## THE CORPORATE GOVERNANCE OF INTELLECTUAL CREATION - IMMEDIATE CONDITION OF TRANSITION TO THE KNOWLEDGE SOCIETY

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## Abstract

The practical application of the results of intellectual activity is the driving force of economic and social development. Their intangible nature created serious difficulties in extending them to the principles of private property inherent in the market economy. In order to overcome them, throughout the nineteenth century, with the expansion of the role of knowledge and information, a number of laws on the legal protection of the most important intellectual creations (inventions, trademarks, literary works, etc.) most European countries. Over time, intellectual creatives become extremely valuable patrimonial objects, important sources of competitive advantages and additional profits, objects of commercial exchanges, and in the twentieth century an important subject of corporate management too.

Keywords: intellectual property, intellectual product, objects portfolio of intellectual property, management of intellectual property.

The intellectual heritage, the estimated value and economic potential of which has grown significantly over the last few decades, presents all the final outcomes of the creative work. In most general terms, these are manifested in knowledge, information, skills, experiences, scientific breakthroughs, inventions, industrial design, trademarks and other distinctive signs of manufacturers, products and services, software, databases, literary and artistic works generated during the along the activity of the knowledge of the lawfulness of nature / society functioning and of the creation of cultural values.

The immaterial specificity of intellectual values enables them to be used by third parties without the consent of the author, subsequent to getting used to their essence. The opportunity to overcome this inconceivable state of affairs implies the need to apply additional patrimonial securing tools that would exclude / limit the actions concerning the unpunished take-over in order to apply the results of creative activity. Their mission consits in granting the authors special rights called exclusive to ensure the legal protection of intellectual creation by legalizing the possibility of third-party sanctions in the case of unauthorized use of creations. Therefore, the need for legal protection of works derives from their immaterial nature and its main functions are to prohibit third parties from applying the results of intellectual activity without the permission of the author / holder and to create appropriate conditions for their commercialization.

The tools applied for the patrimonial securing of the results of the intellectual activity are reduced to the following: a) the titles of protection (patents, sort of plants patents, industrial design registration certificates, trademarks, geographical indications, designations of origin etc.) in the case of industrial property; b) the rights to literary-artistic creations granted automatically without the filing of applications and the issuance of confirmatory protection documents, in the case of the objects of copyright and the related rights; c) know-how (information, knowledge capable of generating competitive advantages, to which the access of third parties is limited), in the case of maintaining the results of creative activity under a trade secret regime. Thus, the legal protection, confirming the right of private ownership of intellectual creations, transforms them into objects of intellectual property (herein after OPI), which, viewed from economic positions, under the conditions of domination of market relations, manifest themselves as commodities.



The composition of the intellectual heritage is extremely complex. Viewed from the evolutionary point of view of the forms of ownership, it includes: 1) the inherited works from predecessors, elaborated by previous generations in the epochs preceding the adoption of legal mechanisms for the protection of intellectual creations and those with expired protection terms, which are the object of public property of the global community as a whole; 2) recently created intellectual products, which are divided into two components: the first also remains in the public property not being subject to legal protection due to the lack of efficient protection mechanisms or the inopportunity to grant it (the official documents of normative, administrative and political nature, official state symbols and signs, etc.); the second includes other creations that are granted legal protection and which are the subject of the private property of the authors / owners. The last ones actually represent the intellectual property in its traditional, restricted sense. After the expiration of the terms of protection established by law, they also become components of the public patrimony.

In the context of the concrete expression of intellectual creations, they are divided into many segments, the most important being: the general knowledge that predominantly covers the field of instruction and knowledge; the information that is expressed in purely informational, statistical sources and the databases; the results of scientific investigations, including scientific discoveries, materialized in research reports, monographs and articles; inventions in various fields of activity; plant varieties and new animal breeds that are the result of plant / animal breeding activities; industrial design works; the distinctive signs of manufacturers and products, including, firstly, brands for products and services; literary works; musical works; cinematic creations; choreography; photography; of plastic art; architectural, etc.Of course, there are many other landmarks for the classification of the various intellectual property objects, less relevant to this present approach.

