

Transformation of Support Measures for Commercialization of Intellectual Property Facilities During the COVID-19 Pandemic

Anna A. Ippolitova , Vera Yu. Tyurina 

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Authors' credentials:

Anna A. Ippolitova, Candidate of Economics, Executive Director of Nonprofit Partnership, NPP Akin, The Venture Fund of Saratov Oblast, Russian Federation
(ippolita@yandex.ru)

Vera Yu. Tyurina, Doctor of Economics, Vice President of NPP Akin, The Venture Fund of Saratov Oblast, Russian Federation,
(vut1954@mail.ru)

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Abstract: The article discusses the weak and promising points of growth of the Russian market for the commercialization of intellectual property. Conclusions are drawn on the transformation of support measures in the field of intellectual property facilities during the COVID-19 pandemic.

Keywords: intellectual property, innovation, digital economy, patents, venture capital financing.

Investments in Intellectual Property in Russia

According to the Federal State Statistics Service of the Russian Federation (*Rosstat*), the accounting for the volume of investments in intellectual property (IP) in Russia is kept sufficiently up to date: the latest available data on this indicator are currently available for 2018, and in absolute terms, these investments amounted to 551 billion rubles [1].

In 2018, spending on research and development (R&D) increased by 5.2%, which significantly exceeded the growth rate of gross domestic product (GDP) worldwide. Venture capital and use of intellectual property facilities (IPF) have reached high levels.

The coronavirus (COVID-19) pandemic has caused an unprecedented downturn in the global economy in 2020. Many enterprises decided to decrease the amount of funding for R&D, which has directly caused the reduction of both innovation activities and rates of IPF creation.

Many governments do not prioritize innovation and R&D as part of new stimulus packages. The only exception is the healthcare sector: colossal funds are directed to developing vaccines against the coronavirus. Since the beginning of the COVID-19 pandemic, the Federal Service for Intellectual Property (*Rospatent*) of the Russian Federation has received over 500 patent applications for the inventions designed to combat the infection [2].

Both intangible and tangible assets could be quite expensive for their rightsholders to create. During the initial creation of an IPF, significant risks arise, which is reflected in the possibility of using such assets of the organization as collateral for any transactions. However, in combination with tangible assets, such difficulties can be avoided.

Any innovative idea generates certain value, which is implemented in the creation of more than just fundamentally new products or services. In other words, the application range of accumulated intellectual potential is much wider than traditionally assumed. It is natural to conclude about the importance of investments in intangible assets and creation of opportunities in the field of financial services for investments in development and commercialization of IPFs.

Despite the fact that the legislation in the Russian Federation provides for loans secured by IP, start-up technology entrepreneurs virtually do not use this opportunity – partially because they are afraid of the risk of losing the pledged rights to innovative solutions due to high interest rates on loans.

A subsidy to reimburse the costs of loans secured against IP has become one of the support measures on the part of the State. The subsidy scheme is determined by the Resolution of the Russian Federation Government dated April 30, 2019, No. 533, “*On approval of the Rules for provisioning the subsidies from the federal budget to small and medium-sized businesses to reimburse the costs associated with obtaining loans secured by intellectual property rights*” [3].

Small and medium-sized businesses may receive subsidies to reimburse the costs of loans secured by IP. To obtain such loan, it is necessary to register the rights over the results of intellectual activity – *i.e.*, to obtain a protection title for an IPF and assess the value of such rights.

It should be noted that the pledge of rights to the results of own intellectual activity is virtually the only opportunity for start-ups to obtain a loan for the development of a technology business. This is due to the fact that such enterprises initially do not have any assets. Start-ups own solely scientific developments and technological solutions. IPFs as collaterals for a loan would allow small companies to receive capital investments to launch innovative solutions. Because of subsidies, loans secured by IP rights should become more affordable for small and medium-sized businesses.

IP, to which exclusive rights are registered, may be given as collateral for the loan. Their pledge is regulated by the Article 358.18 of the Civil Code of the Russian Federation [4].

We would like to emphasize that the development of this field is hampered by the difficulties arising with the assessment of IP. When evaluating IP, organizations most often indicate its value on a cost basis, but there is no active circulation of the results of intellectual activity on the market. The courts of law do not have a unified methodology for determining the value of intangible assets when calculating compensation in favor of rightsholders. Therefore, banks are reluctant to take IP into account when evaluating borrowers: the practice of IP pledging is not common on the Russian market.

Besides, *Rospatent* prepares proposals on tax incentives for inventions in Russia [5]. A new measure of tax incentives for innovation is proposed in the form of income tax reduction for companies that generate a product protected by a Russian patent, whereas in the countries of Europe and Asia, this tool has already established itself and proved its effectiveness.

According to the state of the venture capital investment market and the liquidity of patent rights, Russia belongs to the category of countries, in which lending secured by patent rights would develop only with the support by the State, which removes a significant part of the risks from banks. As the worldwide experience demonstrates and the data of *Rospatent* confirm, in the absence of an instrument of state support, the market for lending secured by patent rights will

The value of intangible assets is recognized all over the world, but their potential is still not in demand on the part of Russian financial institutions due to the absence of a developed market of liquid intangible assets in Russia.

