Introduction, Protection and Utilization of 'New Intellectual Property'

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I. Background

Historically, the development of intellectual property protection has taken place in response to the demands of the times. For instance, copyright law first appeared to serve the objective of providing protection to the emerging industry, and with time, it developed into a more comprehensive and inclusive mechanism of protection. The hidden trait of such advancement is that there is a close inter-relationship between technological development and legal protection which are often regarded as separate entities. The first copyright law, 'the privileges and monopolies of printing presses' appeared with the invention of the printing press. By looking at the relationship between inventions and copyright materials such as cameras and photographic materials, gramophones and sound materials, computers and computer program materials, it is not difficult to find the connection in everyday life.

Further to the advancement of the intellectual property system, the new intellectual property system was developed on the basis of an evolving market-economy and vested interests of relevant stakeholders. After the 1980s, major developed countries such as the U.S. were threatened by the relative decline in their national industry, thus attempted to foster their economy

by strengthening intellectual property protection on their newly invented technologies. To counter such a movement, developing countries claimed for the protection of intellectual heritage and natural resources namely genetic resources, traditional knowledge, and traditional cultural expressions, thereby, setting forth an earnest debate on the issue of new intellectual property. Simultaneously, as areas that used to be marginalized from economic interests started to create added value and began forming markets, the movement to protect these regions accelerated.

As of today, new intellectual properties are continuously being created. For instance, computer programs and semi-conductor layout designs have already received the full recognition of having rights under the intellectual property system. Other types of properties such as trade secret, new varieties of plants and animals, and gene manipulation techniques are expected to firmly secure its position internationally as part of intellectual property in the near future. Various discussions are being held by international organizations regarding this issue. Although the debate within the existing intellectual property system has not yet overcome the limitation of the territorial principle, an ongoing discussion regarding new intellectual property has moved beyond the limitations of national borders by attempting to create a global intellectual property protection system.

II. An Overview of New Intellectual Property

1. Definition of New Intellectual Property

Despite there being no clear definition of 'new intellectual property,' it is generally referred to as the 'the new type of intellectual property that contains economic value which need to be protected but cannot be protected adequately under the existing intellectual property rights such as industrial property and copyright.' Article 3 of the Framework Act on Intellectual Property (draft), which is being enacted in Korea as of now, defines 'intellectual property' as 'knowledge, information, techniques, ideas and expressions of feelings, marks of products or commerce, varieties of plants and animals, genetic resources, and other intangible assets that are produced or discovered by creative human activities and experiences.' Article 3.3 further recognizes 'new intellectual property' as a type of intellectual property which emerges

in the new fields of society after economic, social, cultural, or technological changes have taken place. Thus, the advent of new intellectual property reflects the social and economic changes taking place in the scope of intellectual property.

In general, new intellectual property emerged with the advent of new industries that generate added value. For instance, new intellectual property in the art and culture sector appeared in the midst of a rapidly growing cultural industry, departing itself from the traditional ideology emphasizing the development of culture through the promotion of creativity. For example, in the case of publicity rights, which were considered to be personal rights, are now recognized as property rights.

On the other hand, the emergence of new intellectual property comes in hand with changes in the perception of intellectual property. Fundamental questions on whether to share socially-formed knowledge publicly or to grant exclusive rights may change according to perception. The new intellectual property system aims to extend the original purpose to preserve and utilize the knowledge that was traditionally considered to be a public asset by granting property value. In the case of intangible cultural heritage, it is also going through a change in perception, by moving from the paradigm of preservation and transmission towards the utilization and creation of value. These changes can be perceived as social progress, attempting to create a culturally diversified society rather than an industrial society which only emphasizes the development of economy.

Furthermore, with the development of scientific technology, the utilization of 'derivatives,' which are produced during the makings of final products, is also gaining much importance. As a result, during the process of claims made for the rights of derivatives, the recognition of new intellectual property can appear. Technological developments not only create new products, but also discover and recreate existing products to maximize outcomes. In addition, by moving beyond the system which only emphasized the final outcomes of research, a large amount of derivatives such as information, data, and intellectual outputs may be recognized as valuable resources for the future as well as a source of competitiveness. Thus, these types of interim-products act as stepping stones in developing final products, which is why the issues of ownership and rights of derivatives are becoming important.

