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Защита интеллектуальной собственности на наукоемких предприятиях в процессе реализации стратегии импортозамещения¹

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В статье рассматриваются особенности защиты объектов интеллектуальной собственности наукоемких предприятий в контексте реализации стратегии импортозамещения. Раскрывается роль правовой охраны инноваций в обеспечении технологического суверенитета государства и конкурентоспособности отечественных разработок. Анализируются механизмы защиты интеллектуальной собственности, включая патентование, лицензирование и режим коммерческой тайны, а также их влияние на устойчивость процессов импортозамещения. Выявлены ключевые проблемы, связанные с недостаточной правовой осведомленностью сотрудников инновационных предприятий и рисками утечки технологий.

Ключевые слова: интеллектуальная собственность, инновации, наукоемкое предприятие, импортозамещение, патент, технологический суверенитет.

The post-2020 global economic fracture has established the strategic importance of technological sovereignty and intellectual property independence. In the context of current global geopolitical tensions and disruptions in supply chains, the Russian Federation has prioritized import substitution as a core component of industrial economic policy. For innovative and high-tech enterprises, success in this area depends not only on developing their own technologies but also on ensuring robust intellectual property protection. Intellectual property serves both as a legal security instrument and as a company's strategic asset that enhances technological competitiveness, supports commercialization, and attracts investment.

Various authors highlight the connection between IP governance and innovation resilience in national economies. In the context of import substitution, IP protection ensures that enterprises can take control over critical technologies, reduce vulnerability to foreign «non-friendly» suppliers, and secure a larger share of the domestic market through patented developments. In this regard, one should acknowledge the legal frameworks and core IP protection mechanisms that are crucial under an import substitution policy.

First of all, patent protection should never be overlooked. Patents are the most evident and enforceable mechanism for securing an innovative product. This instrument provides exclusive rights to prevent unauthorized use and helps monetize a company's R&D results. Effective patent strategies involve not only applying for patents but also managing portfolios strategically—aligning them with business objectives and licensing opportunities.

Secondly, trade secrets and confidential know-how play a key role in company management. Trade secrets are becoming increasingly important for high-tech enterprises that rely on process innovations, data, and algorithmic methods. International practice defines trade secrets as confidential business information that provides a competitive advantage. Maintaining their protection requires systematic organizational and technical measures—such as nondisclosure agreements, restricted access regimes, and digital monitoring.

Thirdly, copyright and software protection are extremely important. Software and design documentation fall under copyright law. For industrial enterprises, software-based tools (CAD/CAM, automation systems) represent highly important IP assets that require precise documentation

and licensing. Open-source risks must be managed within enterprise compliance programs. Without proper control, these assets may come under significant competitive pressure.

Finally, it is vital to keep licensing and contractual management under strict regulation. Contractual frameworks play a crucial role in cooperation between R&D entities, subcontractors, and manufacturing partners. Licensing and joint-development agreements must clearly define ownership, usage rights, and confidentiality obligations. It is therefore essential to continuously study both domestic and foreign markets in order to stay up to date with trends in IP management.

Since structured IP contracts significantly reduce the risk of technology leakage and legal disputes, it is important to understand the specific challenges of IP protection under import substitution strategies. Innovative companies face daily challenges when implementing IP strategies under such conditions:

the accelerated pace of the innovation cycle shortens the time available for IP documentation and legal filing;

increased reliance on domestic suppliers exposes firms to potential IP risks due to a lack of IP culture or inadequate legal enforcement;

sanctions and export restrictions complicate international patent cooperation, limit access to foreign patent systems, and force companies to develop national or regional IP portfolios;

weak technology transfer mechanisms hinder the commercialization of protected innovations, reducing the practical benefits of patent protection.

Practical studies show that companies with implemented and integrated IP management systems achieve better innovation performance and stronger market positions.

Despite numerous effective government policies aimed at sustainable economic growth, Russian sovereign innovations still face various problems. Insufficient IP literacy among engineers and managers limits their ability to identify and properly document potentially profitable and patentable solutions.

