

JURISPRUDENCE

EFFECTIVE SUPPORT OF IP POLICIES FOR PROMOTING INNOVATIVE DEVELOPMENT

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Abstract

The article examines the role of intellectual property rights in the process of innovative development of the economy in modern world. Based on the report of the World Intellectual Property Organization on global innovation index, main trends in the economic development of states are analysed, and the role of innovations in this process are put in the centre of attention. The importance of commercialization of innovations is emphasized. The role of protection of intellectual property rights at different stages of innovation activity is also considered, and the main areas in which innovative development is directly related to ensuring these rights are identified. The article examines the experience of Azerbaijan from the point of view of the abovementioned processes and identifies areas that are most important for the development of the country's innovative economy, according to the author.

Keywords: innovative development, intellectual property rights, commercialization, productivity.

1. GLOBAL INNOVATION INDEX 2022

Every year, the World Intellectual Property Organization publishes a report on the Global Innovation Index, which shows the level of innovation development in approximately 132 countries. The main theme of the report, the latest version of which, at the time of writing this article, was published at the end of 2022, is dedicated to innovation-led development. At the same time, the report seeks answers to pressing questions related to the process of innovative development and highlights existing problems.

One of the most important questions is whether the two main directions of modern innovative development, which means "Digital age wave" and "Deep science wave", can lead to a global economic revival and increased productivity around the world.¹³

Here, arises the question of how can innovative development and productivity growth give new impetus to global economic progress? It is worth noting that innovative development should be understood not only as the production of an innovative product, but also as the condition for development of a system of factors necessary to create innovative potential. Development of society based on economy of knowledge is conditioned with the creation of favorable innovative climate, due to innovation is a key form of transformation of knowledge to a tangible product. Innovative development should be understood not only as the production of an innovative product, but also as the development of a system of factors and conditions necessary to create innovative potential transforming all spheres of the economy and social system on the basis of scientific and technical achievements. In other words, such development involves the implementation of major na-

tional, regional, sectoral, and corporate innovation programs and projects, which together embody an innovative culture in society as a whole.

In its report, WIPO analyzes various important factors for innovation development. For example, what problems do different countries face along the way?

This article analyzes the role of effective protection and enforcement of intellectual property rights in the process of forming a knowledge-based economy. The question is how the state can develop intellectual property rights so that they become a catalyst for innovative development. The article, summarizing these processes, further develops these ideas on the specific example of Azerbaijan, deducing positive trends, shortcomings and development prospects in the country in this direction.

2. INNOVATIVE DEVELOPMENT AND IP

Intellectual property has a direct impact on the process of effective management of innovative production. Stronger IPR regimes and growing numbers of registered property rights for knowledge goods have catalytic functions by fostering creative and innovative activities of enterprises and individuals in the economy with economic incentives.¹⁴ We can say that a competent strategy, combined with a policy of reliable protection and enforcement of intellectual property, becomes one of the key success factors. For this reason, the management of this area goes beyond just economic and technological processes, which is reflected in the massive creation of departments at enterprises for working with intellectual property at enterprises. IP captures and secures the competitive advantage conferred by innovation. This translates into enormous value for which IP is the custodian.¹⁵

¹³ Soumitra Dutta, Bruno Lanvin, Lorena Rivera León, Sacha Wunsch-Vincent, *Global Innovation Index 2022 What is the future of innovation-driven growth?* (15th Edition, First published 2022, WIPO, 2022)

¹⁴ Andreas Bielig, *Intellectual property and economic development in Germany: empirical evidence for 1999–2009* (First edition Eur J Law Econ 2015) 609

¹⁵ Abbott Frederick M. *International intellectual property in an integrated world economy* (Fourth edition, 2019) 182

The most important factor in creating innovations are the conditions for attracting investments into the country and theseir investments' effective regulation. In this regard, the Chairman of the Intellectual Property Agency of the Republic of Azerbaijan, Kamran Imanov, believes that "...industrial property (patents and trademarks), being an integral part of intellectual property, is not an abstract, self-sustaining instrument. The main purpose of intellectual property is to attract investment and implement innovation."¹⁶ The function of intellectual property in this aspect is that rights to intellectual property play an important role in the process of bringing innovations to markets, i.e. in their commercialization.

