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METHODOLOGY OF INTELLECTUAL PROPERTY MANAGEMENT PROCESSES

Abstract. *The article proves that the management of intellectual property is a set of management actions carried out by an industrial enterprise in order to ensure the implementation of the legal system of intellectual property and protect the legal rights and interests of subjects of intellectual property law, as well as natural persons. Intellectual property right enables property owners to maximize the economic and social benefits of their intellectual achievements. It is justified that the content of intellectual property management corresponds to the system of intellectual property protection. Only after understanding the content of the intellectual property system, can we find out the content of intellectual property management and scientifically build and operate the intellectual property management system at industrial enterprises.*

Keywords: *intellectual property, management, methodology, essence, use, disposition, legal protection, industrial enterprises*

Introduction. This century is the era of the knowledge economy, and intellectual property, intellectual innovation, industrial competitiveness and international competitiveness will be the eternal themes of this era. At this stage, many of the problems facing the development of national enterprises are related to the lack of an intellectual property management system, which seriously limits the increase in competitiveness and strategic advantages of enterprises. Therefore, it is extremely necessary to follow the trend development of the knowledge economy and creation and improvement of the intellectual property management system of the enterprise. A reliable system of intellectual property management of an enterprise requires not only the improvement of the internal enterprise management system, but also the strengthening by the state of management of intellectual property rights of enterprises and protection of intellectual property rights by society.

An enterprise can achieve commercial success only when it has clear goals of its innovative development and a close-knit management team. Innovation can be defined as the task of endowing human and material resources with new, stronger and more effective opportunities to improve business results, and managers must turn the needs of society into

profitable opportunities for the enterprise. The concept of intellectual property management of an enterprise refers to the guiding ideology and the basic principles of its activities necessary for the creation, improvement and continuous development of the entire management system. In general, the intellectual property management system of the enterprise serves its business goals, and the intellectual property management system of the enterprise should be unified with the strategic thinking of the top management of the enterprise. Only serving the commercial goals of the enterprise, the intellectual property management system may not lose its strategic goals, and the enterprise can receive economic benefits from intellectual property management, which, in turn, contributes to the continuous development of intellectual property.

The problems of intellectual property management at industrial enterprises have long been in the focus of attention of many theorists and practitioners. These issues are presented in most scientific publications, textbooks and manuals published by recognized scientists Butnik-Siverskyi O.B. [Butnik-Siverskyi, 2020], Virchenko V.V. [Virchenko, 2013], Zhavoronkov S.V. [Zhavoronkov, 2010], Illiashenko S.M. [Illiashenko S.M., 2017], Kosenko O.P. [Kosenko, 2015], Kosenko A.V. [Kosenko, 2018], Kobieliava T.O. [Kobieliava, 2017], Kocziszki D. [Kocziszki, 2017], Nagy S. [Nagy, 2018], Pererva P.G. [Pererva, 2019]. In general, scientists consider the organization of economic analysis of the activities of business entities using either a structural approach, which is based on the creation of a form (architecture of links) of managing the organizational structure of an analytical service, or a technological approach that involves considering the content of analytical work (topology of links of analytical tasks) at different technological stages of information processing.

In scientific publications of Ukrainian scientists, the problems of intellectual property management at the enterprise in various directions are raised. In particular, the issues of detailing the components and distribution of volumes of analytical work between officials at each organizational stage of the analysis: preparatory, main and final [Butnik-Siverskyi, 2020] are investigated. I offer different organizational structures and intellectual property management with the inclusion of such a functional block as the intellectual property department [Pererva, 2019]. Also, the publications address the issues of determining a stable regular relationship between the management of intellectual property and the organizational form of the enterprise [Virchenko, 2013], investigate the issues of designing the organization of monitoring of intellectual activity [Illiashenko S.M., 2017]. It should be noted the increased interest of scientists in various fields of economic science to consider the design of

organizational systems for intellectual property management in general [Virchenko, 2013; Pererva, 2019; Illiashenko S.M., 2017].

