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## Article

# Implementing intellectual property policies in a Romanian State University

Management dynamics in the knowledge economy

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## **Implementing Intellectual Property Policies in a Romanian State University**

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**Abstract.** *The paper presents a series of contributions on the possibility of implementing intellectual property policies in a Romanian State University. Starting with the worldwide, well-known examples of universities with a tradition in this field of intellectual property protection, the paper presents practical solutions for the implementation of some intellectual property policies taking into account the mentality which currently exists in Romania on this subject. The study is based on the important experience gained by authors in a European research project involving 15 partners from 9 countries, where the results were remarkable. The University must represent a pole of excellence in research, but also take into account the modalities for implementing and then applying intellectual property policies recommended by the World Intellectual Property Organization. The conclusions lead to tangible results that undoubtedly highlight certain proposals to improve the way in which Intellectual property as a concept is viewed, accepted, implemented and used, but also the possibility of implementing an intellectual property management in a Romanian State University.*

**Keywords:** *intellectual property; industrial property; intellectual property protection management; quality management; strategic thinking.*

## Introduction

One of the main levels of a country's development in all areas is represented by its intellectual property protection legislation. The protection of intellectual property rights has a great importance, the finality being the protection of human intelligence and, at the same time, ensuring that consumers benefit from the use of the product. Closely related to this field are research-development and innovation processes which constitute strategic components, which are critical to economic development and social progress in any country. Science, technology and innovation are areas that generate constant technological progress while ensuring future economic competitiveness. Innovation and technology transfer must be solutions to the problems in the economy but also for permanent renewal of the necessary technology by connecting the Romanian research to the demands and pressures of an expanding free market, in the context of globalization.

Intellectual property as a whole refers to mind creations such as inventions, literary and artistic works, symbols and images used in commercial activities. Intellectual property is a well-defined domain of research within the larger one of the intellectual capital and knowledge management (Bratianu, 2011; Bratianu & Bolisani, 2015). Many authors have tried to find a proper definition of the intellectual capital concept (Andriessen, 2004; Ricceri, 2008). Thomas A. Steward (1999, p.11) considers that "Intellectual capital is intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth".

Intellectual property is a concept that needs to be looked at in close relation to the intellectual capital concept. Studies that have turned attention to this concept can be localized in three of the most powerful areas of the world: Japan, The United States, and Europe. In Japan, Hiroyuki Itami, in the paper "Mobilizing Invisible Assets" (Hiroyuki & Roehl, 1987) published in 1987, points out that successful strategies of Japanese companies depend on intangible assets like know-how, brand visibilities, customer databases, but also personal, tangible and financial assets. It highlights, in the same context, the strategic importance suitable to both the company's internal and external environment. In the United States, Rumelt, Wemerfelt, and Penrose, as economists, formulated different theories about the operation of commercial firms with intangibles, which have been crystallized by David Teece (2000), from the University of Berkeley. In Europe, contributions in the first phase of intellectual capital development had Karl Erik Sveiby (1997), Edvinsson and Malone (1997), Roos, Roos, Dragonetti, and Edvinsson (1997). Intellectual property is a legal term form which allows the owner to control certain intangibles like ideas or phrases. According to the Romanian Copyright Office (ORDA, 2017), "Intellectual Property, abbreviated IP, refers to mind creations: inventions, literary works, artistic works, symbols, names, images and designs used in commercial activities. The owner of intellectual property can control and be rewarded for its use and so, this encourages innovation and creativity for the benefit of humanity".

Intellectual property is the primary resource which has added value, because if it only refers to a patentable invention, after obtaining the recognition of the patent it becomes a worldwide novelty, and thus, obtaining a very important economic and

social status, it leads to a greater attention coming from governments and universities which make serious efforts in promoting and protecting intangible assets and goods (Țîțu & Oprean, 2015). In this context, universities acquire a very special value, because they have contributed to societal and economic evolution as a whole. In fact, a tradition has been established that universities are involved in these areas, by training specialists and achieving performance, always responding to the society demands, which gave birth to stakeholders' partnership, thus generating additional value and implicitly added value. "It is true that Intellectual Property (IP) is a legal creature, but behind all its legal charm IP is a powerful competitive tool and a valuable business asset. Independent of its legal identity, and from the product or process it was originally acquired to protect, IP can be commercialized as the product" (Al-Ali, 2003, p.139).