2. Characteristics of New Intellectual Property

New intellectual property shares similar characteristics to existing intellectual property, but it differs in a way where most of its items appear in the domains not covered by the existing intellectual property. Thus, the only difference between new and old intellectual property is that, new intellectual property is difficult to detect under the framework of existing intellectual property. On the other hand, just as ordinary intellectual property, a great amount of time, money, and investment is needed for the creation and development of new intellectual property, while the duplication is extremely easy. This results in the creation of 'free rides', which make high market failures possible.

Together with the above-mentioned problems, the fundamental issues being discussed in the field of intellectual property continue in the discussion of new intellectual property. These questions and concerns of whether to grant exclusive rights to a property for its protection or to expand its dissemination and public use are still pending.

A clash of various interests may also occur. The most conspicuous one is the dispute between developed countries and developing countries. However, while such dispute is usually carried out in a standardized form within the existing intellectual property framework, it does not have a fixed pattern in the discussion of new intellectual property. This seems to be owed to the inherent characteristic of new intellectual property: 'diversity'. Within the existing intellectual property framework, notably in patent and copyright, there is a clear separation between the groups who lead this framework and those who follow. Nevertheless, in the field of new intellectual property, there are various leading groups in different fields of industry. Furthermore, these groups put in certain efforts to include their vested interests into the discussion of new intellectual property. For example, with respect to traditional knowledge and genetic resources, there exists a dispute between countries who own traditional socio-cultural knowledge and natural resources on one side, and countries who attempt to utilize and commercialize these properties on the other side. In the case of semi-conductors, software (S/W), and chemical patents, which have recently established a firm protection mechanism, it is the developed countries that lead the discussion on provisions for protection, whereas the developing countries oppose it. After all, the position of states often changes in accordance with the trends of the discussion, rather than that of logic. In particular, such a phenomenon is noticeable in recent debates on scientific data, clinical information, and rights of publicity.

III. Importance of Discourse on New Intellectual Property

Despite the growing importance of new intellectual property, the institutional mechanism for its creation, utilization, and protection is still at its rudimentary stage due to the inherent characteristic of intellectual property. Furthermore, it is an undeniable fact that there exist no comprehensive and consistent strategies in response to new intellectual property among the government and other relevant actors.

Need for a Comprehensive Policy and Consistent Position from the Government and Society

It is rather obvious to encourage the creation and utilization of new intellectual property considering its value, but there is no viable measure to support such a movement (probably due to lack of preparation or difficulty in dealing with its inherent characteristics). The measures to deal with new intellectual property should be examined from different aspects, and a comprehensive approach to deal with new intellectual property issues must be adopted.

Thus, the following are among many tasks that need to be tackled with regard to this issue: should a holistic approach be adopted by applying a general definition of intellectual property, or should individual rights be treated differently?; to what extent should property be recognized as having exclusive rights while maintaining its characteristics as a public asset?; how to establish a system which can manage the matters of granting and exercising of rights?; and should there be a unified discussion within the system of the existing intellectual property system or should a specific system be established to deal with individual rights?

On the other hand, consideration should be given to the international dimension of this issue. It is important to recognize that there exist international counterparts as well as domestic ones. Thus, adequate consideration should be given to diverse aspects of the issue, since new intellectual property is closely interlinked with not only a country's economic situation, but also with their socio-cultural circumstances. To be more specific, a dispute between developed and developing countries should be first considered when discussing the economic interests of new intellectual property. In the meantime, when discussing the rights of new intellectual

property, the relationships among neighboring countries such as Korea, Japan, and China, become important. Such problems make it even more difficult for a government to maintain a unified position which is a crucial element in carrying out bilateral and multilateral negotiations in international relations. Thus, a more proactive study and discussion should take place. For instance, although a fierce discussion and struggle of interests may take place during the domestic decision-making process, a unified position must be adopted when engaging in international discussion. Similar problems can occur in almost all areas of new intellectual property including biological diversity, geographical indication, traditional knowledge and genetic resources.

