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PROTECTION OF INDUSTRIAL PROPERTY RIGHTS AS A STIMULATOR FOR ECONOMIC GROWTH¹

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Abstract

In contemporary society, industrial property rights are carriers of economic growth, technological development, and general wellbeing. The market economy can hardly develop without the protection of industrial property and innovations. The industrial property in the contemporary economy presents one of the main competitive advantages. The protection of the intangible property from authorized use is a condition for profitable operation, which is, of course, the main premise for innovations, foreign investments, increase of the gross domestic product, foreign trade and increase of employment. The paper will also analyze the results from the authors' own research and research conducted in the EU regarding the influence of the protection of industrial property rights on innovations, employment, and economic growth.

Keywords: industrial property, innovations, economic growth, employment.

¹ professional paper

INTRODUCTION

In conditions when the development of the global, national economies and the growth and development of the business entities have become determined by the industrial property to a large extent, the protection and the efficiency of protection of violated rights, are becoming increasingly significant. The term industrial property² is a narrower term of intellectual property, which besides the industrial property rights includes copyrights and related rights.

The sphere of protection of industrial property rights includes spiritual works, works which are the product of human intellectual work, and which are in the field of industry and technique³. Unlike copyrights and related rights which refer to spiritual works in the field of literature and art, these rights must be registered in a legally stipulated procedure so that the industrial property rights holders can acquire legal protection.

According to the Law on Industrial Property, which is a basic source of positive-legal protection in the Republic of Macedonia⁴, the industrial property rights are: patent, trademark, industrial design, and appellation of origin and geographical indication.⁵

²The term industrial property originates from the French law (*propriété industrielle*). The root of this term is contained in the text for the first law on patents in Europe (The French Law on Patents from 1791). In the Italian law, the term „*proprietà industriale*“ is used, in the Spanish law the term is „*propiedad industrial*“, in the Anglosaxon law it is „*industrial property*“, in the German law „*gewerblicher Rechtsschutz*“. More information in Mirjana Polenak-Akčimovska, Vlado Buchkovski, Jadranka Dabovik-Atanasovska, Valentin Pepeljugoski. *Right to Industrial Property – selection of texts*. The Right to Industrial Property in the Republic of Macedonia – role, significance and types. Skopje: Faculty of Law “Yustinianus I”- Skopje, 2003, pg. 34.

³According to art.1 para. 3 of the Paris Convention for Industrial Property Protection, the industrial property is understood in the broadest sense and refers not only to the industry and trade in the true sense of that word but also to the branch of agriculture and extractive industries and to all fabricated or natural products such as: wines, cereals, tobacco leaves, fruit, livestock, mines, mineral water, flowers, flour.

⁴Law on Industrial Property (Official Gazette no. 21/2009, 12/2014, 41/2014, 152/2015, 53/2016 и 83/2018), further on LIP.

⁵Serbia, Croatia, Bosnia, and Hercegovina, as well as the Republic of Macedonia, regulate the same industrial property rights, just not in a single law, but in separate laws for a patent, trademark/brand, industrial design, and geographical names. In Slovenia the industrial property rights: patent, trademark, industrial design, and geographical names, are regulated in a single law, *Zakon o industrijski lastnini* (Uradni list RS 51/2006). In Bulgaria the following industrial property rights are

The trend for registration and protection of industrial property rights has become a global process which is inevitably present in Macedonian society also. According to the statistic data of WIPO, worldwide, the number of submitted applications for protection of industrial property rights is on a steady increase: 1.574.300 patent in 2004, and 3.168.900 in 2017, 4.496.883 trademarks in 2004 and 12.387.600 in 2017, 587.900 industrial designs in 2004 and 1.242.100 in 2017.⁶ In the State Industrial Property Office of the Republic of Macedonia, during 2017, 1003 applications for patents were submitted. The number of submitted applications for patents in 2017 compared to 2016 had increased by 6,3%. During 2017 a total of 5319 applications for trademarks were submitted in the State Industrial Property Office of the Republic of Macedonia. Compared to the previous year, it is a decrease of 4,7% of the number of trademark applications. During 2017 a total of 35 industrial design applications were submitted to the State Industrial Property Office. The total number of submitted applications for industrial design in 2017 compared to the previous year was increased by 54%.⁷ The statistic indicators show that the number of registered and protected industrial property rights is growing both worldwide and in our country. It means that the industrial property rights holders are becoming increasingly aware of the value of industrial property rights.

