



# Intellectual property as intangible good

DOMINIKA BOCHAŃCZYK-KUPKA

University of Economics in Katowice, Faculty of Economics, Department of Economics,  
ul. Bogucicka 3, 40-287 Katowice, Poland

✉ dominika.bochanczyk-kupka@ue.katowice.pl

 orcid.org/0000-0003-0428-3434

## Abstract

**Motivation:** Nowadays in economic literature we can observe the increasing popularity of the concept of intellectual property. Nevertheless, this growth is not accomplished by solving conceptual problems. The number of existing definitions, considerations about the intellectual property among intangible resources and descriptions of its characteristic features is enormous. Therefore, in-depth studies on concept of intellectual property are necessary from the point of view of economics and law.

**Aim:** The main purposes of the paper are: to place intellectual property in the area of intangible assets and to specify and describe its specific features. The paper also tries to answer the question: is intellectual property a private, a public or a club good.

**Results:** The paper discusses the differences and relationship between such economic concepts as: property, intangible goods, tangible goods and intellectual property. It exemplifies and describes specific features of intellectual property, and also discusses situations in which intellectual property can be perceived as a private good, a public good or as a club good.

**Keywords:** *intellectual property; intangible good; private good; public good; club good*

**JEL:** *K00; O34; B52*

## 1. Introduction

Despite growing importance of intellectual property it remains the challenging area both for law and economics. Intellectual property can't be considered as just another, albeit very special, type of assets. Its role in modern economies and societies becomes increasingly significant and complex as it is the mixture of culture, innovation and knowledge. The intellectual property has never been



of more importance to a wide range of economic actors, both public and private. It also becomes more and more complex in its substance and law regulation.

The paper tries to show and solve some basic, conceptual problems connected with the understanding of idea of property and its relation to intellectual property. It also shows special, unique features of intellectual property which distinguishes it from tangible assets.

## 2. Literature review

The contemporary world economy is shifting more and more away from consuming tangible, physical goods towards the use of non-physical, intangible goods. This change has been noticed in economics literature and therefore we can observe the increasing popularity of the concept of intellectual property (WIPO, 2016; Yu, 2016, pp. 11–22). Unfortunately, this growth is not accomplished by solving conceptual problems. Despite the growing importance and popularity of intangible goods, research into this area is rather limited so far. The concept of intellectual property disputed in economics is relatively new. Although the first known use of this term dates to 1769 (this phrase was used in the *Monthly Review*) but in economics it became especially important (and globally well-known) due to implementation of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which came into effect on 1 January 1995. The idea of intellectual property wasn't considered and discussed by representatives of classical economics, neoclassical economics and Keynesian economics and even of the new institutional economics so its presence in economics literature is short-term. In fact, a few decades ago intellectual property was regarded as rather obscure and not important field of legal regulations. However, in the last few years, intangible goods have been recognized as a driving force for economic growth and development and the crucial factor of development for many companies. This novelty causes many theoretical and practical problems.

## 3. Methods

The paper shows different, often opposite but well-known opinions connected with understanding the core idea of intellectual property and tries to comment them. As the issues connected with intellectual property are often controversial, the author tries to find the roots of misunderstanding and explain them.

## 4. The concepts of property and intellectual property

A property right gives the owner the exclusive right to the use and benefits of the good/resource, and the unique right to exclude others from them. It also gives the owner freedom to transfer these rights to others. Roman law referred to these elements as *usus* (the right to use), *abusus* (the right to encumber or



transfer), and *fructus* (the right to the fruits). Thus, property rights over a good/resource can be defined as a bundle of decision rights involving the good/resource (also called entitlements in the legal literature), which provide rights to take certain actions and to prevent others from taking certain actions, including the right to take the profit generated by use of it and to prevent others from doing so. The term ‘property’ is only a legal concept. Property is the name that we give to something that we have legal control over. Therefore, it is questionable whenever intellectual property should be considered as property because its owner usually is not able to control its consumption and dissemination and obtain right profits. But if intellectual property cannot be treated as the property, what is the proper, right term for it?