Intellectual property law determines the framing of an innovative invention within a legal framework and ensures its transition to the market as a product without the threat to the author being subjected to unpunished violation of the rights to the results of his intellectual activity.

In general, to improve global innovative development, society and the business world should be more aware of the importance of intellectual property. It is especially important for states to pay increased attention to the development of the education sector and informing society about the importance of intellectual property rights as a factor necessary for achieving long-term income at the individual, micro and macro levels of the economy. An example confirming the above can be the experience of the European Union. Innovative development of the EU is carried out in the form of real assets of industrial property objects - trademarks and patents for inventions. Firstly, being one of the world centers in the number of applications received, the EU makes a significant contribution to the formation of the global trend of increasing demand for protection in the field of high- and medium-tech goods, being a significant subject of the global trademark market. Secondly, the largest number of trademarks registered by the EU Patent Office in the year under study were classified as 5th and 9th classes of the Nice Classification.¹⁷ The main objects of application of the trademark in these classes (apparatus and instruments for scientific or research purposes, information technology equipment, pharmaceuticals and other drugs for medical needs) directly reflect the success of the implementation of the EU innovation policy. The high potential for scientific and technical cooperation between the EU and third countries can be assessed as a strong point of innovative development. The high demand for patent protection among the member countries of the union is due to the large share of regional trade and close inter-dependence of economies. The high level of development of national IP institutions is positive impact on the scale of use of the EU patent system and acts as a central factor in deepening innovative interaction within the EU.

IP also provides a competitive advantage for innovations. A study published by the United States government estimated that in 2019, IP-intensive industries accounted for nearly 41% of U.S. GDP and directly accounted for 33% of all U.S. employment.¹⁸ The recognition of this value derived from IP also explains the growing demand for IP rights worldwide. However, the thesis that an effective legal regime for the protection of intellectual property is a key factor in the development of an innovative economy is also relative. The fact is that this postulate is not valid for all countries. For example, in the issue of technology transfer between countries, with higher incomes and technological capabilities, intellectual property rights become an important factor in this regard, although they are only one of the variables that affect ITT.

3. PROTECTION OF IP RIGHTS IN AZERBAIJAN

Speaking of the legal framework for the protection of IP rights in Azerbaijan, we can say that the nation has quite comprehensive laws in this field, which cover all categories of intellectual property. On February 2, 2021, the "Azerbaijan 2030: National Priorities for Socio-Economic Development" program was approved by the president. The program includes the following goals:

- Development of the business environment
- Promotion of investments
- Development of the non-oil sector
- Focus on innovations development
- A modern educational system and an environment that enables and encourages innovation.¹⁹

Many of these goals have, as a condition for development of economy, an effective system of IP enforcement. Thus, today Azerbaijan is led by a new model of development, which is oriented to the future and meets the challenges of the modern world. This economic model takes into account the development of the business environment, promotion of investments, focus on innovations, and a social orientation. Today, the Azerbaijani economy is entering the path of innovation development, is developing its non-oil sector, is successfully implementing diversification, and is promoting the brand "Made in Azerbaijan." The intellectual property system is one of the factors that has a real effect on the innovation process in Azerbaijan. It creates the legal foundations of the innovative ecosystem.