2. Advent of New Intellectual Property and the Establishment of its Protection System

Unless adequate protection is granted to the newly invented intellectual property, which appeared with the advancement of the high-tech industry such as Information Technology (IT) and Bio-Technology (BT), attracting continuous investment in this area will be difficult. In most cases, products from IT and BT can be protected by the existing intellectual property system such as patent law, but in certain circumstances, it may not be qualified as the subject of protection. Meanwhile, there appear some products such as 'rules of games' and 'font designs' which are not included in the scope of protection according to the court's interpretation of the existing intellectual property law.

A method which could contribute to the protection of new intellectual property is to expand the scope of protection within the existing intellectual property law. Another is to enact a new law to protect new intellectual property. For instance, through the amendment of the copyright law, elements such as computer programs, databases, technological protection measures, and rights management information are protected as of now. Furthermore, through the modification and broad interpretation of the laws on patent (computer programs, business models, etc.), design protection (fonts, etc.), trademark (colors, three-dimensional mark, hologram mark, geographical indication, names of domain, etc.), unfair competition prevention (trade secret, names of domain, etc.), some new intellectual properties are protected. In some cases, instead of using the existing intellectual property law, new laws are enacted to protect properties such as semi-conductors integrated circuits

and computer programs. 1) To conclude, an adequate protection system, which reflects the characteristics of intellectual property and relevant industries, needs to be established.

3. Establishment of a Comprehensive and Systematic New Intellectual Property Protection System

When different governmental departments provide protection to newly emerged intellectual property without coordination, while responding individually, the protection may overlap or be excluded. For example, the issue of duplicated protection appeared as the Ministry of Culture, Sports and Tourism amended the Copyright Act to provide protection to 'databases' only after the Ministry of Information and Communication enacted the Online Digital Content Industry Development Act to protect 'digital contents'. Furthermore, new varieties of plants are under the subject of protection in accordance to the Seed Industry Act, enacted by the Ministry for Food, Agriculture, Forestry and Fisheries. At the same time, new varieties of plants can also be protected under patent. On the other hand, intellectual products such as software and games could fall into several categories of protection simultaneously, for instance copyright, patent right, trade secret, design right and trademark, depending on its composing elements. For this very reason, a comprehensive and organic policy approach needs to be adopted in protecting the above-mentioned new intellectual property. Furthermore, a national system to consult and coordinate different types of protection of new intellectual property should be established.

4. Prevention of Adverse Effects Arising from New Intellectual Property Protection

Given its nature of being the type of intellectual property that is at the stage of formation, new intellectual property is difficult to be approved by society. Such disapproval derives from the consideration not to limit other people's rightful usage of property by providing protection over new intellectual property.

¹_ The Computer Programs Protection Act was abolished and integrated into the Copyright Act. (2009)

An example can be found in the issue of 'font' and copyright. The Supreme Court of Korea excluded 'font' from the subject matter of protection under copyright law, by stating that 'if protection was to be given to 'font' under the copyright law, there exists the danger of granting an exclusive right to Hangul, the Korean alphabet shared by all Koreans, to an individual.' Taking into account such a decision, the Korean Intellectual Property Office placed 'fonts' as the subject matter of protection under the Design Protection Act, while not limiting its commercial usage such as typing, typesetting, and printing.

Although software is the subject matter of copyright protection, some argue for the establishment of a separate protection mechanism since the current law is unable to protect the functional compositions of software, while the patent law requires a subject to meet strict criteria for protection. Others call for the creation of an entirely new protection mechanism, considering the changes taking place in the software industry, especially in business models such as Google's android platform and open source software model.

Likewise, a flexible approach that reflects the above-mentioned issues, the status of relevant industry, and the positions of users should be adopted, rather than only insisting on the creation of a strong and unilateral protection system for new intellectual property.

IV. Major Categories of New Intellectual Property

Although the earlier-mentioned types of intellectual property such as computer programs, semi-conductor layout designs, fonts, and trademarks on sounds and scents which differ from country to country, are already recognized as having rights under specific laws or the existing intellectual property law. Thus, the following are major types of new intellectual property which are frequently being discussed.