During the last few decades the intellectual creations subjected to legal protection have turned into the most important component of the corporate patrimony, which presently ensures 3/4

of the economic growth, and their value expression holds in the West a share of approx. 50% of the total corporate assets in the long run. In the field of information technologies, this share is much more advanced, being more than 90% in some branches. The objects portfolios of intellectual property (patents, trademarks, industrial designs, software, etc.) incorporate tens of thousands of units in some multinational companies, especially in the IT sector. This highly sophisticated, dynamic and valuable element of corporate assets, for which enormous sources have been created and that generates significant profits, requires a specific management of the OPI portfolios, capable of ensuring their efficient use, appropriate to the requirements of knowledge society, to the potential in permanent growth and the peculiarities of immaterial assets of intellectual origin.

The subdivisions of industrial enterprises in industrial era that were involved in patenting inventions and maintaining them in force, as part of the economic reforms in countries in transition, in the optimization of the production costs of companies through staff layoffs, were affected first, being liquidated or, at best, reorganized and merged with other services (legal, technical, marketing, etc.). Currently, in the transition to a knowledge-based society, their functions are to be taken over by new dynamic services, the work of which extends to the protection and efficiency of using a wider segment of intellectual creation and knowledge as a whole by introducing them into the economic circuit by applying the market instruments, by coordinating and ensuring innovative development, by capitalizing the results of intellectual activity, by promoting image and sales, etc. The current operation of each enterprise is constantly accompanied by the development and use of new knowledge, inventions, better methods and techniques of work, skills, information, etc., which have novelty(originality) and a certain economic potential. An immanent condition for their efficient use is to provide legal protection, as well as adequate management to the economic potential and costs.

The starting point in deciding on the most appropriate form of protection is the ability of intellectual creation to generate new revenue. Since the protection of industrial property objects involves certain costs, sometimes quite imposing, such as their protection in several countries, the issue of its effectiveness inevitably arises. In this context, the subsequent effects of the application of intellectual creations will significantly exceed the total costs of their elaboration, protection and management, the settlement of some litigation regarding the illicit use of the OPI, the related risks of innovation.

The choice of the most appropriate way of protecting each outcome of the creative activity, partially depending on its specificity and the optimal degree of protection, is an important mission of the intellectual property management service. The diversity of intellectual creation and its application creates a variety of possibilities for securing it, from commercial secrets to those offered by the copyright law and the related rights. In the case of patenting, of course, there is the risk of the disclosure of information by the publication provided by the law. However, the lack of protection prevents the obtaining of royalties from the alienation of intellectual products, because the commercialization of unprotected intellectual creations is meaningless or even useless from the point of view of the potential beneficiary, because in this case they can be taken over and used free of charge.

The variety of intellectual products and the legal protection modalities transform the selection of the appropriate form of protection into a highly responsible activity. Often, the subject can be protected in several ways, which involves a profound argument for the decision to choose the most appropriate form.

An important milestone in selecting protection options for possible uses of the respective creations is the optimum degree of protection required for the object / work in question. The experience of corporate governance of intellectual property in developed countries, especially of inventions, denotes the opportunity to use more protection ways, depending on the specifics of the creations, the value and the economic potential of the inventions, the ability to protect of each way. Thus, the inventions that have a high (potential) value and demand advanced protection are subject to patents. For valuable inventions that can not achieve a high degree of patrimonial security by patenting, the trade secrets regime applies, extending to the infinite terms of protection and in some cases considerably increasing the patrimonial security level of the invention. For most inventions, patenting provides a sufficient degree of protection. Finally, for less valuable inventions and those with limited patenting potential, the most appropriate form of protection is publication, which ensures the priority and at the same time blocks the possibility of patenting similar inventions by third parties.