If the companies are not able to protect their innovations from the competition and from possible imitations, they will be less motivated and encouraged to take innovative endeavors. If the companies can maintain the competitive advantage obtained as a result of innovation and if they can enjoy the benefits that innovations offer, they will be still motivated to invest in research and development of new innovations. Moreover, one of the most common theories which explain the legal nature of the Right to Intellectual Property is the theory of stimulation and reward, according to which giving appropriate protection to the intellectual property rights and providing conditions for appropriate reward, encourages innovation which eventually provides progress of the whole society.

recognized: patent, industrial design, useful model, trademark and geographical names, which are regulated in several laws (patents and useful model in the Law on patents and registration of useful models; trademarks and geographical names in the Law on marks and geographical names, and industrial design in the Law on Industrial Design).

⁶<http://ipstats.wipo.int/ipstatv2/keysearch.htm?keyId=201> [18.05.2019].

⁷Report on the work of the State Industrial Property Office for 2017, March 2018, pg 2,5 and 9.

INFLUENCE OF THE INDUSTRIAL PROPERTY RIGHTS ON ECONOMIC GROWTH AND DEVELOPMENT

The industrial property in the contemporary economy is one of the main competitive advantages. Protection of intangible property from unauthorized use is a condition for profitable operation, which is, of course, the main premise for innovation, foreign investments, growth of the gross domestic product, foreign trade and increase of employment. Taking into consideration the jurisdiction of the European Observatory for violations of industrial property rights within the EU Intellectual Property Office (EUIPO) for providing data based on evidence for the influence, role and public perception of the intellectual property rights on the EU economy, and the jurisdiction of the European Patent Office (EPO), in 2016 a Report was prepared for the role of industries which intensively use intellectual property rights in the EU. The report analyzed the influence of a large number of intellectual property rights, such as trademarks, patents, industrial designs, copyrights, geographical names, and plant variety rights (PVRs) on a large number of economic indicators, GDP, unemployment, foreign trade, and salaries. This study analyzes the period from 2011-2013.⁸

These indicators were also analyzed in an initial study in 2013 for the period between 2008-2010. By comparing these two studies the changes and dynamics in this area can be seen.⁹

The study from 2016 for the period from 2011-2013 shows that the „IPR intensive“ industries generate 27,8% of all job positions in the EU, or in numbers 60 million citizens of the EU are employed by the „IPR intensive“ industries, additionally 22 million job positions are generated in industries which provide services or goods to „IPR intensive“ industries. The total sum shows that 82.2 million citizens in the EU are employed in the IPR dependent industry, which marks an increase of 38.1%. Also, „IPR intensive“ industries participate with more than 42% of GDP in the European Union. „IPR intensive“ industries pay significantly higher salaries than the other industries, by around 46% than other industries. Also, the „IPR

⁸Intellectual property rights intensive industries and economic performance in the European Union Industry-Level Analysis Report, October 2016 Second edition, A joint project between the European Patent Office and the European Union Intellectual Property Office.

⁹Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union Industry-Level Analysis Report, September 2013, A joint project between the European Patent Office and the Office for Harmonization in the Internal Market.

intensive“ industries proved to be the most resilient to the economic crisis.¹⁰ These indicators show a growth of the economic indicators unlike the period from the first study 2008-2010 when the „IPR intensive“ industries participated with 26% of all employees (even 21% of the so-called “trademark intensive”) with 39% of the GDP in the European Union and employees were paid 40% more than in other industries.¹¹

The Republic of North Macedonia does not belong to the countries with a high global index of innovations. According to the latest, The Global Innovation Index 2018, Energizing the World with Innovation, the Republic of North Macedonia is on the 84th place from 126 countries, which is worse than last year when Macedonia took the 62nd place. The Global Innovation Index (GII) provides detailed metrics about the innovation performance of 126 countries which represent 90.8% of the world’s population and 96.3% of global GDP. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure, and business sophistication.

