

Value of Intellectual Property Protection for Society

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Abstract. Commercialization of intellectual activity through such mechanisms as patents, licenses, copyright legal norms and trademark protection, helps companies to develop innovative products, which directly increases the individual companies and overall market competitiveness. All this encourages social development in the country. However the very public can contribute to social development, recognizing the copyright protection, and intellectual property objects as well as the owner rights in tangible assets. Change of public attitudes to intellectual property protection is a difficult process. It is particularly important for Lithuania, where even the legal acts in protecting intellectual property are adopted, but few residents practically use protection, and generally these laws protect the products developed by foreign authors. Therefore, public awareness should help to improve the country's population protection of intellectual performance. The introduction of training programs in universities should contribute to this process.

Keywords: innovations, intellectual property, patents, copyrights, trademarks

1. Introduction

Improving of the competitiveness of the country's economy is an important part of government policy to increase the country citizen welfare. Countries or individual their companies wishing to become the competitive in the global market, have to direct their activities towards the reduction of costs or development of innovative solutions and product. The choice of the EU and other Western countries is limited due to high labor costs these countries. Therefore, these countries, including Lithuania, are increasingly focusing on research and development (R&D) and in particular the commercialization of this activity. Countries and groups of countries, in order to protect the R&D results from unfair competition, create intellectual property protection systems. In 2000 The European Council launched the 'Lisbon Strategy', aimed at transforming the EU by 2010 into 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion' (Dumciuviene *et al.*, 2007). However the expenditure on R&D in EU are still low, compare to some other countries (EU-304.6; USA-645.1; Japan-700.4, S.Korea-333.0; Lithuania-18.2 Euro/inhabitant in 2008, Eurostat, 2011).

Intellectual property interests are the rights to the intangible asset class, resulting from intellectual activity results. Recognition of these rights is seen by economists as a state policy to ensure an adequate level of private income to inventors and other people or their groups involved in creative activities. Companies are investing in innovative activities such as R&D in order to market the new innovative products or to improve their business processes and thus have the opportunity to increase their income or reduce operating costs.

Country's social progress and awareness and respect of personal rights of intellectual property allow increasing investment in this area. Public attitudes to these activities and their results protection have to change. In the first, awareness raising, and later onset of society's intolerance of unfair competition cases, make the laws in force to function effectively, and companies to invest more in R&D. Therefore, **this article raises the goal** - to find out what can change public attitudes to intellectual property protection and how it contributes to the country's economic competitiveness improvement.

2. Intellectual property protection development

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In the eighteenth and nineteenth century inventors in order to protect the designed facility had to patent it in all desired countries separately. Global protection lack and fear to disclose available inventions and also potentially lose the protection of it, have meant that many inventors declined the offer to participate in an international inventors' exhibition in Vienna in 1873 (Mossinghoff, 2000). The lack of common international protection remained until nearly the end of the nineteenth century. In 1883 the Paris Convention for the Protection of Industrial Property was signed (Bird, 2006).

Whereas this area of legal norms in different countries are different, for a long time there were no united and the precise definition of intellectual property. Perhaps all the rights which are considered as the intellectual property are listed the most accurate by the World Intellectual Property Organization (WIPO), established in 1967 in Stockholm. **Intellectual property (IP)** refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce (WIPO).

In the examination of the intellectual property, the general perception of information, including the intellectual property socio-economic characteristics is important. Key Intellectual Property socio-economic characteristics are (Zilinskas *et al.*, 2007):

Publicity (except trade secrets). Information protected by intellectual property public access is necessary condition to give intellectual property rights. Publicity requirement may be both direct (e.g., patents, trademarks) and indirect (e.g., information protected by copyright must be objectively expressed).

Uncompetitive. Intellectual property uncompetitive in terms of economics means that the intellectual products presentation to the additional consumer surcharge costs is close to zero.

A limited monopoly right with respect to time and volume (use of the rights and exceptions). Protection of Intellectual Property validity is expressly defined by law (for example, patents are valid in individual countries for 15-20 years). Although monopoly is essentially a negative effect of intellectual property, it is base of the creation shaping intellectual property and innovation promotion.

