INTELLECTUAL PROPERTY POLICY AT "LUCIAN BLAGA" UNIVERSITY OF SIBIU

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Abstract – Considering the current situation, the only way to ensure the economic development and to create prerequisites for increasing the competitiveness of national industry is by applying the model of development based on innovation, one of the central strategic elements should be an educational system. In this way, would create prerequisites for a framework in which it would create wellbeing in the long run. The purpose of this article is to highlight the need to implement a policy in the field of intellectual property at the universities of Romania starting from the analysis of the current situation at Lucian Blaga" University of Sibiu.

Keywords- intellectual property, policy, improvement, education.

I. INTRODUCTION

Industrial countries ' history has shown that the success of an economy at the macroeconomic level, depends on development of the innovation process, and the practice confirmed that in order to promote a process of innovation at the national level it requires more knowledge, applied science, embodied in the new technologies, new products and services, a new form of presentation of new products, a new functional structure, a new organizational form, new methods of organization and management of education. In short: to develop, on the basis of creative efforts, a process leading to innovation: creating value by building on knowledge. Therefore, the primary role of the organizations in the protection and integration of specialized knowledge.

To develop innovations, the national economy must be prepared to encourage creative activity, economic exchanges with not only new products and services but also new ideas, new results of innovative activity.

Intellectual property rights mean the combination of intellectual activity associated with the field of literary, artistic and scientific. Intellectual property, unlike property in general, which is linked to the possession of material goods, was established as an objective reality taking into account intangible assets. Enumeration of objects of intellectual property is not comprehensive, it extends to all the achievements resulting from intellectual activity in the industrial, scientific, literary and artistic property of scientific, artistic and literary refers to categories of intellectual creation whose protection is born by itself, from the timing of their, without the need of a procedure for review and certification. It is protected by copyright only if it is original. Industrial property refers to categories of intellectual creation is reproducible industrially processed, processes or methods. It is on request, through certification, protected certification, based on an evaluation of an official body. The common element of the two fields that refer to objects resulting from intellectual activity in the field of human capacity-building respectively. Protection of property of scientific, artistic and literary or copyright protection refers to the fact that, in general, certain practices or uses of these works are considered illicit if they are made without the authorization of the author.

A concrete way in which the property rights is fixed in each country through national legislation. The notion of industrial property shall be understood in the widest meaning because is not only limited to the sphere of the industry but also in other areas of economic and social (economic in general, trade, science, agriculture, health, environment, culture, defense). As a result, industrial property covers both the products and technologies of industrial and food products and technology. The essence of the industrial property law consists of the powers of the holder of a title of protection granted on the territory and a limited time to perform, produce and exploit the subject matter of industrial property as well as to prevent third parties to reproduce, manufacture and use of that object. In other words, it is about conferring a statutory right to a monopoly of exploitation of the object of industrial property in favor of the holder, which is limited in time and in space.

Patented invention in University managed in a particular way determined by the fact that the University is a "non-productive" i.e. it has no production structures and only exceptionally applied directly to the invention. The main goal of a University is to produce and disseminate knowledge. Most universities have a dedicated educational and scientific vocation and are constituted and function according to the model humboldian. The ties with the economic environment in terms of the transfer of the results of scientific research are much less obvious and the value of this one is different and it is found to a

lesser extent even in the ranking of universities. Entrepreneurial vocation, a rare characteristic and specify only for some universities of high prestige, constitutes an objective lately becoming more desirable by both universities and the economic environment. This goal is easily reached by the hand and even though lately the number of successful appeals increase, the rate remains persistently high requiring prudent and appropriate policies. The essence of entrepreneurial behavior or a University's vocation is manifested mainly through technology transfer failed, and its tools are represented by direct research contracts with the industrial environment, transfer of innovative products and services through assignments and licenses and last but not least of spinoff and start-up-generated by universities. The status of the invention patented in a University is a special one.

Avoiding infringement is a defensive function, and blocking competition is an offensive, but both manifests itself on the market. The signal functions are linked more than image, reputation, competitive capacity, etc. The first two functions cannot be manifested in a patent involving the holder a University because the University is a "nonproductive", she is not and does not sell innovative products only in exceptional cases. As such the main function of the patent does not manifest itself and that is why it is imperative that a University to transfer to an invention/patent productive unit, either by assignment or by license, either through the formation of spin-off or start-up. Here follows and concluded that a serious University should not be holding of patents for inventions, especially if they are old inventions. In reality if an application for a patent for invention, once registered at the Patent Office, not find application or recovery through one within 30 months, it is abandoned. It is not recommended for patent portfolio that comes very natural question "what you use if you don't apply?". For a University, it is important to generate many inventions and to transfer them to the industry. Possession of patents without being harnessed and intangible means a liability through expenditure on taxes and their management. valuable scientific solutions Only whose implementation may take longer deserves to be retained as patents. They can bring notoriety through citation indexing system ISI, or elements favoring in winning grants competitively.