1. Geographical Indication System

It is a system which indicates that certain agricultural or processed goods, along with their reputations, qualities, and other characteristics, originate from a specific geographical location; thereby, protecting the producers and

consumers by preserving specific characteristics of geographical conditions and the know-how formed by people who utilized these natural conditions. Regarding this issue, there is a clash of interest between Europe, who calls for stronger measures to protect geographical indications, versus other countries. Institutionally, there exists the issue of the provision of duplicated protection as well as the conflict between the geographical indication and trademark (collective mark).

2. New Plant Varieties System

It provides the breeders of a new variety of plant an exclusive right to propagate, produce, transfer, and import/export new plant varieties. Fostering and supporting new plant varieties is becoming ever more important because they are being recognized as fundamental elements of the development of the seed industry and bio-industry for the future, thereby contributing to the strengthening of national competitiveness. There is a dispute between developed and developing countries which continue with regard to this system, while some argue that there exist a duplication of protection and legal conflict concerning the patent (plant patent).

3. Right of Publicity

As a type of property right that is being formed in recent legal theories and precedents, it gives an individual the right to control commercial use of his/her aspect of identity such as name and image, while preventing others from using it. Although there is some level of consensus with regard to the need of protection of publicity, specific measures and legislation for protection are still yet to come.

4. Genetic Resources

'Genetic resources' means genetic material of actual or potential value among materials of plant, animal, microbial or other origin containing functional units of heredity (Article 2, Convention on Biological Diversity). The movement to protect genetic resources appeared with the realization that

biological diversity is undergoing a rapid decline despite there being a growing importance of bio-industry such as research on biological phenomena and the development of new varieties of plants. In a similar vein, traditional knowledge (the knowledge system inherent in traditional technologies or creations passed down through generations by certain persons or local communities) is also discussed. There is a clash of interest between countries that possess affluent natural resources such as China, India and Brazil and the technologically advanced countries such as the U.S. and Japan. Furthermore, there exist broad legal and institutional issues especially with regard to granting rights to genetic resources.

5. Traditional Cultural Expressions

'Traditional Cultural Expressions (TCEs)' refers to the intangible expressions of traditional culture or knowledge produced in the form of verbal, musical, and actions (WIPO). Recently, the movement to protect creative works produced by using TCEs is being initiated at both international and national levels, and the issue of granting rights and loyalties is being addressed. Furthermore, as the discussion on TCEs moves beyond the paradigm of preservation and transmission towards dissemination and commercialization, the gap between TCEs and existing legal systems widens.

V. Current Conditions and Problems

1. Current Conditions

As mentioned earlier, despite the growing importance of new intellectual property, a comprehensive discussion regarding this issue is still absent in South Korea. Since the issue of new intellectual property is being discussed by different departments of the Korean government sector-by-sector without consultation with others, individual departments operate using their own system to create and protect new intellectual property.

2. Problems

Absence of Discussion on Systematic Protection of New IP

The discussion has not yet taken place on the issue regarding the possible competition and conflict between the existing law and new intellectual property in case the existing intellectual property law is used to protect new intellectual property. Rights and protection are dealt separately by different departments, making a comprehensive discussion at the national level even more difficult to take place. In addition, since it is being launched dispersedly, a consensus on the issue of commercialization of new intellectual property will be difficult to reach if not kept in check.

Absence of Solutions to Practical Problems

A number of practical problems appear during the process of managing new intellectual property, such as the provision of duplicated protection and exclusion of protection. In reality, issues such as right of publicity, copyright of games, dispute among broadcast producers, benefit-sharing in the field of traditional knowledge and genetic resources, and friction between cultural heritage and trademark are being addressed in society. Nevertheless, the discussion of new intellectual property is not being carried out in relation to the perspective of intellectual property in a consistent manner, but is being discussed in the political domain.

Absence of Preparatory Methods for Creating and Utilizing New IP

Most new intellectual property is either self-created with the flow of history or with the changes of perception towards derivatives which are developed during the process of creating the final product. For this reason, systematic strategies for the creation and utilization of new intellectual property do not exist in most cases. In particular, some new intellectual property regards itself as having traits of self-creation and self-existence, thus only aiming at its preservation and transmission rather than promoting its creation and utilization in contribution to industrial development. Although the issue of new intellectual property appeared with changes taking place in the industrial atmosphere, the legal institution and perception still remain in the traditional paradigm, thus unable to follow up with the changing industries.