First, it is worth looking at the legal and institutional framework of IP protection in Azerbaijan. In Azerbaijan there is a comprehensive system of institutional (the Agency of Intellectual Property, established in 2018, plays the role of a single, specialized body in IP) and legislative protection of IP rights. Laws on the different aspects of intellectual property protection can be split in the Azerbaijani legal system into two groups: 1) laws that provide direct protection of IP and 2) laws

¹⁶ Imanov Kamran *Innovative development and intellectual property*. (First edition 2022, Intellectual Property Agency of the Republic of Azerbaijan, Baku) 56

¹⁷ WIPO IP Statistics Data Center < <https://www3.wipo.int/ipstats/key-search/indicator?tab=patent> > last access 23 September 2024

¹⁸ Andrew A. Toole, Richard D. Miller, Nicholas Rada, *Intellectual property and the U.S. economy: Third edition* < [uspto-ip-us-economy-third-edition](https://www.uspto.gov/ip/us-economy-third-edition) > last access 23 September 2024

¹⁹ "Azerbaijan 2030: National Priorities for Socio-Economic Development" Order of the President of the Republic of Azerbaijan 2021

that provide additional IP protection. Below is the list of IP laws in Azerbaijan:

3.1. Direct Protection of IP

3.1.1. Protection of Traditional IP

- Law on Copyrights and Related Rights
- Law on Protection of IP Rights and to Fighting Piracy

- Law on Patents
- Law on Trademarks and Geographical Indication

- Law on Selecting Achievements

3.1.2. Protection of Non-Traditional IP

- Data Protection Law
- Law on Protection of Folklore Samples
- Law on Protection of Integrated Circuit and Topologies

3.1.3. Additional Protection of IP

- Law on Unfair Competition
- Law on Commercial Secret

Regarding an institutional framework of IP protection, there is the Agency of Intellectual Property of Azerbaijan as mentioned, above. The Agency is the central executive authority in the area of IP rights. It implements state policy in the field of copyright, related rights, intellectual property rights to samples of Azerbaijani folklore, integrated scheme topologies, and databases. It also ensures normative regulation, development of the field of intellectual property, and coordinates activities in this area. The Agency also includes the Patent and Trademark Expertise Center.

4. GLOBAL INNOVATION INDEX 2023 - AZERBAIJAN

To understand the state of innovative development in Azerbaijan and to assess the impact of intellectual property rights on this process, let us turn to some indicators for Azerbaijan indicated in the WIPO report on the Global Innovation Index 2023. Azerbaijan performs worse in innovation outputs than innovation inputs in the 2023 GII Report. For 2023, Azerbaijan ranked 76th in innovation inputs, which is higher than a year before. Moreover, Azerbaijan ranks 104th in innovation outputs and this position is also higher in comparison with the previous year. (GII report 2023). According to GII 2023:

- "Relative to GDP, Azerbaijan's innovative performance is below expectations for its level of development."
- "Azerbaijan produces less innovation outputs relative to its level of innovation investments."
- "Azerbaijan ranks highest in Institutions (42nd), Business sophistication (64th), Market sophistication (85th) and Human capital and research (87th).
- Also noteworthy is the fact that "Azerbaijan ranks lowest in Knowledge and Technology outputs (114th), Creative outputs (100th) and Infrastructure (95th)."²⁰

Thus, it follows from the analysis of certain statistical data that there is a certain gap between innovative

results and innovative opportunities in Azerbaijan. Research, conducted with data gathered from around the world, shows that there is a positive relationship between a nation's level of creativity and use of intellectual property on the one hand and the country's economy on the other; for example, around the world there is a correlation (dependence) between the number of claims to register inventions and level of GDP. The problem in Azerbaijan is that such a correlation is still not noticeable. This is because the level of commercialization of innovations is extremely weak. Patents that provide protection of inventions are in a dormant state and mainly just increase the reputation of the inventor. In addition, we observe a decrease in the number of valid patents, which indicates a weak interest by inventors in patent validity and a weak market demand for existing patents. This harms the incentive factor of innovation development due to the lack of commercialization of industrial property objects.

5. THE ROLE OF THE PATENT ACTIVITY FACTOR IN COMMERCIALIZATION

Since the commercialization of intellectual property rights occurs mainly in the field of innovation and scientific and technological development, it is important to study the role of innovation development's patent activity factor in commercialization, in this case using Azerbaijan as an example.

