Legal perspectives on innovations and intellectual property rights

Maksym Sukhanov | Ihor Hlobenko | Juliia Filonova | Nadiia Fedorova | Vitalyi Yarotskiy

Abstract The article focuses on the legal aspects of innovations and intellectual property. The relevance of the study arises from the fact that innovations are increasingly affecting human life. At the same time, the issue of copyright is quite acute since intellectual property in the modern information space is a resource that must be protected very carefully. Therefore, the legal aspects of innovations and intellectual property require a comprehensive study. The following research methods were employed in this paper: description, analysis and synthesis, comparison, generalization, and modeling. The article describes the importance of innovations at the present stage. It defines the essence of the "innovations" concept. The authors reviewed normative legal acts representing the legal aspects of innovation. They include the Law of Ukraine "On Innovation Activity," the Law of Ukraine "On Priority Areas of Innovative Activity," the Law of Ukraine "On Priority Directions of Science and Technology Development," the Law of Ukraine "On State Forecasting and Development of Programs of Economic and Social Development of Ukraine." The role of the state in regulating innovations in the legal field is disclosed. Normative legal acts in the field of intellectual property were systematized. The DSTU 3574-97 Patent Formulary is analyzed, covering its basic provisions, the procedure for compilation and design, as well as the DSTU 3575-97 Patent Research, including its basic provisions and the procedure for conducting it. The authors also analyzed the Law of Ukraine "On Effective Management of Property Rights of Rights Holders in the Field of Copyright and (or) Related Rights," the Law of Ukraine "On Copyright and Related Rights," the Constitution of Ukraine, the Civil Code of Ukraine, Presidential Decree No. 299/2017, the Resolution of the Cabinet of Ministers of Ukraine "On the Formation of the Council on Intellectual Property Issues," and the "Patent Law Agreement."

Keywords: copyright, state, the Law of Ukraine, intellectual property, normative legal act, legal regulation

1. Introduction

Nowadays, much attention is given to the issue of innovations. In particular, cutting-edge technologies are constantly being implemented in our lives, allowing us to witness our existence and functioning modernization. However, innovations, which can take the form of inventions or design models, are objects of economic activity with a material form. Accordingly, innovations can be seen and felt, as even when they are virtual, they are reflected in specific means of access to something (Bassli, 2020, p. 23).

At the same time, intellectual property is an aspect that requires more detailed investigation. This is directly related to the fact that intellectual products mostly do not have a specific form but are immaterial. Therefore, determining who created them can be a complex process. In this regard, it is vital that what constitutes intellectual property is not disseminated without the owner’s consent (Khatniuk et al., 2023).

All of this attests to the relevance of this research, particularly the place of legal aspects in innovations and intellectual property. Consequently, the issue of legal regulation of such matters is quite pertinent.

This study aims to analyze the legal aspects of innovations and intellectual property. The research is grounded in the fact that digitalization has an increasing impact on our lives. Therefore, the growth in the volume of intellectual products and their types cannot but affect the growing role of legal protection of innovations and intellectual property.

Following the aim of our research, we have set the following goals:

- to characterize the legal aspects of innovations;
- to systematize legal acts in the field of intellectual property;
to analyze the legal regulation of intellectual property.

2. Literature review

The issues of legal aspects of innovations and intellectual property have been explored by such scholars as O. Bilovodska (2021), N. Deltsova (2020), K. Hickey (2022), J. Michael (2020), and V. Tyshchenko (2023). In their opinion, legal regulation of innovations and intellectual property is currently an important and controversial issue as the scope and variety of intellectual products expand.

N. Deltsova, in particular, defines legal aspects as crucial when creating innovations and intellectual products (Deltsova, 2020, p. 25). Specifically, in the current era of active digitization, more intangible products, such as ideas with significant commercial value, are being created. This also includes virtual earning systems and other products existing within the Internet network. Therefore, authors may lose commercial benefits if owners’ rights to such products are not sufficiently protected. This impacts the overall value of such ideas.

