Legal problems of technology transfer in Russia

T F Kryaklina[1], S V Rettikh[2*] and S V Shirokostup[2]

[1] Altai State University, 61 Lenina prospekt, Barnaul 656038 Russia
[2] Altai State Medical University, 40 Lenina prospekt, Barnaul 656038 Russia

E-mail: rettihsv@agmu.ru

Abstract. The concept of "technology transfer" has many meanings. In a number of cases, the content of this term is narrowed down to issues of turnover of rights to the results of intellectual activity, in others, the content of the term is expanded to any form of knowledge transfer, production methods, material carriers to a wide range of users. Technology transfer is one of the integral components of modern scientific and technological progress. In the light of constitutional norms on guarantees of unity of economic space, freedom of technical activity, and protection of intellectual property by law, the problem of legal regulation of relations on the transfer of rights to technology seems to be relevant. The importance of the development of technology transfer in the context of the transition to an innovative and sustainable economy has long been recognized at the level of public policy, it is dictated by the needs of market participants and representatives of the scientific infrastructure. The export of technology is of special national interest. At the same time, this is a priority of the state innovation policy of the Russian Federation. In conditions of the economic crisis, the innovation system and the legislation of Russia should solve the issues of ensuring the output of domestic innovative technologies to world markets. The scientific novelty of the research is the rationale for developing the problems of the legal regulation of technology transfer in Russia. In particular, we would like to mention the following: a legislative definition of the concept "technology"; mechanisms for transferring rights to them; developing of legal relations between the owners, investors, and production; improving the existing legal institutions, such as blame; creating new requirements of innovation activities related to the use of electronic financial technologies, telemedicine services, the Internet, new regulatory objects (sites, domains, blogs, blockchains, etc.) and the emergence new structures (startups, venture capital funds, technology transfer centers, etc.).

Keywords: technology, technology transfer, legal regulation, rights

1. Introduction

The intellectual property, economic and civil law circulation of rights to the results of intellectual activity, their commercialization, including through foresight, are becoming increasingly important today. Intellectual innovations become the defining trends of the future development of Russia. The President of the Russian Federation focuses on the need to reduce the share of the commodity sector and increase the productivity of science-intensive, advanced scientific and technological sectors of the economy, the growth of their export activity. All this is impossible to create without technology transfer, the development of legal relations between rights holders, investors and production.

The subject of the research is the contradictions between the established legal institutions in Russia and the emerging relationships both within and between innovation structures, the rationale for the need to transform existing ones and the rationale for the need to form new legal institutions that adequately regulate these relations.

2. Materials and Methods

Research methods: analysis of domestic and international legal documents relating to intellectual activity and innovation; methods of comparative studies, modeling, expert assessments.

3. Results

Russia is on the verge of big changes. It is no coincidence that in the Government the bills are on the introduction of parallel imports and innovative intellectual property. In this regard, the ratio of copyright and antimonopoly legislation is becoming the main issue for the solution of which the limits of its inviolability must be determined. The results of the study of statistics on the consideration by courts of general jurisdiction of cases on the protection of intellectual rights indicate that the number of cases in this category, the proceedings for which were completed, decreased in 2014 compared with the same figures for 2012-2013. For instance, 770 cases were considered with a decision (including 596 cases with the satisfaction of the requirement) in 2012, 636 cases were considered (of which -475 cases were satisfied with the requirement) in 2013, then 579 cases of this category were considered with a decision in 2014.

In the world, a sufficiently large number of innovative foresight networks exist, using different models of organization of their activities, management, financing. For example, the European IRC network was created in 1995 on the initiative and with financial support from the European Commission. The purpose of the network is to assist organizations in the field of technology transfer. The experience of the scientific and technological company “Merk” is interesting. Back in the 19th century, the company opened its representative office in Moscow. Recently, the company is actively developing projects related to the transfer of technologies in the field of life scienceб providing the necessary technological solutions, equipmentб and materials for biotechnological research, biopharmaceutical production and laboratory work.

On November 27, 2018, in Russia, a memorandum of cooperation between the intergovernmental organization “International Center for Scientific and Technical Information” and the autonomous non-profit organization “Agency for Technological Development” was signed. According to the agreement, the partners will assist each other in the formation of the “National Centers for Technology Transfer.” Preparation of projects of the best available technologies for transfer and localization also implies joint work in the areas of attracting funding, creating partnerships, attracting government support measures and embedding these projects in scientific and technological platforms. It is also planned that the partners will organize the provision of information compatibility of databases, as well as joint activities for the exchange of scientific and technological information are planned. A bilateral treaty provides for joint participation in seminars and conferences on the promotion, localization, and distribution of available technologies; determines directions and forms of further interaction. The main task of the international foresight centers is to provide information, analysis, consulting, and organizational support for international cooperation in the field of science, technology, and business. The International Center for Scientific and Technical Information acts on the basis of the Regulations, performs the tasks assigned to it together with the interested information bodies of national systems and individual scientists and specialists of the Member States on the basis of treaties and cooperation agreements.