First, we observe a decrease in the number of valid patents, which indicates a weak interest of inventors in patent validity and a weak market demand for existing patents; this harms the incentive factor of innovation development due to the lack of commercialization of industrial property objects. This can be the result of two conditions. The first one is that there is weak interest of inventors in patent validity, while the second one is weak market demand for existing patents. We have tried to find what could be the reason for these processes. Searching for the answer to this question brings us back to the issue of weak commercialization. The issue is that weak commercialization of industrial property objects also harms the incentive factor in turn. The adoption of a law protecting the rights of inventors along with the law on patents is one way out of this situation. Passing a law that protects the rights of inventors can have a number of positive effects. Firstly, it can encourage innovation. Protecting intellectual property rights can encourage inventors and companies to innovate because they can be confident that their intellectual property will be protected and will not be misused by others. Secondly, such law eventually can cause economic growth, because innovation can lead to the creation of new goods, services, and jobs. Relatedly, protecting inventors' rights can help companies become more competitive in the marketplace because they can protect their innovations from being copied by competitors. Thirdly, it can support the innovation ecosystem. Protecting the rights of inventors can develop the innovation ecosystem, which includes universities, research

²⁰ Azerbaijan ranking in the Global Innovation Index 2023 < chrome-extension://efaidnbmnnnibpcajpcglclefind-mkaj/https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023/az.pdf > accessed 23 September 2024

institutes, and start-ups because these entities can be confident that their research and development will be protected. Finally, it can attract investments to the country because investors can be confident that their intellectual property will be protected. However, it should be noted that the protection of inventors' rights must be balanced with public interests, such as access to knowledge and innovation, so as not to create obstacles to development.

6. ROLE OF IP IN INVESTMENT ATTRACTIVENESS

Intellectual property protection plays an important role in stimulating investment. When companies and individual inventors are confident that their intellectual property will be protected, they are more willing to invest in research, development, and innovation. Here are some ways IP protection can impact investment by increasing investors and companies' confidence that their investments in innovation will be protected from illegal use by competitors. Effective IP protection can foster innovation due to how when companies know that their intellectual property will be protected they tend to invest more in research and development of new products and technologies. Attracting capital is another positive result, as countries with well-developed IP protection systems may be more attractive to investors looking for places to invest in innovative projects. Moreover, competitiveness is increased due to how companies with protected intellectual property can be more competitive in the marketplace, which can lead to increased investment in those companies.

Overall, intellectual property protection helps create an enabling environment for investment in innovation, which promotes economic growth and development. In Azerbaijan support by legal acts regarding intellectual property to increase investment to areas of innovations is developed by legislation. However, enforcement mechanisms of these laws have certain gaps and flaws. Specifically, in the patent registration process there is established procedure that determines how a given company or inventor hires a patent attorney who will review his/her application and approve its patentability. The problem with this is that there are very limited number of patent attorneys in the country, and they are overloaded with incoming applications. At the moment, there are only 12 patent attorneys in the country who are appointed to this position by the Intellectual Property Agency. Given that these same attorneys review applications related to the registration of trademarks, too, the volume of their work is very large, and for this reason the consideration of applications can be delayed for a long time. This leads to the problem where foreign companies that want to register their patents in the country are faced with a very long procedure for reviewing their applications, registration, etc. This, in turn, sometimes causes companies simply to refuse to register their inventions in the country and selling its patented goods there. One way out of this situation is increasing the number of patent attorneys from

the state and enforcing examination-based admission to the position of patent attorney.

A second very important condition of IP protection in a given country are effective judicial mechanisms providing this protection. Effective judicial protection of IP rights in case of infringement is a condition for attracting investors to the field of innovation and creating an effective system for protecting their intellectual rights in the courts. Despite improvements in the judicial system for protecting intellectual property rights in Azerbaijan, there are some challenges and problems such as the length of the dispute resolution process and the need for further improvement of legislation and judicial practice. For this, it is necessary to conduct trainings and refresher courses in IP law for judges and to prospect for and establish specialized IP courts. "Specialized IPR courts often make quicker and more effective decisions. Because judges in specialized courts are generally encouraged to have specialized knowledge, they are able to understand the procedures and technicalities associated with IPR cases."²¹

7. UNIVERSITIES AND INDUSTRY – CORRELATION

The next important point in terms of commercializing the results of intellectual activity and their positive impact on economic growth is the connecting of universities, scientific institutes, and research centers with industry. Commercialization of technologies is a two-way street between universities and industry.

