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# Vladyslav V. Sviatetskyi *Kyiv National University of Technologies and Design, Ukraine* BUILDING A MANAGEMENT FRAMEWORK FOR INTELLECTUAL PROPERTY COMMERCIALISATION

The article presents the results of research on the justification of structural elements within the management framework for intellectual property commercialization under the process of technology transfer. The study provides basic theoretical premises, approaches and principles of intellectual property management and reveals the specifics of management decision making. Based on scientific research in favour of viewing the subsystem of intellectual asset management as an independent subsystem of management along with production, financial, marketing and other subsystems, the study offers a functional and structural representation of the management framework for intellectual property commercialization along with focusing on its critical role in the overall management paradigm and technology transfer system. The significance of information and intellectual assets as a research object in the theory and practice of management has been reasoned. It is argued that the process of intellectual property management in a modern research and production enterprise challenges fundamental adjustments and regulatory support. According to the results of the study in the area of management theory and practice of intellectual property commercialization in modern realia, the following structural elements of the system have been identified: a developed enterprise strategy and technology transfer vectors; strategy implementation assessment; making a decision as to diversification and expansion towards intellectual property commercialization; calculation of remuneration to creators of intellectual assets; informing external stakeholders as to the market value of the enterprise strategic goals in technology transfer.

*Keywords: intellectual property; innovation activity; intellectual assets; commercialization process; technology transfer; system; system approach.* 

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У статті викладено результати досліджень щодо обтрунтування елементів системи управління комериіалізацією інтелектуальної власності в процесі трансферу технологій. Окреслено базові теоретичні передумови, підходи і принципи управління інтелектуальною власністю, розглянуто особливості ухвалення рішень у загальній системі управління. Визначено, що виконання завдань управління інтелектуальними активами здійснюється в рамках створення системи управління ними. Ґрунтуючись на наукових дослідженнях на користь виділення підсистеми управління інтелектуальних активів у самостійну підсистему управління, разом з виробничою, фінансовою, маркетинговою та іншими підсистемами, запропоновано функціонально-структурне представлення системи управління комерціалізацією інтелектуальної власності, а також визначено її місце в загальній системі управління та трансферу технологій. Обтрунтовано значущість інформації та інтелектуальних активів як об'єкта дослідження в теорії і практиці управління. Доведено, що стан процесу управління інтелектуальною власністю сучасного науково-виробничого підприємства вимагає значного корегування та нормативно-правового забезпечення. За результатами дослідження теорії і практики управління комерціалізацією інтелектуальної власності на сучасному етапі визначено такі основні складові елементи системи: наявність стратегії підприємства та напрямів трансферу; оцінка виконання стратегії; ухвалення

рішення щодо диверсифікації та розширення в частині комерціалізації інтелектуальної власності; розрахунок винагород творцям інтелектуальних активів; інформування зовнішніх зацікавлених осіб щодо ринкової вартості підприємства й стратегічних напрямів трансферу технологій.

*Ключові слова:* інтелектуальна власність; інноваційна діяльність; інтелектуальні активи; процес комерціалізації; трансфер технологій; система; системний підхід.

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# Киевский национальный университет технологий и дизайна, Украина ФОРМИРОВАНИЕ СИСТЕМЫ УПРАВЛЕНИЯ КОММЕРЦИАЛИЗАЦИЕЙ ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ

В статье изложены результаты исследований по обоснованию элементов системы управления коммерциализацией интеллектуальной собственности в процессе трансфера технологий. Рассмотрены базовые теоретические предпосылки, подходы и принципы управления интеллектуальной собственностью, представлены особенности принятия решений в общей системе управления. Определено, что выполнение задач управления интеллектуальными активами осуществляется в рамках создания системы управления ими. Основываясь на научных исследованиях в пользу выделения подсистемы управления интеллектуальных активов в самостоятельную подсистему управления вместе с производственной, финансовой, маркетинговой и другими подсистемами, предложено функционально-структурное представление системы управления коммерциализацией интеллектуальной собственности и определено ее место в общей системе управления и трансфера технологий. Обоснованно значимость информации и интеллектуальных активов, как объекта исследования в теории и практике управления, Доказано, что состояние процесса управления интеллектуальной собственностью современного научнопроизводственного предприятия требует значительной коррекции и нормативно-правового обеспечения. По результатам исследования теории практики и управления коммерциализацией интеллектуальной собственности на современном этапе определены основные составляющие элементы системы: наличие стратегии предприятия и направлений трансфера технологий; оценка выполнения стратегии; принятие решения по поводу диверсификации и расширения в части коммерциализации интеллектуальной собственности; расчет вознаграждений создателям интеллектуальных активов; информирование внешних заинтересованных лиц о рыночной стоимости предприятия и стратегические направления трансфера технологий.

