INTELLECTUAL PROPERTY MANAGEMENT AS PART OF THE KNOWLEDGE ECONOMY

By the end of the 20th century, economy had been developing as a classic one. As we entered the new century and the ever changing economic environment, traditional economy is no more actual. Time has come for the so-called knowledge economy which focuses almost exclusively on intangible assets. Among these, are of most value intellectual property items. Factors such as land, machines, buildings and other tangible assets are not so important anymore. Intangible assets based on knowledge, experience, creativity, innovations, technological advancement are on the forefront of economic progress and are defined as intellectual property. As such, the ownership and effective management and protection of intellectual property is vital to all companies and their success.

Keywords: intellectual property, intellectual property management, knowledge economy, importance of intellectual property, effective management of intellectual property.

Statement of the problem and its connection with important scientific and practical tasks. Knowledge economy is an economic system, in which the production and services are based on actions concerning knowledge. Main assets for creating services and products in knowledge economy are intangibles as technologies, scientific achievements, innovations [8]. Since the birth of economic thought the rules for the functioning of economic units have followed one and the same logic. What has been changing was only the environment in which they had to exist and work. With the transition to knowledge economy though – a phenomenon which basically changed the history and the conditions for development in and of the economic environment – the traditional factors such as land, labour, machines and buildings, have lost their significance for the economic activities and thus, gradually, was determined the need of a new orientation towards other factors there. These new factors, which are of exceptional significance for the correct functioning of the economic units and also a moving mechanism of modern knowledge economy, are with intangible character. And the most significant and with a financial capacity are the objects of intellectual property. And as knowledge economy is not just a modern economic system which has temporarily gained popularity, but a basically different method, model, approach which basically changes micro- and macro-economic environment, for every kind of business, it becomes indispensable to follow the methods and, in the new conditions created by knowledge economy, the activities of the business should use these intangible assets with emphasis on the objects of intellectual property.

The analysis of the latest publications on the problem. The topic of intellectual property management, although highly relevant, is unfortunately sporadically discussed and poorly developed in Bulgaria. The most notable writings in the field are - "Management of Artist Performer Rights" by Prof. Violeta Tsakova, - "Trademark Management" by Assoc. Prof. Rumyana Brestnichka, - "Financial Management of Intellectual Property" by Dr. Fanny Koleva, - "Management of Innovation in the Industrial Enterprise” by Dr. Iskra Pantaleeva and - "Collective Management of Copyright and Related Rights” by Georgi Sarakinov.

The fundamental information on the topic is provided in Prof. Violeta Tsakova's lectures, which she delivers for students from the Department of Intellectual Property in the University of National and World Economy as part of the "Fundamentals of Intellectual Property Management” course presented in New Bulgarian University, as well as "Intellectual Property Management" by Prof. Dr. Vladya Borisova in UNWE.

The basic principles of the topic are also laid out in the books and writings by specialists and professors in the intellectual property field such as Prof. Violeta Tsakova, Prof. Borislav Borisov, Prof. Maria Markova, Assoc. Prof. Dr. Rumiana Brestnichka, Prof. Dr. Vladya Borisova.

Forming of the aims of the research. The goal of this article is to show the importance of intellectual property and its management for the contemporary know-
ledge economy based business. The first part presents synthesized information about the nature of knowledge economy, the second part outlines the economic benefits of owning intellectual property and the third part outlines the three steps of effective intellectual property management. The last part presents the two possible outcomes as a result of intellectual property management – both positive and negative, as well as their consequences.

Giving an account of the main results and their substantiation. Knowledge economy and intellectual property. The important groups of assets of knowledge economy are divided into two main groups - assets concerning human resources (including but not limited to knowledge, skills and experience, introduced under the collective term know-how [16,17]) and assets concerning any intangible assets (including but not limited to patents, licenses, trademarks, designs etc., emerging as incredibly valuable for companies across the board). The common thing between those two groups of assets is that they are both the foundation for knowledge economy and part of intellectual property.

As it is not a new phenomenon, intellectual property is displaced by knowledge economy in the spotlight, and from the periphery of the economic activity it falls at the core of all changes. Due to the emphasis which knowledge economy places on intangible assets, intellectual property which formerly has been an economic factor with the purely protective function to protect objects such as innovations, inventions, copyright, designs, trademarks from outer unauthorized use and abuse, now has become an economic factor affirming its positions of a means of development, economic growth and creating value.

