보네	公正	1
万门	邧圦	4

報告番号	*	第		号					
		主	論	文	Ŋ	要	山田		
論 文 題 目 The Interface between Design Patents and Copyright: Toward Reforming Industrial Design Protection in Thailand (意匠特許と著作権のインターフェース:タイにおける意匠保護の改革に 向けて)									
氏	名	PA	LAGAWON	NG NA A	YUTTHAY	A Suth	inee		
		₹/ Ⅲ	章 文	内	卒の	要			

The interface between industrial designs and copyright is a contentious issue in the field of intellectual property, becoming more prominent in the era of new technology due to the increasingly significant role of industrial designs. Industrial designs are germane to the very existence of human beings. They serve as a reflection of how society and culture developed during a specific era. The industrial revolution instigated the beginning of industrially applied products, propelling industrial designs to stardom. The evolution of industrial designs has continually progressed through time and changes among economic and cultural diversities. The dynamics of industrial designs are not rigid and veer in a more fluid direction with the coming new technologies. The future of industrial designs, thus, hinges on the legal protection endorsed in each country. The historical development of industrial design protection and the interface between industrial designs and copyright varies widely from country to country. In view of both economic and non-economic justifications of industrial designs, each country shares some common goals of regulating the level of protection that is most suitable for its economic, cultural, and political objectives. Despite the positive aspects, the complex interaction between industrial designs and copyright raises concern over the scope of protection upsetting the balance of rights underpinning each intellectual property regime, as demonstrated in case law, which

provokes debates on industrial design protection. Nonetheless, there is a limited number of literature about the interface between industrial designs and copyright, and there is a paucity of literature analyzing the issue in developing countries, such as Thailand.

The purpose of this dissertation is to contribute to the enhancement of the legal protection of industrial designs in Thailand by focusing on the interface between design patents and copyright. To achieve this objective, it is important to ascertain whether the current design patent regime protects industrial designs adequately and whether and to what extent cumulative protection with copyright should be permissible for the balanced interests of industrial design proprietors and the benefits of economic and cultural developments. For Thailand, there are potential benefits of industrial designs to boost its economy and promote cultural identities. However, there is no sufficient realization of the significance of industrial design protection and the legal framework for the protection of industrial designs requires a careful revolution.

The complexity of industrial design protection stems from two main reasons: the nature of industrial designs and the legal framework for industrial design protection. As comparatively examined in chapter 2, the inherent nature of industrial designs causes several perplexing problems, resulting in the convolutions of the legal protection for industrial designs. The terms "industrial" and "design" signify two opposite sides of the same coin, two opposing elements merged into "industrial design," thus posing conceptual difficulties for the legal protection thereof. Viewed artistically, industrial designs can be copyrightable due to their artistic elements in utilitarian articles. However, the copyrightability of industrial designs is not the same everywhere in the world.

Despite the great significance of industrial designs across the globe, the legal protection of industrial designs and cumulative protection with copyright is diverse across jurisdictions. The divergence of industrial design protection can be problematic for industrial design proprietors because the legal protection of their works in a country does not mean the same level of protection in other countries. Particularly, cumulative protection with copyright has long been the subject of debate in many jurisdictions, but there is no international harmonization of the issue. The functioning of international agreements fails to completely harmonize industrial design protection and guarantee strong protection to industrial design proprietors. Although international agreements oblige certain

standards of industrial design protection, they are quite reserved and ambiguous about the legal framework of industrial designs. The Paris Convention for the Protection of Industrial Property merely recognizes industrial design as an object of intellectual property. The Berne Convention for the Protection of Literary and Artistic Works obliges Member countries to protect such works as artistic works when there is no sui generis design legislation, but it provides considerable autonomy to Member countries for protecting industrial designs and works of applied art. The Agreement on Trade-Related Aspects of Intellectual Property Rights, which is the most descriptive of industrial design protection, does not strictly enforce a particular intellectual property regime to protect industrial designs but allows copyright to be an option. Member countries, thus, may choose to adopt a different legal framework for the protection: the EU, UK, and Japan implement sui generis design legislation, whereas Thailand and US protect industrial designs under patent law. The divergence between countries using a sui generis design regime and a design patent regime results in not only the level of difficulty in satisfying the legal requirements, but also the practical conveniences in obtaining the protection. There are also some differences regarding protection requirements, for instance, even among countries adopting the same means of protection. Hence, the legal protection of industrial designs is nowhere near complete harmonization.