II. MANAGEMENT OF INTELLECTUAL PROPERTY IN UNIVERSITIES

Patented invention management in universities involves engaging the inventor, of the University through its leadership and by specialists dealing with technology transfer, the applicant of the invention and of the national certification body, OSIM, in a process image runs over several years.

Several studies have investigated the effectiveness of technology transfer from universities and research centres [2], [3], [4], but at the level of Romania there are no such initiatives.

Among these studies mentioned above, as well as Siegel [5] summarized in a series of studies about the centers of technology transfer from universities that are key performance factors and how they are affected by the characteristics of the University as well as membership (public versus private), academic quality, local demand for high-tech and licensing agreements as well as the format and characteristics of research centers related to the size and length of service. More recently, Caldera and Debande [1] have examined the way in which research centers features affect performance of the universities in technology transfer, and maintained control over the nature and type of technology transfer as well as its quality. Using a questionnaire concerning technology transfer activities within the 52 universities from Spain between 2001 and 2005, it was found that the rules relating to conflict of interest University of responsibilities teaching academic and extracurricular activities have a positive effect on the development of rise contracts, licenses and lineal of spin-off companies. Thus, previous empirical studies highlight the importance of intellectual property in universities for the performance of transfers.

III. INTELLECTUAL PROPERTY POLICY AT "LUCIAN BLAGA" UNIVERSITY OF SIBIU

"Lucian Blaga" University of Sibiu is a higher state education institution. As constituted has 9 faculties and a number of remote education centers in different cities of the country. The nine faculties included in the University "Lucian Blaga" din Sibiu, encompasses the areas of interest ranging from theology to economics and is chosen for development of 13701 students (Figure 1).

The Faculty of Theology (1786)	The Faculty of Law (1844)	The Faculty of Letters and Arts (1969)
Faculty of Social and Human Sciences (2011)	The Faculty of Engineering (1976)	The Faculty of Sciences (1990)
The Faculty of Medicine (1990)	The Faculty of Agricultural Sciences, Food Industry and Environmental Protection (1990)	The Faculty of Economics (2002)

Figure 1. The faculties of "Lucian Blaga" Universityes of Sibiu [6]

Within the 9 faculties (Faculty of Theology Faculty of law the Faculty of letters and Arts Faculty of Humanities Faculty of Engineering-Faculty of human sciences, Faculty of medicine, Faculty of agricultural sciences, food industry and environmental protection, Faculty of Economics) is conducted both bachelor and master and PhD studies (Figure 2).



Figure 2. A comprehensive university

"Lucian Blaga" University of Sibiu has concluded agreements of cooperation with universities, of which 108 universities, 4 consortia, 33 cooperation agreements and 61 Erasmus partnerships (Figure 2).

Erasmus partnerships were concluded with Universities like:

- -University of Vienna (Austria);
- -University of Hull (England);
- -University of Lancashire (England);
- -Sligo Technology Institute (Ireland);
- -University of Leon (Spain);
- -University of Applied Science from München (Germany);
- -University of Inholland from Haarlem (Netherlands);
- -National Polytechnic Institute of Toulouse (France);
- -Academia di Belle Arti Abadir from Palermo (Italiy) etc.

An important role in the economic development played by organizations is actively involved in society. As can be seen, "Lucian Blaga" University has partnerships with several international and national organizations (Figure 3).

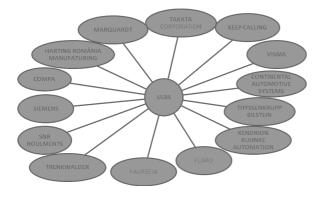


Figure 3. Partners of the "Lucian Blaga" University of Sibiu

Due to the numerous agreements concluded at "Lucian Blaga" University of Sibiu students come from all corners of the world. It should be noted that partnerships with foreign universities, Erasmus agreements with the partner with 61 countries represented the first step in the way of foreign students by the "Lucian Blaga" University of Sibiu. Thus, most of the foreign students come from Moldova, Israel, Germany.

