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Legal Features of the Principles and Methods for Estimating the Cost of Intellectual Property

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ABSTRACT: The article outlines the legal features of the system of general and specific principles of market valuation of intellectual property and considers methods for valuing its objects. The author shows that the use of officially recommended valuation methods leads to unequal results, as a result of which it is proposed to use a new set of methods for estimating the value of intellectual property objects.

KEYWORD: intellectual property, objects of intellectual property, methods for assessing market value, innovative economy.

As a result of the innovative activity of enterprises, new ideas, information and knowledge are born, new and improved products, new production and management technologies appear, leading to an increase in the productivity of social labor. These innovations can have specific material and intangible forms, be intended for commercial and non-commercial implementation. To protect innovations, their creators acquire copyright on them in the form of rules, norms and regulations, as a result of which such a legal concept as "intellectual property" arises.

According to Art. 2 of the Convention that established the World Intellectual Property Organization (WIPO) in 1967, of which Russia is a member, intellectual property (IP) is understood as a conditional (virtual) collective term that includes rights related to the results of intellectual activity in industrial, scientific, literary and artistic spheres [1].

In accordance with modern ideas, intellectual property is the right of certain persons (right holders) to the results of intellectual activity of these or other persons established by legal laws [2].

Intellectual property, unlike other types of property, has its own specific features:

- its object is the creations of the human mind, its intellect, and the subject is information and new knowledge, as its essential form, presented on a material carrier in one form or another;
- it has a sign of priority and can be deposited;
- in relation to intellectual property, the rights of the owner (non-property rights) and exclusive copyrights (rights to use) can be allocated;
- it is subject to some specific restrictions (duration of copyright in time).

The results of intellectual activity, which are granted legal protection, become objects of intellectual property. The protection of objects of copyright and related rights comes from the moment of their creation, and objects of industrial property - from the moment of their registration and receipt of a title of protection [2].

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A distinctive feature of intellectual property objects is their suitability for consumption and use (to meet the industrial, domestic and cultural needs of people, education, commercial activities, etc.), i.e. they have a certain consumer value. In market conditions, in the presence of demand and the possibility of implementation, it also has a market price.

Intellectual property objects (OIP) in the process of their use perform the following main functions:

- saturation of the goods produced on their basis with special consumer properties;
- ensuring the competitive advantage of the enterprise in the market;
- monopolization of effective creative solutions used in business;
- obtaining excess profits due to the monopolization of new ideas and knowledge of doing business;
- socialization of business through the possibility of solving social problems of society or its individual groups;
- formation of a special creative culture among the personnel of enterprises;
- increasing the national wealth of countries in the implementation of these functions.

Recently, various general and specific principles have been used in the evaluation of intellectual property objects.

Thus, the general principles for assessing the market value of intellectual property assets include the following:

- scientific validity. It means the use of laws or generally recognized provisions of the socio-economic development of social systems to assess the value of intellectual property rights;
- systemic. Expresses the need to take into account the totality of its consumer characteristics when assessing the value of intellectual property;
- modeling and reliability. Proceeds from the objective position that the process of estimating the value of intellectual property can be presented in the form of a formalized model with the reliability of information;
- relevance. Means the need to match the adopted assessment model with the properties of the intellectual property and the subject of its assessment;
- measurability (qualimetricity). Determines the need to express the valuation of intellectual property assets in a quantitative or qualitative form;
- usefulness. Market value have IPOs that can meet specific needs when used for a certain period of time;
- availa*bility of supply and demand and competition.* IPOs have market value in the presence of supply and demand in the market and the nature of competition between sellers and buyers.