The approach of intellectual property as a corporate heritage imposes a set of objectives focused both on the design and the protection of the results of the creative activity, as well as on obtaining some economic benefits from their application. In this line of thought, there follow to be determined the spheres of use of the available intellectual creations that can be reached, the competitive advantages that can be achieved, the main parameters on the respective market segments, the competitive capacities of the company as a whole, the technologies or new products expected to capitalize / launch.

It should be mentioned that the efficient use of intellectual assets is an important factor in optimizing the economic and financial results of the enterprise. The efficiency of the application of these assets can only be achieved in the context of corporate governance of intellectual property which naturally presupposes the presumption and the proper functioning of certain structures (subdivisions) specially invested with the complex realization of the functions related to the organization of the elaboration activities, protection and proper use of intellectual products. The experience of developed countries demonstrates their opportunity. The subdivisions of big corporations in the West, often involved in managing knowledge and the intellectual property, comprise hundreds, in some cases even thousands of qualified managerial, legal, economic, informational, technical, patent and marketing specialists etc. Thus, the effective management of OPI portfolios including various titles of protection implies not only advanced skill and professionalism, but also the combined efforts of numerous teams of multidisciplinary specialists.

The main objectives of corporate governance of intellectual property are focused on the activities: developing implementing policies for the innovation and application of new knowledge / information / technologies; training and promoting within the enterprise a favorable innovation climate; effective use of the company's intellectual potential; encouraging the development and implementation of intellectual products; selecting the optimal way of protecting intellectual creations, ensuring the confidentiality of commercial secrets; legal protection and maintenance of property of industrial property; the commercialization of intellectual creations; detecting illicit cases of illicit use by third parties of OIPs and resolving related litigation; the capitalization of intellectual property through commercial use, pledge, inclusion in share capital, bookkeeping and financial reports; the organization of OPI inventory works.

Most enterprises in transition countries, including the Republic of Moldova, have so far insufficient interest in developing, capitalizing, marketing and capitalizing of OPI, having a passive position in organizing their efficient management. The stated state of affairs, in our opinion, is due to the following circumstances: the focus of corporate management predominantly on the management of traditional resources and processes; insufficient awareness of opportunity of intellectual property management and under-estimation of its economic potential, which denotes the insufficiency of managerial and innovative culture; the absence of an honest competitive environment, which is manifested in the monopolization of several economic activities and that admits some considerable overbenefits by using factors less subject to technological, financial risks, etc. Thus, the surplus profits in the monopolized areas, by stealing the investments from the innovation process, diminish the real demand for innovation, thus preventing a favorable climate for investment in innovations that would encourage the development, marketing and implementation of new products and technologies, that would improve the status of creative work.

The opportunity to ensure effective management of intellectual property, of course,

also refers to a grat extent to the academic and university institutions that are less focused on the application in the economic practice of the results of human creativity, being predominantly concerned with their engendering. The results obtained, having a consistent creative / scientific component, usually constitute a complexity of intellectual goods with a certain scientific, economic, didactic and commercial potential, to be given legal protection and technological and economic- financial adequate resources. The ultimate goal of this activity is to make effective use of the available intellectual creations.

The composition of the intellectual creation of the university institutions and of the research area includes the following elements: patents and plant varieties; reports of scientific investigations; scientific / teaching publications / works including articles, anthologies, published scientific conferences, etc.; works of art and design donated to institutions or purchased, including executed under master undergraduate theses; innovative projects developed / forwarded; the distinctive signs of the institutions (trademarks, logos, symbols, including subdivisions: institutes, laboratories, faculties etc.), the name of the institution as a commercial / institutional name; the corporate domain names used; software applied to the activity of the institution (developed, licensed and used free of charge); databases of suppliers, partners in various activities, beneficiaries of educational services and scientific research, scientific and teaching staff, graduates, etc.; radio and TV broadcasts in the didactic activity, various internal regulations and operating instructions, methodical indications, plans and curricula, etc.