Intellectual property rights mean the combination of intellectual activity associated with the literary, artistic and scientific field. Intellectual property, unlike property in general, which is linked to the material goods possession, was established as an objective reality taking into account intangible assets. Objects enumeration of the intellectual property is not comprehensive; it extends to all the resulting achievements by intellectual activity in the industrial, scientific, literary and artistic domain and literarily refers to categories of intellectual creation whose protection is born by itself, from their timing, without the procedural need of review and certification. It is protected by copyright only if it is original. It is protected on request, through certification, based on the official body evaluation. The common element of the two fields refers to the resulting objects by intellectual activity in the human capacity-building field. Scientific property protection, as well as, artistic, literary or copyright protection refers, in general, to certain practices or uses of these works are considered illicit if they are made without the author's authorization. A concrete way in which the property rights are defined is done in each country through national legislation. The notion of *industrial property* shall be understood in the widest meaning because it is not only limited to the industry sphere but also in other economic and social areas (economic in general, trade, science, agriculture, health, environment, culture, and defense). As a result, industrial property covers both the products and industrial technologies and food products and technology. The industrial property law essentially consists of the holder powers regarding the protection title granted on the territory and a limited time performing, producing and exploiting the industrial property in question as well as to prevent third parties to reproduce, the object's manufacture and use. In other words, it is about conferring a statutory right to a monopoly of the object exploitation of the industrial property in the holder's favor, which is time and space limited (Țîțu, 2016).

To develop innovations, the national economy must be prepared to encourage creative activity with economic exchanges, not only with the new products and services but also with new ideas and new results of the innovative activity. All stakeholders must be within the innovation chain that facilitates the new jobs, new products, and services creation that facilitate the increasing conditions of well-being. Public funds contribute to the creation of wealth. Looking at the national reports, the largest amounts were received by the governmental sector (66.0%), followed by higher educational entities (17.3%). The funding sources of the research and

development activity from abroad have been targeted mostly to the business sector (52.6%), higher education sector (26.0%) and government sector (20.9%). This highlights the fact that the higher education sector units have received the smallest portion of the public fund's resources (Țîțu, Oprean, Stan, & Țîțu, 2017).

The universities' objectives are usually more complex than they are in the firms. For example, the public universities are responsible for a stakeholder's broader range. Public universities typically have less flexible policies than private universities in terms of patenting, licensing, training of start-ups companies, and other interactions with private firms (Siegel & Wessner, 2007). Private universities may find it easier to adapt the faculty incentives of licensing promotion, which may be constrained by political pressures in public universities. A study made by two Americans (Thursby & Thursby, 2007, p.39) examines a number of central issues surrounding university patenting and licensing using US data from the Association of University Technology Managers (AUTM), as well as their own surveys. Their identification of a growing trend in patenting and licensing by universities is paralleled elsewhere. In the UK, for example, patents issued by universities increased 59 % and new licenses executed increased 39 % between 2001 and 2002 (Wright & Filatotchev, 2007).

But, a study made by OHIM, through the EU Intellectual Property Rights Observatory tasked with assessing citizens' knowledge and perceptions of infringements of intellectual property rights, in order to better understand them, and therefore the design of appropriate actions shows that a large majority of EU citizens have shown strong support for IP, and nevertheless considered that personal violations of IP laws can be justified to deal with the consequences of limited purchasing power, to protest against a market-driven economic model and premium brands or legal offers that are not geared to the digital market (Office for Harmonization in the Internal Market, 2013). From the entrepreneurship point of view, Romania's position is a good one, as it reflects the expenditure on research and development (Table 1).