Competitiveness and efficiency. Intellectual property market value and its effect are directly related to social values and social needs; developers, deciding where to invest and what create can compare the costs of potential investments ant the social value, which they will create.

Siegel and Wright (2007) state that well-established knowledge economy has pushed industrial nations focus more on intellectual property protection and commercialization of intellectual performance through mechanisms such as patents, licenses, copyright or trademark protection.

3. Intellectual Property Protection in Lithuania

Republic of Lithuania adopted modern Copyright and Related Rights Law, the Patent Law, Design Law, and Trademark Law. Protection of intellectual performance is provided in other laws and rulings. However, formal legal protection does not ensure the increase of patentability of inventions and other intellectual property objects registrations. Contrary, as shown in Table 1, over the past few years, patenting and registration of objects has stabilized, and of some objects began to decline.

Table 1. National patents, trademarks registration, design registration in Lithuania 2004-2007 m. (VPB statistics, 2005; 2006; 2007; 2008, 2009, 2010, 2011)

Subjects of Intellectual Property	2004	2005	2006	2007	2008	2009	2010
National Patents	66	84	66	50	67	75	78
National Trademarks Registration	1482	1787	2922	2701	2432	2777	1587
National Design Registration	69	29	40	23	34	33	20

Steady state of patents or trademarks and design registrations show a relatively high level of country's development, but in absolute terms, these figures are virtually small. It can be seen in the examination of the European patents applicable in Lithuania (see Figure 1).

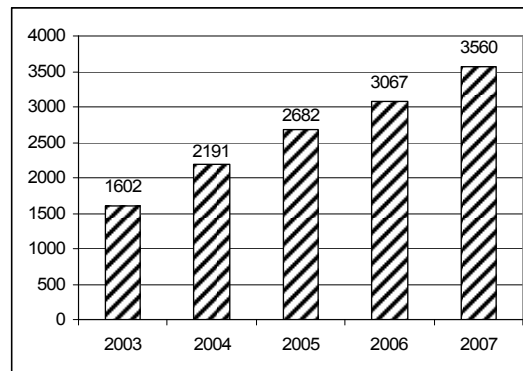


Fig. 1: European patents in force in Lithuania (Valasevicius, 2008)

As can be seen from the above data a number of Europe patents in force in Lithuania in the times is large of national patents. Knowing that every year, even about 130,000 applications for the European patent are presented, and the Lithuanian authorities during the period 1990-2006 filed only 15 applications for a European patent and the inventor of Lithuania mentioned only in 25 applications, the said data makes us to look for ways to change the situation (Valasevicius, 2008).

Lithuanian organizations patent and at the same time it is likely that commercialize few invention. It does not provide conditions for high value-added product development and production, while at the same time is limited scope for increasing the country's economic competitiveness by providing the market with high quality goods. Increasing the number of European patents in Lithuania shows the interest of foreign organizations in the Lithuanian market. It would seem that patents should be followed by foreign direct investment, which in the long-time should to increase social progress of residents of Lithuania. However, the majority of patents in the Lithuanian market remain unused and a license to use them are not issued - these patents are intended to protect against the potential of competition from Lithuania enterprises, so they do not contribute to social progress, but on the contrary - it stop.

In order to, the Lithuanian population more exploits the intellectual property rights protection, the first, the people themselves have to change their approach to intellectual property, treat it in the same way as tangible assets, in breach of a property right of which public looks very unfavorably.

4. Public approach to intellectual property protection in Lithuania

Intellectual property protection encourages people to create socially useful inventions. With no guarantees on private property and related rights, inventors do not invest their available human and material resources to inventive activities, where their performance can be quickly and with impunity simulated and thereby reduce the income inventors (Greenhalgh and Rogers, 2007).