The main objective in conducting the intellectual property management of a research institution or university is the efficient estimation and application of the intellectual potential and the results of the creative activity that appear in the OPI portfolio, protected / liable to protection, both those generated within the entity and those taken from third parties. In the case of the presence of an extended portfolio of objects, especially if it also includes objects of industrial property (patented inventions, plant varieties, industrial design, trademarks, etc.), it is necessary

to create a subdivision (main section, office, center, etc.) the task of which is to carry out the intellectual property management activities. The starting point of the activity of the subdivision in question is the working out of the internal normative acts of the intellectual property management works, firstly of its regulation.

If the institution has a limited portfolio of intellectual creations, it is proposed to assign the respective functions to a specialist in the field, whose work will exclusively focus on their protection and capitalization. Nowadays, for the research institutions and most of the universities in the Republic of Moldova it is characteristic to hold more than one of these functions with other job obligations. Only in USM, UTM and USMF there function technological transfer centers / sections, protection and exploitation of scientific research results, while in some institutions the activities mentioned above are totally ignored. Aware of the opportunity to create intellectual property management centers / offices in research institutions, universities and large enterprises, the State Agency for Intellectual Property has developed a model regulation of such a section / office, making it available to the ASM and other potential beneficiaries. Regarding the state of affairs in the research institutes, we mention that most of them are responsible for the patenting of elaborate inventions and varieties of plants, the other components of intellectual creation being often left to the will of fate.

An efficient tool for intellectual creations management is their registers that are to be implemented and maintained on an ongoing basis. They include brief information on the working out, protection, capitalization, costs and other data on the composition and status of the OPI created and found on endowment. The registers must include both own and third-party designs, including free of charge. Their main mission is to identify and verify the integrity of the entity's intellectual assets, to create favorable conditions for effective evidence and use, to monitor the intellectual and innovative potential, to store / preserve and to secure the intellectual creations in endowment.

Another instrument of corporate management of intellectual property is its inventory, which presents a much more complex and difficult procedure than that applied to the material patrimony, because in the case of intellectual creations the physical, corporeal consistency of objects subject to inventory is missing. In the inventory of intellectual creations, not only the presence of the previously elaborated works, but also the elaborations in the process of creation, which can not be subjected or inappropriate to the legal protection, are to be traced. These are usually included in the Intellectual Property Register if they have potential for implementation with the prospect of gaining economic benefits.

A common problem for all areas of intellectual property, which is also within the competence of intellectual property management subdivision, is the separation of patrimonial rights over them between the author, the employer / institution and the state. Proper resolution of it can make a significant contribution to encouraging scientific and inventive work, generating other intellectual property objects, and making them more effective. Usually, the results obtained in the research and innovation activity in the exercise of the job functions belong to the employer. Obviously, the complexity of the creative work does not always allow for fair and equitable separation of the results obtained during working hours from those achieved outside them.

In the Republic of Moldova, the rights to the creations developed by the employee are delineated in accordance with the provisions of the Regulation on intellectual property objects created in the exercise of his / her duties (OFFICIAL GAZETTE, 2004). According to his provisions, the objects created by the employee in the performance of his / her duties, the fulfillment of a concrete task given in writing by the employer, using his material / financial means or of the beneficiary, the knowledge acquired during the activity within the enterprise, institution or organization, belong to the employer if the contract between the employer and the employee does not provide otherwise. At the same time, the author, in turn, is obliged to communicate in writing to the employer about the creation of OPI in the performance of his / her duties (OFFICIAL GAZETTE, 2004).

In this respect, it is very important for the establishment of fair relations between the employee and the employer in the delimitation of the patrimonial rights of the intellectual creations elaborated in the exercise of the job duties to conclude contracts in which the parties' rights and obligations should be specifically stipulated. They should also include the conditions, amount or method of calculating the remuneration of the inventor / author employee, as well as how to settle any disputes. The perfection of these contracts largely depends on the fairness of the patrimonial relations between the employer and the employee regarding the rights to intellectual creation and the remuneration of the authors.