**Table 1. Total expenditure in Romania on research and development, financing sources and sectors of performance in 2014 (million lei, current prices) (INS, 2015)**

<b>Funding sources/sectors of performance</b>	<b>Total</b>	<b>Business sector</b>	<b>Governmental sector</b>	<b>Higher education sector</b>	<b>Private non-profit sector</b>
Enterprises	841,2	627,5	186,7	26,9	9,5
Public funds	1240,8	201,4	818,7	214,4	6,3
Higher education establishments	36,9	1,9	1,2	33,8	-
Private non-profit	2,4	0,2	0,6	1,0	0,6
Overseas	4434,4	228,4	90,6	112,9	2,5
Total	2555,7	1059,4	1097,8	389,6	9,5

But, right now the problem is that talented people leave Romania and the real value is created elsewhere and captured by others (WEF, 2016). Currently, reports and statistics conducted globally converge in supporting the theory that human capital is an economic growth factor (Gyimah-Brempong, Paddison, & Mitiku, 2006; Keun &

Byung-Yeon, 2009; Krueger & Lindahl, 2001). Over time, researchers have emphasized the importance of the higher education in the human capital formation and economic growth. For example, there are studies that have shown that there is a more pronounced growth in countries where the higher education system it is well developed (Matton, 2006).

Further, through this research paper, based on the worldwide well-known examples, by universities with a tradition in the intellectual property protection field, it is desirable to present the possibility of finding real solutions for the implementation of an intellectual property policy, taking into account the mentality that exists at this moment in Romania on this subject.

The study is based on the important experience gained by authors in a transnational European research project involving 15 partners from 9 countries, where the results were remarkable. The University must represent a pinnacle of excellence in research, but also taking into account the modalities of implementing and then applying the intellectual property policies recommended by the World Intellectual Property Organization (WIPO). The conclusions of this paper lead to tangible results that undoubtedly highlight certain proposals to improve the way in which intellectual property as a concept is viewed, accepted, implemented and used, but also the possibility of implementing an intellectual property management in a state university in a Romanian State University.

### **General theoretical considerations**

In the 1st article, paragraph 2 of the Paris Convention from 1883 on the protection of industrial property, utility models are presented which contribute to the protection of inventions which are based on a low or absent inventive activity, but also those who do not meet the necessary conditions for obtaining a patent. Yet today, there are utility models which subsequently lead to obtaining patents, and so the utility model is considered as "petty patents" and is recognized in certain national offices including *Oficiul de Stat pentru Invenții și Mărci* (OSIM) (OSIM, 1997).

In the paper Introduction to Intellectual Property from 2001, World Intellectual Property Organization (WIPO, 2001) claimed that industrial design and drawings are "the creative activity of obtaining a formal or ornamental appearance for items of mass production, within the available costs the limits, satisfy both to the visual appearance of the product for the potential consumers and it is also expected to perform its function effectively." Innovative activities defined by the National Institute of Statistics (INS) as research and development activities, machinery purchase, equipment, buildings, computer software, engineering activities and development purchase, design activities, training and marketing, are undertaken mainly for product development and/or implementation or process innovations (INS, 2017).

The Law no. 64/1991, republished, Article 1, paragraph 1, shows that "an invention's rights are recognized and protected in Romania by granting a patent by OSIM, as

provided by law" (Romanian Parliament, 1991). We cannot forget about the intellectual property right which is called brand. A brand is a sign or combination of signs that distinguish the organization goods or services from those of others. Such signs may consist of words, letters, pictures, shapes or colors, but also combinations thereof (Romanian Parliament, 1991).

The university environment is probably the largest consumer of "copyright" and this is due to the natural desire of any university professor or researcher need to publish scientific papers, and so, Law. 8/1996 as amended and supplemented governs the conditions in which copyright of literary, artistic, scientific and other works of intellectual creation shall be recognized and protected in Romania (Romanian Parliament, 1996, 2004).

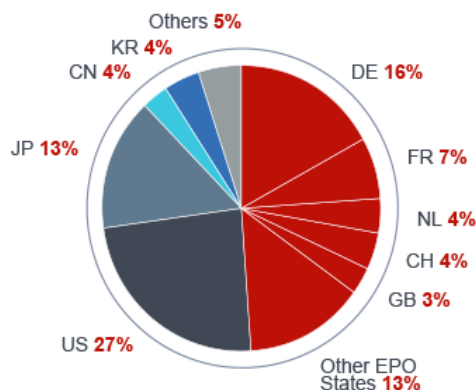
In a country's terms, intellectual property system is used as a social policy tool. Each country should make a choice and arrangement on public policy, based on its actual situation and future development, for the purpose of answering questions regarding intellectual property, such as whether intellectual property should be protected or not. What should be granted intellectual property? On what level should the intellectual property be protected?

