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# A Brief Study on Extending the Scope of Appraisal for Software (SW) Valuation

Si-Yeol Kim\*, Jas-Sik Choi\*\*, Yeon-Yi Seo\*\*\*, Jae-Im Han\*\*\*

## Abstract

This study is intended to suggest the necessity to establish the valuation system for software (SW) copyrights and the related issues to it through the valuation of intellectual property rights, which has recently become increasingly important. As the appraisal of development expense computation has limitations in conducting valuation for copyrights, the necessity for the valuation of practical SW copyrights is proposed in this study. In addition, considering issues arising from the valuation system for patent rights, a brief approach for the establishment of the valuation system for SW copyrights is outlined here.

**Keyword : copyright, software appraisal, copyright valuation**

## 1. Introduction

Valuation has become a very important field in intellectual property rights recently. In particular, the valuation market, which centered on funding through asset valuation based on patent rights, has become increasingly active. Nevertheless, the copyright is somewhat

distant from this trend. There is no particular discussion, except for some on copyright valuation in 2010, also in the appraisal field. There have been no special changes until recently, except for arranging the development expense computation method on software (SW) in the early 2000s.

It is necessary that attention is paid to the appraisal of valuation and to extend the appraisal method that is limited to current development expense computation into the valuation range to respond appropriately to the trend and the demand of time. As a basic examination, we intend to draw up some implications from the comparison with existing industrial property valuation range.

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\* Korea Institute of Intellectual Property, Associate Research Fellow/ Soongsil Univ. Adjunct Professor(Ph.D in Law)  
(email: sykimlaw@hanmail.net)

\*\* Korea Institute of Intellectual Property, Associate Research Fellow(Ph.D in Eng./Lawyer), Coresponding Author

\*\*\* Soongsil Univ. Department of Global Law  
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## 2. Status and Limitations of SW Value Appraisal

### 2.1. Status of appraisal projects related to current SW valuation

The method of the development expense computation corresponds with the appraisal about the valuation performed in the SW appraisal system (Article 119) under the current copyright law. However, the number of appraisal achievement is extremely small, which is only about one to two cases per year.

Table 1. Recent Appraisal Statistics

Sort	2011	2012	2013	2014	2015
Completeness	2	9	8	9	11
Similarity	19	20	37	32	30
Development expense computation	1	2	2	0	1
Others	5	9	7	6	5
Subtotal	27	40	54	47	47

※ See the copyright statistics 2016, 6, and the announcement of the expert witness workshop 2017.

The type of appraisal of the development expense computation is generally to compute the value of compensation for damages in case of defects and to compute the value of the system when the company is on sale. Specific examples include the following: “the minimum

level of technicians required to develop specified additional items and the computation of development expense to be spent” and “the complexity and duration of development services expected to be developed and the general service charge.”

### 2.2. The appraisal of development expense computation and the appraisal of valuation

The copyright valuation, especially SW copyright valuation, is materially different from general SW valuation. This is distinguished by the valuation of rights and the valuation of things.

The assessment of copyright valuation through the appraisal of development expense computation, which is estimated by Article 119 of the Copyright Law, is difficult because it targets SW. If we refer to previous research results,<sup>1)</sup> we can recognize that the essence of valuation is not the value of rights but the value of things. Moreover, there is an additional limitation in that the development expense computation is based on the actual contract price unlike ordinary value computations in the past. Considering this point, it is difficult to regard the appraisal of existing development expense as a valuation of SW copyright.

1) See SW Asset (2006). A Study on the Introduction of Technology Evaluation and Establishment of Evaluation Center, program deliberation and mediation committee, etc.

### 2.3. The expansion of the importance of evaluation of the right

Firstly, the intellectual property right, especially industrial property right, has forwarded policies that promote the utilization of industrial property right valuation since 2006. The past technology valuation has been expanded to the appraisal of patent rights. In 2016, some developments have been made, including the promotion of appraisal based on right only through the complete separation of right and thing at the valuation.<sup>2)</sup>

Secondly, the intellectual property right seeks to establish a public valuation organization for industrial property right, as the need for valuation increased in cases of intellectual property disputes. Under Article 55-4<sup>3)</sup> of the Invention Promotion Act Revision, currently pending in the National Assembly, grounds are prepared for the Korea Intellectual Property Protection Agency to compute damages on the industrial property right in the course of the dispute over industrial property right. Through this, it is intended that risks

with varying valuation model be reduced and evaluation service that secure publicness is provided.

