

Virtual Assets as the Newest Object of Property Rights

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Summary

New realities of social relations are changing the understanding of certain phenomena, including the emergence of new concepts among the objects of property rights, such as: virtual assets, and the circulation of virtual assets. The rapid development of the virtual assets market involves the legislative consolidation of the status of such assets, changes in taxation, their circulation, and so on. These circumstances increase the interest in the study of virtual assets as the latest object of property rights and necessitate the study of this topic. The work aims to explore the theoretical developments and regulations on virtual assets in the modern world, as well as to summarize the conclusions about virtual assets as the latest object of property rights. The object of research is the content of the concept of "virtual asset" and its legal status. The methodology of work is represented by a set of methods and techniques that were used to achieve this goal, namely: hermeneutic, historical, extrapolation, comparative law, generalization, analysis, synthesis, and deduction. The study analyzed different approaches to understanding virtual assets, analyzed the characteristics of virtual assets, and concluded that in today's conditions there is no single unified legal regulation of virtual assets, although many countries are moving towards consolidating the status of virtual assets.

Keywords:

virtual asset, digital record, legislative regulation, object of property right.

1. Introduction

Recently, there is a new stage of digitalization, due to the development of information and telecommunications technologies, new needs of the population, and lifestyle changes. Values are changing, new technologies are emerging, and so are new properties. The words "collective intelligence", and "collective mind" appear more and more often in a person's life, where the main feature is the exchange of information, the ability to use information, to exchange it. In this aspect, the ability of society to develop an information culture following the needs plays an important role. As a result of joint activities, new subjects and objects of property rights appear. Artificial intelligence and virtual organizations can already be potential players. At the same time, new objects of property rights are emerging. These include computer programs, databases, websites, multimedia, online artwork, domain names, digital content, etc.

In this study, special attention is paid to virtual assets as the newest object of property rights. "Virtual assets" have already become a concept that is clearly ingrained in people's minds. Markets are formed around them, transactions are made with them, they are invested in and they are invested in other objects. The number of participants in this legal relationship is growing, as is the amount of real capital associated with virtual assets.

Both private and public law relations are proposed for settlement, in particular, in the context of issues of civil circulation of virtual assets, taxation of transactions with them, prevention of "money laundering" and so on. In this context, the international experience of regulating this issue and consolidating the status of "virtual asset" in the legislation is analyzed. In international practice, virtual assets are legally legalized in many countries, including countries such as the United Kingdom of Great Britain, Estonia, Switzerland, Northern Ireland, and others. It should be noted that Ukraine is in the top twenty in the world among the countries for the development of the virtual asset market and the implementation of projects based on blockchain [9].

The above indicates the need to regulate the market of virtual assets, and the regulatory definition of issues related to the circulation, storage, possession, taxation, use, and conduct of operations, of the market for virtual assets. Thus, the relevant draft laws have been registered so far, in particular, the draft law "On Virtual Assets" was adopted, according to which it is proposed to define a virtual asset - as an intangible asset that is subject to civil rights, has value and is expressed in electronic form. The existence and turnover of a virtual asset are ensured by the system of ensuring the turnover of virtual assets. A virtual asset can certify property rights, including claims against other civil rights objects [3, 4, 5, 2].

Therefore, given that the virtualization of property is manifested in the formation of a market mechanism for intangible assets that are not intellectual property, as well as in the creation and operation of virtual organizations, due to the high cost of such assets there is a need for legal regulation and protection. Given the issues of this issue, the

analysis of the legal regulation of virtual assets and attention to the uncoordinated aspects of this topic is relevant.

2. Methodology

From this section, input the body of your manuscript according to the constitution that you had. For detailed information for authors, please refer to [1]. The following methods of scientific cognition are used in the work: hermeneutic, historical, extrapolation method, comparative legal method, generalization, analysis, synthesis, and deduction. Such a method as the hermeneutic method was used for a detailed study of the conceptual apparatus on a given topic. This method has explored the meaning of concepts, definitions, definitions, and categories that operate theorists and practitioners in the field of digital technology in general and virtual assets in particular.

The historical method was used to establish the chronology of the development of legislation on virtual assets. In general, the historical method is a research process used to gather evidence of past events and further develop ideas or theories about history and includes methodological techniques for analyzing relevant data on a historical topic, which allows synthesizing information to make a consistent report about the events that took place in the episode under study. This method allowed us to understand under the influence of which processes there were changes concerning virtual assets in Ukraine and the world.

The comparative legal method was used to learn about the legal regulation of virtual assets in different countries and in different periods. Identifying the similarity of legal positions and levers of regulation makes it possible to identify patterns and trends in the field of virtual assets.