### **Intellectual property approaches in some well-known universities**

Several studies have investigated the technology transfer effectiveness from universities and research centres (Anderson, Daim, & Lovoie, 2007; Chapple, Lockett, Siegel, & Wright, 2005; Debackere & Veugelers, 2005), but at the Romanian level, there are no such initiatives. Among these mentioned above studies, as well as Siegel, Veugelers, and Wright (2007) summarized in a series of studies about the technology transfer from universities centres that are key performance factors and how they are affected by the University characteristics 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 service scope and duration. More recently, Caldera and Debande (2010) have examined the way in which research centres' features affect the universities' performances in technology transfer, and maintain control over nature and technology transfer type 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 University interest on responsibilities of teaching academic and extracurricular activities have a positive effect on the rising development of contracts, licenses and linear of spin-off companies. Thus, previous empirical studies highlight the importance of intellectual property in universities of the transfers' performance.

The effects of university intellectual property policies on performance have never been explicitly addressed or empirically examined. University patenting is not only a small, albeit growing, phenomenon in the patent landscape, it is a growing phenomenon. Only a few countries and a few institutes account for the bulk of university patenting. Approximately half of the European patent applications are

from the Member States of the European Patent Office, followed by the United States, Japan, South Korea and China. Applications in Europe have generally grown modestly, with marked differences between the larger economies. The most significant growth came from Italy, the United Kingdom, Spain, the Netherlands, and Switzerland. France has grown moderately, while Germany and some of the Nordic countries have filed fewer requests. The US and China have been the main engines of application growth. Growth in South Korea was moderate, and Japanese companies filed less (Fig. 1) (Țîțu et al., 2017).



**Figure 1. European patent applications (EPO, 2015)**

Taking the example of Finland, the most innovative country in the European Union, it can be found that this country has earned this position on account of some massive investment in research and in intellectual property rights (table 1). In just ten years, Finland has increased investment in research up to 3.17% of GDP, which resulted in an increase in the annual rate of growth up to 4.2% (Țîțu et al., 2017).

*Victoria University of Wellington*

A defining characteristic of universities is that they undertake research, defined as including both investigative and creative activities. The output of research is Intellectual Property (IP) which manifests itself in such ways as new (or substantially improved) knowledge, products, services, materials, processes, designs, and artistic works. The purpose of this policy is to address issues related to the ownership and management of IP and to the sharing of any benefits derived from that IP, and in so doing to assist the development of a strong research culture at Victoria University of Wellington ('the University') and encourage a greater focus on and awareness of IP. To the knowledge creation and dissemination, the free exchange of ideas, information, and scholarship represent a necessary element. The university, the staff, and students have a common interest in developing and maintaining a positive atmosphere for creative efforts. This policy recognizes the University, staff, and students need to work in partnership to maximize the creative productivity and the benefits associated with it. The New Zealand laws have granted the University, its staff, and its students certain rights with respect to IP ownership. Under the law, the



first owners of IP created by employees during their normal business are the employers. In contrast, undergraduate and research students normally own the originally IP created exclusively by them in their studies course. However, in certain circumstances, undergraduate and researchers may be required to conclude an IP assignment contract with the University. This policy distinguishes between property and IP-derived benefits. An explicit provision is made for dividing the benefits between IP creators and the university, even if the property is not shared in a similar way.

#### *Monash University – Australia*

Intellectual property (IP) is a creative idea or solution that you have developed yourself. The ability to protect IP encourages individuals and industry to research and develop innovative products and services. Monash University has a comprehensive policy to cover ownership of intellectual property created by its staff and students. The policy also explains the distribution of any revenues produced from the commercialization of intellectual property. For the majority of cases, the revenue share shown in the table below will apply. Contact us for full details and to discuss your situation.

