. Thus, it was concluded that Samsung had not infringed upon Apple's design rights.

Furthermore, trade dress infringement or dilution claims filed by Apple was also rejected on the grounds that there is no likelihood for consumers to confuse the products' sources. Since consumers usually purchase for smartphones or tablet devices based on comprehensive considerations, trade dress dilution claim was dismissed and the Court judged that Samsung had not infringed upon or diluted Apple's trade dress, with reference to the provisions of the UCPA.

3. Findings of the U.S. Court

The first jury in the U.S. District Court for the Northern District of California affirmed Apple's claim that Samsung had willfully infringed upon the plaintiff's 3 utility patents, 3 design patents and trademark/trade dress rights attached to iPhone models.³⁴⁸ According to the jury verdict, Samsung's 'Galaxy S II' infringed upon D'677 and D'087 Patents, and all of the accused Samsung smartphones infringed upon D'306 Patent.³⁴⁹ The jury particularly affirmed that Apple's designs are protectable as trade dress and Samsung's smartphones (i.e., Galaxy S, Galaxy S 4G, Galaxy S II Showcase, Mesmerize and Vibrant) had diluted such trade dress rights against the Lanham Act. Rather than analytically reviewing the designs, the jury regarded that Apple's designs in overall is more similar to device designs adopted

³⁴⁸ Claims on trade dress infringement relevant to Apple's iPad models were dismissed.

³⁴⁹ The first jury delivered a verdict that Samsung's 'Galaxy Tab 10.1' product had not infringed upon Apple's D'889 Patent.

by Samsung than the prior art; this similarity would be likely to cause confusion among consumers.³⁵⁰ Thus, the jury found distinctiveness in Apple's iPhone products and admitted Samsung's trade dress dilution, alongside the design patent infringement. On the other hand, Samsung's claims on patent infringement by Apple were rejected. Despite Samsung's post-trial motion, the District Court, in line with the first jury trial, upheld the jury findings of the defendant's design and utility patent infringement as well as trade dress dilution. While the jury awarded \$1 billion damages to Samsung, the District Court re-calculated and ordered \$930 million for damages.

Upon Samsung's appeal, the CAFC reaffirmed Samsung's infringement of Apple's three design patents and two utility patents, but reversed the jury's verdict on trade dress dilution.³⁵¹ First, as for design infringement, the Court found similarity in the designs and marked the Apple's patented design features as not "too functional" and therefore eligible for patent protection.³⁵² The Court also suggested that in order for a design to lack non-functionality requirement for patent protection, the design has to be dictated solely by functionality that no other design options can exist, rejecting Samsung's claim that the functionality test for design patents should be the same as that for trade dress.³⁵³ Thus, the patented designs by Apple are concluded to have enough ornamentality for protection.

³⁵⁰ 김송이(한국지식재산연구원). 2012. 「삼성전자와 애플의 분쟁으로 보는 국내 디자인 보호 제도」. 『지식재산정책(IP policy)』12:79-84, p.82.

³⁵¹ Apple Inc. v. Samsung Electronics Co., Ltd., 786 F.3d 983 (Fed. Cir. 2015).

³⁵² In terms of design infringement by Samsung devices (i.e., Galaxy S and Galaxy Tab), the European Courts showed a tendency to emphasize the 'originality' of a design for protection: the High Court of Justice of England and Wales ruled that Apple's design lacks originality and dismissed the design infringement claim; likewise, the Hague District Court and the Mannheim Court ruled that Samsung had not infringed upon Apple's design right.

³⁵³ Samuelson, Pamela. 2016. "Legally Speaking: *Apple v. Samsung* and the Upcoming Design Patent Wars?" *Communications of the ACM* 59(7):22-24.

The CAFC, however, overturned the trade dress infringement claim based on the lack of ornamentality/non-functionality. The Court found that the external designs of iPhone, such as the rectangular shape with rounded corners and bezels of a device, are mainly included to make smartphones more “pocketable” and protect the devices from breakage.³⁵⁴ Therefore, non-functionality of this unregistered trade dress was not sufficiently proved by the plaintiff, Apple, and the Court delineated the existence of ‘utilitarian advantage’ in the trade dress. Likewise, individual elements of the registered trade dress (’983) are concluded as functional; the display of icons on a device screen, for instance, was viewed to serve functional and useful roles, as the icons indicate the properties of applications to be opened by touching them on a screen. With a burden of proof for non-functionality shifting back to Apple, the Court pointed out that Apple had failed to show substantial evidence supporting the non-functionality of its registered trade dress. In summary, it was concluded in the Federal Circuit that Samsung had not diluted or infringed on Apple’s trade dress, both registered and unregistered.³⁵⁵

Thus, the damages awarded to Apple for Samsung’s design infringement were cut down to \$399 million. However, Samsung petitioned for the certiorari to the U.S. Supreme Court, dissatisfied with the calculation of design patent infringement damages determined by the Federal Circuit. The CAFC had determined that the amount of damages should be based on ‘total profits’ Samsung had earned from selling the smartphones containing Apple’s patented designs. The CAFC also held that the “article of manufacture” mentioned in the statute (35 U.S.C. § 289) is to be applied to a smartphone device as a whole and not only to the components containing the infringing designs, since consumers do not separately purchase for individual

³⁵⁴ Ibid.

³⁵⁵ The U.S. Supreme Court has maintained that trade dress is “too functional” for protection if it is “essential to the use of purpose of the article or if it affects the cost or quality of the article, or would put competitors at a significant non-reputational-related disadvantage.”

components of a smartphone.