Despite the huge potential and foreign countries practices, intellectual property in Lithuania is not sufficiently used to promote the innovations (Kumpikaite and Sakalas, 2007). This is not due to a lack of innovation, but management, economic and legal failure to appreciate the meaning of intellectual property. Society often connects intellectual property only with the possibility of unauthorized access to audio and video production, marginal social value and the absence of the payment to intellectual property developers (Zilinskas *et al.*, 2007). To whom is intellectual property needed, if it has no use - the most common response, which can be expected from the author in Lithuania. It should be understood that intellectual property is just one of the factors contributing to innovation, because in addition to modern intellectual property laws adequate management, public infrastructure conducive to intellectual property creation and protection, which in turn is determined by education on intellectual property issues, clear State support for the creation and protection of this property, are necessary. Unfortunately, these issues in Lithuania are poorly addressed. Intellectual property issues included only to the special education programs and government efforts in support of intellectual property is more focused on foreign intellectual property protection, rather than the promotion of the national intellectual potential. We need to aim that Lithuanian intellectual products are adequately protected in law, used in national business and realized abroad, thus creating added value to the Lithuanian public.

Intellectual property rights violations massive distribution in the knowledge society is illustrated by scale of the illegal reproduction and distribution (piracy) of computer programs, phonograms and audio-visual production – in global scale part of unauthorized computer programs, phonograms and audio-visual production in a global market in 2004 amounted to ~ 40 per cent of total production. In Lithuania in 2004 unauthorized copies of phonograms in the market amounted to ~ 45 per cent of total production, and computer programs for nearly 60 percent of total production (Kiškis, 2006). Such a large scale infringements of intellectual property results causes huge economic and social damage to young knowledge-based economy and society.

On the order of the State Patent Bureau made a representative survey of Lithuanian population on inventions, trademarks and industrial design opportunities in Lithuania showed that those who know about such opportunities are growing - from 8 percent (April 2007) to 11 percent (February 2008) - but it is still quite low. Respondents with higher/ unfinished higher education, representatives of the largest income group, large urban population and high-, middle-level managers often stated that they are aware of inventions, trademarks and design options (Spinter tyrimai, 2008).

Taking into account the ideas described above and findings of study, in order to increase the country's economy competitiveness, it is necessary to change public attitudes to intellectual property protection.

5. The proposals to change public attitudes to intellectual property protection

Intelligent people with the higher education face the most commonly with results of intellectual performance. Therefore, first and foremost we need to change the attitudes of these individuals, offering them various training programs related to inventive activity, patents, and trademark and design protection. The mentioned Spinter tyrimai survey has said how the Lithuanian people would respond to the introduction of such programs.

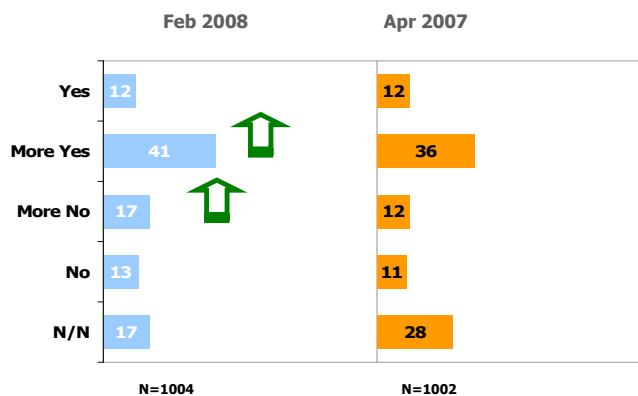


Fig. 2: Do respondents would prefer that in the education institution in Lithuania would be the training program of invention, trade mark or design protection?, percent (Spinter tyrimai, 2008)

The said Spinter tyrimai (2008) study results show that the respondents expressed a clearer provisions on the training programs on inventions, trademarks or designs protection setting in the Lithuanian educational institutions: the share of both of those who agree with this proposal (from 48 percent in 2007 to 53 percent 2008), and disagree with him (from 23 percent in 2007 to 30 percent 2008) have grown. Positive attitude on the training programs of inventions, trademarks or designs protection setting in the educational institutions often was expressed by a higher level of education and higher-income participants of the study.