VI. Suggested Strategic Approaches

1. Aspects of Creation and Utilization

It is necessary to establish a strategy to promote creation and utilization of new intellectual property based on the different characteristics of individual rights. In case there is a new discovery or invention, a new protection strategy in response to these new properties is recommended to be established. Likewise, in the case of the discovery of the existing property, relevant strategies should also be sought. A discussion might be necessary with the type of property which places importance on its preservation, considering whether improvement or modernization is needed or not.

The globalization of Korean food, which has recently gained international popularity with the spread of the Korean wave, could set a good example. Modernization of the *Hanbok* (Korean traditional dress) and *Madang Nori* (outdoor performances) should be thoroughly analyzed as a case study. In addition, the linking of *Pansori* and musicals as well as modernization of *Taekgyeon* and *Ssireum* are useful themes to consider for creating and utilizing new intellectual property. The traditional cultural art sector should take into account the above-mentioned issues and should actively change its perception to utilize traditional culture and spend some time in the consumer's shoes.

2. Aspects of Protection and Grant of Rights

It is not enough to stress the importance of establishing a legal system pertaining to new intellectual property. The discussion should include the question on how to decide the scope of right as well as the methods to reach such a decision. Furthermore, the main points of discussion will be: whether to include new intellectual property within the existing framework of traditional intellectual property or to establish a new framework; and whether to protect new intellectual property through the existing preservation/promotion law or to enact a new law.

At the same time, a controversy over the issue of conflicting rights of similar intellectual property should be tackled as a prior task. In relation to the rights of new intellectual property, although there exists a consensus on the need for protection of new intellectual property, an agreement on how to establish protection measures and to avoid duplicated protection is yet to be

reached. The discussion on new intellectual property will be more effective if the incentives and benefits as a result of the new intellectual property are included.

3. Aspects of Promoting Nationwide Policy-based Discussion

It is essential to coordinate the dispersed and overlapping of the new intellectual system in a rational manner, thus broad communication should be critically called upon among relevant stakeholders. Through such a system, a social consensus could be reached. The clash of interests can be extended to the matter of pride and rivalry among relevant actors, not simply because of economic reasons, but because it is intricately intermingled with sociocultural elements; it thereby needs a prudent approach.

VII. Intangible Cultural Heritage and New Intellectual Property

1. Overview

These days, the subjects of intangible cultural heritage, traditional cultural expressions, and intellectual property are continually discussed by WIPO. This issue originates from the recognition of a problem that, despite frequent usage of TCEs which belong to states, local communities, and indigenous people, the benefits generated by such acts are not being shared by the holders, while cases of distortion and degradation of TCEs are appearing.

2. Present Conditions of Protection and Trends in the Field

The Cultural Heritage Protection Act of Korea defines intangible cultural heritage, using the concept of intangible cultural properties as: "Intangible cultural products such as plays, music, dances, games, rituals and craft techniques with great historic, artistic, or scientific value."

Nevertheless, since the Cultural Heritage Protection Act aims at 'preserving, managing, and utilizing' cultural property in its original form, the approach that the law has taken is entirely different from that of the protection

of right under intellectual property. This is to say, the law acknowledges the important intangible cultural properties and their holders (preservation societies), but it does not mention anything about exclusive right, nor the exercise of right with regard to the cultural assets.

As of today, the Ministry of Culture, Sports and Tourism, together with the Korea Copyright Commission, continuously introduce the trend of international discussion, especially that of WIPO, while the Cultural Heritage Administration of Korea addresses major intellectual property issues surrounding intangible cultural heritage. At the same time, some experts are calling for the establishment of an entirely new type of safeguarding mechanism through the protection of intellectual property rights of intangible cultural heritage other than traditional safeguarding measures through designating important intangible cultural properties. The clarification of intellectual property rights of intangible cultural heritage is also called upon by some experts, but the countermeasures for these issues are still at a rudimentary stage. In the meantime, it is necessary to protect intangible cultural heritage through trademark right, as some practical problems²⁾ such as misappropriation of intangible cultural heritage trademark may appear.