On December 6, 2016, the U.S. Supreme Court pronounced the judgment regarding the calculation of damages for design patent infringement.³⁵⁶ In a unanimous opinion by the Justices, the Supreme Court reversed the decision by the Federal Circuit and recognized the inequity in awarding damages on the basis of an entire product (smartphone) in case where an infringing design patent is only a part of the product. It was concluded that the term “article of manufacture” can encompass both the entire product sold to consumers and the components of that product; therefore, the CAFC erred in deciding that the term must only indicate the end product and in this case, the Samsung smartphone in its entirety.³⁵⁷

The Supreme Court did not provide an explicit ruling on the amount of damages awarded to Apple or allocation of the profits; instead, the case was reversed and remanded back to the Federal Circuit. This decision confirmed that limiting the scope of damages for which a design patent infringer is liable to the profits attributable to the infringing components of an article should not be prohibited.

Then, the Federal Circuit remanded the case to the District Court. On May 24, 2018, the federal jury in the U.S. District Court of Northern California Court made a verdict that the amount of damages awarded to Apple against the design and utility patent infringement should be \$539 million, which required Samsung to make an additional payment of about \$140 million after it had paid \$548 million in December 2015. The legal dispute was finally settled in June 2018, as the both parties informed the Court of their agreement on undisclosed terms.³⁵⁸ Apple and Samsung might

³⁵⁶ Samsung Electronics Co., Ltd., et al. v. Apple Inc., 137 S.Ct. 429 (2016).

³⁵⁷ Ibid.

³⁵⁸ Apple highlighted, in its statement, that it “believe[s] deeply in the value of design ... Apple ignited the smartphone revolution with iPhone and it is a fact that Samsung blatantly copied our design. It is important that we continue to protect the hard work and innovation of so many people at Apple.”

have determined that continuing the long-term IP dispute, which had persisted for seven years, would be of no benefit for the both companies.³⁵⁹

Table 8. Court Decisions on Samsung’s IP Infringement in *Apple v. Samsung* (2011-2018)³⁶⁰

		2012.8	2014.3	2015.5	2016.12	2018.5
		N.D. Cal.		CAFC	Supreme Court	N.D. Cal.
		Jury Verdict	Court Ruling			Jury Verdict
Infringement	Design Patents (3)	O	O	O	O (review on damages)	O
	Utility Patents (3)	O	O	O	•	O
	Trade Dress	O	O	X	•	•

4. Analysis of the Findings

4-1. U.S. Design Patent Damages

A series of disputes in *Apple v. Samsung* have introduced a significant implication on the amount of damages for design patent infringement in the United States. The main rationales behind Samsung’s appeals were pertinent to the calculation of design patent infringement damages by the U.S. Courts. Regarding the Section 289 of the Patent Act, the both parties were especially concerned with the

³⁵⁹ 박순찬·강동철. 2018. “삼성·애플, 7년 특허戰 종지부... “누구도 승리 못한 소송.” 조선비즈(Chosun Biz), June 29. Accessed October 22, 2020.

https://biz.chosun.com/site/data/html_dir/2018/06/29/2018062900018.html.

³⁶⁰ Compiled by Author.

scope of “article of manufacture.”³⁶¹ The problem was that a smartphone device is a multi-component product involving different components of design and technology, whereas the three infringed design patents at issue were associated with partial configurations of a smartphone. Therefore, Samsung argued in its appeals that the subject for damages – “article of manufacture” – should be limited to the infringed design features of an article, rather than a finished article in its entirety. On the other hand, Apple was in favor of the ‘total profits’ award, a way of calculating the damages based on the defendant’s total profits gained from selling the article of manufacture embodying the patented designs. The U.S. Courts in general sided with Apple.

At the first trial in the U.S. District Court for the Northern District of California, the judge had pointed out to the jury that the Court could not clarify the extent to which Samsung’s profits from smartphone sales were attributable to the patented designs.³⁶² Nonetheless, the first jury ordered Samsung to pay over \$1 billion in damages and no damages were ordered in a countersuit filed by Samsung. The District Court decided that the damages awarded to Apple against Samsung would amount to \$930 million. Here, the damages for design patent infringement were the largest, followed by those for trade dress and utility patent infringement; damages for design patent, trade dress dilution and utility patent infringement were \$399 million, \$382 million and \$149 million, respectively.

The U.S. Court of Appeals for the Federal Circuit (CAFC) affirmed the validity

³⁶¹ 35 U.S.C. § 289. “Whoever during the term of a patent for a design, without license of the owner, (1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or (2) sells or exposes for sale any article of manufacture to which such design or colorable imitation has been applied shall be liable to the owner *to the extent of his total profit*, but not less than \$250, recoverable in any United States district court having jurisdiction of the parties. Nothing in this section shall prevent, lessen, or impeach any other remedy which an owner of an infringed patent has under the provisions of this title, but he shall not twice recover the profit made from the infringement.”