Thus, the specific principles are as follows:

- *priority of the right of the creator of intellectual property objects to use them.* This principle is aimed at encouraging the creator of intellectual property to engage in intellectual activity;
- *a compromise in relation to knowledge (knowledge trade-off)* or the capabilities of the OIP. It means the need to find a compromise (balance of interests) between the desire of the creator of the intellectual property to maximize private benefits and optimize the use of new knowledge or its capabilities from the point of view of society;

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- *customer-oriented approach.* When assessing, it is necessary to take into account the interests of consumers of intellectual property in order to solve their problems;
- *substitutions.* The market value of intellectual property items cannot exceed the most probable costs of acquiring an object of equivalent utility;
- *expectations.* The market value of intellectual property is determined by the expected value, duration and probability of receiving income (benefits) that can be received over a certain period of time with the most efficient use of them;
- *changes.* The market value of intellectual property changes over time and must be determined on a specific date;
- *external influence.* The market value of intellectual property items depends on external factors that determine the conditions for their use (the degree of legal protection, legislation, etc.);
- *the most efficient use.* The market value of intellectual property items should be determined from their most probable use, which is realizable, economically viable, financially feasible and in line with legal requirements;
- *development of intellectual property rights.* Causes the need to ensure a balance between the protection of the rights of OIP owners and the interests of their users;
- *promotion of economic growth and socio-economic development.* It means that when using intellectual property objects, it is necessary to be guided not only by economic benefits, but also by the motives of social and cultural development;
- *transfer of knowledge and technologies of intellectual property objects.* Causes the need to disseminate knowledge and technologies of intellectual property for the sustainable development of civilization and the solution of global problems of mankind;
- *priority use of intellectual property for innovative development of the economy.* Means the need to stimulate the use of intellectual property for the innovative development of industries and enterprises in national and global economic relations.

The need to assess the value of intellectual property is determined by a significant increase in their share in the assets of enterprises in the new technological order of the information (innovation) economy [3].

The object of evaluation of intellectual property is a set of rights to its elements that have a territorial, temporary and valid character, i.e., do not violate the rights of third parties. The subject of intellectual property assessment are the direct results of human creative activity - these are scientific and technical achievements in the form of production and management technologies, design developments, business and production secrets, professional knowledge and experience.

In other words, the valuation of intellectual property objects is the process of determining the potential value of the volume of rights to specific results of intellectual activity, the possession of which provides their right holder with certain direct and indirect economic benefits. Estimation of the value of intellectual property is necessary for the following economic transactions:

- purchase and sale of intellectual property rights;
- patenting intellectual property rights;
- licensing and assessment of damage from violation of the rights of the owner of an intellectual property object;

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- making intellectual property objects as a contribution to the authorized capital;
- determining the share of intellectual property in investment projects;
- purchases, sales and restructuring of the enterprise;
- revaluation of intangible assets of the enterprise;
- optimization of taxes paid by the enterprise;
- secured loans;
- intellectual property insurance;
- donation and inheritance of intellectual property rights.

The valuation of intellectual property should be carried out in accordance with international and national standards for the valuation of property and property rights and be based on the methodological principles proposed by the authors based on the analysis and generalization of proposals available in the special literature [4] and their own developments. The above general and specific principles for assessing the value of intellectual property objects ensure, on the one hand, the observance of the private interests of the owners of intellectual property rights and stimulate them to develop innovative activities, and, on the other hand, contribute to the dissemination of new knowledge within national and global boundaries, contributing to the social and cultural development of people and solving global problems of mankind as a whole.

Many factors influence the market value of the OIP of industrial enterprises, among which the following should be highlighted:

- reliability of legal protection, patent purity, technical and economic significance and commercial readiness of intellectual property items;
- actions of the market infrastructure;
- state policy in the field of IP;
- requirements of international and national legislation;
- costs for the creation and patenting (registration) of an object of industrial property, maintaining titles of protection in force; on the organization of the use of the object; for insurance of risks associated with the object; to resolve conflicts on the evaluated object; expenses associated with the need to pay taxes and fees;
- expected receipts of license payments for this object of industrial property;
- expected receipts in the form of compensation (penalty) payments upon confirmation of the fact of violation of the exclusive rights of the owner of an industrial property object;
- the period of validity of the title of protection (patent, certificate) at the time of its value assessment or the period of validity of the license agreement;
- useful life of the object;
- average statistical royalty rates for this type of objects of legal protection;
- risks of development and use of intellectual property in different industries associated with failure to achieve the technical, environmental and economic parameters of intellectual property, as well as investment risks due to changes in the volume and time structure of investments.

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Currently, a significant part of the intellectual property objects at the disposal of enterprises is not taken into account and is not fully evaluated (for example, the intellectual and business qualities of the personnel - educational and professional level, creativity, etc.).