The existing protection of intellectual property rights should not be a purpose for itself. On the contrary, according to the economic Nobel laureate Jozef Stiglic it should be seen as a tool for raising the general wellbeing by encouraging the innovations, but innovations which use will include more social justice and lower costs for using the intellectual property rights in the developing countries. What separates the developed countries from the developing countries are not only the difference in resources but also the difference in knowledge, and the system of intellectual property can affect whether or not the differences in knowledge will be higher or lower.¹²

One of the legal modules for using foreign innovations and decreasing the differences between the developed countries and the developing countries are licenses. The license agreement regulates the relations between the inventor, the author and other subjects who use the work of the authors or the inventors. The license agreement is increasingly implemented by the occurrence of the technical revolution, opening of new markets and modernization of the production processes. Especially important for the development of the whole social order is the right to use the industrial property rights, since the conclusion of the license agreement provides the license holder to use the benefits of the work of the licensor under certain

¹⁰ Intellectual property rights intensive industries and economic performance in the European Union Industry-Level Analysis Report, October 2016 Second edition, A joint project between the European Patent Office and the European Union Intellectual Property Office, pg.6.

¹¹ Ibid, pg.6.

¹² Zashtitaintelektualnogvlasnistva u funkcijipoticanjainovacija, Ljubinka Kljaic, pg.6.

conditions. According to the Law on Industrial Property if the license agreement is supposed to provide activity towards a third party it should be entered in the appropriate register of the Industrial Property Office. According to the Report for the operation of the State Industrial Property Office for 2017, there are data for entering only 3 licenses for industrial designs, while there are not any data for the other industrial property rights.

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The link between innovations and opening new job positions is a subject of analysis and from another aspect, i.e. how much innovations, i.e. digitalization would influence negatively on the job positions. There is research which shows that in the following 20 years, even 40 to 50 percentage of the job positions will be replaced with robots. Still, it can not be generally discussed in numbers in all vocations but the most affected by the automation process would be certain industry sectors: processing industry and food industry, and other sectors of the industry where the human labor is reduced to performing more simple repetitive actions, where a lot of creativity and intellectual human labor is not necessary. According to the study from Oxford Martin School the percentage of job positions which would be automated depends from country to country, while in Ethiopia that percentage is 85%, in the USA it is 47%.¹⁴

Still, scientists believe that the fear of losing jobs is exaggerated. Professors Ken Goldberg and Eric Bryer from the University Berkley claim that there is no possibility of losing so many jobs due to artificial intelligence. They believe that in future people will do creative work, while those who seek automatism will be left to robots. Automation will have a lesser effect on jobs that involve managing people, applying expertise, and social interactions, where machines are unable to match human performance for now.

Jobs in unpredictable environments—occupations such as gardeners, plumbers, or providers of child- and eldercare—will also generally see less automation by 2030, because they are technically difficult to automate and often command relatively lower wages, which makes automation a less attractive business proposition.¹⁵The robotization and automation might still

¹³¹³Report on the work of the State Industrial Property Office for 2017, March 2018, pg11.

¹⁴TECHNOLOGY AT WORK v2.0 The Future Is Not What It Used to Be, Citi GPS: Global Perspectives & Solutions January 2016, Oxford Martin School, pg. 4.

¹⁵Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages, James Manyika, Susan Lund, Michael Chui, Jacques Bughin, Jonathan Woetzel, Parul Batra, Ryan Ko, and Saurabh Sanghvi, November 2017 | Report.

have a higher influence on the structure of the job positions in the future and adjusting the qualifications of the workforce to the requirements of the labor market.