³⁶² Samuelson, Pamela. 2017. “Legally Speaking: Supreme Court on Design Patent Damages in *Samsung v. Apple*.” *Communications of the ACM* 60(3):26-28.

of the damages awarded for design and utility patents infringement, but reversed the jury's verdict on trade dress dilution, thus vacating the trade dress damages awards (\$382 million) against the Samsung's products. Though Samsung agreed to make a payment of \$548 million in damages to Apple, design patent infringement award was a primary issue for Samsung's petition for writ of certiorari and plea for the Supreme Court's review. On the contrary to the decision by the CAFC, Samsung argued that the damages should be limited to about \$28 million, not \$399 million, in that the company was only liable for the profits attributable to the components of its smartphones with three infringed design patents on iPhone. The CAFC addressed that the Section 289 of the Patent Act, which governs the remedy for design patent infringement, authorized the total profits award being granted on the end product (a smartphone as a whole). The Court also reasoned that a limit on damages was not required at all, since the components/portions of Samsung's smartphones were not being sold separately to ordinary consumers as distinct "article(s) of manufacture."³⁶³

This judgment by the Federal Circuit raised a huge controversy among the IT industry and enterprises. Indeed, technology industry associations and a number of technology companies, such as Facebook, Google, Dell and eBay, filed *amicus curiae* ("friend of the court") briefs in support of Samsung: they warned against the upholding of the total profits award, as it could lead to a "deluge of litigation" with "unwanted windfalls" in case where infringed design patents are only a small portion of a more complex multi-component product.³⁶⁴ The U.S. Solicitor General (SG) also filed a brief and participated in the oral argument to challenge the CAFC's ruling on the same grounds.³⁶⁵

³⁶³ Samsung Electronics Co., Ltd., et al. v. Apple Inc., 137 S.Ct. 429 (2016).

³⁶⁴ Samuelson, Pamela. 2017, *op.cit.*

³⁶⁵ The U.S. government had rarely filed briefs with the Supreme Court cases and joined the oral argument in litigations between private parties like Apple and Samsung.

Furthermore, the CAFC's interpretation of Section 289 in the Patent Act posed a fundamental question on the language of this statute. The provision stands as a separate statute on the remedy for infringement of patent design, besides the Section 271 which governs patent infringement in general. The CAFC reasoned out the legitimacy of total profits award from the language of the Section 289: "Whoever during the term of a patent for a design, without license of the owner ... applies the patented design ... to any article of manufacture ... for the purpose of sale ... shall be liable to the owner to the extent of his total profit, but not less than \$250."³⁶⁶ One of the problems was that an origin of this provision or the total profits award dates back to the late 19th century when design patents were embodied in simple articles of manufactures (i.e., carpets and wallpaper).³⁶⁷ On the other hand, most of the design patents nowadays are more likely to be included as specific components in complex articles of manufacture (i.e., smartphones). This is why the Federal Circuit's ruling received criticism for overinflating design patents especially embodied in state-of-the-art high-technology products comprised of numerous and complex elements, since it would generate excessive awards in design patent litigations. Samsung argued against such overcompensation for patented designs, maintaining that the three infringed design features had contributed only marginally to its smartphone sales.

Granting certiorari petitioned by Samsung, the U.S. Supreme Court continued addressing this issue regarding Section 289. The major questions at hand, therefore, were determining: (a) scope of the relevant "article of manufacture"; and (b) whether the infringer's profits awarded to a design patent holder can be limited to the profits attributable to the infringed components. The Supreme Court reversed the prior

³⁶⁶ 35 U.S.C. § 289 (2020).

³⁶⁷ Ornamental designs in articles of manufacture have been protectable as design patents in the U.S. since 1842; the U.S. Congress amended the design patent statute and introduced the 'total profits' rule in 1887. The provision has not been amended since 1952.

ruling by the CAFC and determined that the scope of the term “article of manufacture” for arriving at damages award is “broad enough” to encompass both the end product sold to consumers and the component(s) of that product.³⁶⁸ Thus, the Supreme Court judged that a narrower reading of the term by the CAFC was not congruent with the statutory text of Section 289. This led to a conclusion that total profits award is not mandatory in every case; design patent infringement damages need not always be attributable to infringer’s total profits from the entire end product sold in the market. Namely, in case where a patented design is only a part of a multi-component product, a patent holder may be awarded damages based on infringer’s profits from the infringed component of the end product.

As the case was remanded back to the lower Courts, the U.S. District Court for the Northern District of California was in charge of deciding upon the damages. Contrary to the expectation that the amount of damages Samsung was liable for would be lowered than what had been affirmed by the Federal Circuit prior to the Supreme Court’s decision, the new jury verdict awarded Apple nearly \$539 million in damages; specifically, the damages for design patent infringement – the vast majority of the total damages award – accounted for \$533.3 million, while additional damages for utility patent infringement were about \$5.3 million. In particular, the damages for design patent infringement were even more increased than in the first trial (\$399 million), and Samsung would have been supposed to pay additional \$140 million in damages if the jury verdict had been finalized. Though the trial was eventually settled by bilateral agreement between the litigants with specific terms being kept in confidence, *Apple v. Samsung* is a landmark case demonstrating the significance of design patent infringement, principally with regard to enormous damages and awards assessed and interpreted by the U.S. Courts and juries.

³⁶⁸ Samsung Electronics Co., Ltd., et al. v. Apple Inc., 137 S.Ct. 429 (2016). The court addressed that such a broad reading of the 35 U.S.C. § 289 is consistent with 35 U.S.C. 171(a).