To forecast the development of legislation in the field of virtual assets, the method of extrapolation was used. This method was used for short-term forecasting and allowed to determine the stable and current trends in the past and present and transfer them to the future. As a result of the application of the extrapolation method, it has become possible to predict the results that can be achieved in the future if we move to them at the same speed or acceleration as in the past.

To single out common trends, and principles and unite the common in the regulation of virtual assets as an object of property rights, the method of generalization was used. Generalization, as a logical process of transition from individual to general or from less general to more general knowledge, allowed to understand the diversity of types and forms in which the essentially identical processes of exchange of virtual assets, divide them into components, groups of a special class.

Analysis of the legal nature of virtual assets, by highlighting the characteristics and properties, studying them separately and as part of the whole played a significant role in this study, because properly performed analysis is a guarantee of logical presentation of research material.

The use of deduction method was used to explain the reasons for the processes in the field of regulation of virtual assets. Deduction made it possible to develop a version of the causal series that explains the consequences.

Finally, the method of synthesis was used together with the use of analysis because it is necessary to study some properties of the phenomenon of virtualization of social relations and consider them as a system, i.e. a set of interconnected elements that generate each other and are interconnected and interdependent.

3. Literature Review

The latest objects of property have aroused the interest of many scholars and lawyers. In particular, Kharytonov and Kharytonova, Aksonov, Baranov, Gorobets, Ennan, Zherlitsyn, Kirilyuk, Lebedeva, Maidanik, Mischechko, Rekhlytsky, Semenyuk, and Simson were interested in these issues. However, despite the significant interest in the latest property rights, virtual assets as the latest property rights are insufficiently researched and need to be studied [19, 20, 22, 23].

Aksonova [7] revealed the issues of the virtual assets market in her work. The author analyzed the provisions of the draft law "On Virtual Assets" and summarized that this law is basic for the development of such a market in Ukraine. Another researcher, Baranova [8], analyzed the prospects of consolidating virtual assets, digital money, and securities as objects of civil rights and noted that the ability of civil rights to satisfy the interests of individuals and legal entities in the digitalization of public relations and their involvement in property turnover in the digital environment of economic development necessitates the need to determine at the legislative level the legal nature, the legal basis for the functioning of the legal regime of these objects and to develop effective legal mechanisms for their property turnover.

The place of virtual objects in the institute of property rights in his work was determined by Gorobets [9]. According to the author, the turning point in cloud technology was the COVID-19 pandemic, which spread to the whole world and forced people to isolate themselves and use the Internet as the only means of communication with the outside world. The author notes that currently, the turnover of virtual objects is not inferior to things as objects of material reality, but the number of people in Ukraine and the world involved in virtual reality is growing steadily

every year. Social media accounts, gaming objects, and computer games are becoming more and more valuable to their owners and users. Judicial practice shows that cases in which virtual objects are the subject of a dispute are not isolated. Courts in their consideration are inclined to the analogy with the right of ownership of things. Numerous psychological studies show that very often players are so absorbed in the virtual world that they "live" there and only return to reality for a short time to meet their natural needs. Thus, everything that happens and is acquired by them in the game is their property. It is assumed that virtual property arises concerning virtual objects (data) that have economic value, are objects of trade in cyberspace, have no material shell, are unique, sustainable, viable, and are considered by owners as their belongings. According to the author, such properties as uniqueness, sustainability and viability allow such objects to belong to the institution of property rights. Virtual space allows the owner of virtual objects to own, use and manage them. Therefore, according to the author, the right to virtual property arises, which should be considered as a special kind of property right, the object of which is disembodied things.

The issue of the legal regime of virtual property in his work was outlined by Ennan [10]. The researcher considered the nature and legal nature of "virtual property" in the formation of cyberspace and considers it necessary to involve cyberspace in the field of current legal regulation, not opposing the real and virtual worlds, but understanding that they exist together and what happens in one has serious consequences in another.

Moreover, Zherlitsyn considered problematic aspects of the taxation of transactions with virtual financial assets in his work [11]. Kyryliuk [12] analyzed the objects of virtual property and concluded that the formation of a special type of property – virtual, intangible, may be the object of intellectual property rights (provided there are signs of creativity), exists in a virtual environment, and for which property rights or exclusive rights may arise.

Further, Kharytonova, O., and Kharytonov E. [21] studied the virtual property and intellectual property law in more detail and concluded that it is currently a matter of creating and recognizing a paradigm: "IT law – a concept", which is an alternative to positions that have gained some popularity in domestic law. This concept makes it possible to remove the methodological problems that inevitably arise when trying to determine the place of "IT-law" in the legal system based on the traditional, "normative" approach.