It is also essential to highlight the views of V. Tyshchenko (2023, p. 28). She emphasizes that legal aspects of innovations and intellectual property are fundamental methods for protecting the copyright of enterprises operating in the small and medium business sector, including the activities of individual entrepreneurs. Innovations in such enterprises are valuable resources. Also, they may constitute a significant portion of expenses or profits, so their protection needs to be particularly careful.

Therefore, the analyzed studies are sufficient for conducting research. Their quantity and the provided material suggest that foreign scholars predominantly study this issue. In addition, the problem of innovations and intellectual property becomes acute during the period of digitization and the information society.

3. Methods

The following research methods were applied in this paper: description, analysis and synthesis, comparison, generalization, and modeling. The description method was used to present the essence of innovations. The method of analysis and synthesis was employed to highlight the existing scientific studies on the subject matter of the study. The method of comparison was utilized to compare the legal acts in the field of intellectual property. The method of generalization was used to reflect the main research findings.

The modeling method was applied to create a system of normative legal acts in the field of intellectual property. This method allowed the authors to divide normative legal acts into blocks. Each block contained separate normative legal and legislative acts, within which the article identifies them.

4. Results

Today, considerable attention is given to the issues of innovations and intellectual property. This is primarily because modern life is only possible with technology and digital development (Bilousov, 2014, p. 52). In general, innovations are steps with scientific, technological, financial, and commercial characteristics. They are aimed at the implementation of something new (Bilovodska, 2021, p. 72). Innovations are systemic, and they allow us to speak of a phenomenon known as innovative activity. According to such activity, the results of scientific and technical research acquire a commercial nature. Thus, they take the form of services and goods that become competitive (Moyse, 2016, p. 5).

Innovations gradually influence the emergence of the innovation process. This involves the gradual process of generating ideas, designing, testing, and implementing them into production (Zoričić, 2015, p. 168). In this context, the innovation process positively affects the image of the country. Such a process primarily affects a country that has a clear state innovation policy and constantly introduces innovations into the economy. The latter reflected in the country’s political, social, and industrial life. As a result, legal regulation of innovations requires special attention (Nenko, 2021, p. 148).

In Ukraine, innovations are primarily regulated by the law defining innovative activity (On Innovation Activity: Law of Ukraine). According to this law, such key terms are defined as follows:

- State innovation policy (the state's activity aimed at creating conditions and implementing scientific and technical potential).
- Principles of state innovation policy (the basic principles of innovative development in the state).
- Regional innovation programs (tasks and measures aimed at solving regional problems through innovative solutions).
- Subjects of state innovation policy (government bodies and local self-government implementing state innovation policy).

By this law, the state regulates innovative activities through the following means. Primarily, it involves shaping structural and investment policies in a way that innovation becomes fundamental to the economy. Significant attention is given to targeted projects and innovative programs, which outline aspects of implementing innovations in various spheres.
The state must also create economic, legal, and organizational conditions that facilitate the state regulation of innovative activities. This allows every enterprise and organization to develop innovations, as each institution will be legislatively protected and have all the opportunities to develop innovations (Tyshchenko, 2023, p. 30).

Simultaneously, it is worth highlighting the path of developing the infrastructure of innovative activities. Its essence lies in the fact that the state must devise all possible directions, following which innovations will be implemented. These could include projects and programs that, when executed, allow the enterprise to bring innovations into reality. In essence, this guarantees state support for innovations and a roadmap for their implementation in various directions.

In this regard, the state is obliged to control all economic entities engaged in innovative activities, necessitated by the need to comply with state innovation programs and existing legislation. This includes control over the use of investments. For example, the state may impose prohibitions or restrictions on the use of foreign investments in certain areas. It is directly related to the fact that innovations can have strategic importance for the state, especially in the defense, industrial, and engineering sectors. Thus, using such technologies by other states may lead to the loss of economic security or other threats to the state. In the context of this, the state guarantees support for innovative projects, the development of innovative infrastructure, protection of intellectual property, economic security, fair competition, assistance in training and qualification of personnel, and access to the necessary information (Kortukova et al., 2023).