Table 9. Damages Awarded to Apple in *Apple v. Samsung* (2011-2018)³⁶⁹

(unit: USD million)						
	2012.8	2014.3	2015.5	2016.12	2018.5	2018.6
	N.D. Cal.		CAFC	Supreme Court	N.D. Cal.	Settlement
	Jury Verdict	Court Ruling			Jury Verdict	
Design Patents (3)		\$399	\$399	*Remanded.	\$533.3	
Utility Patents (3)		\$149	\$149	\$149	\$149 + \$5.3	
Trade Dress		\$382	.	.	.	
Approx. Total	\$1,049	\$930	\$548	→ \$688		Undisclosed.
Additional payment: \$140						

4-2. Differences in Design Interpretation

The most pivotal issues in *Apple v. Samsung* being a dispute over designs infringement, it is rendered necessary to discuss the differences in relevant Court rulings and statutes from South Korea and the United States.

The Courts presented diverging views on the interpretation of similarity in designs of iPhone and Samsung smartphones. When testing novelty of designs, the Korean Court focused more on specific features or elements, whereas the U.S. Courts and juries made observation of the overall product designs. Accordingly, Seoul Central District Court – the Korean Court – called attention to the partial modifications or changes in configurations of Samsung smartphones, which deviate from those of iPhones, and judged that Apple’s design rights had not been violated, based on such dissimilar features. Here, the designs asserted by Apple were regarded to lack novelty, as iPhone’s overall designs (i.e., round-cornered front face and bezel

³⁶⁹ Compiled by Author, using KISTA Issue Paper. (Korea Intellectual Property Strategy Agency (KISTA). 2018. “삼성-애플 특허전쟁 리뷰.” *KISTA Issue Paper* 17:1-25.)

of a device) corresponded to the prior art or publicly known designs for smartphones. Therefore, although the Court recognized similarity in overall designs of the plaintiff's and the defendant's smartphones, this fact per se was not potent enough to override the importance of distinctiveness in partial design elements. Samsung's smartphone designs were not concluded to be similar or identical to Apple's iPhone designs.

In contrast, the U.S. Courts – District Court for the Northern District of California and the Federal Circuit – as well as the juries determined the novelty of designs based on the ordinary observer test.³⁷⁰ In perspective of an 'ordinary observer,' similarity in designs was examined under a more holistic view; the jury found that the overall designs of iPhones were much more similar to those of Samsung smartphones than to the prior art. Judging that iPhone designs had been infringed by Samsung, the U.S. Courts could afford comprehensive protection for Apple's design patents.

Another difference between the two countries' industrial design protection pertains to the trade dress system. Though designs can be protected as trademarks – especially, three-dimensional marks – in Korea under the Trademark Act or the Unfair Competition Protection Act (UCPA), the actual effects of this protection are distinctive from those of the U.S. trade dress system under the Lanham Act.³⁷¹ In *Apple v. Samsung*, the trade dress dilution claims by Apple were recognized at a District Court level, whereas the Korean Court rejected the claim. The dismissal of Apple's claim from the Korean Court was mainly grounded on the unlikelihood of confusion by consumers. That is, the Court addressed that consumers highly likely to acknowledge differences in designs and receive varying impressions from the two

³⁷⁰ To determine the novelty of designs, the U.S. case law has applied the two tests: ordinary observer test and point of novelty test. The former means that a design patent is infringed if an ordinary observer or purchaser would have been deceived in terms of two designs at issue.

³⁷¹ 김종균·이철남·강민정, *op.cit.*, pp.553-554.

companies' smartphones. Even when there are only minor modifications in designs or configurations of devices, consumers are expected to differentiate and identify the source or manufacturer of smartphones.

Unlike Korea where the distinctiveness of iPhone designs was not fully acknowledged, the U.S. trade dress system aims to provide more comprehensive and thorough protection for product designs as a whole. In this case, the U.S. District Court and the jury affirmed trade dress dilution by Samsung since the iPhone's minimalism design was regarded to constitute a trade dress with distinctiveness or secondary meaning. Though this trade dress dilution claim was reversed in the Federal Circuit because of functionality in designs, the jury of the District Court found Samsung liable for diluting iPhone's overall designs – trade dress – which is likely to cause confusion among consumers in the market.

Chapter VI. Implications

1. KOR-US FTA and USMCA

There have been continuous efforts to harmonize and integrate divergent IPR regimes of the international community by means of multilateral agreements and Free Trade Agreements (FTAs) among states. The most paramount treaty being WTO's TRIPS Agreement, states have particularly shown inclinations toward standardizing terms of protection for various types of intellectual properties. For instance, the minimum duration of patent right has been unified by the TRIPS Agreement, while the KOR-US and KOR-EU FTAs served as a main catalyst for extending the term of protection for copyright in South Korea. With regard to design rights in Korea, the term of protection has been consecutively extended as a part of amendments to the Design Protection Act, in order to live up to the international standards (i.e., Hague Agreement).

The intellectual property legislation and policies of South Korea are especially influenced by the United States, one of Korea's biggest trade partners. In fact, Korea's Trademark Act was revised following the 2012 KOR-US FTA to extend the range of protected marks, and the Design Protection Act was amended after the initiation of *Apple v. Samsung*. Considering that Korea's IP regimes are closely linked to international trends and agreements, especially in respect to the U.S., it is essential to examine the current IPR and design protection policies of the U.S. in agreements with other states.