#### *Tsinghua University – China*

As part of Tsinghua University's ongoing effort to enhance the quality of scientific research, the major focus of patent management efforts has been shifted from managing applications to supporting high-quality patents and technology transfer. University support seeks to reinforce the idea of patent protection across a wide range of scientific research, providing guidance on patent enforcement strategies and the choice of patent attorney, and providing assistance for market assessment. Tsinghua University has developed an online application system that provides teachers and students with quick and easy access to patent applications. The system makes the university's IP management responsible and standardized. With the help of the system, the number of patents applied and granted on the domestic market has increased rapidly in recent years, while the number of patents applied and granted abroad has increased from one year to the next. As regards the number of patents granted abroad, Tsinghua University ranks first among Chinese universities and ranks 2th-3th among universities around the world. In 2015, 500 overseas patent applications were filed and 390 overseas patents were granted. Between 1985 and 2015, Tsinghua University filed 22,308 national patents, with 14,306 patents granted. At the same time, over 3966 patent applications were filed, of which 2132 were granted. In addition, 2187 copyright entries were made. The total number of valid patents is about 15300, with 45% maintained over a period of more than 10 years. Approximately 35% of Tsinghua University patents are co-owners of our industrial partners. Most of these property patents have been marketed through start-up companies. By 2015, Tsinghua University has won 14 Chinese Gold Awards, which is the largest number of Chinese universities. In 2015, Tsinghua University has won 5 national awards for outstanding patents, ranking at the top of all Chinese universities.

### *University of Waterloo*

This policy applies to all members of the University of Waterloo (the University); and to external contractors, unless there are written, contract clauses that stipulate otherwise and which have been approved by the Vice-President, University Research or delegate and an authorized individual representing the contractor. It should be noted, however, that individuals who are not Canadian citizens, or citizens or subjects of, or ordinarily resident in an international copyright convention country, or a resident within Her Majesty's Realms, may not be protected under Canadian copyright law. Efforts to increase and to communicate knowledge are at the heart of academic endeavors. Quite often these endeavors will result in the creation of IP which will have rights conferred by statute and common law in Canada, and which may be eligible for rights in other countries and under international treaties. Within the University community, it is important to ensure that such IP rights are properly conferred on all those who are responsible for the development of the IP, while at the same time encouraging the openness and free exchange of ideas that are essential to successful scholarship. This policy requires the contribution of all parties to be appropriately recognized. Except in certain well-defined situations, this policy provides that the ownership of IP rights rests with the creator(s) of the IP. Because of the complex interactions of members of the University in the course of their work, a chief difficulty in implementing such a policy lies in identifying the creator(s), and in determining who should share in any benefits resulting from IP. A substantial part of this policy is concerned with setting out the principles and procedures to be used in such determinations. However, a critical need that cannot be imposed by policy, is the requirement for all parties to discuss and negotiate issues with professionalism and in good faith. In establishing this policy, the historical practices of the University have been taken into account. Consideration has also been given to standards and traditions in diverse academic disciplines.

### *Harvard University*

Harvard University had a long history of providing its research programs to the public. A recognized aspect of the university is that the public has benefited from new products and processes are resulting from discoveries and inventions made by university-related individuals during university activities. The fact that communication media, the computer programs, the educational technology and other innovative approaches shows a growing application and use within the university often raises complex and continuing challenges in terms of the appropriate, fair and equitable use, obligations and rewards of innovation. After reviewing the information, the OTD will determine if the invention is a sustained invention or incidental invention and, in the case of a sustained invention, will continue to determine, with the assistance of the patent attorney, who is the inventor based on US patent law. Harvard has the right to hold and every inventor, at Harvard's request, will assign to Harvard all his rights, title, and interest to a sustained invention. The property of an incidental invention remains with the inventor or inventors, subject to any rights that may be granted to Harvard in accordance with the requirements of this policy. The sole responsibility for determining whether a patent application is to be filed for a sustained invention is

the OTD. Registration decisions could be made based on the commercial potential of the obligations, the obligations, and rights of third parties, or other reasons the OTD deems appropriate at its discretion. The inventor or inventors of a sustained invention for which patent applications are filed must cooperate without incurring costs for the inventor in the patenting process in all manner required by the university or an agent or its appointed agent.