A critical review of the specialized literature has shown that in modern systems for making managerial decisions of business entities in the field of intellectual property, along with the processes of forming the structure and technology of performing analytical procedures, it is necessary to take into account the functions performed by the organizational system for analyzing intellectual activity. Since in the organizational system of intellectual property management modern domestic enterprises analytical functions are not differentiated, issues related to the application of a matrix approach to the organization of intellectual property management, taking into account the functional structuring of analytical work, acquire importance and require additional research.

Research results. In essence, intellectual property management belongs to the category of enterprise management, but compared to human resource management, financial management, sales management and development management, intellectual property management has its own unique characteristics. A complete intellectual property management system includes the choice of management models, the construction of management departments, the distribution of management personnel, the formulation and implementation of management systems, management measures, etc. to form a comprehensive, multi-level and three-dimensional protection for enterprises and the realization of the management goal of creating profits for enterprises through intellectual property management.

We propose for wide use the following definition of this process in relation to an industrial enterprise.

Intellectual property management is a set of management actions carried out by an industrial enterprise in order to ensure the implementation of the legal system of intellectual property and protect the legitimate rights and interests of subjects of intellectual property rights, as well as the individual rights of intellectual property owners in order to maximize economic and social benefits from their intellectual achievements. Based on the proposed definition, we can assert that intellectual property management is, in fact, property management of intellectual property owners. Property is the owner's right to own, use, use and dispose of all his property within the limits established by law. Although intellectual property has its own peculiarity in form, it is still objective and real property. Therefore, in our opinion, an industrial enterprise has a real opportunity to carry out scientific

management of intangible intellectual property rights and to increase the efficiency of management and its use in their production and commercial activities.

First of all, the intellectual property management system of an enterprise is a general system that is not only a component of research and development or production, but also an enterprise management subsystem that includes all parts of the production process: R & D, production, procurement, sales, import and export, etc. Effective intellectual property management is not only the responsibility of the intellectual property management service, but also involves all other services of the enterprise and almost every employee in this process. In particular, a trade secret in intellectual property concerns every employee of this enterprise.

The main provisions of the content of intellectual property management processes at an industrial enterprise are presented in Figure 1.

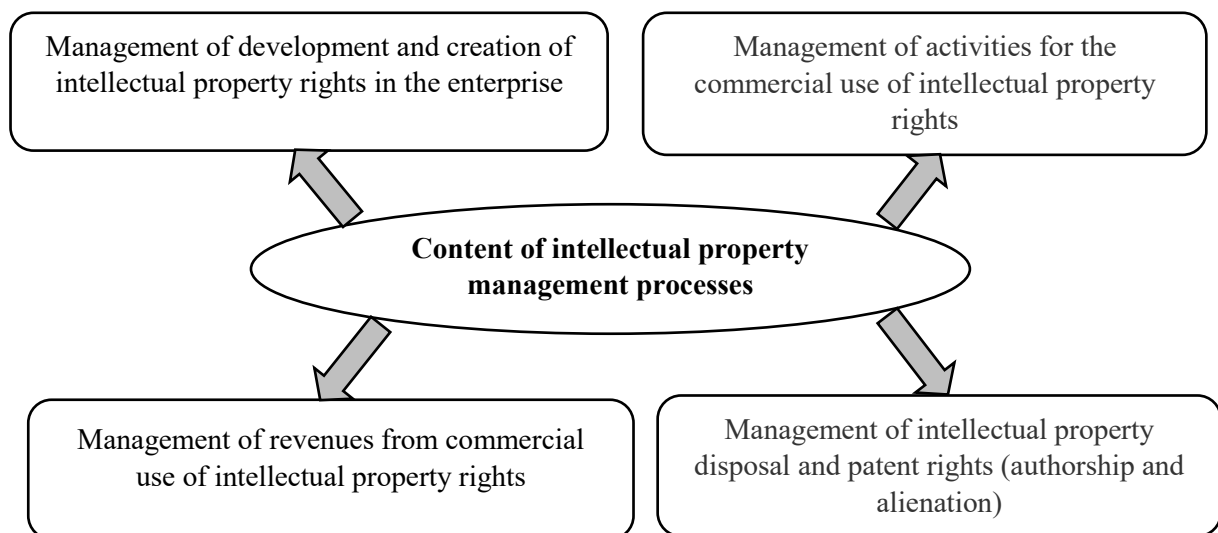


Figure 1. The content of intellectual property management processes at an industrial enterprise
(developed by the authors)

The content of intellectual property management uniquely corresponds to the system of intellectual property protection. Only by understanding the content of the intellectual property system, can we find out the content of intellectual property management and scientifically build and operate an intellectual property management system in enterprises.