In general, the term ‘intellectual property’ can be defined as any creation of human mind, which means that it is always intangible. WTO (2018) describes intellectual property rights as the rights given to persons over the creations of their minds which usually give the creator an exclusive right over the use of his/her creation for a certain period of time. A clear, brief definition of intangible goods is also difficult to give. O. Koppius (1999) defines this kind of goods literally. The literal meaning of the term ‘intangible goods’ allows to create the colloquial definition of ‘being a product that you can drop on your foot without feeling it’. V. Lindberg (2009) defines intellectual property as a hybrid good made up of equal part information and law. The Stanford Encyclopedia of Philosophy edited by E.N. Zalta (2011), states that intellectual property is generally characterized as non-physical property that is the product of original thought. This originality is the main determinant of intellectual property. However, it should be remembered that originality is not identical to innovation. Therefore, intellectual property does not have to carry innovation, only novelty and originality.

In the basic concept of property rights property has to have its physical presence. Many economists, lawyers and politicians try to portray intellectual property as nothing else but standard private property adapted to the case of creations of human mind. World Intellectual Property Organization states that intellectual property rights are like any other property right. They allow creators, or owners of patents, trademarks or copyrighted works to benefit from their own work or investment in a creation. These rights are also outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions. In fact, these statements refer to artificial property called intellectual property which obtained some characteristics of typical property thanks to protection given to it by law. The nature and original meaning of the intellectual property is different — it is just creation of human mind, and therefore is intangible. This intangible resource has many characteristics that differs it from tangibles and therefore the intangible nature of intellectual property presents difficulties when compared with traditional, tangible property.

The conceptual foundations that justify the exclusive title over tangible goods defines property right as a right which gives the owner the exclusive right to the use and benefits of the good/resource, and the right to exclude others from them. In fact, the nature of intellectual property, especially its intangible character does not allow to exclude others from using it (intellectual property defined as the creation of human mind). The idea, song or picture once published becomes the good which can be easily distributed without any cost among millions of people and nobody is able to stop this process. Even if some types of intellectual property (especially these mentioned in TRIPS Agreement) are protected by law, this protection is time limited. Also the cost of this protection is usually very high.

In the economic literature the best well-known definitions of intellectual property are these created by the Organization for Economic Cooperation and Development (OECD), the World Intellectual Property Organization (WIPO) and TRIPS Agreement. According to OECD (2008, p. 276), intellectual property rights refers to the general term for the assignment of property rights through patents, copyrights and trademarks. These property rights allow the holder to exercise a monopoly on the use of the item for a specified period. Among types of intellectual property there are: ownership of ideas, including literary and artistic works (protected by copyright), inventions (protected by patents), signs for distinguishing goods of an enterprise (protected by trademarks) and other elements of industrial property (Khemani & Shapiro, 1993). *The Convention Establishing the World Intellectual Property Organization* (WIPO, 1967), concluded in Stockholm on July 14, 1967 in Article 2(viii) provides that intellectual property shall include rights relating to:

- literary, artistic and scientific works;
- performances of performing artists, phonograms and broadcasts;
- inventions in all fields of human endeavor;
- scientific discoveries;
- industrial designs;
- trademarks, service marks and commercial names and designations;
- protection against unfair competition;
- and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

In this definition the list of intellectual property types was open to new types of intellectual property which means that any new rights resulting from any intellectual process of human mind should be treated as intellectual property.

The TRIPS Agreement, which came into effect on 1 January 1995, is to date the most comprehensive multilateral agreement on intellectual property. The areas of intellectual property that it covers are (Aplin & Davis, 2017, p. 28):

- copyright and related rights (i.e. the rights of performers, producers of sound recordings and broadcasting organizations);
- trademarks including service marks;
- geographical indications including appellations of origin;

- industrial designs;
- patents including the protection of new varieties of plants;
- the layout-designs of integrated circuits;
- undisclosed information including trade secrets and test data.