3. Issues to be Discussed

Regarding the issue of intangible cultural heritage, bridging the gap of perception between the traditional protection system of intangible cultural heritage and intellectual property should be the starting point of discussion. To be specific, the existing system focuses on the 'preservation and transmission' of intangible cultural heritage, whereas the intellectual property system emphasizes the promotion of 'economic values.' Thus, such differences in perception must be tackled; and to achieve this objective, the meaning of the term 'safeguarding' needs to be clarified. After carefully studying the relationship between the meaning of 'safeguarding' and 'active protection,' which is the granting of right to intangible cultural heritage for commercial

²_ Gyeongju Gyodong Beopju Case (Rice Wine in Gyo-dong Village in the Gyeongju Area): A holder of Gyeongju Gyodong Beobju (Important Intangible Cultural Property of Korea) attempted to apply for a trademark for this wine. However, the application was rejected because there was an existing trademark registered under the name of 'Gyeongju Beopju'. Furthermore, a concern was raised for the possibility of the holders unable to use this name if somebody register a trademark under the name of 'Gyodong Beopju'. The complaint was brought before the Cultural Heritage Administration.

usage, a solution can be found.

By taking into account the results that can be drawn from this discussion, the meaning of 'creation' in the context of traditional cultural heritage can be formed. This concerns the question of whether 'creation' of traditional cultural heritage is realistically possible, or rather the 'identifying' of traditional cultural heritage should mean 'creation'. In addition, the question arises as to whether 'creation' means producing new cultural property by 'applying' traditional culture which reflects the modern times. Simultaneously, the relationship between the 'preservation of originality' of cultural heritage and 'promotion and transmission' needs to be clarified, while an approach must be adopted to deal with the dissemination and commercialization of cultural heritage.

Furthermore, traditional cultural heritage, which is formed throughout history, has an inherent characteristic of being shared by neighboring countries, such as Korea, Japan, and China. Nevertheless, such characteristic becomes the source of various problems. Thus, an adequate approach to solve them must be found. In particular, the clash of national interest as well as the rivalry in pride between Korea and China may appear, and it is already taking place in some areas. Additionally, there is always a possibility of such a problem arising within the country amongst relevant actors from different communities and regions.

In the meantime, the relationship between the intangible cultural heritage and the existing intellectual property protection system such as copyright law, trademark law and design law needs to be examined. This is to say that a thorough study needs to be conducted in relation to the scope of protection within the existing system, in order to examine which subject matters can be included for protection or not, and what composes a violation of right. In the case of *Gyodong Beopju*, discussed earlier, the problematic aspect of the existing intellectual property systems could be addressed, such as abuse of the system and demands for modification could be called upon.

In addition, it is necessary to discuss this issue parallel with the ongoing international debate. In most intellectual property cases, there is the possibility of the advent of inter-state conflicts based on national economic interests. Intangible cultural heritage should be discussed at the national level, not just at specific regional or sectoral levels.

VIII. Conclusion

This paper has examined the discussion on the issue of creation, protection and utilization of new intellectual property including intangible cultural heritage.

At the current stage, it is difficult to propose any specific solution to this issue, so we must encourage a national discussion for the promotion of new intellectual property and to urge for the establishment of a relevant infrastructure as a foundation for the discussion. A prior need for establishing such a foundation is to develop a pan-governmental consultation system.

For the conclusion of this paper, it is noteworthy to mention a few things that should be considered for the construction of the above-mentioned consultation system.

First, the establishment of a new intellectual property system that promotes the rights and benefits of intangible cultural heritage holders and guarantees for public access to the heritage element should be discussed.

Second, the elements of intangible cultural heritage that needs to be included in the contents of intellectual property should be verified, while the adequate preparatory measures for possible disputes with neighboring countries such as China need to be sought.

Third, the subject matter of intellectual property rights need to be specified and clarified through the strengthening and diversifying of inventory-making activities for intangible cultural heritage. This should also be followed by the establishment of databases for the generated outcomes, and official rights should be granted.

Finally, methods to improve the existing intellectual property system should be examined. For instance, any attempts to register important intangible cultural properties as commercial trademark should be denied, and such trademark should be prevented from taking effect. Furthermore, a method should be sought to allow holders of intangible cultural heritage to freely use their rights.