Let us consider in more detail the individual provisions of the content of intellectual property management processes at an industrial enterprise, which are presented in Fig. 1.

Management of the development and creation of intellectual property rights means that top management at the enterprise should proceed from the goal of encouraging staff to

create inventions and creativity, formulate appropriate strategies, promote the development of intellectual property rights, perform effective work on registration and statistics of intellectual property rights, check and use all assets available at the enterprise, understand changes in property rights, as well as exercise direct management of intellectual property rights existing at the disposal of the enterprise Management and supervision of indirect ownership of intellectual property rights.

The management of activities for the commercial use of intellectual property rights mainly regulates the operation and use of intellectual property rights, studies and approves methods of functioning and management of intellectual property rights, formulates intellectual property rights, etc.

The management of revenues from the commercial use of intellectual property rights determines the transfer, use and suspension of intellectual property rights in accordance with the terms of the enterprise in question. Revenue management perfectly combines scientific forecasting technology and optimization technology using modern computer technology, deeply applies marketing theories at a very detailed level, such as market segmentation and pricing, forms a set of systematic concepts and management methods.

The management of intellectual property ruling and patent rights involves determining the transfer, use, and termination of intellectual property rights in accordance with its own terms. Patent rights are an essential part of intellectual property management of enterprises and are considered as a lifeline and amulet of enterprise development. In today's increasingly tough market competition, resources are the basis for enterprise participation in market competition, especially for monopoly resources such as patents, mastery of patents means the presence of a certain competitive advantage. The patented technology is not only a means for enterprises to protect their own interests from violations, but also weapons to gain market advantage over competitors.

In the field of intellectual property, two important concepts should be distinguished: the system and the strategy of intellectual property.

The intellectual property system is a legal system in which the right holder of intellectual achievements enjoys for a certain time the exclusive right to his intellectual achievements. Without the permission of the copyright holder, no one is allowed to use his intellectual achievements. The introduction of an intellectual property system can stimulate innovation, protect the achievements of people's intellectual work and contribute to its transformation into real productivity. It is an incentive and protection mechanism to promote scientific and technological progress, economic development and cultural prosperity.

Intellectual property rights, commonly known as intellectual property rights, refer to the rights enjoyed by spiritual riches created by intellectual activity in the fields of science, technology, culture, and the arts. Intellectual property rights in a broad sense include patent law, copyright, related rights, trademark rights, trade name rights, trade secret rights, integrated circuit layout design rights, etc. To encourage people to create intangible property, countries have consistently passed legislation to protect the rights of all people to intellectual achievement.

Compared to an intellectual property system, an intellectual property management strategy essentially refers to the study of how to effectively use and implement an intellectual property system. That is, the intellectual property system is the basis of strategic intellectual property management, which determines the nature and content of the intellectual property strategy, and the intellectual property management strategy is a comprehensive planning of the general application of the intellectual property system.

We propose to divide strategic management of intellectual property into several, to a certain extent, and independent, but interrelated levels (Figure 2).