Thirdly, in case of actual copyright disputes, the demand for valuation based on copyright itself has increased. In the case of a recent consultation with the Seongnam Branch of Suwon District Court, eliminating value distortion has been attempted by faithfully computing the value of the SW copyright, although this issue can be solved through the development of expense computation. In particular, this case is important as it shows that the subject of valuation is not limited to SW, but deals with the value of various works contained therein.

As a result, the demand for the evaluation of SW copyright has increased, and a professional and fair valuation system throughout the market itself is demanded.

### 2.4. Limitation of existing system

As we have seen, in the appraisal system according to the current copyright law, the appraisal of development expense computation is the only one that can be treated as a valuation area of SW. But strictly speaking, it is also difficult to say that of copyright valuation. In such situation, the valuation methods to access SW become difficult as well, as things have already been widely served by various relevant agencies. To secure the uniqueness of the appraisal system by the copyright law, it seems necessary that a model that can draw the value of SW copyright itself

2) Efforts are being made to implement professional and fair valuation models, such as promoting valuation and loan services in connection with the Korea Development Bank and appointing various evaluation agencies.

3) Article 55-4 of the Invention Promotion Act Revision (computation of damages, etc.) ① Protection Agency may compute damages if requested by both parties to the grievance mediation pursuant to Article 43.

② Necessary matters for the procedures for computation damage and commission in accordance with Paragraph 1 shall be determined by a Presidential Decree.

be derived, and not just as a thing. Therefore, it is necessary to switch from valuation of existing things to the valuation of rights. Considering that there is no service to be performed in the market, this change will be more public value and will serve as an opportunity to lead the copyright valuation.

### 3. Implication of Right Valuation System Case

#### 3.1. An overview of patent valuation system

To evaluate the value of a patent, the basis will be the valuation of technology, which is included in the right. Hence, designated evaluation institutions restrictively implemented technology valuation in the partial field, with each purpose according to the 1997 legislation. Meanwhile, also in the appraisal followed by the [Act on Appraisal and Certified Public Appraiser], they regulated the scope as “Land, etc.,” and state that Copyrights and Industrial Property Rights can be subjected for appraisal based on enforcement ordinance. Meanwhile, recently, it has become more important to accurately judge the value of patents as the number of cases in which loan products with patent rights are developed, or patent rights are subjected to individual transactions has increased.

The valuation of the patent was led by the public sector; however, recently the companies from the private sector, which possess

considerable competitiveness, have expanded their market. In addition, the development of new business models based on patent valuation has become active.

Table 2. Status of Patent Value Appraisers

sort	Institution Name
Public sector	<ul style="list-style-type: none"> <li>o Korea Invention Promotion Association</li> <li>o Korea Development Bank</li> <li>o Korea Institute for Advancement of Technology</li> <li>o Kibo</li> <li>o Korea Testing Laboratory</li> <li>o Korea Testing &amp; Research Institute</li> <li>o Korea Conformity Laboratories</li> <li>o Korea Testing Certification</li> <li>o Others</li> </ul>
Private sector	<ul style="list-style-type: none"> <li>o WIPS Co.</li> <li>o Darae Law &amp; IP.</li> <li>o PatentPia Inc.</li> <li>o DANA PATENT LAW FIRM</li> <li>o Others</li> </ul>

#### 3.2. Example of patent valuation model (SMART 3.1)

Korea Invention Promotion Association’s SMART 3.1 is a representative patent valuation. In this model, the evaluation is performed by classifying the evaluation factors, deriving the weighted scores, and evaluating them based on the scores.

The evaluation factor consists of 13 items.

Table 3. The Evaluation Factors of SMART 3.1

<ul style="list-style-type: none"> <li>o Number of independent clauses</li> <li>o Number of local family patent</li> <li>o Number of international family patent</li> <li>o Number of annual registration</li> <li>o Ascertain of the claim of preference examination</li> <li>o Number of submitted written opinion</li> <li>o Number of provision of information</li> <li>o Number of appeal against decision of rejection</li> <li>o Number of total quoted</li> <li>o Number of performers</li> <li>o Number of declaratory judgment on the scope/extent of a right</li> <li>o Number of defensive confirmation trial for the scope of a right</li> <li>o Number of invalidation trial</li> </ul>
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An appraisal is composed of the degree of rights (40 scores), the degree of technology (20 scores), and the degree of availability (40 scores) as indicators. By looking at the classification detail, the degree of rights is divided into sectors of breadth and narrowness of the extent of a right, loyalty comes out on top of the right, and patent stability; the degree of technology is divided into sectors of compliance with the technology trends, technology life span, and technology leader; and the degree of availability is divided into sectors of commercial potential and the possibility of exercising rights.