#### *MIT University*

When the Intellectual Property is developed by MIT University, the students, staff, visitors, or other MIT program participants who use its facilities or funds, MIT will be the only one who owns the intellectual property. If the document is not the main subject of sponsored research or other agreement conferring rights on a third party, the question of whether a significant use of MIT facilities or funds will be reviewed by the director or chief of the inventor/author's laboratory department; a recommendation sent to the Technological Licensing Bureau (TLO). Where intellectual property is not the subject of sponsored research or other agreement (like the equipment agreement) but has been developed using significant funds or facilities of MIT, the Technology Licensing Bureau may, at its sole discretion and in accordance with the public interest, the inventor (s)/author (s) exclusively or exclusively on a royalty basis. The inventor(s)/author(s) have to demonstrate the financial and technical capacity to market the intellectual property, and TLO will have the right to finish this license if the inventor(s)/author(s) did not achieve effective dissemination within three years. If such a license is issued, the inventor (s)/author (s) may incur the filing costs, prosecution, and maintenance of any patent rights. At the invention disclosure date, an internal case number is assigned and a disclosure copy is sent to the Intellectual Property Coordinator of the Sponsorship Program Office examining the patent and copyright terms of the applicable research agreements, and notifying sponsors from disclosures. In TLO, the disclosure is attributed to a technician licensing officer who will contact the inventor (s) in order to discuss the invention aspects. It is therefore decided whether the transfer of technology will be most efficiently achieved by applying the patent or other legal protection. Usually, the industrial sponsors are granted the right to choose a technology license for which patent or other legal protection is sought; the specific conditions are then negotiated with TLO. In general, TLO will pursue technology licensing by exploring the technology market, initiating some discussions with the potential licensees, caring out a business plan, negotiating licenses or other appropriate agreements, monitoring progress and distributing royalties to the inventor(s)/author(s) in accordance with the MIT copyright policy. Also, students should be recognized as authors of their own work. Academic and financial rights of students must be honored in the creation and dissemination of educational materials.

Based on the above-mentioned considerations, the importance of implementing an intellectual property policy in a Romanian state university will be presented below.

### **Study on the implementation of an intellectual property policy in a Romanian state university**

The increased interest in protecting intellectual property rights and thus for innovation can be achieved based on a strategy aimed at make human resources aware about the importance of these issues in relation to the economic development. Introduction of at least one teaching specialty discipline proposes awareness concerning the importance of intellectual property in the current life, with a creativity emphasis and the development of new technologies. This academic discipline in the university matches the context in which the European Commission encourages the promotion of the concepts of open education (Țițu & Oprean, 2015).

In regards to Romania, it cannot say very much about the excellence in research and those adjacent to this area because of the low interest in protecting intellectual property rights. The causes of the low interest to protect IP rights can be (Țițu & Oprean, 2015):

- Lack of education in this field;
- Lack of activities that promote the Romanian technical creation;
- Low interest for national heritage interest research;
- Failure to detect the importance of creative activity in the evolution process;
- Lack of support for the concept of the innovation process.

In this respect, Romanian Ministry of Education, starting with the academic year 2015-2016, proposed the introduction of four new optional disciplines among which include "education for intellectual property rights". It proposes exposure of high school students to the issue of intellectual property rights, involving youth in the development and in the promotion of projects for copyright or other intellectual property rights, preparing high school students for appropriate behavior in respect to sustainable development (INS, 2016).

Intellectual Property is inherent to many research and teaching functions of a university or research centres. A successful research program can generate patentable inventions and other forms of IP. Decisions must be made regarding whether to protect and how to bring those inventions to the next development step. This, then, raises the question of who the inventors are. There can be different types of people involved in the research: professors, students, visiting scholars, post-docs or research employees.

The university's teaching activities will also generate intellectual property: teaching materials, theses or articles. It is generally considered that universities and research centres shall have a priority to serve the public interest by ensuring that such intellectual property is transferred and developed or otherwise disseminated for ultimately the public benefit, for example in the form of new products, new therapies, new services, environment improvement, job creation etc. (Țițu et al., 2017).

There are many people who could be involved in the process of commercialization of inventions and research funding. Starting with universities as such through their research centres, teachers, researchers and inventors, students, technology transfer,

etc. Each of the participants which may be involved in the generating and marketing process of research results or in the process of obtaining research contracts make a contribution. But, they have their own interests and expectations, a situation which, in the majority of cases, will result in a conflict of interest.