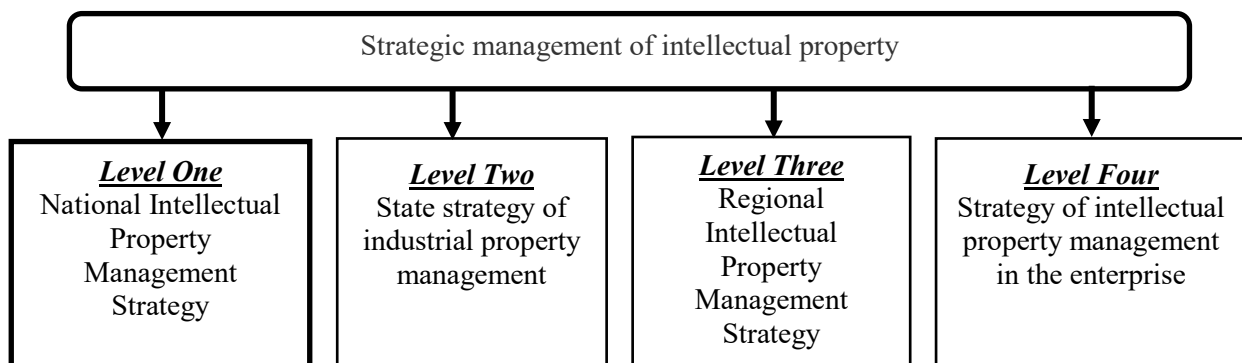


Figure 2. Levels of tag management of intellectual property

(developed by the authors)

The national strategy for intellectual property management considers the macro level of the whole country, it is closely related to the model of economic development of the country, personnel training, research system, etc., it should be planned as a whole. The National Intellectual Property Management Strategy concerns not only the strategy for the development of the intellectual property sphere itself, not only the strategy for the protection of intellectual property, it is an extremely important national strategy that covers many areas. The National Strategy covers all areas of intellectual property, including patents, trademarks, copyright and related rights, layout of integrated circuits, geographical indications, new biological varieties, trade secrets, traditional knowledge, genetic resources

and folklore, property rights and prohibition of abuse of intellectual property rights. The National Intellectual Property Management Strategy fully takes into account the government's leading role in adjusting and improving the system of intellectual property laws, regulations and policies, creating a system of indexes for evaluating institutional mechanisms, and creating a policy environment that encourages innovation.

The State Strategy for Industrial Property Management determines the fact that it is impossible to simultaneously effectively cover all spheres of intellectual activity, but at the same time these actions should not be unilateral. The country should focus on promoting industrial intellectual property strategies in priority sectors such as information technology, biotechnology, medicine, etc.

The regional strategy for intellectual property management determines that there are large differences in scientific and technological progress, economic development and intellectual property resources in different regions of the country, and there should be different accents according to the actual situation in different regions. It also reminds government departments that it is inappropriate to pursue one goal when measuring the IP development status in each oblast or region.

The strategy of intellectual property management in the enterprise concerns the strategy and means of using the intellectual property system by the enterprise in order to obtain and maintain market competitive advantages for obtaining the best economic benefits. Strategic management at the enterprise level involves the development and maintenance of personnel awareness of the means of protection, protection and use of intellectual property. Enterprise strategy in the field of intellectual property must comply with the laws of a market economy and direct enterprises to increase by their own means their intellectual potential in the field of creation, use and protection of intellectual property rights in conditions of market competition.

Strategic management at the enterprise in the field of intellectual property is directly related to its business strategy and is actually an integral part of its overall development strategy. The practical implementation of the intellectual property management strategy at the enterprise involves the analysis of economic and technological information of the enterprise, market forecasts, trends in new products and strategic intentions of the main participants in the target market of the enterprise. Therefore, it is advisable to maintain confidentiality of the content of the intellectual property strategy of the enterprise, which provides for the status of a trade secret, that is, has the characteristics of confidentiality.

The research and analysis of strategic management of intellectual property in the enterprise mainly includes the following elements:

1. Formation of the basic theory of strategic management of intellectual property of the enterprise.
2. Determine and justify the status of the intellectual property strategy of the enterprise in the prospects of its development.
3. Substantiation of the relationship between the intellectual property strategy of the enterprise and other strategies of enterprise development.
4. Optimize the allocation of intellectual property resources of the enterprise and their use in economy and these enterprises.
5. Analyze the types of intellectual property strategies of the enterprise and specific strategies for their implementation.
6. Evaluate the relationship between intellectual property strategies of the enterprise and the creation of modern corporate systems.
7. Explore methods of strategic intellectual property management in other enterprises in order to summarize and use best practices.
8. Determine the legal guarantees of the chosen intellectual property strategy of the enterprise
9. Study of progressive practice of strategic management of intellectual property of enterprises in developed countries and possibilities of its use for domestic enterprises.