As regards prospective KOR-US agreements or negotiations surrounding IP in the future, it is to be noted that the U.S. has demonstrated a clear tendency to strengthen the general protection of IPRs through FTAs. The recent Agreement between the United States of America, the United Mexican States, and Canada

(USMCA), which is a renegotiation to the 1994 North American Free Trade Agreement (NAFTA), includes a separate chapter on IPR. The U.S. aimed to intensify the overall IPR protection, by extending copyright terms and strengthening regulatory exclusivity or enforcement of digital rights, trade secrets and patents for biologic drugs. Above all, the USMCA addresses a stronger protection of industrial designs than the NAFTA as well. A provision stipulating that each Party shall provide “adequate and effective” protection of industrial designs in consistency with the TRIPS Agreement (Section 4, Articles 25 and 26 on Industrial Designs) is added in the USMCA.³⁷² The minimum term of protection for industrial designs was extended to 15 years from the date of filing or the date of grant/registration,³⁷³ whereas in NAFTA, it was 10 years. Partial designs (“designs embodied in a part of an article”) are also guaranteed a legal protection.³⁷⁴ This extension of a term and scope for industrial design protection can be construed as a manifestation of a policy objective – emphasis on IPR protection.³⁷⁵ Additionally, each Party is supposed to provide an electronic system of application and publicly available information for better protection of industrial designs.³⁷⁶ Likewise, the provisions on trademarks are aimed to ensure more accessible enforcement of trademarks; a term of protection is in line with the U.S. trademark registration practices. The existing KOR-US FTA is yet to include an explicit provision addressing industrial design sector. However, design protection should not be underestimated, considering current U.S. foreign policies with regard to IPR protection; even setting aside industrial designs, the United States has been strengthening patent, copyright and trademark protection – which are all associated with design rights in the United States. In this respect, the

³⁷² Article 20.52 (1) of the USMCA. [Enforcement date: July 1, 2020]

³⁷³ Article 20.55 of the USMCA.

³⁷⁴ Article 20.52 (2) of the USMCA.

³⁷⁵ According to Kwon (2016), implementation of policies for stronger IPR protection typically results in the expansion of either a term or scope of protection. (Kwon, In Hee. 2016. “A Study on the History of the Term of Protection of Intellectual Property.” *과학기술법연구* 22(1):3-38.)

³⁷⁶ Article 20.54 of the USMCA.

future pacts, especially FTAs, between South Korea and the United States are highly likely to include raised standards and norms for IPR protection than in the past, signifying more strengthened protection of industrial designs as well.

The continuous strengthening of IPR protection in the United States should be closely noted by South Korea. It is assumed that direction of further revision or change in Korea's current IPR policies is to be determined mainly on the basis of the U.S. policies alongside the global trends. Inasmuch as a significant number of Korean IPR-holding corporations are engaged in global trade and business, Korea's IPR protection environment and relevant policies need incessant coordination in parallel with those of the United States and international agreements, so as to prevent unforeseen IP disputes in foreign jurisdictions, mainly including U.S. Courts.

2. Significance of Industrial Design Protection

Despite the international efforts to harmonize standards and cooperate for IPR protection, laws and policies on industrial design rights are relatively discrepant among countries and jurisdictions. The importance of understanding colliding views on design infringement between the Courts from South Korea and the United States was emphasized in *Apple v. Samsung*. This trial between the Korean and U.S. high-tech companies, which took seven years until the settlement, especially served as momentum to raise consciousness on industrial design protection and possible dispute issues relating to design infringement claims.

In case where legal disputes take place under the jurisdiction of U.S. Courts, one of the most far-reaching consequences of design infringement would be damages awarded to design patent owners. In particular, the total profits award is a unique method of calculating damages, which exist only in the U.S. design patent protection system. Such a calculation of damages based on the Section 289 of the Patent Act

can be of huge burden to infringer companies and individuals in violation of patent rights. In fact, the damages awarded to Apple for design patent infringement were considerably higher than those for utility patent infringement in *Apple v. Samsung*. Furthermore, the U.S. trade dress system, which is comparable to Korea's trademark protection³⁷⁷, provides more comprehensive protection for both registered and unregistered designs, as witnessed in the District Court ruling in this case.

South Korea is broadly known as a leading country in terms of filing activities for PCT patents and utility models, mainly related to high-technology (i.e., digital communications, computer technology, electrical machinery and apparatus). This tendency was evident in *Apple v. Samsung*, as the lawsuits filed by Samsung against Apple were mostly centered on utility or technology patent infringement. Apple, on the other hand, brought forth its innovative design elements and managed to claim for damages upon design infringement in the U.S. Courts, though the infringed features were widely argued as public or general designs for smartphones. It is certainly inferred from this case that a company with design patent rights can exert compelling power on U.S. market and tribunals. Along with the possibility of Court decisions to be in favor of domestic business in international trials, differing national laws and interpretations surrounding design infringement render companies to be cognizant of industrial design aspects of products, especially for those engaged in international trade or sales. For many Korean companies manufacturing and exporting electric or IT devices, more awareness is required for the products' design features, in order to prepare for possible infringement suits involving foreign parties.

According to the WIPO, South Korea has ranked 10th in the Global Innovation Index (GII) 2020, among the 131 economies around the world.³⁷⁸ The major factor

³⁷⁷ South Korea has strengthened trade dress protection under the Unfair Competition Protection Act (UCPA).