It should be noted, however, that a university, as such, is the main participant in the research results process, as this provides: research infrastructure, staff salary, funds for research, the good name of the institution. The capitalization of intellectual property rights, especially by countries that are in development, is often correlated with the globalization process so that it is difficult to identify negative or positive consequences in a given economic system. The positive effects of the capitalization 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 welfare lowering. Over long periods of time, the competitiveness of an economy depends on the innovation process potential achieved through the capitalization of intellectual property rights. Beyond the effects of the globalization process, which relates to foreign direct investment, relocation of production activities, etc., there are deeper causes which determine the evolution of competitiveness, these being correlated with investments in research and exploitation of innovation (Țîțu et al., 2017).

### ***The role of intellectual property in a state university***

Public or private research institutes are commissioned to carry out research. Traditionally, education has been the universities primary function. However, universities are research institutes carrying out technology transfer activities. Thus, intellectual property is inherent in many research and education functions. A successful research program can generate inventions that can be patented, as well as other forms of intellectual property. Decisions must be made taking into account the protection of these inventions and bringing them to the next development level.

Intellectual property policies play several roles having the following effects:

- Accountability of all involved parties in the innovation process;
- Educating future specialists in the field;
- Raising public awareness not only on the intellectual property area but also on the importance of its rights and its protection;
- Create a regulation that will be respected by all involved, avoiding any errors;
- Economic, social and cultural development of the country;
- Creating relationships with interested enterprises in new creations that can facilitate production processes;
- Compatibility and harmonization of the intellectual property system in Romania with the existing mechanisms at the level of the European Union;
- Achieving a performance level demanded by the evolution of a knowledge-based society;
- Transparent cooperation between the involved organizations in the intellectual property protection;
- Building an appropriate administrative infrastructure in the field.

### ***The need for a PI policy within a state university***

An institutional IP policy implemented within a State University serves the following objectives:

- Recognition of the created intellectual property owners;
- Providing a framework in which the institution can identify, assess, protect and monitor exactly IP for the further development and usually its marketing;
- The defining of responsibilities, rights, and privileges of those involved.

On the other hand, a PI policy also contributes to:

- Promoting scientific and research investigations;
- Encouraging researchers to consider global value and possible opportunities for any new inventions and increase the potential flow of societal benefits;
- Providing legal certainty;
- Balancing various conflicts of interest;
- Providing an environment in which the innovative spirit is present and those who participate can be rewarded correctly for contributions to successful development;
- Provide practical guidance and specific procedures for identifying, evaluating, protecting, managing and licensing or IP transferring.

### ***PI policy objectives***

By establishing the objectives, a State University should undertake the objective of ensuring that intellectual property is used for the individuals' and societies' benefit. At the same time, it should also engage in the widespread promotion and use of research results through appropriate means, including publications and marketing. The policy sets the University's stance on the possession and use of intellectual property, the recognition and rewarding of IP creators, and the obligations, roles, and responsibilities of all.

### ***The purpose of IP policy***

This policy must be applied to all properties created within the University as well as associated rights. At the same time, this policy can be applied to all researchers who have established relationships with the University.

### ***Mastery and use of intellectual property***

The mastery of intellectual property largely depends on the current legislative context, the contractual situation between the sponsor and the intellectual property creator, as well as its nature. Therefore, the person designated to exercise authority on behalf of the university must ensure that the contract includes provisions that align the researcher with the policy. In this respect, students are required to sign an agreement to regulate the relationship with the university but link them to this policy before starting any research activity. It is the responsibility of the researcher to ensure that an agreement (hereinafter referred to as the Research Agreement), whose cooperation terms and conditions are appropriate for both Contracting

Parties, has been concluded prior to the commencement of the research activity in collaboration with third parties.

#### *Directorate and conflicts of interest*

The right to appoint, remove or replace a director falls entirely on the University and the Board of Directors of the Company. Thus, the director of the university will normally be selected by the members of the Intellectual Property Trading Council. However, the position of director of the company may also come back to an inventor who will necessarily act in the company's interest, for individuals in this position must recognize potential conflicts of interest.

#### *Sharing revenue*

The university policy should provide for the distribution of any income generated by the commercial exploitation of intellectual property, depending on the contributions that each individual involved in research brings to the creation of intellectual property.