An important factor in the development of "Lucian Blaga" University of Sibiu is represented by the existence of a Department dedicated to the protection of intellectual property.

The PatLib Centre developments beginning in 2002 with the establishment of the Department for the protection of intellectual property at the Lucian Blaga University of Sibiu.

Continues with the opening of a Regional Center for collaboration and strengthening the relationship with the EPO which took place at the PatLib Conference in 2011.

A remarking point in the evolution of the PatLib Center happened in early 2016 when the whole collection of national patents, including patents, from the beginnings to the present day has arrived in the library Centre.

The most important services offered by the Centre of PatLib are depicted in Figure 4.



Figure 4. Services offered by PatLib Centre of Sibiu [7]

Starting from a series of services offered, you can make correlation with the PatLib Centre of notoriety after it was awarded by the prizes and awards received at international and national Salons: Switzerland, Germany, Croatia, Poland, Kuwait, Korea, Turkey, Hong Kong, China, Singapore and of course Romania (Figure 5).

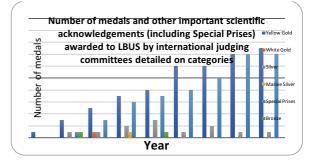


Figure 5. Number of medals obtained by the "Lucian Blaga" University of Sibiu

At "Lucian Blaga" University of Sibiu the concern for intellectual property is divided chiefly by students of faculties of law, engineering, medicine and Economics faculties at these courses will be carried out in this area.

At the same time, "Lucian Blaga" University of Sibiu concern for intellectual property goes beyond the gates of the University to the economic environment. "Lucian Blaga" University of Sibiu offers trainings and workshops for all those interested in this field.

Courses for intellectual property and innovation have proven success by the number of "products "applications for patents quickly deposited.

As can be seen in Figure 6, there is a strong correlation between most requests filed and faculties where courses were conducted in the field of intellectual property.

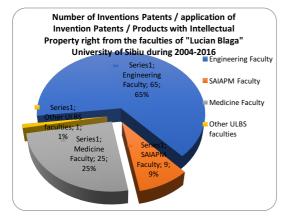


Figure 6. The number of intellectual property products submitted and accepted by the faculties "Lucian Blaga" University of Sibiu

Remarking results obtained by "Lucian Blaga" University of Sibiu in the field of intellectual property are the result of the fact that it has a high value patents library which allows access to relevant international databases, a Romanian patent collection from the beginnings to the present day and the fact that it provides mentoring and support to those interested (Figure 7).



Figure 7. Services that lead to performance

At "Lucian Blaga" University of Sibiu communication occupies a very important place in the development of a favorable environment for the development of intellectual property.

There are procedures for everything that means advice in matters of intellectual property, there is an easy to use site and a social networking page to bring closer young intellectual property pupils. For master and doctoral studies, the University anti-plagiarism software prevent problems related to plagiarism.

Continuing the way those who argue the workings of license, master, and PhD programs is to be noted that "Lucian Blaga" University, Sibiu has a very good collaboration with the business.

Projects carried out by the "Lucian Blaga" University of Sibiu have meant the mule a fruitful collaboration between the academic and business environment has resulted in technology transfer.

In support of the results accumulated up to that point, it should be noted that the "Lucian Blaga" University of Sibiu follows a process of continuous improvement.

For greater involvement in the field of intellectual property to improve the educational plans with the introduction of intellectual property subjects for specialization, increased training for teachers and the number of projects aimed at increasing the transfer of knowledge and the importance of intellectual property awareness.

The fact that it is desirable to integrate the disciplines of education plans relating to the field of intellectual property constitutes the proof that is made aware of the importance of whatever field of study or career toward which it is aimed.

 TABLE I.
 POTENTIAL BENEFICIARIES OF THE INTELLECTUAL

 PROPERTY POLICY IMPLEMENTED IN UNIVERSITIES

Beneficiaries	How do I benefit from?	
Manufacturers	Manufacturing secrets protection	
Traders	Trading value of marks and geographical indications	
Designers	Protection of new products and their innovative projects	
Software developers	Protection and innovation of software codes	
Journalists and writers	Copyright protection of their works	
Artists and photographers	Copyright protection of their works	

Intellectual property, regarded the two components under its industrial property, on the one hand and copyright and related rights, on the other hand, is one of the basic levers of economic development, social and cultural needs of the nation. In this context one can appreciate that the protection of intellectual property rights is of great importance, in essence, the aim and purpose of which is to protect the product of human intelligence, and at the same time, guarantee the benefit to consumers to make use of this product.