³⁷⁸ WIPO. The Global Innovation Index (GII) 2020. The GII, co-published by Cornell

contributing to Korea's innovation ecosystem has been active engagement by companies or individuals of Korean origin in filing patents and industrial designs, representing knowledge/technology outputs and creative outputs, respectively. As mentioned in the Chapter I, industrial design sector stands as one of the IP strengths of South Korea. And Korean companies, especially high-tech companies like Samsung, are still not without concern over design infringement litigations filed by foreign companies. For instance, in 2019, 'the Swatch Group' ("Swatch Group") – the brands owned by a Swiss watchmaker, Swatch – filed a trademark infringement suit against Samsung Electronics in the District Court for the Southern District Court of New York. Swatch Group claimed that designs of Samsung's smartwatch faces, which were downloadable in Galaxy Apps Store and used in Samsung smartwatch products (i.e., Galaxy Watch, Gear S3 Classic/Frontier and Gear Sport), had breached Swatch Group's registered U.S. trademarks on designs. Further accusing Samsung of unfair competition act, Swatch Group sought for \$100 million damages. Samsung, alleging that the designs were created by third-party developers, filed a motion to the Court for dismissal of the lawsuit.

Considering the global trend of increasing economic values attached to product designs as well as the reinforced IPR protection by the United States, international communities are likely to move towards offering more inclusive protection for industrial designs. As for the private sector, it is crucial for companies to thoroughly review dissimilar laws and precedents concerning design infringement in other countries, in efforts to internationalize their inventions. Strategic and consistent management of 'design identity' for a company has become ever more important in the era of IPR protection, so as to improve IP competitiveness for both private companies and states.

University, INSEAD and the WIPO, ranks innovation capabilities of world economies using 80 indicators grouped into innovation inputs and outputs. South Korea joined the GII top 10 for the first time in 2020. The United States was ranked 3rd in GII 2020.

Most importantly, in light of design IPR protection, it is essential to align relevant IP policies or laws with global standards and secure compatibility for industries. Though industrial design rights serve as crucial means of differentiating products, design protection via more traditional forms of IPRs, such as patent, trademark and copyright, is often associated with technical problems. National regulations on design protection are less harmonized internationally and WTO Members tend to have differing structures of conferring exclusive legal rights for industrial designs. The case study of a multijurisdictional design dispute (*Apple v. Samsung*) demonstrated a considerable amount of damages a Korean company had to pay under the U.S. design patent law, signifying a high transaction cost involved in case where IPR protection regimes of different countries are in misalignment. Especially for South Korea, merely revising provisions to include stronger protection of design or trademark rights would be inadequate as a principal initiative for IP law amendment; rather, attempts to coordinate and align national IPR systems with global design protection regimes and those of the United States will certainly offer practical benefits in international dispute settlement.

Chapter VII. Conclusion

Intellectual property rights (IPRs) refer to legal rights endowed upon creators or owners of Intellectual Property (IP), allowing them to benefit from their inventions or creative works. The World Intellectual Property Organization (WIPO) categorizes various types of IP into industrial property, including patents, utility models, trademarks, industrial designs and geographical indications, and copyright. The global IP filings have increased sharply in recent years, and the significance of IPR protection is widely acknowledged around the world, in the hope of enhancing cultural and technological innovations which would further the economic development. The knowledge-based economy of the Republic of Korea, in particular, is highly relevant to IPRs. A comparative analysis of different IP regimes by country is rendered pivotal for boosting IPR competitiveness, as there is a growing need to manage international disputes and cooperate globally on issues relevant to intellectual properties.

Industrial design, a specific type of IP recognized worldwide, is officially defined by the WIPO as “ornamental or aesthetic” elements of a useful article. Though the industrial design sector comprises a relatively moderate percentage of total international IP applications, its significance is not to be overlooked. Design has become an essential competitive tool and value of industrial products, often playing a leading role in determining commercial values or marketability for products. Thus, applying and protecting design rights attached upon the ornamental or aesthetic aspects of articles are crucial for companies or individuals creating, manufacturing or commercializing such articles. Alongside a broadly recognized notion that South Korea holds a major position in a patent sector, the country also excels in industrial design filing activities, with the highest rank of industrial design counts by origin, when adjusted for the GDP and residential population. South

Korean firms, including Samsung Electronics, LG Electronics and Hyundai Motor Company, are among the top design applicants to the Hague System.

Analyses on industrial design rights require sophisticated examination owing to the fact that designs are additionally relevant to a number of IP domains – patent, trademark and copyright. In this regard, existing literature comparing the design protection regimes of different countries is limited to a certain extent. In this paper, national legislation and judicial precedents pertinent to industrial design protection systems of South Korea and the United States are comparatively analyzed, following the reviews of relevant international treaties centering on the Agreement on Trade-Related Aspects of Intellectual Property (TRIPS Agreement).

Industrial design filing activities worldwide began in 1883 when the Paris Convention was concluded. It was the first major treaty stipulating global IP protection, including the industrial designs protection. The Berne Convention (1886) further ensured the protection for works of applied art, and the Hague Agreement (1925) established the Hague System which governs the international registration of industrial designs. The WIPO Convention (1967), which instituted the WIPO, provided detailed provisions on IPR protection. And the Locarno Agreement (1968) authorized the international classification system for designs. Finally, the WTO TRIPS Agreement (1995), remaining as the most comprehensive treaty on IPRs, included more substantive provisions (Articles 25 and 26) on industrial design protection. Both South Korea and the U.S. are Member States to the Paris Agreement, Berne Convention, Hague Agreement, WIPO Convention and the TRIPS Agreement; only the former became Party to the Locarno Agreement. Reflected in the TRIPS Agreement, design protection approaches can be largely categorized into patent, copyright and design approaches. Industrial design policies of South Korea and the U.S. are both construed to be under the patent approach, though the specific laws and registration systems are different.