In the case of new plant inventions and varieties, the general principles of patrimonial relations between the employer and the employee on the results obtained are set at the legislative level, these provisions being common to most countries. Thus, if the employer has not confirmed the intent to exercise his patrimonial rights within 60 days of the written communication on the invention of the invention / plant variety, the employer is entitled to apply and obtain the patent on his / her behalf, the employer reverting to his preferential right to obtain a non-exclusive license for its exploitation. In the case of patenting the invention / plant variety by the employer, the employee author / breeder also has the right to a non-exclusive free of charge license. If the parties do not reach a common denominator on the amount of the author's remuneration or the royalty fees for the non-exclusive license, they will be determined by the law courts according to the contribution of the parties in generating the respective works and their commercial value (OFFICIAL GAZETTE, 2008).

A number of provisions regarding the status of the intellectual patrimony created within the academic and university environment and its rights are stipulated in the Code on Science and Innovation and the Education Code of the Republic of Moldova. Thus, according to the Code of Science and Innovation, the results of intellectual activity obtained by state institutions following scientific research, being a natural element of public property, are treated as components of the patrimony of the Academy of Sciences and the organizations in the field of research and innovation transmitted their use (in management) (OFFICIAL GAZETTE, 2004).

Regarding the intellectual creation developed within the higher education institutions, the Code of Education, adopted 10 years after the one on science and innovation, by passing to universities the rights on them, ensures a more categorical treatment of the patrimonial attributions of the universities. In this respect, according to the provisions of Article 106 of the Code, all property, including intellectual property, of public higher education institutions, with the exception of buildings and land, is their property. Practically speaking, the approaches set out in the two codes do not differ significantly, because both deal with intellectual creations developed within public research and public institutions as assets belonging to them (OFFICIAL GAZETTE, 2014).

In the context of the division of intellectual property rights created within the educational institutions, we will point out that the incorporation, according to the provisions of the Education Code of the Republic of Moldova, of the results of the research activity of teachers in their scientific-didactic normative obligations is a legal basis for the establishment of the rights of the institution over them (OFFICIAL GAZETTE, 2014). In our opinion, under the miserable remuneration of the university staff, these provisions are humiliating, except for the creations obtained in university labs funded from the state budget.

Therefore, we can state that in the Republic of Moldova there exists the normative framework of the delimitation of intellectual property rights between state, employer and employee / author, which largely coincides with international practices. Of course, its functionality does not always manifest itself to a great extent, which is caused, first of all, by the low interest of the business towards the implementation of the intellectual creation results in the economic activity. Thus, at the corporate level, a task of major importance in promoting the efficient use of intellectual creations is the formation of structures specifically focused on managing and encouraging the development and valorisation of intellectual property. Their functions are to be extended to all activities related to the efficient use of knowledge and information, the management of the innovation process, but also

the entire portfolio of OPI, including their marketing. In this regard, we can mention that in our country the notion of intellectual property management is more and more frequently present in the normative acts at the national level: the Education Code of the Republic of Moldova, the National Strategy for Intellectual Property by 2020, the Innovation Strategy Republic of Moldova (OFFICIAL GAZETTE, 2012; OFFICIAL GAZETTE, 2013; OFFICIAL GAZETTE, 2014;) etc. But in practical terms, the implementation of a corporate management of intellectual property adequate to the demands of the knowledge society in the Republic of Moldova is just beginning.

Given the fact that the value expression of immaterial patrimony of intellectual origin has a tendency to expand by reaching its weight in the long-standing corporate assets comparable to the material patrimony, and in some cases even exceeding it, ignoring the continuous management of intellectual property, the concern of the management body mainly for optimizing the use of material and financial resources, is nothing but the manifestation of a lack of professionalism or the abundance of traditional resources at diminished costs. According to our opinion, in the economies in transition, including in the Republic of Moldova, both mentioned causes of the nihilist attitude to intellectual property management with persistance of predominance of the latter, which hinders the

innovation development and the application of economic neo-factors related to the use of new technologies, knowledge and information, patented inventions. Under these circumstances, the corporate governance of intellectual property further remains at the outskirts of the managerial activity.

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