Besides, Lebedeva [13] regarded the newest objects of intellectual property rights in more detail. The author concludes that copyright objects such as computer programs and non-creative databases need to reconsider conceptual approaches to their legal regulation. It is also

remarked that in the conditions of active use of methods of automatic circulation and data processing, global information and communication systems, there is a need to protect non-creative databases (client databases, information on previous requests of the user of the electronic network, etc.) and proposed at the legislative level to introduce mandatory registration of all types of intellectual property, including the registration of copyright and related rights. The introduction of a single register of intellectual property rights eliminates the problem of proving the guilt of the infringer of intellectual property rights, because if the register is presumed that the infringer knew or should have known that his actions may infringe intellectual property rights to the register.

What is more, Maidanyk [14] studied the virtual object as a challenge to classical approaches in property law. Mischechko [15] analyzed the Law of Ukraine "On Virtual Assets" (Bill №3637 of June 11, 2020).

Additionally, Rehlytsky [16] highlighted the need for legislative regulation of virtual assets in his work.

Also, Semenyuk [17] analyzed complex objects of intellectual property rights in his study [2021]. According to the results of the study, the author identified prospects for the development of complex objects of intellectual property rights, which can be divided into two groups – general and special. The general ones should include the legal support of these facilities, with the relevant areas of public policy and the formation of the legal field; definition and characteristics of the information society as a form, space, and territory of their application, circulation, and implementation, under conditions of proper technological condition; and for special – placement of complex objects of intellectual property rights on the Internet in a form accessible to the public, as well as other consumption based on civil law agreements in the form of electronic documents and other forms. Based on the results of research of some complex objects of intellectual property rights, the author proposes the definition of new information and legal definitions in the legislation – computer game as a type of multimedia creative product that combines images (moving or still), text, music, software, created to interact with the user within the game theme; website as a complex object of intellectual property rights, which includes: software, hardware, a unique address on the Internet, information resources; artificial intelligence as a complex object of intellectual property law, which includes a variety of creative activities depending on the purpose of use. Finally, Simson [18] summarized the features of intellectual property regulation in the digital age.

4. Main Research Results

Before describing virtual assets as the newest object of property rights, let's consider the general theoretical aspects of this issue.

The theory of Roman law provides for the division of things into corporeal (*res corporals*) and disembodied (*res incorporals*) (Table 1).

Table 1: The division of things in the theory of Roman law [12]

<i>Res corporals</i>	<i>Res incorporals</i>
tangible, those that can be seen and felt	those that cannot be touched, but they exist by law

Modern legal systems generally follow the same approach to the division of things. At the same time, in Ukraine, this approach has its differences. In particular, some disembodied phenomena (such as electricity and gas) are equated with things because of their resemblance to corporeal things. Therefore, according to the Ukrainian concept of property rights, the object of property rights can be both corporeal and disembodied.

Article 316 of the Civil Code of Ukraine defines an object of property as a thing (property). At the same time, in accordance with Art. 190 of the Civil Code of Ukraine property as a special object is a separate thing, a set of things, as well as property rights and obligations. Property rights are a non-consumable thing [1].

An interesting approach is that virtual property, like intellectual property, is intangible. There is also the view that intellectual property is part of virtual property. In our opinion, we should not combine these concepts, because the concept of virtual property was introduced to denote objects that do not exist in the material world but in virtual reality. Therefore, to distinguish between intellectual and virtual property, it is required to pay attention to the following.

1. Virtual property is characterized by competitiveness, while intellectual property is subject to restrictions on its use arising from special rights provided by law.
2. Objects of virtual property are characterized by stability, in contrast to the object of intellectual property.
3. Features of interaction with the objects of virtual property, because virtual objects are actively involved in the circulation of goods along with material things, in contrast to the objects of intellectual property rights.
4. The value added by the user can affect the formation of the price of the virtual property [12].

This analysis confirms the need to distinguish the virtual property from others.

Consider the legislative consolidation of virtual assets under the laws of Ukraine.

On September 8, 2021, the Verkhovna Rada of Ukraine adopted in the second reading the Law of Ukraine "On

Virtual Assets" [3], thus legalizing the concept of "virtual asset". According to the bill, a virtual asset in Ukraine means an intangible asset that is an object of civil rights, has value, and is expressed in a set of data in electronic form, can certify property rights, including claims to other objects of civil rights.