**Ключевые слова:** интеллектуальная собственность; инновационная деятельность; интеллектуальные активы; процесс коммерциализации; трансфер технологий; система; системный подход.

**Problem statement.** The most complex and relevant in practice are the problems of managing the commercial use of intellectual capital, because the degree of successful solution of these problems depends on the possibility of achieving the final positive results of innovation and investment activities of domestic enterprises.

It should be noted that the consideration of the commercialization of intangible assets in most cases is reduced by researchers to the problems of commercialization of intellectual property. In this case, the commercialization of intellectual property means the process of attracting the results of intellectual activity in economic turnover or use in their own economic activities [2]. Many sources mention the term "commercialization of intellectual capital", but the interpretation of

this term is not given [1, 4–6, 10]. In the current situation, the development of a methodology for managing the commercialization of intellectual capital is relevant.

The aim of the article is to study the elements of the management system of intellectual property commercialization.

**Unresolved parts of the problem** In order to form a conceptual framework for managing the commercialization of intellectual capital of enterprises, we consider some aspects of commercialization of intellectual performance, basic methodological approaches to market value assessment and identify the main components of methodology for managing the commercialization of intellectual capital.

The results of the study Note that in themselves the results of intellectual activity do not represent any economic value without their proper use. Such use is possible either in own economic activity, or in transfer of the right of use to the third parties, and also in the mixed form. According to experts, the greatest interest is the process of market realization of intellectual property, which leads to the formation of the market of intellectual capital and ensuring the company's income from interaction with it [4, 6, 10].

The general economic and legal principle in the transfer of ownership of intellectual property is expressed in the fact that the owner of the latter may transfer full or partial rights to any other natural or legal person. Any person has the right to use intellectual property only with the permission of its owner and in accordance with a license or other agreement.

However, both the use of intellectual property and commercialization directly in the enterprise is the most important condition for business efficiency and, consequently, the object of management: planning, analysis, evaluation and so on. It should be noted that many domestic enterprises do not use the available intellectual resources even to a satisfactory extent. Extremely low speed of their implementation (duration of the stage from development to operation). In this regard, a certain practical interest is a systematic analysis of organizational and legal problems of commercialization of intellectual assets in the practical implementation of innovative activities of the enterprise (as the main link of industrial production), as effective regulation of property relations is the main means of market relations in industry and ultimately determines effectiveness. innovative activity of the enterprise. The urgency of solving these problems is determined by the fact that the degree of scientific development of general issues of this complex issue is very small, as the transition to a market economy has not only introduced significant innovations in the content of economic and social relations, but also revived a number of industrial and civil relations. which before in the socialist practice of management in fact did not exist. There has been a radical replacement of almost all legislation in the field of creation, legal protection and use of intellectual property (industrial property, copyright and confidential information), intensively formed the institution of private property, including the results of research. The results of intellectual activity become one of the most important objects of property commodity-money relations and a legal part of property complexes (enterprises and organizations) [2]. In the property (on the balance sheet, in the budget) of enterprises and organizations, previously unknown intangible assets and "intangible fixed assets" have appeared and are increasingly used, and valuation activities, including intellectual property rights, are developing. Intellectual property rights are contributed to the authorized capital of enterprises and used as part of the property of enterprises and organizations. New forms of contractual registration of transfer of rights to use objects of exclusive right under commercial concession agreements and trust management are being formed and developed.

We will note that the problem of involvement in economic (commercial) turnover of results of intellectual activity arose already at the state level.