RESULTS FROM RESEARCH ON THE INFLUENCE OF THE PROTECTION OF INDUSTRIAL PROPERTY RIGHTS ON INNOVATIONS, EMPLOYMENT, AND ECONOMIC GROWTH

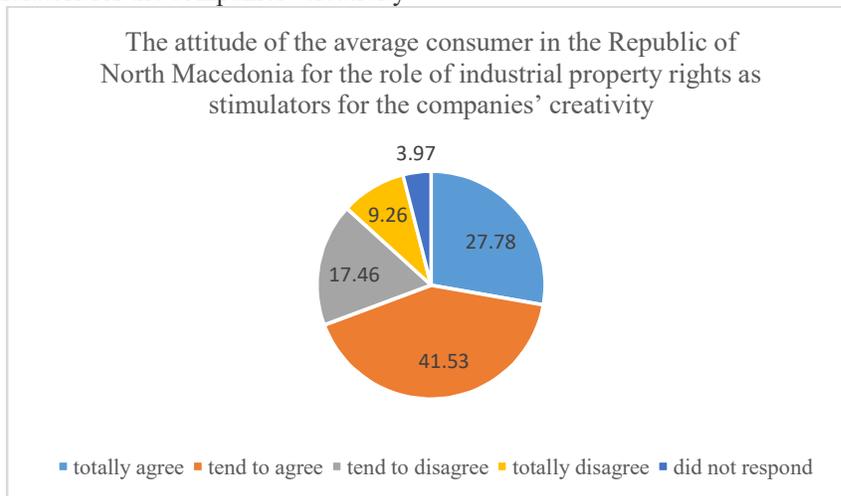
In this part, the results of the part of the questions from the research conducted by the authors in the Republic of North Macedonia will be compared, where 378 respondents replied, who were consumers from the territory of the Republic of North Macedonia at the age from 15-65 years, adequately represented by eight statistic regions. The research refers to the influence of the industrial property rights protection on innovations, employment, and economic growth. The situation in the Republic of North Macedonia will be compared to the situation in the European Union and the perception of the average European citizen according to the Report of the Institute for Harmonization of the internal market of the European Union after the conducted research in 2013.¹⁶By the possibility to ask the questions to the Macedonian individual as a consumer, a real picture was created about the Macedonian vs. European situation in terms of industrial property rights from a consumers' aspect.

According to 69,31% of the consumers -participants in the research in the Republic of North Macedonia, the protection of the industrial property rights is an important prerequisite for the creativity of the companies, while according to every fourth respondent companies would be also creative without the protection of the industrial property rights. Such result is almost identical to the research in the European Union countries, where 68% of the respondents believe that without the protection of the intellectual property rights the companies and individuals would be less creative, and 76% believe that the protection of the intellectual property rights and innovations go hand in hand and cannot exist without one another.¹⁷

¹⁶Between 21 and 27 May 2013, TNS opinion carried out the survey "Property rights in the European Union". The survey covers the population of the respective nationalities of the 28 states, and 26.549 residents older than 15 years were interviewed. European Perception, awareness and behavior, Office for Harmonization in the internal market (trademarks and designs)November 2013, pg.43.

¹⁷Ibid.

Graph 1: Analysis of the attitude of the average consumer in the Republic of North Macedonia for the role of industrial property rights as stimulators for the companies' creativity