Intellectual property objects do not present economic growth and do not create value solely based on existence. Growth and value are generated by and through effective intellectual property management. Intellectual property management gives room for ideas to manifest in financial statements to be compiled, legal and economic interests of the company to be protected, freedom to operate in a particular market to be ensured, and even some costs minimization. All of the above are signs of significant value and promising future of the company to investors, competitors and customers.

Economic benefits of owning intellectual property. Microeconomic units which use intellectual property and which have introduced its management as a part of their overall strategy, those who accept intellectual property as a valuable asset and effectively manage this asset – they all become a standard of development and of applying modern business decisions and accomplishing modern economic activity. This model of work leads to a success of microeconomic units which also influences the macroeconomic environment. In the list of STATISTA [18] – the number one global platform of business data – in the top 100 of the most expensive companies whose basic assets are objects of intellectual property or a big part of their profit is made by intellectual property in the main. In addition to this, intellectual property (respectively, its quality management) becomes a criterion on the basis of which separate microeconomic units can be compared. The development of the management of intellectual property leads to an increase of the efficiency of inter-organizational relations, which directly leads to economic growth. These are two of the aspects of economic advantages on the macroeconomic level.

At microeconomic level, there are two other important economic benefits of intellectual property and its management - intellectual property management can be used for qualitative allocation of resources and can be crucial in risk management. At the same time, intellectual property objects as assets, can undergo various transactions (sale, licensing, exploitation, barter, use as a collateral) to help bridge any gaps in company's finances.

Effective management of intellectual property. Due to all aforementioned significant economic benefits of intellectual property and increasing percentage of companies using it as a primary source of company value, achieving effective management of intellectual property is of prime importance. In order to achieve this efficiency, it is necessary to determine what assets exactly the company owns and accordingly to make a meaningful, objective and qualitative classification of any intellectual property objects. At the same time, it’s necessary to answer exactly why these have been selected for assets and investment what objectives of the choice, characteristics and peculiarities are, whether there are determining factors for their choice, any prerequisites, conditions and circumstances for owning, usage and economic realization of those objects as a whole. According to Dr. Shirley Lanning, intellectual property is the primordial source of value for the companies and IP management where it should be started from. For this reason, before even starting the development of intellectual property management system it is from core importance to have idea about the relation between company’s objectives and the intellectual property it owns [3].

The classification of the intellectual property objects is the first step towards their measurement. Anything that is not measured cannot be managed. Due to their specificity, intellectual property objects in their capacity of intangible assets must be assessed and reported simultaneously with financial and non-financial indicators. This way, their contribution to value creation can be calculated most accurately.

Secondly, when implementing intellectual property management system, one should determine what business strategies and vision for company’s development have been chosen. They must be in line with the intellectual property management policies, ensuring adequate use of resources, taking correct actions, achieving company goals, executing strategies and achieving optimal results. That is, intellectual property management should develop the economic framework, models and tools through which the company should develop.

The third step is to establish active management process of intellectual property (including use, creation, purchase, licensing, sale, transfer of rights) with an emphasis on efficiency, quality, costs optimization. As this combination is not only the most profitable but also
the easiest and most efficient management approach. Profitability is the main goal as, in all cases, intellectual property management must be commercially-oriented.

**Fig. 1. Steps for effective intellectual property management**
*developed by the author

**Consequences.** Many companies fear that they do not have enough resources to build and manage an intellectual property portfolio. In fact, companies need to acquire (create, attract, license, sell) and manage their own intellectual property in order to have sufficient financial resources. A different perspective on intellectual property puts the company in a profitable or loss position and could lead to two major economic results - positive and negative. Each of these is a prerequisite for the development of dozens of business, economic and financial "scenarios".

The result of poor intellectual property management is inefficient allocation of company resources, potential failure to meet investment goals and strategies, under or overestimation of the current financial outlook of the company.

The result based on the effective management of intellectual property is the use of all intellectual property objects as an active and powerful tool for increasing company's influence in the sector, attracting investors, increasing company's profit, creating an innovator culture and, last but not least, creating competitive advantage with ongoing technological innovation, setting and introducing industry standards, and high barriers to enter the market based on the intellectual property owned.