From the analysis of this definition, we can conclude that for an object to be regarded as a virtual asset, it must meet three criteria: the value, the possibility of circulation in digital format (transferability), and the possibility of its exchange for other objects of civil law (payment or investment purpose). The advantage of this approach is technology neutrality, which allows not to narrow the list of virtual assets to cryptocurrencies or other instruments created following DLT (distributed ledger technology) – a distributed registry system, the most famous example of which is the blockchain.

This definition of a virtual asset as an intangible asset has been criticized. According to the legislator, the virtual asset falls under the category of intangible assets specified in Article 199 of the Civil Code of Ukraine [1]. According to Art. 199 of the Civil Code of Ukraine, the results of intellectual, creative activities and other objects of intellectual property rights create civil rights and obligations following the fourth book of the Civil Code and other laws.

However, the legislator does not specify to which intellectual property rights the VA belongs. In this context, it is worth noting the position of the Financial Action Task Force (FATF) on Money Laundering, which defines a virtual asset as a digital representation of value that can be traded in digital format or transferred and can be used for payment or investment purposes. The United Kingdom also takes the approach of treating a virtual asset as a separate asset. Liechtenstein uses the special term "value rights" for a virtual asset and uses the concept of Trustworthy Technology [1]. Therefore, the question of classifying a virtual asset as an intellectual property object is quite controversial.

In addition, the provisions of this bill provide the properties of a virtual asset (Table 2).

Table 2: Properties of a virtual asset [8]

<i>No.</i>	<i>Properties of a virtual asset</i>
1	exchanged for other virtual assets or national currency (hryvnia), and in cases determined by the National Bank of Ukraine – for other currency values;
2	transferred from the wallet of virtual assets of third parties to the wallet of virtual assets of others, and;
3	the subject of a public offer.

virtual asset as an intellectual property object is quite controversial.

In addition, the provisions of this bill provide the properties of a virtual asset (Table 2). There is also a list of business transactions for the supply of services related to the turnover of virtual assets, which are allowed only to legal entities and only based on a special permit issued by the central executive body implementing state policy in the field of virtual assets:

- storage or administration of virtual assets or their keys;
- transfer of virtual assets;
- exchange of virtual assets, and;
- provision of intermediary services related to virtual assets.

The law also stipulates requirements for such legal entities. Thus, a legal entity established in accordance with the legislation of a state recognized by the Verkhovna Rada of Ukraine as an occupying state or an aggressor state cannot be a service provider, just as a citizen of this country cannot be a beneficiary, founder, director or accountant of such a legal entity.

As for the requirements for the authorized capital, firstly, it depends on the type of activity and residence of the legal entity and should be formed only by funds of transparent origin. As for the fee for obtaining a special permit, as in the case of the formation of authorized capital, its size depends on the activity and residence and ranges from 4 thousand to 40 thousand non-taxable minimum incomes.

The law enters into force on the date of entry into force of the Law of Ukraine on Amendments to the Tax Code of Ukraine on the peculiarities of taxation of transactions with virtual assets, which should regulate the taxation of transactions with such assets.

Thus, although at the legislative level there are some controversial issues in the formulation of the definition of a virtual asset as an object of property rights, the legal regulation of transactions with such objects is positive.

In particular, the regulation of virtual assets allows real businesses to obtain a legal framework for asset tokenization (an innovative tool that can be used by businesses in their activities, such as real estate or loyalty programs, etc.); the ability to legally operate and invest in virtual assets (for example, to contribute a virtual asset to the authorized capital); and the ability to declare their income in virtual assets and protect their personal capital, their investments in cryptocurrencies from possible abuse or fraud.

5. Conclusions

Thus, the issue of assigning virtual assets to the newest object of ownership is quite relevant and controversial. As a result of the study, the following conclusions were made:

1. Recognition of virtual assets as property or intangible assets creates opportunities to protect the rights of their owners through legislation.
 2. It is essential to distinguish between virtual property rights and intellectual property rights. Virtual property rights in the virtual world are not only the right to gaming items but also new specific objects, such as cryptocurrencies and etc.
 3. In order to recognize an object as a virtual asset, it is necessary to meet three criteria: value, the possibility of circulation in digital format (transferability), and the ability to exchange it for other objects of civil law (payment or investment purpose).
 4. Virtualization of property is manifested in the formation of the mechanism of appropriation and market turnover of intangible assets, which are not only objects of intellectual property, but also objects of property rights.
- Regarding further research, it is important to analyze the features of the regulation of virtual assets abroad, as well as the institutional support of such activities in foreign countries, in order to gain a better experience for Ukraine.

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