The effectiveness of the intellectual property management process is ensured by the performance of a number of extremely important functions, which include the following:

- a) formulating and implementation of corporate intellectual property strategies to achieve corporate business objectives;
- b) managing the resources of intellectual property of the enterprise for the implementation of the task of preservation and evaluation of intellectual assets;
- c) identifying and training professional talents, including R&D personnel and intellectual property management personnel;
- d) formation and development of a mechanism for research and innovation in order to encourage employees of the enterprise to creative search and scientific activity;
- e) in accordance with national legislation, incentives and restrictions policy, forming and implementation of a mechanism for patent management at the enterprise, which

includes as components: incentives and restrictions, assessment and a system of financial guarantees;

- f) use all available information resources in the field of creation, commercialization and transfer of intellectual property;
- g) establishing and improvement of intellectual property rules and regulations, preventing legal risks and responding to intellectual property litigation;
- h) carrying out processes of commercialization and use of intellectual property, using the market value of exclusive rights of intellectual resources.

To ensure the smooth implementation of the strategic system of acceptance and management of intellectual property in the enterprise, it is necessary to create an orderly and effective intellectual property management department at the enterprise under the responsibility of the main managers of the enterprise. Industrial enterprises usually have a specialized department of intellectual property management, which is called the department (department) of intellectual property. The intellectual property department, design department, technology department and business department together form the core of the enterprise, and the legal department and finance department together form a high-level organization and enterprise management organization.

The conducted studies allow to form the main types of organizational structure for managing intellectual property of the enterprise (Figure 3).

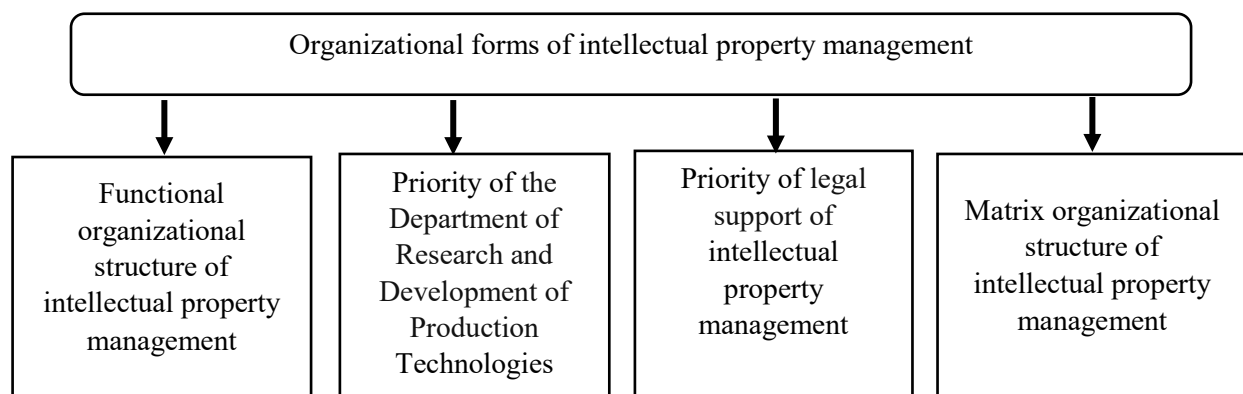


Figure 3 – The main types of organizational structures for managing intellectual property in an industrial enterprise

(developed by the authors)

A number of industrial enterprises use the organizational structure of intellectual property management on a priority basis Department of Research and Development of Production Technologies. This Organizational form subordinate There is an Intellectual

Property Department into technology research and development. This form is suitable for high-tech enterprises, the strategy of which is dominated by patented technology, and the scope of which is concentrated mainly in this country. The advantage of this Form is that it facilitates timely communication between the intellectual property management department and R&D personnel, so that decision-making and development can be carried out simultaneously, which can save development costs and avoid unnecessary risks of infringement. Moreover, the establishment of an intellectual property management department is within the R&D department, which can clearly understand the key points of technological innovation and product development, as well as formulate in a timely manner Necessary Strategy management Intellectually own Contents. However, since the intellectual property management department is located in the research department and has a low rank, this has and certain Disadvantages: employees of the department cannot take Directo participation in corporate decision-making, not fully Mindi's general objectives of the enterprise and General intellectual property rights of the enterprise, which complicates management processes Department of Intellectual Property.