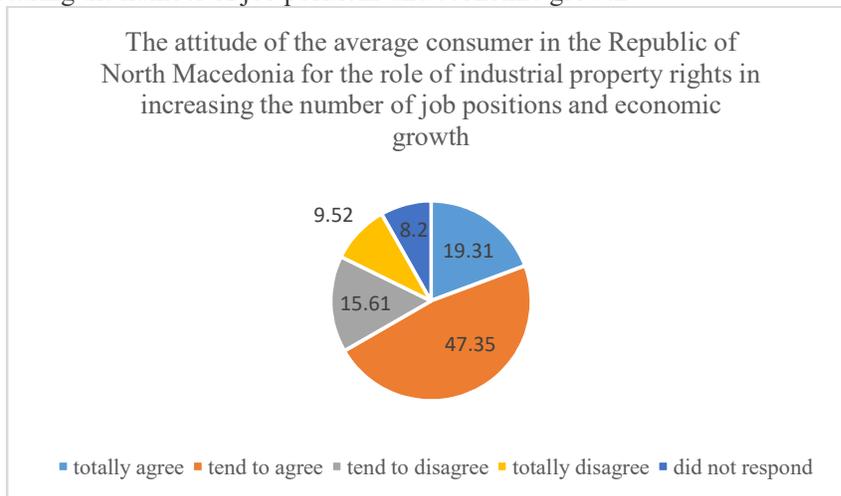
Source: Authors' own research

Age, not income is a factor that significantly affects the results, so the oldest group of respondents over 46 years old shows a significantly higher degree of awareness about the significance of the protection of industrial rights in relation to stimulating the companies' creativity (88% agree), while the percentage is 64% with the youngest group of respondents at the age of 31 to 45.

Almost identical are the results related to the attitude of the average consumer for the relation of the number of industrial property rights and the number of job positions in companies and the economic growth of the country in general. So, 66,67% of the respondents in North Macedonia completely or mostly agree that companies which register industrial property rights contribute more to the increase of the number of job positions and economic growth. In the European Union, that number is 69%.¹⁸ It is indisputable evidence that the dominant part of the consumers sees the industrial property rights as an important right for economic growth.

¹⁸Ibid.

Graph 2: Analysis of the attitude of the average consumer in the Republic of North Macedonia for the role of industrial property rights in increasing the number of job positions and economic growth



Source: Authors' own research

The Macedonian consumer dominantly recognizes the macroeconomic role of the industrial property rights and its influence on economic development and an increase of the number of job positions. Still, the youngest population the least recognizes such function and enhanced information is necessary and introducing to the positive effects of the protection of the industrial property rights in terms of the number of employees and the economic growth. It is obvious that the oldest group of consumers is mostly aware of the meaning of the protection of industrial property rights in terms of stimulating companies' creativity. The awareness of the youngest group of respondents is drastically lower. Consumers agree above the European average that buying counterfeit products demotivates companies in the processes of creating new products, which directly affects the function of the industrial property in terms of increasing the sale and realizing the profit of the business community. The fact remains that the respondents who have the lowest family income and the youngest express the least connection between the processes for creating new products by companies and buying counterfeit products. The situation can be improved only by improving the standard of living of the consumers and raising awareness for the meaning of industrial property rights.

CONCLUSION

Undoubtedly, innovations, protection of industrial property rights have a favorable effect on the economic growth, technological development, and the general wellbeing. According to the global index of innovations, the Republic of North Macedonia does not belong in countries with a high global index of innovations. For that purpose, more activities are necessary for improving the situation of innovation in the country. One of those activities by the Government of Macedonia was the adopting of the Innovations Strategy 2012-2020 which proposes a series of measures for alleviating the growth and innovation, as well as adopting the Industrial property Strategy. The series of measures and activities for strengthening the legal framework in the area of industrial property, the conducting of protection of the industrial property rights, the advancement of the capacities of the individual holders and the business community for protection and conducting the industrial property rights and measures for raising the public awareness and the contributions of the industrial property, would provide security of the legal order and guaranteeing free, smooth and complete realization of the industrial property rights in social relations built on the basis of the principles of the market economy.

It is hard to expect foreign or domestic investments, and by them, a transfer of knowledge and technology, creating new job positions and thus and higher economic growth and decreasing of poverty, in a country which shows tolerance and passive attitude towards violations of the industrial property rights. That is why investing in development and research is mainly directed towards countries which consistently respect the industrial property rights. Attracting investments to which the transfer of technologies, know-how, etc is immanent can be done by taking a whole range of activities by the country, and of course, a guarantee of the industrial property rights is necessary and raising the public awareness for the meaning of industrial property rights.

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