**Conclusions and prospects of the further investigations.** Based on the analysis, intellectual property objects are at the heart of knowledge economy and must be consistent with a company's activity, policy, and strategy. Intellectual property has tremendous economic benefits for any organization and, when used properly, guarantees success at microeconomic level which also leads to success at macroeconomic level. These benefits are not only part of the activity of the individual economic entities, but also part of the development and state of the macro-economic system as a whole.

Due to the economic importance of intellectual property, it is imperative to emphasize on the efficient management of its objects. They must be properly classified and evaluated with financial and non-financial indicators, they also should be in a two-way alignment with the strategy and the vision for the company development, management should focus on efficiency, quality and cost optimization.

Depending on the extent to which a company is committed to quality intellectual property management, relevant results can be achieved. If intellectual property management is neglected, results will be with poor financial consequences. If a focus is emphasized, the company is well on its way to achieve positive financial results.

* Refers to Intellectual Property
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УПРАВЛЕНИЕ ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТЬЮ, КАК ЧАСТЬ KNOWLEDGE ECONOMY

К концу XX века экономика развивалась как классическая, с ее традиционными факторами, проблемами и способом функционирования. По мере того, как мы вступаем в новый век, экономическая среда меняется с ее рынками, клиентами, правилами, потребностями и возможностями, трендовая экономика перестает быть актуальной, и возникает необходимость в управлении новым типом экономики. Настало время для так называемой экономики знаний. Экономика знаний фокусируется почти исключительно на нематериальных активах, которые становятся основой для этой новой системы экономики и имеют первостепенное значение для ее развития. Среди этих нематериальных активов наиболее ценными и наиболее важными являются объекты интеллектуальной собственности. Это связано с тем, что такие факторы, как земля, машины, здания и другие материальные активы, которые всегда имели решающее значение для экономики, теряют свое значение и уже не так заметны. Нематериальные активы, основанные на знаниях, опыте, творчестве, инновациях, технологическом прогрессе и т. д., в настоящее время находятся на переднем крае экономического прогресса и, будучи определены как интеллектуальная собственность, они толкают эту интеллектуальную собственность в ядро новой экономики. Таким образом, возникает необходимость владения интеллектуальной собственностью, ее защиты и эффективного управления ею для обеспечения существования интеллектуальной собственности.

Ключевые слова: интеллектуальная собственность, управление интеллектуальной собственностью, экономика знаний, значимость интеллектуальной собственности, эффективное управление интеллектуальной собственностью.

УПРАВЛЯНИЯ ИНТЕЛЛЕКТУАЛЬНОЙ ВЛАСТИЮ, ЯК ЧАСТИНА KNOWLEDGE ECONOMY

К кінцю XX століття економіка розвивалась як класична, з її традиційними факторами, проблемами та способами функціонування. По мірі того, як ми вступаємо в новий століття, економічна система змінюється з її ринками, клієнтами, правилами, потребами та можливостями, традиційна економіка перестає бути актуальною, і виникає необхідність в управлінні новим типом економіки. Настало час для такozначної економіки знань. Економіка знань вважається основою для нової системи економіки, та має першочергове значення для її розвитку. Серед нематеріальних активів найбільш цінними і важливими є об'єкти інтелектуальної власності. Це пов'язано з тим, що такі явища, як земля, машини, будівлі та інші матеріальні активи, які завжди мали своє значення для економіки, втрачають його та є не такими помітними. Нематеріальні активи, засновані на знаннях, досвіді, творчості, інноваціях, технологічному прогресі, в даний час перебувають на передньому краї економічного прогресу.

Ключові слова: інтелектуальна власність, управління інтелектуальною власністю, экономика знань, важливість інтелектуальної власності, ефективне управління інтелектуальною власністю.
також змінює економіку знань. Цей взаємозв’язок є настільки вузьким і важливим, що для інтелектуальної власності та економіки знає практично неможливо розглядати її окремо.

**Ключові слова:** інтелектуальна власність, управління інтелектуальною власністю, економіка знань, важливість інтелектуальної власності, ефективне управління інтелектуальною власністю.

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