The TRIPS approach limited the number of types of intellectual property which could be protected. It means that any other types of intellectual property which is not mentioned in this Agreement can't be protected by it without changes in it. As the impact of the TRIPS Agreement on worldwide economic and political relations was undoubtedly huge, therefore its perceiving the intellectual property become naturally accepted worldwide.

All these definitions don't refer to the nature of intellectual property but only exemplify some of its types. The lack of one, commonly accepted definition created by well-known international institution influences the uncertainty and leads to misunderstanding of this concept and may cause many doubts and future conflicts.

## 5. Tangible and intangible goods — main differences

The property is a central institution for market development and for the operation of any market oriented economy. Goods, both tangible and intangible, which can be easily traded are the core elements of market economy. To distinguish intangible and tangible goods it is worth to consider (Bochańczyk-Kupka, 2018):

- the existence of a physical form;
- the length of protection period;
- the available method of measurement;
- place in conventional accounting systems;
- availability;
- copy resistance;
- legal protection;
- the rate of depreciation;
- the transfer possibility and its cost;
- the possibility of simultaneous multiple use;
- realization through people.

The issue of physical form is obvious. A tangible goods have a physical presence and includes both fixed assets, such as machinery, buildings, land, and current assets such as inventory. Intellectual property is an intangible good which means, as the colloquial definition mentioned above states, that we cannot see it, touch it or feel it. So it is not perceived by traditional senses, just only by human minds.

Traditional, tangible property right is perpetual. Property rights are assigned to economic goods in order to create maximum utility in their use. In terms of physical goods, their scarcity is a presupposition of the existence of property. The property rights of intellectual property are not perpetual. They are mainly



temporary, with the exception of distinctive signs such as trademarks, slogans, brand names, as long as they are used and their registration is kept up-to-date. Also geographical indications are protected indefinitely. The need of permanent protection of geographical indications and trademarks comes from their rival-in-consumption character as their main economic function is to distinguish some products from others (only geographical indications and trademarks have got this special rival-in-consumption character). The moral rights, the rights of creator to be recognized as an author, also exist in perpetuity. The exclusive rights to use are temporary but the moral rights are perpetuity and cannot be sold or inherited (it means that they also differ from the typical physical property which can be easily traded and inherited). As the time of exclusive rights of other types of intellectual property is limited so when the period of protection expires, they become common goods or 'public domain' goods and everybody can use them even without permission of the rights owner.

Tangible assets have the physical form, which means then they can be easily seen, felt or touched. This physical form facilitates measurement of the loss of the value. The tangible assets depreciate over a period of time. The depreciation and valuation of tangible resources is much easier than intangible assets. There are many well-known standards of tangible resources valuation which are transparent, efficient and comparable. Additionally, tangible assets possess a scrap or residual value, and they can be used as collateral to obtain loans. The intangible assets can't be depreciated. They are amortized (except for goodwill) over the useful life of the asset. Generally, intangible assets are amortized using straight-line expense method. Also many problems cause the valuation of intangibles, which is treated as very subjective and changeable. The intangible assets represent a major share of the value of modern firms and play an important role in their strategies and they are also usually long-term assets. They can be separated into two classes. They can be identifiable and non-identifiable. Identifiable intangible assets are those that can be separated from other assets and can even be sold by the company. These are such assets as patents, copyrights, trademarks, and trade names. Unidentifiable intangible assets are those that cannot be physically separated from the company. The most well-known unidentifiable intangible assets are goodwill, branding and reputation. Their valuation is even more difficult. The accurate valuation of intellectual property still remains a challenge. There are several accepted ways to measure the value of intellectual property such as: cost approach, income approach, market approach and debatable relief from royalty approach (Bochańczyk-Kupka, 2017, pp. 51–64). But they are not such accurate and reliable as methods used for valuation of tangible assets.