In Azerbaijan, despite the universities having good scientific results, there is a lack of patenting activity and a lack of technology commercialization.

Generally, universities play an important role in the development of innovation and intellectual property. Universities can facilitate this process by promoting research and development due to their being centers of scientific research and their conducting research in various fields including science, technology, engineering, and mathematics (STEM). This research may lead to the creation of new technologies, products, and services that may be protected by patents and other forms of intellectual property protection. Moreover, universities can facilitate technology transfer from academia to industry through commercialization and licensing processes. These processes allow innovations created in universities to be transformed into commercially successful products and services. Universities also can train students and researchers in entrepreneurship and commercialization skills, which would facilitate the creation of new start-ups and innovative companies, as well as facilitate collaboration with industrial partners to conduct joint research and development, which in turn would facilitate the exchange of knowledge and experience between universities and business. Finally, universities can play an important role in supporting regional development through innovation, helping to create new jobs, and improving quality of life. Thus, universities play a key role in the creation and

²¹ Rohazar Wati Zuallocobley, *Study on Specialized Intellectual Property Courts, International Intellectual Property In-*

stitute, 25 January 2012 <https://www.yumpu.com/en/document/read/29991735/assoc-prof-rohazar-wati-zuallocobley-international-intellectual> last accessed 23 September 2024

commercialization of innovations, which contributes to the development of the economy and society as a whole.

Azerbaijani universities have a high level of scientific activity and results. However, there is a lack of patent activity and a low level of commercialization of innovations. An important factor for the development of an innovative economy is the process of introducing innovations into markets. Unfortunately, the practice of applying intellectual property rights as tool for protecting the rights of inventors and the commercialization of technology are poorly developed in Azerbaijani universities. That said, the country has sufficiently rich scientific and educational potential.

8. WHAT IS DONE AND WHAT ARE THE SUGGESTIONS FOR FUTURE IN THIS REGARD?

First, we would like to draw attention to the achievements in this area that increase the development of innovative potential in universities.

- Universities and scientific research institutes have become public legal entities.

In doing so, universities can act as intellectual property owners.

- The Commercialization and Transfer of Technology Center under the supervision of Intellectual Property Agency of the Republic of Azerbaijan was established. (2022)

The Center's main aim is commercialization of research results in institutions and universities and the establishment of a connection between science and industry.

- Technology and Innovation support centers have been established under the supervision of Intellectual Property Agency of the Republic of Azerbaijan.

These centers' aim is to provide patent information to participants of the innovation process and, by this, increase innovation potential.

9. SUGGESTIONS FOR DEVELOPMENT OF IP COMMERCIALIZATION

In conclusion, we would like to emphasize, using Azerbaijan as an example, measures that could create significant prerequisites for the development of commercialization of the results of intellectual activity and innovative potential in a given country. Below are some important points, for Azerbaijan in particular, that may raise the scientific activity at the university level and stimulate the commercialization process for innovative results in universities and research institutes:

- Formation of universities and scientific-research institutes' official legal position on IP issues (IP policy)
- Establishment of rules for distribution of income gained by commercialization
- Giving preference to those intellectual property results which have commercial potential

- Increasing IP literacy, culture, education, and business skills

- Implementation of measures related to the availability, openness, and attractiveness of research to venture capital owners and potential investors of private capital

- Developing technology transfer between universities and industries by establishing clear IP policies

All these factors, if implemented correctly, can serve to ensure that knowledge eventually leaves the walls of universities and becomes an object of trade, thereby contributing to the development of the overall economic growth of the country.

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