Intellectual property as a factor of increasing innovation activity of economic entities

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Abstract. Today, innovation is a powerful engine of social progress. Innovations determine economic growth in all spheres of state activity through constant introduction of new technologies, products and services into production, which leads to reduction of dependence on imports of technologies, materials and consumer goods. Effectiveness development of enterprises in dynamically changing external and internal environment that requires constant innovation of production and management technologies depends on the existing intellectual property and the possibility of its generation in the foreseeable future. The intellectual property acts as a binding component of the scientific and industrial spheres, is a factor of increasing the innovative activity of the economic entities. The article proposes the principles of formation and development of the intellectual property of an economic entity, such as: efficiency, planning, dynamism, objectivity, balance, circulation of the intellectual property, synergy, rational transparency and minimization of transaction costs. Necessity of each principle of formation and development of the intellectual property of the economic subject is proved. On the basis of synthesis of approaches existing in scientific literature the author's definition of intellectual property of the economic subject in which presence of these principles is designated is offered. The article substantiates that the intellectual property has a direct impact on the activation of innovation processes due to the fact that intellectual property is the main “driver” scientific research, contributes to activation the processes of territorial and inter-sectoral transfer of innovation, contributes to the processes of industrial cooperation for create new innovative ideas and projects.

1. Introduction
Most scientists agree that innovation has become a major driver of economic and social development. So, according to J. Schumpeter economic dynamics is based on the spread of innovations in various spheres of economic life. The result of innovation is the impact on economic processes or directly on products [1].

The level of development of markets in industrialized countries no longer makes it possible to provide significant advantages of the company only due to material and financial factors. Individual advantages and leadership are increasingly becoming a consequence of the effective use of unique by its nature factors of intangible, intangible nature, including the receipt, processing, analysis, interpretation of information; forecasting, foresight, modeling of changes; the creation, use of commercialization of knowledge, experience and other intellectual products; the formation of an
The conne...inventions determine economic growth in all spheres of state activity by constant introduction of new technologies, products and services into production. The state plays a decisive role in the formation of the national innovation system. It defines the legal framework, creates infrastructure and ensures growth of sales the high-tech products of industrial enterprises [6, p.6].

Innovative action is a purposeful work of business entities for formation, testing, implementation results of research and development [7, p.29]. Economic entities prefer to invest in the creation of new technologies, increase of intangible assets, consolidation and monopoly of intellectual property rights, opening of new product markets.

Innovation activity is one of the most common characteristics of innovation, reflecting the degree of intensity, timeliness of action, ability to use advanced methods, technologies and potential for achieve scientific, technical and economic effect. The main factors of innovation activity of economic entities of various forms of ownership and economic activities are:

- ownership structure for production means and interest of owners in the long-term development and improvement of the activity of the business entity on the innovative basis;
- intensity of scientific and technological progress in the industry which this business entity belongs;
- availability of available financial resources for increase the level of innovation;
- staffing of the innovation process, its composition and structure;
- presence and pattern of use the intellectual property of the business entity and other factors.

The connecting component of the scientific and industrial spheres perform the intellectual property, thereby integrating science and material production. Intellectual property is the driving force of...
various industrial, technological, organizational changes, primarily of an innovative nature. A. A. Bovin and L. E. Cherednikova emphasize "intellectual property is the most important category of innovative management" [8].

It should be noted that the first mention of the intellectual property began to appear in scientific works at the end of the XVIII century in the form of the theory of natural law, the essence of which was that everything that was created by man in the form of material and creative objects was recognized as his property, which gave the possibility of exclusive right of disposal. Consider that the tradition of proprietary approach to copyright and patent law occurred in France and was embodied in the Patent law in 1791 [9, p.10], after which the countries that followed the French model of copyright began to recognize the personal non-property rights of authors. However, the idea of copyright as the "most sacred form of property" was embodied in the laws of some US States even earlier in 1789 [10, p.11].

The first international agreement in the field of the intellectual property is the Paris Convention for the protection of industrial property (1883), but the term "intellectual property" came into wide use in 1976, with the signing in Stockholm of the Convention establishing the world intellectual property organization, where the concept of the intellectual property includes both intellectual activity of man in the industrial, scientific, literary and artistic fields and legal protection of its results [10].

In the Russian legislation, the concept of the intellectual property is formulated in the article 1225 of the Civil code of the Russian Federation [11], and the Constitution of the Russian Federation establishes the need to protect intellectual property by law (art.44, 71) [12]. Providing services for the protection of the intellectual property, the state solves the problem of improving their quality, both in the domestic economic and foreign economic environment.