In South Korea, the scope of industrial designs eligible for protection is defined in the Design Protection Act: designs should meet the requirements of visibility, merchantability, configuration and aesthetics. Industrial designs can be protected through registration to either the Korean Intellectual Property Office (KIPO) or the WIPO under the Hague System. A term of protection for Korean design right is 20 years. The requirements for design registration in Korea are as follows: (a) industrial applicability; (b) novelty; and (c) difficulty in creation. Therefore, designs should be reproducible by industrial production procedures, not be publicized or exposed prior to application, and not be easily creatable by a person with ordinary skill in the art using the publicly known designs. These were illustrated by legal cases involving registered designs of a sauna, hairbands (between Cool Enough Studio and Dr. Jart+), Viagra pills (between Pfizer and Hanmi Pharmaceutical), and water bottles (between LocknLock and Komax). Furthermore, designs with distinctiveness can be protected as registered trademarks – mainly three-dimensional marks – under the Trademark Act, and unregistered design protection is possible under the Copyright Act and the Unfair Competition Prevention Act (UCPA). For instance, Binggrae’s banana-milk packaging design was protected as a trademark and against an unfair competition act, and the water bottle design by Komax was additionally protected under the UCPA.

In the United States, industrial designs are mainly registered and protected as patents. Without an independent legislation devoted to design protection, the U.S. design patents are governed under the U.S. Patent Act (35 U.S.C. § 171-173). The 15-year period of patent protection is granted to new, original and ornamental designs embodied in articles of manufacture with merchantability. Designs can be registered to either the U.S. Patent and Trademark Office (USPTO) or the WIPO under the Hague System. The requirements for U.S. design patentability are: (a) non-functional subject matter; (b) novelty; and (c) non-obviousness. Thus, the designs should be ornamental and novel features of a manufactured article and not determined as obvious or similar in comparison against the prior art. One of the most distinguishing policies for U.S. design protection is the trade dress system. Under

the Lanham Act, both registered and unregistered trade dress – overall images or design features of the exterior of articles – are legally protected. The requirements for trade dress protection are non-functionality, distinctiveness or secondary meaning and likelihood of confusion. Distinctiveness and non-functionality of trade dress were emphasized in *Wal-Mart Stores, Inc., v. Samara Brothers, Inc.* and *TrafFix Devices, Inc., v. Marketing Displays, Inc.*, respectively. Designs which are not utilitarian can be protected as copyrights, as the cheerleading uniform designs judged to be copyrightable in *Star Athletica, L.L.C., v. Varsity Brands, Inc., et al.*

Thus, the biggest difference between the two countries' industrial design protection policies would be the fact that designs are mainly protected as independent design rights in Korea, whereas in the U.S., they are protectable under the patent regime. The requirements for design registration in both countries are rather similar. While South Korea and the U.S. both enable designs to be regarded as trademarks, the U.S. trade dress system offers more comprehensive protection since both registered and unregistered trademarks are covered; Korea's design trademark protection under the Trademark Act applies to registered marks, while unregistered marks are likely to be protectable under the UCPA.

Table 10. Comparison of Industrial Design Protection in South Korea and the U.S.

		SOUTH KOREA	U.S.
REGISTERED DESIGN PROTECTION	Concept	<i>Design Right</i>	<i>Design Patent</i>
	Legislation	<i>Design Protection Act</i>	<i>Patent Act (35 U.S.C.)</i>
	Term	20 years from application filling date	15 years from patent registration
	Registration Requirement	Industrial Applicability	Patentability/ Ornamentality
		Novelty	Novelty
		Difficulty in Creation	Non-obviousness
ALTERNATIVE DESIGN PROTECTION	Relevant Legislation	Trademark Act	Trademark Act (Lanham Act)
		UCPA	
		Copyright Act	Copyright Act

The central question in the case study of *Apple Inc. v. Samsung Electronics Co., Ltd.* was on the jurisprudential bases of the South Korean and the U.S. Courts which led to varying decisions on Apple's claim of design infringement by Samsung. As regards industrial designs, Apple accused Samsung of design patents infringement and trade dress dilution for its iPhones. In the South Korean Court, both claims were dismissed, as Samsung smartphone designs were judged to evoke different aesthetic sense from iPhones and that consumers are unlikely to confuse the source of smartphones. On the contrary, the U.S. District Court and jury affirmed all the claims filed by Apple. On Samsung's appeal to the U.S. Court of Appeals for the Federal Circuit (CAFC), the verdict on trade dress dilution was reversed due to the lack of ornamentality, while the design patent infringement claim was reaffirmed. Mainly owing to the 'total profits' award – the CAFC's calculation of design patent infringement damages based on entire profits from selling smartphones, Samsung petitioned for a certiorari to the U.S. Supreme Court and it was ruled that the damages award could be based on the sales of either an entire product or an infringing design component of the product. Upon the reversal, however, the District Court jury awarded Apple with more damages for design patent infringement. The major issue in this dispute, therefore, was the considerable amount of damages that could be awarded for design patent infringement in U.S. jurisdictions under the 35 U.S.C. § 289, which aroused criticism especially from the IT industry. Moreover, it is notable that the Korean and U.S. Courts applied dissimilar standards when interpreting the similarity of designs between iPhones and Samsung smartphones.