To capture and to better protect the public and the public scientific and technological achievements (technical creation results) priority, we need not only prepare qualified specialists of patent science, but also to educate engineers, managers, economists, doctors, teachers, other professionals of fundamentals of intellectual property and patents' science. Future learning professionals can access indirectly the intellectual property framework (Kasperavicius and Zilinskas, 2004).

Direct form of training of intellectual property is intellectual property discipline in the teaching of microeconomics, accounting, financial management, marketing, innovation, business management, business

and tourism or information laws things. This form can be effective if students have enough material to work independently.

Indirect intellectual property training. When reading invention, intellectual property and patent science books and manuals, you can understand the basic problems, but in order to examine in detail invention, intellectual property and patent issues, we need to pay attention to intellectual property and patent science in learning other subjects too. These issues should be interested not only directly but also indirectly.

6. Conclusions

Historical development resulted in that intellectual property is protected by two types of legal norms: copyright and related rights, when the rights of authors in the created objects are protected and are not registered separately; patent rights, which are protected only by copyright laws of the patented items.

Although an established legal environment protects intellectual property rights holders in Lithuania, but this protection is used in a relatively small layer of people. This is determined by yet different society awareness of tangible and intangible asset protection. Only the latter change should begin to grow the number of patents issued, and, in turn, their commercialization degree, what should to enhance national enterprises competitiveness when implementing innovations.

Direct and indirect training of intellectual property should contribute to public attitudes to intellectual property change in the country's post-secondary and higher education institutions.

7. References

- [1] R. C. Bird, Defending Intellectual Property Rights in the BRIC Economies. *American Business Law Journal*, 2006, 43 (2): 317–363.
- [2] D. Dumciuvienė, G. Startienė, K. Duoba. The European Education Policy for a knowledge economy. 10th UICEE Annual Conference on Engineering Education, Conference Proceedings, Reinforcing Partnerships in Engineering Education, Monash Engineering Education, 2007: 99-102.
- [3] Ch. Greenhalgh and M. Rogers. The value of intellectual property rights to firms and society. *Oxford Review of Economic Policy*, 2007, 23 (4): 541–567.
- [4] P. Kasperavičius and V. Žilinskas. *Intelektinė nuosavybė ir jos apsauga*. Klaipėda: KU, 2004.
- [5] M. Kiškis. *Intelektinės nuosavybės apsauga elektroninėje erdvėje*. MRU, 2006. <http://www.mruni.lt>.
- [6] V. Kumpikaitė and A. Sakalas. Human resource development in innovation process in the age of globalization (Lithuanian study). *Managing Total Innovation and Open Innovation in the 21st Century : proceedings of the 5th International Symposium on Management Technology ISMOT'07*, 2007: 408-412.
- [7] G. J. Mossinghoff, National Obligations Under Intellectual Property Treaties: The Beginning of a True International Regime, 9 *FED. CIR. B.J.*, 2000.
- [8] D. S. Siegel, M. Wright. Intellectual property: the assessment. *Oxford Review of Economic Policy*, 2007, 23 (4): 529–540.
- [9] Spinter tyrimai. Visuomenės nuomonės tyrimas dėl pramoninės nuosavybės apsaugos galimybių žinomumo. Užsakovas LR Valstybinis patentų biuras, 2008, <http://www.vpb.lt>.
- [10] Z. Valasevičius. Išradimų teisinė apsauga Lietuvoje ir užsienyje. Seminaro „Intelektinės nuosavybės apsauga: problemos, iššūkiai“ medžiaga, 2008.
- [11] VPB statistics 2004-2010 (2005-2011). Official Bulletin of the State Patent Bureau of the Republic of Lithuania. VPB. <http://www.vpb.lt>.
- [12] V.J. Žilinskas, P. Kasperavičius, P. Kiškis. *Intelektinė nuosavybė ir jos teisinė apsauga*. Klaipėda: KU, 2007.
- [13] Eurostat. <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>
- [14] WIPO. World Intellectual Property Organisation. <http://www.wipo.int/about-ip/en/>