Depending on the sphere of application, there is a fairly significant range of views on the nature and content of the economic concept of "intellectual property". Thus, the legal approach for definition of the intellectual property considers intellectual property as a set of exclusive rights that allow to determine the scope of rights for created results of the intellectual action arising from the right holders. Protection of these rights allows commercial implementation of innovations [13]. According to I. A. Bliznets, "exactly objectively expressed the intellectual action result can participate in economic turnover, become a product, and function in the market. Such object should be protected by the state, society, law" [14, p. 4].

When using an economic approach aimed mainly at determining the effectiveness of the creation and use of the intellectual property, in this case, intellectual property is considered like the system of social relations about the results of intellectual work arising in the process of production, distribution, exchange and consumption.

As a basis for the formation and development of the knowledge economy, intellectual property has such specific features:
- it is not material in the traditional sense, what is its main difference from property in the traditional sense, although the forms that acquire intellectual assets can be embodied in physical (material) objects that have a certain economic value;
- generates income on condition fixing the intellectual property rights and in result does not allow public use;
- give the ability to create a sphere of influence in the market;
- main component of determining the market value of modern enterprises.

Basis of the synthesis of different approaches for the economic entity, we can offer the following meaningful definition: "intellectual property of an economic entity” is intangible assets of organization, and system of accumulated knowledge and competencies of staff which are used for purpose of entity functioning, give the right a benefit from their use and formed in accordance with such basic principles as efficiency, consistency, dynamism, objectivity, balance, synergy, rational transparency, minimization of transaction costs [13].
Let us consider the system for principle of developing the intellectual property for entities with different forms of ownership (table 1).

| Наименование                              | Содержание                                                                                                                                 |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Principle of efficiency                | Imply obtained profit in result of the using the intellectual property of an economic entity will exceed the costs of its formatting and developing. |
| 2. Principle of planning                   | Necessity in operating and future planning the need for intellectual property and its sources of funding for organization's divisions and business entity as a whole. |
| 3. Principle of dynamism                   | Means that intellectual property of an economic entity have to continuous improvement with the trends of changes in the internal and external environment, especially the trends of scientific and technological progress, development of new competencies, rapid circulation the intellectual property elements between the divisions of the organization. |
| 4. Principle of objectify                  | Formatting and developing the intellectual property of an economic entity should be based on scientifically based methods and models, with a minimum role of the subjective factor. |
| 5. Principle of balance                    | There should not be a significant imbalance in developing the intellectual property between the individual units of the organization. This kind of imbalance will prevent the rapid and effective transfer of knowledge, technologies, ideas between the organization's units, and will hinder the implementation of joint projects for several departments of the economic entity. |
| 6. Principle of circulation                | There should be methods of transfer some types of the intangible assets between the structures of the economic entity, possibility of knowledge exchange and competencies of different units. This principle directly follows of principle of balance and determines the principle of synergy the intellectual property. |
| 7. Principle of synergy                    | Imply need interaction the intellectual property of different structures for organization with the purpose to take additional economic effect. This principle may also involve the interaction of several types of the intellectual property in different structures of the organization, for example, when specialists of another structure are involved in the implementation of a modern information system at one of the divisions from a large organization on the project basis. |
| 8. Principle of rational transparency      | Means necessity providing maximum possible cost transparency for formatting of intellectual property and its management methods in the business entity for order to minimize possible misuse. |
| 9. Principle of minimization of transaction costs | The development of the intellectual property should be organized in such a way that in the future ensure minimization of all types of transaction costs arising in the course of transactions between the structures of the economic entity, and its transactions with external |
It should be accentuate that intellectual property contributes the expansion of the organization's capabilities, increases the level of business reputation, competitiveness, forms the intellectual potential of the enterprise, allows gaining a leading position in the market, stimulates and ensures progress, etc. According to O. V. Gurenkova, in the modern society advances in the area of science and technology began to determine the dynamics of economic growth of States, the level of competitiveness of products and services, the degree of national security and equal integration into the world economy [16 p.4]. Considering the main directions the intellectual property influence on the activation of innovative activity in the economy, we can distinguish the following.