Many developed countries have a well-regulated framework for the legal protection of industrial designs and cumulative protection with copyright; however, Thailand's legal framework still has plenty of room for improvement. The beneficial role of industrial designs is evident in the EU and UK, where there is a well-regulated framework for the legal protection of industrial designs. As comparatively discussed in chapter 3, countries adopting sui generis design regimes and harmonizing certain aspects of protection including cumulative protection with copyright tend to handle the interface between industrial designs and copyright without unmanageable conflicts: the Design Directive and Design Regulation explicitly address cumulative protection with copyright in legislation, and the UK laws delineate copyrightable subject-matter clearly. In contrast, countries utilizing a design patent regime appear to face more difficulty in protecting industrial designs and handling cumulative protection with copyright. The US struggles with the copyrightability of industrial designs by virtue of the useful article doctrine and the separability test, which rests with the courts. Thailand

faces inconsistency and legal uncertainty owing to the ill-regulated legal framework concerning the interface between design patents and copyright. The carefully constructed legal framework in each country can thus minimize problems causing ineffective protection of industrial designs.

In response to the research question, this dissertation delves into both legal and practical analyses of the Thai legal framework related to industrial design protection, particularly on the interface between design patents and copyright. By using the comparative method to discover the legal and practical problems toward effective protection of industrial designs in Thailand, this dissertation presents detailed analyses of the Thai legal framework related to industrial design protection and the relevant case law. The legal analysis includes examining the historical development of design patent protection and means of intellectual property protection available to industrial designs under patent and copyright laws. To analyze the practical aspects, this dissertation further investigates the practical data from the patent database of Thailand's Department of Intellectual Property since the enactment of the Thai Patent Act in 1979. For this purpose, the author collected data using an automated program originally created to perform exploratory data analysis. The results of the analysis are then presented in graphs and summary statistics, which are means and standard deviations, together with the discussion. The numbers of design patent applications and granted design patents are computed to render outcomes based on the dimensions of industrial designs: two-dimensional and three-dimensional forms. The statistical results can provide new insights into the popularity and the likelihood of success for each type of industrial designs applied for design patents in Thailand. In addition, the data analysis reveals the average number of days between the date of filing a design patent application and the date of granting a design patent from 2000 to 2019, confirming the timeconsuming process before granting design patents. It also shows the annual design patent allowance rates from 1979 to 2019, portraying the inconsistent trend that is unsatisfactory to the industrial design proprietors. To the best of the author's knowledge, these kinds of analyses are never before conducted in the literature regarding industrial design protection in Thailand, and the results yield some interesting findings that can reflect the functioning of the Thai design patent regime.

To ascertain whether cumulative protection should be permissible in Thailand, this dissertation comparatively reviews the historical development related to industrial design protection

and the interface between industrial designs and copyright in the EU, UK, and US. The comparative review acknowledges the fact that some countries vacillated between different approaches regarding cumulative protection with copyright under different intellectual property laws. For example, the UK affords registered design protection for two- and three-dimensional designs under the Registered Designs Act 1949 and unregistered design protection for three-dimensional designs under the Copyright, Designs and Patents Act 1988. The EU's strong economic objectives on trade matters further support cumulation, establishing the EU-wide unitary design rights for sui generis unregistered and registered design protection. The US predominantly remains in a position of demarcating between design patent protection and copyright protection, protecting ornamental attributes of industrial designs under taw. Thailand remains silent on cumulative protection with copyright of industrial designs, and as a result, it poses a risk to the interests of the industrial design proprietors in cases where cumulative protection with copyright is not possible.