Thus, from a legal point of view, a transfer is a complex institution that includes the norms of civil, tax, customs, financial, and administrative law. In general, it should proceed from the conceptual model of a foresight abroad, which has not yet been created. There is no legislative definition of technology in the Russian legislation. According to the analysts, only one out of 500 lawyers will keep their jobs in twenty years. Artificial intelligence will take on the roles of the rest. Under these

conditions, the legal community has no choice but to take the head of rapidly occurring changes and review the mechanisms for the legal regulation of technology transfer in accordance with the requirements of the new technological order and the possibilities of automating law. In the new technological structure, the place of professional lawyers has yet to be determined.

In March 2017, the Digital Economy Legislative Council was created. Its main tasks are the creation of a regulatory framework for relations in the "man-artificial intelligence" system. In the State Duma, a number of bills are being drafted aimed at improving legislation in the field of copyright protection and ensuring technology transfer. Among them there is a project on the distribution and transfer of rights to the results of intellectual activity created at the expense of the state budget, and a project on simplifying the procedure for terminating the right to trademark. Currently, in Russia, the model of "pushing technologies" is considered as the main one in the implementation of the "Concept 2020". Its essence is reduced to the cooperation of intellectual, financial, and industrial areas at all stages of innovation commercialization.

4. Discussion

In the conditions of economic and political recession in society, for the development of the national economy, the intensification of innovation activities and government assistance for the commercialization of intellectual products is required. Technology transfer is one of the most important components of innovation processes, factors of economic stabilization in the state. Recently, his problems have become debatable among domestic and foreign researchers.

In our opinion, two groups of factors affect the implementation of foresight projects, such as:

1. Insufficiently active development, untimely the organization and stimulation of innovation processes, non-systemic participation of the country in the international exchange of technologies;
2. Untimely legislative regulation of the definition and protection of intellectual property rights of participants in the innovation process.

The first group of factors should also be attributed: reduction and even elimination of high-tech production, including military orders; reorganization of specialized research and design institutions; a relative reduction in the share of innovative products in its total volume and a decrease in the intellectual activity of enterprises; the formation of volumes and commodity structure of exports mainly due to raw materials; the lack of a single federal authority on foresight and others. The development of technology transfer is hampered due to the lack or low demand for relevant scientific and technological developments from the state and economic entities of the private sector of the economy. The volume of state order for the latest technology also remains problematic.

The second group of factors include: the lack of a modern legislative base on technology transfer issues; imperfection of the system of intellectual property protection due to deficiencies in the legal framework; high costs of patent clearance; insecurity of public and free access to the international patent classification of intellectual property, which contains not only their description, but also the characteristics and advantages of innovations. Therefore, domestic innovators and researchers do not always have the opportunity to receive information about already developed and patented analogues and their technical capabilities, which makes it difficult to orient in the international technology market; lack of regulated valuation of intellectual property objects and their reflection.

The presence of one of these factors, not to mention their combination, becomes a serious obstacle to the implementation of projects related to technology transfer.

5. Conclusion

Thus, the proposed article considers the need for organizational and legal support of the process of transforming the idea of a scientific result into an innovation (technology); proves the need for the development and introduction of the concepts of "technology" and technology transfer (foresight)" into the Russian legislation for their most adequate legal regulation; considers the need for a

comprehensive development of legal regulation of the transfer of Russian technologies abroad, the creation of technological infrastructure.

Reducing the impact of these negative factors and trends is associated with the creation of special institutional structures: improving the legislative base in the field of technology transfer and the development of state policy in the field of commercialization of copyright results; providing state financial assistance to the development of the technology market infrastructure by forming market mechanisms, attracting enterprises of various forms of ownership to the use of registered intellectual property.

6. Acknowledgments

The authors are grateful for their contribution to the research management of the Altai State Medical University.

References

[1] GOST R 57194.2-2016 Technology Transfer. Intellectual performance

[2] Council of the Eurasian Economic Commission 2018 *Decision "On the Concept of the creation and functioning of the Eurasian technology transfer network"* (March 30, 2018 No. 23) Available at: http://docs.cntd.ru/document/557013895

[3] Krivosheev S V 2016 The main problems of the use of technology transfer in Russia in the context of the economic crisis In materials of the V International Scientific Conference: *Problems and Prospects of Economics and Management* (pp 112-114) (St. Petersburg, Russia: Svoye izdatelstvo) Available at: https://moluch.ru/conf/econ/archive/219/11503/ (Accessed 14 01 2019)

[4] State Duma of the Russian Federation 2008 *Federal Law "On Transfer of Rights to Unified Technologies"* (December 25, 2008 No. 284-FZ) (dated December 6, 2011)

[5] State Duma of the Russian Federation 1996 *Federal Law "On Science and State Science and Technology Policy"* (August 23, 1996 No. 127-FZ, revised May 23, 2016) (with amendments and additions, entered into force on January 1, 2017)

[6] Zimenko E Yu, and Yanova E A 2016 Formation and management of the transfer of technology In O N Shirokov Ed Materials of the IX International Scientific and Practical Conference: *Scientific Research: from Theory to Practice* (pp 281-285) (Cheboksary, Russia: CNC "Interactive plus")

[7] Rettikh S V 2017 Indicators for assessing the quality of innovative activities of a professional educational institution In E D Rodionov Ed. *Collection of scientific articles of an international* conference "*Lomonosov Readings in Altai: Fundamental Problems of Science and Education"* (pp 1901-1906) (Barnaul, Russia)

[8] Ageeva E P 2014 Problems of technology transfer in Russia In *Innovations in Science* **3**(28) pp 10-15