However, in a modern economy based on knowledge and innovation, when intellectual property, intangible assets and intellectual capital become new competitive dominants, their market assessment is essential. The procedure for assessing intellectual property objects includes several stages, among which the main ones are: examination of intellectual property objects; examination of security documents; examination of intellectual property rights; carrying out valuation calculations, including the choice of valuation methods; collection and analysis of information necessary for the assessment of the object; cost calculation according to the chosen methods; reconciliation of calculations obtained by various methods and preparation of the final assessment report.

At present, the Methodological Guidelines for the Evaluation of OIP (hereinafter referred to as the Guidelines) recommend using the following methods [4]:

- *costly (according to the actual costs incurred);*
- *market (based on the analysis of comparative sales);*
- *profitable (in terms of potential profit).*

The cost method is based on determining the cost of intellectual property items at the actual costs incurred by their right holders, which does not take into account future income from the use of intellectual property items. Estimating the cost of intellectual property using the cost method involves the following operations [4]:

- establishment of actual costs for the creation, acquisition and introduction of intellectual property into economic circulation;
- bringing the multi-temporal costs of the previous period to the current value on the date of assessment, taking into account changes in prices, inflation and bank interest rates on deposits and loans;
- determination of the amount of depreciation deductions for OIP.

The use of the cost method in assessing the value of intellectual property is associated with its significant drawbacks. Indeed, the reduction of multi-temporal costs to the current period is associated with the subjective choice of the appropriate coefficients for recalculating prices and other parameters, which, to a certain extent, distorts the reliability of the assessment.

However, its more significant drawback is due to the failure to take into account future benefits from the use of intellectual property items in economic activity, which, as practice shows, can significantly exceed the actual costs of their creation, acquisition and introduction into economic circulation. Therefore, the estimated cost of intellectual property items obtained by the cost method should be considered as the minimum possible in the current conditions of their use.

The market method is based on a comparative analysis of actual sales of similar or comparable items. The cost of a new IPO is determined at the market sales prices of comparable objects, taking into account the adjustment of comparison indicators (royalty rates, price indices, inflation, etc.).

The following data is used to estimate the market price of a new IPO:

- information on other completed transactions for similar IPOs;
- a list of comparable indicators of the OIS;

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- the results of the adjustment of actual prices for transactions in the market of a specific IPO, taking into account the values of the indicators taken to compare the object being valued and its analogue [4].

Like the cost method, the market method has a similar disadvantage of adjusting prices and matching ratios. In addition, the market method has another significant drawback associated with the risks of failure to achieve the technological, economic and social parameters of the evaluated intellectual property in the changed market conditions for its use.

However, the market method allows you to determine the likely market value of intellectual property items in the current conditions of their use in the market.

In contrast to the above cost and market methods, the income method for estimating the value of a new intellectual property is based on taking into account both the actual costs associated with the creation, acquisition and introduction into economic circulation, and the expected income from its future use based on the forecast for the development of an enterprise (industry), market conditions market, expected cash receipts and other parameters of its production and economic activity (PCB), given to the current assessment period.

The income method for assessing the market value of intellectual property, being essentially a method that synthesizes the approaches of the cost and market methods, has similar disadvantages associated with the uncertainty of the conditions of the future market environment, the assessment of PCB parameters of enterprises and the adjustment of macroeconomic indicators (prices, inflation, loan rates, royalties, etc.).

Unlike the first two methods, the income method allows you to estimate the predicted maximum possible cost of intellectual property assets at the current moment of their assessment. However, the risk of estimating the value of intellectual property in this case is significantly higher than using the cost and market methods, due to the greater uncertainty of the future strategies of PCBs of enterprises and their market environment.

When assessing the value of intellectual property assets using the income method, the conditions and factors for generating income from their use are essential, among which the following should be taken into account [5]:

- non-competitiveness (ability to expand) is a fundamental feature of knowledge-based OIS. It consists in the fact that they can be reused without reducing consumer qualities, i.e. they are characterized by "increasing economies of scale", when the value increases with use;
- Knowledge-based IIS has positive network effects that increase with network size.