Most of the state universities should aim to develop academic partnerships with institutions authorized for certification and authentication of products and objects resulting from intellectual property rights, both nationally and internationally, managing to create an organizational culture focused on recognizing its own values, intellectual property assets and increased interest for their protection.

In the area of intellectual property, the State University should be based on a set of procedures that govern the analyses of the cases of the people seeking registration of products and objects of intellectual property rights.

An important role in the economic development played by organizations is active involvement in society. For greater involvement in the field of intellectual property, the State University should 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.

As a conclusion 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 for education and scientific research, and most universities have no income with which to be able to supplement government funds. Non-availability of adequate funds is causing difficulties in fulfilling the Mission of universities and their objectives.

## **Conclusions**

Intellectual property is native to all the people, marking the world evolution and contributing, from the historical point of view to the progress of society. Ensuring and protection of industrial property rights, which release the potential barriers of development by encouraging creativity and innovation, is ensured by the institutions dealing with rights related to intellectual property, through which a connection is made with society - government, courts, research and education institutions.

Romania has a complex legislation in the field of intellectual property protection, covering all areas and aiming at harmonization with the EU legal acts and international treaties. It offers protection to all categories of rights, based on EU legislation but also on the founding treaties and binding legislation. 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 for education and scientific research, and most universities have no income with which to be able to supplement government funds. Non-availability of adequate funds is causing difficulties in fulfilling the Mission of universities and their goals. The universities experience developed countries shows that a significant income can be generated through consultancy, research, and development, as follows: a) licensing fees for intellectual property rights; b) copyright; c) income from consultancy services; d) income from research contracts; e) income from sponsorship contracts.

The efficiency with which a university uses intellectual property is an important factor that influences the evolution of the university's reputation, for intellectual property is considered to be the main reward that creates value. The government, research, and education institutes, as well as the Courts of Justice, are the institutions that manage intellectual property rights and those that connect with society, with the main objectives of ensuring and guaranteeing the protection of intellectual property rights; this lowers the possible barriers to development, encouraging creativity and innovation.

Harmonization with EU normative acts and international treaties in the field is given by the complexity of the intellectual property legislation of our country and covering all the related fields. Thus, it can be said that the legislation of the European Union is based not only on the founding treaties but also on the binding law acts, thus managing to give protection to all categories of rights. The principal aim of European Union is to ensure the intellectual property protection, being a priority, as there is no progress without new ideas and knowledge. Intellectual property rights are important for stimulating innovation and creativity, leading to a continuous evolution, both socially and economically. The economic sectors in which intellectual property rights are widely used the account for about 39% of all economic activities in the European Union, which means that they account for up to 26% of the total number of jobs in the EU.

Research institutions, whether public or private, are endowed for doing research. The primary function of universities, however, has traditionally been teaching. Yet,



universities are also increasingly undertaking research and technology transfer activities. So, the universities must carry out intellectual property policies mainly because this means promoting the scientific investigation and research. Also, it clarifies the way the institution intends to balance the dual goals of disseminating knowledge created and rewarding those who produce knowledge, encouraging researchers to consider the global value and the possible opportunities for any new inventions and to increase the potential flow of benefits to society.

To advance the cause of the benefits of intellectual property protection at the national and international levels, intellectual property is necessary and must be advocated. We must develop individual persons, companies, and governments aware of the intellectual property concept, and only at that moment, they can take some positions on the issue to affect change. It is time to reorganize universities and is obviously the time to perform many changes for the better. But first, it is time for the importance of intellectual property for development and growth on all levels. It is time to look the statistics and act so in order to bring Romania into the top ranks related to competitiveness. So, the universities must implement intellectual property policies mainly because this means promoting scientific investigation and research. Also, it cleared the way the institution intends to balance the dual goals of disseminating the knowledge created and rewarding those who produce knowledge.

Encourage researchers to consider the global value and the possible opportunities for any new inventions and to increase the potential flow of benefits to society. Another important aspect is that it provides practical guidance and specific rules for the identification, evaluation, protection, management and licensing or transfer of IP. It also promotes balanced opportunities for collaboration with the economy and provides researchers with the freedom to work, balancing the various conflicting interests and ensuring the compliance with applicable national laws and regulations.

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