The law also defines the financial support for innovative projects from the state. In particular, this includes interest-free financing of priority innovative projects from the budget of our state and local budgets, partial (up to 50%) interest-free financing of priority innovative projects from the budget of our state and funds from local budgets, with the involvement of funds from the executor of the innovation project. There is also full or partial compensation of interest to commercial banks for priority innovative projects from our state budget and funds from local budgets. Such support is implemented by attracting long-term loans in the national currency from commercial banks for 1-3 years. Each year, compensations are provided for certain entities, determined on a competitive basis, but the interest rate in the bank should be at most 18%.

The law concerning priority areas of innovative activity in Ukraine is the next legislative act related to the legal regulation of innovations. According to this law, the priority areas of innovative activity are those aimed at presenting high-tech and competitive products that are in demand in society, environmentally friendly, export-oriented, corresponding to the scientific and technical potential of the country, and also related to the development of the global economy. These directions are medium-term and strategic and can be at the national, regional, or sectoral levels.

Innovative programs of national, sectoral, regional, and local significance are formed based on priority areas. Also, on their basis, a regulatory framework is developed to stimulate innovative activities (Markova, 2023, p. 964). It is also advisable to highlight the normative legal act related to the development of science and technology (On Priority Directions of Science and Technology Development: Law of Ukraine). This law defines the interpretation of priority directions of science and technology development as directions of scientific and technical development. They have been designed for more than ten years and have economic justification, ensuring the competitive positions of our state in the market (Blikhar, 2020, p. 412). The concept of priority thematic directions of science and technology development is also distinguished. It means directions of applied and fundamental scientific research designed for five years. They determine the main aspects of the development of the country's scientific and technical potential (Blikhar, 2020, p. 412).

The law defines such types of priority directions in science and technology as information technologies, energy and energy efficiency, communication technologies, rational use of natural resources, fundamental scientific research, new technologies, treatment methods, new substances, and materials. The determination of priority directions is carried out through the development of a state target program for forecasting scientific, technological, and innovative development in Ukraine. It is formed based on the recommendations of scientists, representatives of central executive authorities, and researchers from sectoral science academies (Nazar et al., 2022).

The state also pays attention to forecasting the further development of priority directions in science and technology. Based on forecasts, the Cabinet of Ministers of Ukraine submits target programs to the Verkhovna Rada of Ukraine that contribute to the innovative development of Ukraine.

It is worth highlighting the significance of normative-legal regulation of state forecasting in this aspect (On State Forecasting and Development of Programs of Economic and Social Development of Ukraine: Law of Ukraine). According to this law, innovative activities at the nationwide medium-term level are implemented on a competitive basis through state orders and state program systems. If the innovation activity is at the sectoral level in the medium term, it is implemented through government programs, projects, and initiatives, including innovative parks. Innovative activities at the regional level in the medium term are implemented through local innovation programs.

According to the law, the creation of a regulatory framework for innovation is one of the mechanisms for supporting and developing innovations. In addition, such a legal act reflects the guarantees of the state's innovation policy, which are also reflected in the Law of Ukraine "On Innovation Activity."

Normative legal acts in the field of intellectual property constitute a system of legal documents of different levels (intellectual property). In our opinion, it is better to illustrate this system in Figure 1: Normative legal acts in the field of intellectual property.
Regarding standards in the field of intellectual property, the main ones include DSTU 3574-97 and DSTU 3575-97 (Hickey, 2022, p. 2). It is worth noting that DSTU 3574-97 contains information on the compilation and design of the patent form (DSTU 3575-97 Patent studies. Basic provisions and procedure of implementation). Taking into account DSTU 3575-97, issues related to the correctness and consistency of compiling a report on patent research are highlighted (DSTU 3574-97 Patent form. Substantive provisions. The order of assembly and registration; Masnum, 2021, p. 535).

The patent is one of the key documents regulating intellectual property issues. According to the standards defined above, the author has the right to use the utility model or invention he has created at his own discretion. In other words, there are no norms that would restrict such usage. At the same time, the invention needs to be patented, meaning that it is established that the author invented what he is patenting. Specifically, the patent should contain information about the author, the invention or utility model itself, the parameters and properties of the invention, its utility, the graphical part of the construction, and a breakdown of its elements (Levchenko et al., 2022).