Table 2

| Specific properties and functions of the intellectual property | Directions influence on the activation of innovative activity |
|---------------------------------------------------------------|----------------------------------------------------------|
| 1. The intellectual property as the main factor of formatting knowledge economy | Knowledge of employees the institutions of higher education, research institutes, design offices, research departments of corporations and holdings are the main source of fundamental and applied research and development work, which, commercializing, transformed into innovation. |
| 2. Organizational and economic function the intellectual property | The intellectual property is a factor that able to organize different types of capital the economic entity in order to ensure the maximum level of their productivity, including on an innovative basis. |
| 3. Mobility the intellectual property | The intellectual property is a mobile resource. Specialists with knowledge freely move between enterprises of various industries and territories. There is a constant circulation of knowledge in the economy. Thus, the intellectual property helps to transfer of innovative technologies and solutions. |
| 4. Scalability of the intellectual property | Using the intellectual property available for enable and accelerate innovation activity even for the small businesses. |
| 5. Synergy of the intellectual property | The intellectual property contributes to the processes of cooperating of various enterprises, including economic clusters, which allows to implement joint innovative projects, to achieve a positive synergetic effect on the basis of joint generation ideas, developments, formatting of new innovative forms of economic integration. |

3. Conclusions

Thus, the intellectual property is directly related with creative process and acting in the form of knowledge, skills of personnel or intangible assets, including licenses and patents for implementation of innovative technologies and methods of production, ensures the activation of research and development work. Not only Intellectual capital is formed and also the involvement of other people in the development of new ideas, technologies, original solutions. On the basis of joint work, including at the level of different kinds of state and municipal enterprises, the institutions of higher education, scientific organizations, special investment and innovation funds and other objects of the state innovation infrastructure, occur generation of ideas and their implementation is achieved, thus there is an innovative modernization, an environment is created that contributes to the formation of the intellectual property market.

In the case of an economic entity, the process of the intellectual property management is implemented through a set of functions, methods and organizational management structures in order to extract profit and increase the amount of capital as a result of the creation and use of intellectual property.
The obtained results of intellectual activity acquire a certain form and are the objects of legal protection. Protection of these rights allows for the commercial implementation of innovations. Exclusive rights for results of the intellectual action give their owner a competitive advantage until even more perfect object of the intellectual property is created. Therefore, the intellectual property should have the ability to continuously improve in accordance with the trends of changes in the factors of internal and external environments, which determines the principle of dynamism in the formation and further development of the intellectual property.

References
[1] Schumpeter J A 1982 Theory of economic development (Moscow, Progress) p 79
[2] Abdullin A L, Arslanov V A, Gazizov I S, Kashapov N F etc. 2014 Intellectual property (Kazan, “Fen” of Academy of Sciences of RT) p 268
[3] Santo B 1990 Innovation as a means of economic development: Per. with Weng. (Moscow, Progress) p. 296
[4] Hofmeister E 1981 Innovation stamen. WiVon the willingness of rum Technical walls (Berlin and Munchen) p 241
[5] Drucker P F 1992 Innowacje a przedsiębiorczosc (Warszawa) p 39.
[6] Abdullin A L, Arslanov V A, Gazizov I S, Kashapov N F etc. 2014 Regional market of intellectual property. Part 1 (Kazan, Brig) p 6
[7] Paley T F 2011 Innovation management. Ed. 2nd, revised. EXT (Kazan, Foliant) p 29
[8] Bovin A A, Cherednikova L E 2014 Intellectual property: economic aspec (Moscow, INFRA) p. 278
[9] Sergeev A P 1996 Intellectual property Rights in the Russian Federation (Moscow, Theis) p. 10
[10] Convention establishing the World Intellectual Property Organisation 1979 Article 2 (Stockholm)
[11] The civil code of the Russian Federation (part four) from 18.12.2006 №230 –FZ (as amended on 01.07.2017) Article 1225
[12] The Constitution of the Russian Federation (adopted by popular vote 12.12.1993) Articles 44, 71
[13] Iksanova L R 2018 The principle of rational transparency for forming and developing the intellectual property. Management of economic systems: electronic scientific journal №2 (108) URL: http://www.uecs.ru/index.php?option=com_flexicontent&view=items&id=4790
[14] Bliznets I A 2001 Intellectual property and the law. Theoretical question. Materials on copyright and related rights. (Moscow) p 4
[15] Iksanova L R 2014 Strategy of developing the intellectual capital of a holding // Aktual’niye problemy ekonomiki i prava No 1 (29) p 113
[16] Gurenkova O V 2010 Formation of a complex of intelligent products for logistics in the market of innovation (Samara state University of Economics) p 4
[17] Iksanova L R 2014 Features of intellectual capital influence on innovation activities Akademisches Magazin Intellekt. Innovationen. Investition No 3 p 22