In the conditions of developing market relations, intellectual property becomes one of the most important objects of property of the legal entity (enterprise, organization) by means of which

property commodity-money relations in the field of creation, legal protection and use of results of intellectual activity (new knowledge and information). This means that the economic turnover of IP at the level of the economic entity (enterprise, organization, entrepreneur) is an economic and legal model of the public market of intellectual property (results of intellectual activity). The mechanism of effective economic turnover of intellectual property through the balance of rights and legitimate interests of legal entities is a way to "ensure the unity of supply and demand for intellectual property, development of scientific and technical research, their industrial implementation, production and consumption of new competitive goods and services, thus stimulating the process of scientific and technological development and revival of Ukraine's economy. The complexity of the analysis of property civil law relations of economic turnover of intellectual property in the activities of enterprises and organizations is also due to the fact that the problems of introducing intellectual property into economic turnover and its use as property of participants in civil turnover are manifested in a complex set of legal developments. economic, financial, technical and social relations that arise at different times between different subjects of market relations, sometimes with opposite interests. In this regard, it is necessary to identify individual, self-interested, subjects of innovation and analysis of the relationship between them to find ways to effectively regulate them in the process of commercialization of intellectual property. According to this figure, the main subjects of market relations in the commercialization of intellectual property in the process of innovation are:

- public administration and control bodies;

- an enterprise that directly creates and uses new technologies in innovation;

- authors (creators) of new technologies in the form of results of intellectual activity (objects of copyright, industrial property, trade secrets – know-how);

- investors involved in financing the production cycle of the creation and use of intellectual property and in the organization of industrial production of new products; competing manufacturers that produce competing products (services) on the basis of their own developments or other similar intellectual property;

- manufacturers – "pirates" who carry out unauthorized use of intellectual property of the enterprise and produce counterfeit products.

The place where the practical conflict of interests of separate subjects of innovative activity and realization of control over objects of market relations is possible, the consumer market of production (services) acts. It is in the market that the problems that arise in the relationships of market participants in the commercialization of intellectual property, the difference and similarity of their interests are most acute. By the nature of the manifestation, we can distinguish three main aspects of the relationship [1, 6]:

1) technical, directly related to tangible and intangible objects of industrial production (services) on the basis of IP;

2) financial and economic, associated with the consumption of products of innovative activities and the corresponding redistribution of funds;

3) socio-legal, related to moral and legal norms and traditions that must be taken into account in business.

The subjects involved in the relationship can be divided into the following groups of legal entities in the commercialization of intellectual property [9, 10]:

- enterprise – public administration and control;

- enterprise – authors of intellectual property;

- enterprise – investors;

- enterprise – competing manufacturers;

- enterprise - manufacturers - "pirates";

- enterprise – consumers.

In this case, each of these groups of relations in practice requires separate consideration and development of special measures to resolve the problems of the relationship in accordance with the specific market situation, strategy, tactics of the enterprise in the market. In any of these groups of relations it is necessary to develop measures appropriate to the specific market situation to regulate relations, ensure reliable protection and effective use of intellectual property. Such measures may include:

- legal measures, ie protection of the rights and interests of authors and their successors (protection of the "patent monopoly") by the laws of the state through appropriate punishment of producers – "pirates" for unauthorized use of industrial property;

- economic measures (measures of economic calculation), based on the conscious and voluntary choice of acceptable rules of individual conduct on the basis of economic feasibility, the use of official tax benefits and the benefits of authorized use of new technologies;

- moral and ethical measures based on the promotion of the rules of "honest business" and public rejection of unauthorized use of someone else's intellectual property;

- contractual measures based on the careful development of favorable contracts and agreements for enterprises and on the voluntary assumption of contractual obligations for cooperation and joint activities with partners in innovative business;

- measures for registration of intellectual property as property (objects of property) of the enterprise by inventory, documentation, evaluation and accounting of the results of intellectual activity.

Note that in the commercialization of intellectual property is considered essential to have and correct the documents confirming the rights of the enterprise to intellectual property, as the accounting documents of the enterprise reflect only the values belonging to the enterprise on the rights of ownership or use.

**Conclusions and prospects for further research** The formation of a methodology for managing the commercialization of intellectual capital involves a preliminary analysis of key aspects of commercial use of intellectual property, which include problems of commercialization of intellectual property (including intellectual property) and basic methodological approaches to assessing market value of intellectual capital.

Thus, in the practical implementation of IP commercialization in innovation, it is necessary to identify groups of relations between individual subjects of market relations, to formulate those that arise in these relations in specific market conditions, organizational and legal problems and seek adequate and most effective ways for each group. solutions to these problems.

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