However, there are factors that reduce the cost of OIP:

- partial exclusivity and externalities (externalities), since rather vague property rights are inherent in all components of the OIP:
- the inability to completely exclude other economic agents from the use of intellectual property reduces its value to the owner;
- low liquidity, since there are no sufficiently liquid markets for OIP components that would provide interested parties with accurate market information about prices; this situation is due to the low marginal costs of their production, as well as the asymmetry of information about intellectual property;
- the presence of sunk losses due to the rapid dissemination of information about knowledge, which is the reason for the increased risk and the limitations of traditional mechanisms for its reduction.
- In our opinion, in addition to the methods recommended by the Guidelines, other methods can be used to assess the value of intellectual property items, among which the following are no less effective:
  - ✓ *method of real options;*

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- ✓ *expert method;*
- ✓ *a method based on the methodology of fuzzy logic (fuzzy sets).*

The real options method involves the valuation of OIP components using the Black-Scholes real options model, on which the traditional methodology for valuing financial options is based. However, when applying this method, non-financial indicators are used as its input data [5].

The expert method is based on the assessment of the value of intellectual property by qualified and experienced expert appraisers. Practice shows that an experienced appraiser in 93-95% of cases gives the results of the assessment of the value of intellectual property no less accurate than the assessments obtained using the more complex methods indicated above. This method is characterized by simplicity and the ability to obtain an estimate of the value of intellectual property assets in a short time. However, in order to achieve more accurate assessments, it is recommended to use a step-by-step assessment of the value of intellectual property, consisting of several expert appraisers (7–10 people).

The method based on the methodology of fuzzy logic (fuzzy sets) has been used in economic research relatively recently due to the need to "disclose" the uncertainty of future economic and technological opportunities for using intellectual property and residual risks due to inaccurate initial data.

This method allows you to form a continuous range of implementation options (scenarios) for each of the possible parameters of the OIS (unlike conventional interval approaches), operate with both quantitative and qualitative criteria and determine the probable integral market value of the OIS using the mathematical apparatus of the fuzzy set theory, tested for solving many similar problems [6, 7].

Estimating the value of intellectual property is a necessary condition for their commercialization, i.e., their involvement in commercial circulation (purchase and sale) or use in their own production and economic activities in order to increase its effectiveness and efficiency.

It should be noted that the issues of estimating the value of intellectual property objects and their commercialization are quite complex and require further research to form their reliable methodological and methodological base. Increasing requirements for the quality and competitiveness of products of domestic industrial enterprises also necessitate further refinement of the principles and development of new methods and tools for the process of commercialization of intellectual property objects and their active introduction into economic circulation.

References:

1. Convention establishing the World Intellectual Property Organization. Federal Service for Intellectual Property, Patents and Trademarks (Rospatent). http://www.fips.ru
2. S. A. Sudarkov. Intellectual Property Law: textbook. M.: Prospekt, 2017.
3. R. V. Okorokov, Ya. V. Lemekha, and A. A. Timofeeva. Innovative potential of the enterprise: its evaluation and use. St. Petersburg: Publishing house of Politekhn. University, 2018.
4. Guidelines for determining the market value of intellectual property. Ministry of Property Relations of the Russian Federation, No. SK-4/21297 dated November 26, 2002
5. L. I. Lukicheva, D. N. Egorychev, M. R. Salikhov, and E. V. Egorycheva. Management of the processes of commercialization and valuation of the intellectual capital of high technology enterprises// Management in Russia and abroad, No. 4, 2009.

ISSN 2690-9626 (online), Published by "Global Research Network LLC"
under Volume: 3 Issue: 11 in Nov-2022 https://grnjournals.us/index.php/AJSHR

6. N. V. Diligensky and L. G. Dymova. Fuzzy modeling and multicriteria optimization of production systems under uncertainty: technology, economics, ecology. Moscow: Mashinostroenie Publishing House, 2004.
7. Yu. N. Nikishina and R. V. Okorokov. Economic sustainability of industrial enterprises: assessment and forecasting. St. Petersburg: Inkor Publishing House, 2014.

ISSN 2690-9626 (online), Published by "Global Research Network LLC"
under Volume: 3 Issue: 11 in Nov-2022 https://grnjournals.us/index.php/AJSHR