Based on these facts, the appraisal shows different relative scale; the appraisal applies Stanine 9 grades by using the five major technologies of the WIPO category (electricity,

electron, IT; machine; natural laws; chemistry; and bio).

### 3.3. Foreign case

The United States actively uses expert witness at the beginning of a case following the discovery of a crime and uses the Master to the account consignment, computation of patent infringement-related cost of the damage, etc. in the trial step (Federal Rule of Civil Procedure, Art. 53).

In Japan, the document submission order under the Civil Procedure Act grants a wide range of exceptions to criminal prosecution concerns such as the parties or spouses, or to the writing of technical or professional secrets. Therefore, the document submission order under the Patent Act serves as a special case for such an exception. If the other party does not respond to the document submission order, the applicant's allegation can be presumed to be true. In addition, they have a system for an expert witness account for the cost of the damage on patent infringement.

### 3.4. Implications

First, accepting the variety of the valuation model induces market choice. Rather than deriving an absolute valuation model, we aim to derive a rational valuation model so that we can enter the market with a variety of this model and leave the choice to the market.

Second, the development phase of various models is gradually focused on objectification.

As the technology and environment infrastructure for evaluation, such as artificial intelligence, database, etc., are developed, the valuation algorithm to promote the market transaction of intellectual property rights is improved, and objectification of evaluation is discussed.

Third, the public sector is leading and expanding the market. The development of evaluation models and the construction of services entail considerable cost and time, which, in the public sector, initially leads to market creation. Based on this, the private sector is encouraged to expand the market for patent valuation through the expansion of the intellectual property service industry.

Fourth, support is focused on the start-up company based on intangible value. Institutional support is provided so that companies with intellectual property rights, such as patents, do not have valuable assets at the time of start-up, and that they can receive appropriate funding based on intellectual property rights.

#### 4. Conclusion

The value of the patent is usually the highest at the time when it is released; naturally, the patent is formed at a similar level of the technology used in the market. In the copyright aspect, there are cases that meet the commercialization level (films, etc.) similar to patent cases; on the contrary, there is the limitation that attempting valuation is hard by

getting the same help that the existing technology and products received from the market, because of the fact that the creation did not meet commercialization level. In the case of copyright, especially, the value increases as the time passes, and both copyright and patent show a significant difference in their features based on the fact that patent shows high value at first but shows a tendency to decrease as the time passes. Nevertheless, the SW field pursues the valuation of the patent, and it is close to the technological domain because of its features. Even when there are limits existing on the valuation of patent, the value graph is more similar to the copyright graph compared to the traditional patent field as it is in the technological field. In other words, they have a more feasible background to form valuation system compared to other tangible patents because they can refer to the preexisting market, which is identical to the technology market. Therefore, they have significance at the beginning of the preparation of patent valuation model. It is essential that an institutional base be prepared to form the future SW patent valuation system. For the stable progress of the preparation of valuation system, which requires considerable time, cost and legal basis are needed. By forming the basic infrastructure and inserting constant financial resources, valuation systems must be able to act as a bridge to form the market in the public field. The writer believes that it is essential that the definition forming the attitude of the defensive system be widened, as it is

seen as a dispute, compared to the definition that offers services.

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Choi, Jas-Sik

2005: Seoul Univ. Graduate School Ph.D in Eng.  
2005-2009: Samsung Electronics Co., Ltd  
2012 - Present: Korea Institute of Intellectual Property, Associate Research Fellow  
2012 - Present: Lawyer



Seo, Yeon-Yi

2014 - Present: Soongsil Univ. Department of Global Law

## ———— Introduction of Author ————



Kim, Si-Yeol

2012: Soongsil Univ. Graduate School Ph.D in Law  
2007-2012: Korea Copyright Committee  
2012 - Present: Korea Institute of Intellectual Property, Associate Research Fellow  
2015 - Present: Soongsil Univ. Adjunct Professor



Han, Jae-Im

2015 - Present: Soongsil Univ. Department of Global Law