According to standards, the protection of intellectual property rights for the invention is achieved by affixing the patent number on the packaging of the invention. This is done by marking special symbols on the product or its packaging. Such marking also assures buyers and consumers that the invention is safe and complies with all existing standards. For example, patent marking can frequently be used on packaging with household appliances. This allows buyers to be confident that the item can be used, and it is an indicator that the institution conducts its own research and development, thus engaging in innovative activities (Yuldashev et al., 2022).

Moreover, such marking protects the product from competitors using the technology of its development without permission. Significant image and reputational losses may occur for a company whose developments are used without its consent and for free (DSTU 3574-97 Patent form. Substantive provisions. The order of assembly and registration).

It is necessary to note that without the author’s consent, other individuals cannot use his invention or utility model. At the same time, the author can transfer ownership rights to the invention to other persons by signing an agreement. This can be done through succession (when authors share the invention with children, relatives, or representatives of the company where they work if the latter continue the authors’ work) or by selling the rights to use the model (the sale can be made with the participation of all interested parties) (Dutchak et al., 2020).

However, if the invention is confidential, the transfer of ownership rights is possible only with the consent of the State Expert. This occurs when the utility model is a prototype of a weapon or another object that is of significant importance to the state’s security. Such an invention falls within the scope of state secret protection, so it cannot be simply sold or transferred. The use of such an invention is also possible only with the approval of the State Expert.

At the same time, having a license is sufficient to use a non-confidential invention. Having a license allows the inventor to both use it and submit statements to the state intellectual property agency about the readiness of the invention for use.

It is worth noting that, according to the standards, the right to obtain a patent belongs to the inventor, a group of inventors if created collaboratively, the inventor’s employer, or the inventor’s legal successor. If the utility model was created by several inventors working separately, the right to obtain a patent first belongs to the person who applied to the relevant
agency. This is directly related to the fact that the earlier date has priority, as any invention has economic value. However, if the earlier application was withdrawn or rejected, the next application will have the right to obtain a patent (DSTU 3575-97 Patent studies. Basic provisions and implementation procedure).

According to the specified standards, intellectual property protection for patents is carried out by examining the author's request. The examination includes conclusions indicating whether the application can be further processed or should be withdrawn. If the invention indeed has value, its registration is carried out. In this case, the expert's conclusion must be based on the real utility model and its actual parameters. Accordingly, a reasoned decision must be sent to the author within 1 month from the date of application (Kuybida et al., 2023; Yarotskiy et al., 2021).

The author can reapply to the agency if no response is received within 1 month from the application date. In addition, if the results obtained do not correspond to the author's own beliefs, the applicant can request the accompanying materials for the examination process. This will allow determining whether the expert acted correctly and whether his research corresponds to reality.

In other words, it can be argued that even if the author disagrees with the examination results, he/she can familiarize himself with all the materials and identify the place of his/her invention among other similar ones. In addition, the author can challenge the decisions of the experts.

According to the Constitution of Ukraine, specifically Article 9, the Verkhovna Rada (Parliament of Ukraine) consents to ratifying existing international treaties. Additionally, Article 41 states that every person has the right to dispose of and own their intellectual property. Property rights, however, should not harm other people (Antoshkina et al., 2023).

Furthermore, according to Article 54, every person has the right to the results of their intellectual property, and no one can distribute or use it without the author's consent. Citizens also have the right to freedom in literary, scientific, artistic, and technical creativity, and their intellectual creativity must be protected (Constitution of Ukraine, 1996).

The Constitution also stipulates that cultural heritage is protected by law. The state guarantees the preservation of historical monuments and other cultural objects. Additionally, the state supports the development of science and cooperation between domestic scientists and the global scientific community (Michael, 2020, p. 2).

According to the Civil Code of Ukraine, intellectual property rights for an invention are subject to state registration (Civil Code of Ukraine; Saunders, 2016, p. 980).