While employees suffer from limited time and lack of knowledge, managers often implement inadequate rules and policies for managing intangible assets. Only 30 to 40 percent of Russian businesses maintain sustainable and reliable accounting and valuation mechanisms for managing IP portfolios.

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Moreover, frequent collaborations with foreign firms or untrustworthy suppliers may result in significant technology leakage. These risks should be carefully assessed in order to prevent major failures in engineering, production, logistics, and supply chains. A lack of strict and robust confidentiality measures can substantially increase this risk.

The last but not least, Russian companies often struggle with weak IP enforcement and limited access to international patent databases. While the judicial and administrative system's lack of capacity to protect rights efficiently is primarily an internal problem, access restrictions should be highlighted as targeted actions implemented by Western bloc countries. Their limiting policies aim to slow down the development of the Russian innovative sector of the economy.

Given the challenges and problems outlined above, it becomes clear that the existing IP protection processes in highly innovative Russian companies require systematic and comprehensive enhancement. While legal enforcement mechanisms such as patent law and various government-issued regulations provide a solid basis for a company's future development, poor internal IP management and a limited number of external collaboration channels may lead to a decline in overall effectiveness. Therefore, the following recommendations for strengthening IP protection have been developed to address practical issues.

First of all, companies should focus on establishing an in-house IP management office. It would be responsible for overseeing the IP portfolio, administering contracts, and managing trade secrets. This R&D unit should protect and advance the company's strategic approach to handling IP and maximizing future benefits.

Next, the enterprise should develop clear, easy-to-understand corporate policies and compliance systems for handling confidential information, nondisclosure agreements, and R&D results. Even a minor procedural failure can lead the entire manufacturing process in the wrong direction.

In our view, adopting modern patenting strategies focused on key technological domains should be a top priority for the company's senior

management. One should not underestimate the importance of patent strategies, which may guide the company toward a prosperous future.

In addition, digital IP management systems that are successfully implemented and integrated with ERP/PLM operational tools for real-time tracking of innovations should not be overlooked when suggesting improvement measures.

Furthermore, offering IP education courses may be a valuable addition to an already established IP management program. Regular team training sessions are essential as well. Inventor bonuses can help attract top-performing specialists, as can publicly available company performance indicators. All these factors contribute to improving IP outcomes.

Finally, a company should always remember that cooperation with national IP and innovation institutions is of great importance. Governmental bodies such as patent offices, R&D institutions, and technology transfer networks provide access to additional funding and external expertise.

On this basis, we conclude that intellectual property protection is a vital cornerstone for any Russian industrial company. Only through achieving technological sovereignty in the era of import substitution can we contribute to the steady improvement of the national economy. Moreover, intellectual property serves as a highly valuable strategic resource for innovative companies, securing innovation-driven growth. By developing an educational system, implementing internal policies, and maintaining cooperation with governmental institutions, companies can build a profound and well-structured culture of IP management. Such measures correspond to best practices outlined by WIPO and the OECD and contribute to strengthening the ecosystem of Russian innovative enterprises. The aforementioned approaches represent advanced techniques that can transform import substitution policy from a reactive measure into a long-term strategic framework. Ultimately, this policy may become a key driver of the nation's technological competitiveness.

Примечания

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English version

Protection of intellectual property at high-tech enterprises in the process of implementing an import substitution strategy

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This article examines the specifics of protecting intellectual property at high-tech enterprises in the context of implementing an import substitution strategy. It highlights the role of legal protection of innovations in ensuring the state's technological sovereignty and enhancing the competitiveness of domestic developments. The study analyzes mechanisms for safeguarding intellectual property, including patenting, licensing, and trade secret protection, as well as their impact on the sustainability of import substitution processes. Key challenges are identified, such as insufficient legal awareness among employees of innovative enterprises and risks related to technology leakage.

Keywords: intellectual property, innovation, high-tech enterprise, import substitution, patent, technological sovereignty.