Closely related to this field is research-development and innovation which constitutes a strategic component, critical to economic development and social progress. Thus, science, technology and innovation represent the areas that generate constant technological progress, ensuring the sustainability of development and economic competitiveness perspective. At the same time innovation and technology transfer are economical solutions for solving problems and for permanent renewal of the necessary technology by connecting the Romanian research to the demands and pressures of a free market, expanding in the globalization context.

In the process of the reform in the field of intellectual property will take account of the social and economic problems, particularly in relation to technology transfer, e-commerce, and biotechnology and information technology. It also requires a shift in terms of technological exchanges and new models of economic management to include issues of intellectual property as an element of economic cohesion between the leading manufacturers and small and medium enterprises which are able to cope with new challenges. Because the activity of innovation, research and development of an organization to be a functional and focused on continuous improvement and knowledge is necessary to establish general objectives for the protection of intellectual property, as well as specific objectives for each process, which will be linked to the objectives for each of the Organization's structure.

In a market economy in which competition law truly prevails, with prestigious organizations have set up departments/specialized compartments, watchers and leverages all the mistakes in their own benefit competing organizations, especially those in the field of intellectual property.

The technologies covered by the recovery of intellectual property are contained in patents, utility models, designs, trademarks, know-how, including information and data technology, technology services, technological support and other rights of protection of chip and software.

Compared with developed countries in the European Union, universities in Romania are faced with many problems, in terms of transforming them into entrepreneurial universities. There is a scarcity of public funding of education and scientific research, and most universities have no income with which to be able to supplement government funds. Nonavailability of adequate funds is causing difficulties in fulfilling the Mission of universities and their objectives. The experience of the universities in developed countries shows that a significant income can be generated through consultancy, research and development, as follows:

- Licensing fees for intellectual property rights.
- Copyright.

- Income from consultancy services.
- Income from research contracts.
- Income from sponsorship contracts.

But because this revenue to universities must complete fulfillment to invest in what is called the generic education in the field of intellectual property.

Intellectual property rights is the process of creating value from knowledge, with its transformation to be appropriate or consistent use of social economic times by introducing research results into new products, processes or services and competitive in new commercial activities.

The system of intellectual property rights, involves a variety of actors, which are varied interests with incentives.

Capitalizing on intellectual property rights, especially by countries that are in development, it is often correlated with the process of globalization so that it is difficult to identify negative or positive consequences in a given economic system.

The positive effects of the recovery of intellectual property rights may include increased productivity, the development of complementary activities with local firms, while the negative effects may include adverse competitiveness effects in relation to local firms, personnel layoffs and the implications of lowering the welfare.

In the long run, the competitiveness of an economy depends on potential recovery process through innovative won intellectual property rights.

This is the key factor analysis of factors of competitiveness, such as the cost of production. The owners and people who have access to high technology influence a country's position in the international classification of competitiveness.

IV. CONCLUSION

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References

- [1] Caldera, A., & Debande, O. 2010, Performance of Spanish universities in technology transfer: An empirical analysis. Research Policy, 39, pp. 1160–1173.
- [2] Chapple, W., Lockett, A., Siegel, D. S., & Wright, M. 2005, Assessing the relative performance of U.K. university technology transfer offices: Parametric and non-parametric evidence. Research Policy, 34, pp. 369–384.
- [3] Debackere, K., & Veugelers, R., 2005, The role of academic technology transfer organizations in improving science industry links. Research Policy, 34, pp. 321–342.
- [4] Anderson, T. R., Daim, T. U., & Lovoie, F. F., 2007, Measuring the efficiency of university technology transfer. Technovation, 27, pp. 306– 318.
- [5] Siegel, D. S., Veugelers, R., & Wright, M., 2007). Technology transfer offices and commercialization of university intellectual property: Performance and policy implications. Oxford Review of Economic Policy, 23, pp. 640– 660.
- [6] Facultățile Universității "Lucian Blaga" din Sibiu, http://www.ulbsibiu.ro/ro/facultati/.
- [7] Protecția Proprietății Intelectuale la Universitatea "Lucian Blaga" din Sibiu, http://ppi.ulbsibiu.ro/ro/despre/index.php.