According to the laws of Ukraine related to copyright, only the owner has the right to grant permission for non-commercial use of copyright objects (On Effective Management of Property Rights of Rights Holders in the Field of Copyright and (or) Related Rights: Law of Ukraine; Bulat, 2019, p. 2; On copyright and related rights: Law of Ukraine).

According to the Decree of the President of Ukraine No. 299/2017, a decision was made to establish the High Court on intellectual property with its headquarters in Kyiv.


As for international treaties, it is advisable to distinguish the "Patent Law Agreement." According to this treaty, if the change of applicant or owner results from a contract, a Contracting Party may require a copy of the document drawn up by the competent authority. The document shall be a proof of merger, reorganization, or division of a legal entity.

5. Discussions

In general, the legal aspects of innovations and intellectual property are a rather acute issue. In particular, there are currently many legal acts regulating the innovation sphere. However, they do not define the types of innovations and fail to systematize them. Also, the definition of innovations is rather abstract, without the necessary specification. Furthermore, the main processes of regulating the implementation of innovations in the business of enterprises are not covered (Yatsyshyn et al., 2023).

Another problematic aspect is the regulation of intellectual property in the legal field. In particular, there are more national normative legal acts in Ukraine, and harmonization with international normative acts has yet to be fully implemented. In addition, the normative acts do not address the issue of copyright protection in various problematic situations. In addition, the standards relating to the registration and creation of patents, as well as patent research, are outdated and need to be updated since many new intellectual products have been created recently (Yarotskiy et al., 2022).

It is also worth noting that another problematic issue arises from the fact that many new information products are being created. In this regard, it is difficult to determine the right to intellectual property unambiguously. For example, in the case of information content created by bloggers, it is often difficult to decide who the first author is and who came up with the idea for a particular video. If such an author can be found, the problem is how to prove that this person has the right to this intellectual product. Although bloggers and advertising content customers enter into agreements on cooperation and the nature of the information product, it is difficult to determine and protect the authorship.
Consequently, the debatable issues give rise to the relevance of research into the legal aspects of innovations and intellectual property. It can be predicted that, in the future, it will be essential to study the legal regulation of innovations and intellectual property in social networks, in particular in the case of intellectual products created by bloggers.

6. Conclusions

As a result, it was determined that the legal aspects of innovations and intellectual property are currently among the key issues in the legal sphere of Ukraine. The following results were obtained from the study. According to them, the legal regulation of the aforementioned areas is carried out by using laws, patents, standards, civil law, and international treaties.

In general, it is advisable to propose the harmonization of legal acts to ensure innovations and intellectual property. For example, the standards of Ukrainian Patent Law could be harmonized with International Patent Law agreements. In particular, Ukrainian standards contain requirements for the registration of an invention, and the exact requirements are contained in international documents. Therefore, it is possible to correlate Ukrainian legislation with the European one, amend it, and make the registration procedure faster and more convenient.

In addition, it would be advisable to develop a regulatory framework for innovative and intellectual products operating in the virtual space. For example, many products created on social networks are not protected by specific laws. Hence, it is difficult for the author to prove the uniqueness and authorship of such a product. Often, the authors place their own watermarks on such products to prove authorship, but they are not legally binding.

We can also suggest that the state should pay attention to the education of lawyers in the field of intellectual property law. Currently, intellectual property and innovations are the subject of educational courses created by legal professionals who teach other people how to work with intellectual property. However, this should not be an initiative by lawyers but rather a system where the state encourages lawyers to work with intellectual property and help others protect their copyrights. In addition, the focus should also be placed on innovation, as lawyers working in the field of innovation should understand how to protect the rights of organizations that create something new.

Ethical considerations

Not applicable.

Conflict of Interest

The authors declare no conflicts of interest.

Funding

This research did not receive any financial support.

References


Intelectual property. https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=f282e17e-9c14-4b88-94508f7cc12c158e&title=ZakonodavstvoVSferiIntelektualnoiVlasnosti&isSpecial=true