The findings of this dissertation indicate that Thailand's legal framework related to industrial design protection has several shortcomings when compared to the EU, UK, and US counterparts. The Thai patent and copyright laws do not explicitly address the interface between design patents and copyright for industrial design protection. Thailand's industrial design protection regimes provide no clear boundaries as regards the protection of industrial designs under patent and copyright laws. According to the Thai legislative development, design patent protection should serve as a primary means for protecting industrial art; however, the protection afforded currently is inadequate and inefficacious. Design patents protect new and industrially applicable designs for ten years from the filing date, which is also less than the one granted by the US design patents. By contrast, original industrial designs copyrightable as works of applied art receive protection for twenty-five years after the creation or the first publication of the work. For industrial designs, overprotection is often associated with copyright, whereas under-protection is paired with design patents.

To put it succinctly, the design patent regime is inadequate, while the copyright regime is too lax in protecting industrial designs in Thailand. Notably, the statutory definitions of subject-matter protectable under design patent and copyright laws are not well-defined. The obscure wording leads to overlapping protection and paradoxical situations, unjustifiably affecting the balance between the interests of the industrial design proprietors and those of the public. According to the statutory definitions, purely functional industrial designs may be subject-matter protectable under copyright and patent laws since there exist the loose boundary of copyrightable subject-matter as works of applied art and the absence of the functionality exclusion under patent law. Such results are contrary to the legal provisions implemented for functional industrial designs in the EU, UK, and US. The ill-regulated framework of industrial designs, contributing to their ineffective protection in Thailand. This dissertation, then, concludes that there is a need to reform the design patent regime for more effective protection of industrial designs by clarifying design patentable subject-matter, simplifying the design patent regime will untangle the relationship with copyright and closely align industrial design protection with developed countries.

Furthermore, this dissertation finds that there is a positive correlation between design patent protection and copyright protection for industrial designs. In light of legal and practical analyses using comparative studies on industrial design protection, the findings contribute additional evidence that cumulative protection between design patents and copyright is desirable for stronger protection. The cumulation of rights helps preserve the interests of the industrial design proprietors to reap the rewards after investing costs and efforts in developing industrial designs. Without adequate protection, the free-riding problem of industrial designs is not only detrimental to the economic interests of industrial design proprietors, but also to the creativity enriching the society. Consequently, the public interests would also be negatively affected by ineffective protection. The availability of copyright for industrial designs can thus serve as a supplementary means of protection alongside design patents. Cumulative protection with copyright will also reduce some obstacles caused by the absence of unregistered design protection in Thailand. The role of copyright will be of great benefit to short-lived designs and in cases where there is an immediate need for protection similar to unregistered design rights available in the EU and UK. The legal analyses and the practical statistics in chapter 4 also confirm the findings that copyright can play an important role in strengthening industrial design protection in the context of the Thai legal framework, which provides inadequate protection for industrial designs under the Thai design patent regime.

Having comparatively scrutinized industrial design protection in the EU, UK, and US, this dissertation recommends and proposes resolutions in dealing with the interface between design patents and copyright for industrial design protection as follows: first, there should be a statutory provision explicitly allowing for cumulation between design patent protection and copyright protection for the purpose of legal uncertainty. The proposed approach to cumulative protection is a hybrid approach based on partial cumulation subject to some restrictions. Second, the statutory definitions of what constitutes design patentable and copyrightable subject-matter should be clearly defined under patent and copyright laws. Design patents should protect ornamental aspects of industrially applied articles, whereas copyright should protect genuine artistic works and works of applied art worthy of the long-term exclusivity rights conferred under copyright law. The boundaries between industrial designs copyrightable as works of applied art and those exclusively subject to the design patent regime must be clearly delineated. To prevent the adverse effects on competition and maintain the balance of interests between the industrial design proprietors and those of the public, both copyright and patent laws should explicitly forbid the protection of industrial designs solely or essentially dictated by functionality. As demonstrated in the EU, UK, and US, industrial designs as part of the creative industries are vital to the creative economy, serving as a valuable asset to foster economic growth and cultural prosperity. To achieve the purposes, Thailand needs to adjust the legislative landscape by reforming the legal framework related to industrial design protection, as recommended in this dissertation.