Another obstacle to obtaining this type of support is the lack of a unified register of banks providing this service. Large enterprises or research institutions wishing to obtain a loan secured by their IP should apply themselves directly to the banks of their interest. In order to receive a subsidy, small and medium-sized businesses must independently apply for a loan from banks that are partners of the Federal Corporation for the Development of Small and Medium Enterprises (SME Corporation).

The consequences of the current crisis can have a profound effect on start-ups, leading them

to rethink their funding sources for innovation. Innovative technologies cannot develop without investment funds. In 2020, investors were very careful when considering the business ideas of start-ups, which resulted in the stagnation of the venture capital market.

Venture Capital Financing

Venture capital financing is a source of capital for direct investment and a form of investment in the development of private companies. Venture capital is provided for patenting or introducing an idea, as well as for financing several subsequent stages – up to the product launch in commercial production. Further participation in the project is called private funding. Venture capital investment is possible in both formal and informal sectors. In the first case, venture capital funds become the main instrument, pooling together the resources of multiple investors: private and public funds, corporations, and individuals. Participants in the informal venture capital sector are private investors, the so-called *business angels*.

Venture capital financing is characterized by an increased degree of entrepreneurial risk, as well as specific methods of its distribution among the participants of the venture process: the investor and the entrepreneur. The main result of such financing is not so much profit as a sharp increase in the value (capitalization) of a company that has managed to implement a certain technical novelty, and thereby ensure for itself a significant market advantage over potential competitors. This type of investment financing allows attracting additional start-up capital at the early stages of the company life cycle, when it has neither a strong position in the market, nor sufficient financial resources, nor liquid collateral assets; that is, when traditional credit and exchange-based forms of raising capital for it are essentially not available.

In most countries, the development of venture business is considered the most important factor and priority of innovation policy. Cooperation between the State and private investors in the creation of venture capital funds is carried out in two key areas:

- Financing of venture funds created in the country with the participation of state capital from the federal budget or extrabudgetary funds;

- Participation of the State and regional authorities in the management of venture funds. The forms of such participation are quite diverse.

At the most problematic stage of the innovation process – between scientific developments and serial production – the State becomes actively involved in the implementation of the venture financing model. In Russia, according to the Russian Venture Capital Association (RVCA), over 90 venture funds are registered [6]. The list of venture funds in Russia in 2020 [7] includes 79 market participants who have made at least one investment in 2018–2019. It is they who are currently taking an active part in financing innovative projects. Therefore, in addition to creating institutions of legal and financial support, the role of the State is also in the formation of demand for innovations, particularly through public procurement. It is planned to invest over 4 trillion rubles through this mechanism annually, for which it is necessary to adopt amendments to the Law on Public Procurement, so that the main criterion is not the price, but the quality of the product or service.

Causes of Low Innovation Activity in Russia

In order to gain the attention of venture capital, we need mechanisms for selecting and nurturing projects that could find a potential market consumer. The key factor in attracting venture capital financing is the assessment of potential profitability of the project, as well as of the increase in the company value.

This explains the fact that the Russian National Network of Business Angels, *Private Capital*, considers projects with a projected profitability of at least 35–40%. Moreover, this value is valid for already running projects that need investments to expand their business. For projects in earlier stages, profitability should be higher. Currently, these requirements are met by just 3–5% of all innovative projects nationwide, which constitutes the *first cause* of the low innovation activity in the Russian Federation.

Venture capital funds choose products that provide base to the company and allow them to quickly transform in the conditions of COVID-19 pandemic. The emphasis is shifting towards projects related to telecommuting and distance education. Industries, such as travel, have been hit hard, whereas the e-commerce sector has experienced a significant recovery.

Thus, the low attractiveness of venture investment as an investment tool for individuals is the *second cause* for low innovation activity in Russia.

In addition, low liquidity of venture investments should be noted. It is largely due to the insufficient development of the stock market in Russia, which is considered the most attractive way for venture capital funds to exit from invested enterprises. In Russia, at the moment, the most common way of venture capital funds exit is the sale by an investor of his share to a strategic partner operating in the same market.

The *third cause* of the low innovation activity in Russia is the inadequacy of legal institutions, in particular, lack of regulation of the legal IP protection, which necessitates the differentiation of the product ownership and its subsequent commercialization.

The economic crisis made its own adjustments to formation of the innovation system. Nearly all innovative projects are designed for a long-term existence, while banks, in conditions of an outflow of funds, can no longer provide long-term loans: hence, many innovative projects are simply denied funding. Besides, if the existing venture funds in conditions of instability could still continue working, the creation of new funds is associated with great

difficulties. Government venture funds are not always willing to take risks. One of the most pressing problems remains the lack of professional investors in the field of innovation. During the crisis, many companies intending to conduct advanced training of the personnel in the field of innovations temporarily suspend such programs, which automatically leads to a halt of the overall innovation activity in the region.

Conclusion

Summarizing the above, we can identify promising areas for improving the socioeconomic institutions of innovative development:

- Establishment of a legal framework for development of innovative activities;
- Concentration of efforts and resources on implementation of priority innovative projects;
- Formation of attractive conditions for investment in innovative activities;
- Generating conditions for developing the system of training and retraining the personnel in the field of innovation, along with scientific and technical entrepreneurship;
- Information support for innovative activities.

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