The organizational structure of intellectual property management is also often encountered, which provides for the subordination of the intellectual property management department to the legal department of the enterprise. This model subordinates the intellectual property management department under the legal department at the same time, employees of the intellectual property management service sometimes also perform the functions of legal personnel. This kind of model is more suitable for the new technology companies with few patented technologies, but high legal requirements and a lot of litigation. Its use in practice contributes to measures against legal violations related to intellectual property, and also allows pain to effectively carry out litigation. However, in this structure, the intellectual property department is far from other departments and cannot receive information from the research and development department in time, which does not contribute to the formulation of an intellectual property strategy in the field of high technology and cannot guarantee the availability of operational capabilities necessary for effective management of intellectual property.

The matrix organizational structure is an adaptive management model (that is, specially created to achieve a goal). In other words, such a structure adapts very quickly to current changes, unlike other organizational structures, which are considered to be to some extent bureaucratic. The peculiarity of the artic organizational structure is that here, in addition to the head of the department, there is an additional manager – the project

manager. Along with this, it is a combination of a linear-functional management structure and a program-target management structure. At the same time, the specialist of the department is subordinate to two managers at once, that is, directly to the line manager and at the same time to the project manager. In such a structure, the functional manager is responsible for the quality of the work performed by his department, and the project manager for the project from the beginning of its production to release.

In our opinion, the matrix structure of intellectual property management is most suitable for the specifics of scientific and technological developments of an industrial enterprise and for the management of intellectual property objects that are the result of these developments. Each scientific task is a specific project that has its own tasks, goals and deadlines. The specificity of scientific and technological projects is that their formation, implementation and practical implementation is not always directly related to the main production and economic activity. Intellectual results can occur unpredictably, and a side scientific result can have much greater weight and effectiveness than the main one.

Conclusions. Effective management of intellectual property is of great importance for the survival and development of enterprises. Standardized intellectual property management will effectively reduce business risks and provide guarantees of security, stability and rapid development of enterprises. On the contrary, if the intellectual property management of an enterprise is not standardized, it will lead to many business risks, the main of which should be considered the following:

1. *Innovative achievements of the enterprise will not receive appropriate legal protection in time.* Standardized intellectual property management activities can timely excavate, sort, and apply to the State for relevant intellectual property rights and obtain permission. If an enterprise does not pay attention to intellectual property management, then innovative achievements of the enterprise may not be able to obtain intellectual property protection in a timely manner, and can even be obtained and used by competitors for free.
2. *Innovative achievements of enterprises face the risk of loss. Businesses will face ownership of intellectual property rights in corporate development, service inventions, service work, intellectual property transfer, and intellectual property licensing.* The standardized process and intellectual property management system will protect the interests of enterprises as much as possible in terms of ownership. If an enterprise lacks success in managing intellectual property, these innovations

may face the risk of losses that Ultimately, it will hinder the healthy development of the enterprise.

3. *The lack of evidence leads to obstacles to the protection of corporate exclusive rights.* Intellectual property rights activities have high evidence requirements, especially for rights such as copyrights and trade secrets, which do not require approval and submission by relevant government departments. For example, the owner of a trade secret must prove the specific content of a trade secret, confidentiality of information, taking reasonable confidentiality measures, etc. All this requires the company to pay attention to the collection, sorting and accumulation of relevant evidence materials in the daily process of intellectual property management. If there is no proper intellectual property management system, once an intellectual property dispute arises in an enterprise, it is easy to create evidence that hinders the protection of rights, and it may be too late to make up for it by then.

4. *Increased risk of infringement of intellectual property rights of others. A standardized intellectual property management system also helps companies avoid possible risks of infringement.* Thanks to the system of early warning of infringement of intellectual property rights, enterprises can identify possible risks of infringement in their products as early as possible and avoid them through technical or legal means. Without a robust intellectual property management system, businesses may infringe the existing intellectual property rights of others if they blindly develop products, produce and sell them.

It can be seen that there is a close relationship between intellectual property management and business risks, and it has permeated all aspects of day-to-day enterprise management. Of course, there are still many risks in the process of doing business, such as financial risk, tax risk, market risk, human resource risk, etc., but the results of the study proposed in the article consider business risk only from the point of view of intellectual property management and provide appropriate preventive measures and suggestions in this regard.

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