As the IP legislation of South Korea is much influenced by the United States, it is crucial to note the recent trends in terms of the U.S. IP policies in foreign relations. In the 2020 United States-Mexico-Canada Agreement (USMCA), general protection on IPRs, including industrial design rights, was strengthened. The future KOR-US FTA is likely to include provisions on IPRs with raised standards on protection, possibly signifying intensified protection for design rights.

Having reviewed the commonalities and differences between design protection legal frameworks of South Korea and the United States, along with actual litigations involving parties from both countries, it is clearly inferred that national laws and policies on design right protection include discrepancies depending on a country or jurisdiction. This illustrates the importance of aligning national IPR regimes with global standards. It is also crucial for governments, companies or individuals engaged in international trade to acknowledge such dissimilar laws on design infringement as well as significant legal and economic values attached to product designs. This would consequently lead to cooperative and reasonable IP dispute resolution, under the general guidance of the TRIPS Agreement.

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국 문 초 록

WTO TRIPS 협정 아래 한국과 미국의 지식재산권 보호: 산업디자인권 법제의 비교를 중심으로

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정유현

지식재산권은 인간의 지적 창작물을 보호하는 장치로서, 창작자 혹은 발명가에게 일정 기간 동안 부여되는 법적 권리이다. 지식재산권 국제분쟁이 지속적으로 증가하며 그 중요성이 널리 인식되고 있는데, 해외 출원 문제 및 여러 국가의 법원이 관할권을 갖는 지재권 분쟁 문제 등 해당 분야와 관련된 각국의 법제에 대한 종합적인 이해가 필요한 시점이다. 특히, 해당 논문에서는 지식재산권 영역 가운데 ‘산업디자인’을 중점적으로 다루며 디자인 보호와 관련된 국제조약 및 법률과 판례들을 살펴보고자 한다. 세계지식재산권기구(WIPO)에 따르면, 산업디자인은 물품에 장식성과 심미감을 부여하는 디자인적 요소들을 일컫는다. 이는 상품의 상업적 가치와 경쟁력, 상표적 기능에 중대한 영향을 미치며, 기업 혹은 제작자에게는 시장에서의 경쟁력 제고와 사업 전략 수립을 위한 필수적인 고려 요소로 작용한다.

이처럼 산업디자인의 중요성이 점차 인정되면서 대다수의 국가들이 헤이그 협정 등 디자인권 관련 조약들에 가입하여 왔다. 특히 세계무역기구 회원국들에 적용되는 무역관련 지적재산권 협정(TRIPS Agreement)에는 산업디자인 보호에 관한 일반적 조항들이 포함되어 있다. 그럼에도 불구하고 산업디자인권의 구체적인 보호 기준과 방법 등은 국가별로 상당한 차이를 보인다. 디자인권은 특허권, 상표권, 저작권 등 다른 지재권 영역과도 맞닿아 있기 때문에, 국가별 비교분석에 있어 더욱 다각적인 접근이 필요하다.

이 논문에서는 한국과 미국의 산업디자인권 보호법과 관련 판례들을 비교·분석하여, 두 국가 간의 법제상 차이점들을 규명하고자 한다. 한국은 산업디자인 국제출원이 가장 활발히 이루어지는 국가들 중 하나로, 디자인권의 국내외적 보호에 관한 논의는 특허강국으로 알려진 한국이 디자인 분야

에서도 경쟁력을 확보하고 지식재산 선진국으로 발돋움하는 데 중요한 것이다. 본고에서 한-미간 비교연구를 수행한 것은, 한국의 지재산 관련 법 제·개정이 주요 무역상대국인 미국과의 무역협정에 큰 영향을 받아왔고 한국의 특허청에 가장 많은 디자인 출원을 신청하는 해외 국가 역시 미국에 해당하기 때문이다. 그리고 무엇보다 애플과 삼성의 분쟁을 통해 두 국가간 디자인권 비교 연구의 필요성이 더욱더 강조되었다.

이에 따라, 본고에서는 한-미간 산업디자인 지재산 보호를 위한 법률적 기반의 차이를 조명하였다. 한국의 디자인보호법에 따른 디자인권과 미국의 특허법에 따른 디자인 특허권을 중점적으로 비교하였으며, 양국의 디자인 상표 및 트레이드 드레스 제도 또한 분석하였다. ‘애플 대 삼성’ 분쟁 사례연구를 통해서는 이러한 차이점들이 실제 판결에 적용되는 양상을 살펴보았다. 본 사례에서는 디자인 유사성 판단의 차이에 따라 양국 법원 간 피고의 디자인 침해 여부에 대한 상이한 판결이 내려졌고, 미국 특허법상 디자인 특허 침해에 따른 손해액 산정문제가 주요 쟁점에 해당하였다. 나아가 최근 미국-멕시코-캐나다 협정(USMCA)에서 미국이 디자인권을 포함한 지재산 전반의 국제적 보호를 강화한 것을 참조하여 볼 때, 앞으로의 한-미간 무역협정에서도 미국이 유사한 접근을 취할 것이라 유추된다. 특히 미국은 트레이드 드레스와 특허 등을 통해 보다 포괄적이고 강력한 산업디자인 보호시스템을 구축할 수 있다. 국내 지재산 보호 법제를 세계적 기준에 맞추어 산업환경의 호환성을 마련해야 한다는 점을 이해하는 것은, 국제 지재산 분쟁에 대비·대응하는 데 중요한 기틀이 될 것이다.

주요어: 지식재산권, 산업디자인, 디자인보호법, 디자인 특허, 애플 대 삼성, TRIPS 협정

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