The existence of physical form of tangible resources causes that they are easier available than intangible resources, which very often are unique and therefore hard-to-reach. But this immaterial character causes that creation of legal or illegal copies of tangible goods is much more expensive. Costs and availability of materials necessary for production process and time needed to produce influ-

ence higher cost of copy creation. Intangible goods can be duplicated immediately in massive numbers at zero cost.

The tangible goods are usually limited in number and their consumption shorten their availability. It means that their physical nature causes that the simultaneous consumption by more than one person in that same time is impossible. Intangible goods can be consumed concurrently by infinite number of individuals and making a copy does not deprive anyone of their possessions. The consumption of intellectual property doesn't influence the quality, availability and volume of it. Intellectual property is inexhaustible. It means that the intellectual property is the paradigmatic opposite of classic property because of its non-rival consumption, high exclusion costs and its inexhaustibility. The conventional economics of intellectual property law is based on public goods theory<sup>1</sup>. It states that the information embodied in majority of intellectual property types has two characteristics that distinguish it from tangible property. Like other public goods, copyrighted expressions and patented inventions are non-rivalrous and non-excludable. If a good is non-rivalrous it is costless to allow additional consumers simultaneously to enjoy the benefits of a public good once it has been produced. If a good is non-excludable, it is difficult for producers to get consumers to pay for the privilege of using it (Barnes, 2011, pp. 533–563). But there are two types of intellectual property which don't share this characteristic: geographical indications and trademarks. The geographical indications are non-rivalrous but excludable. It means then they can be treated as the club asset for a club membership consisting of firms located in the territory to which the particular geographical indication is attached, and that share the reputation of the geographical indication. The trademarks are rival-in-consumption and excludable so they should be treated as pure private goods. To sum up, it is worth to mention that different types of intellectual property can be classified as private goods, public goods and club goods. Individual types of intellectual property differ significantly so is it right to use one term for all of them? Should they all share a common concept of intellectual property?

## 6. Results

Intellectual property, very broadly, means the legal property which results from intellectual activity in the industrial, scientific and artistic fields. In fact,

---

<sup>1</sup> Public goods theory has been a cornerstone of the economic theory of the public sector since the 1950s. It was inspired by two Paul Samuelson papers, published in 1954 and 1955. On this basis the economists have accepted a rigorous definition of the term 'public good' (Holcombe, 2000). Property rights define who gets what when a given stream of income is divided. But different kinds of property and thus different kinds of property rights exist. The Ostroms (1977) defined goods using the two binary characteristics of excludability and rivalry/subtractability in consumption. These characteristics define four ideal types of goods with potentially different kinds of property rights: private goods, public goods, common pool goods, and club/franchise goods.

even this definition is improper and doesn't show the specifics of intellectual property. In fact, there are some intellectual properties which are not products of the mind, for instance: trademarks and geographical indications. Trademarks creation does not necessarily require intellectual activity. The same holds true for geographical indication which don't require the work of the mind like patent and copyright.

The concept of intangible goods is completely different from the idea of tangible goods and these two categories aren't directly related. The big mistake was made during the creation of intellectual property law when its creators preparing the intellectual property law based mainly on solutions which were specific to tangibles and underestimated the intellectual property specificity. Nowadays scholars know that these two types of goods are completely different. The paper distinguishes intellectual property from physical property, shows and explains the main differences between tangibles and intangibles. Among them are: the existence of a physical form, the length of protection period, the available method of measurement, place in conventional accounting systems, availability, copy resistance, legal protection, the rate of depreciation, the transfer possibility and its cost, the possibility of simultaneous multiple use and realization through people. Intellectual property has its own peculiar features. These features may also serve to identify intellectual properties from other types of properties.

## 7. Conclusion

Intellectual property is intangible. This statement is indisputable. But it is the only incontestable statement connected with intellectual property. Is it a property or not? Is legal order created for tangible assets protection right for intangible assets? Or maybe intellectual property should be protected in different way? Is the expression 'intellectual property' right for all types of human mind creations? Maybe the creation of the new term for human mind creations in 1967 wasn't the best solution? Many questions arise. Economists, layers and politicians have to find the answers. They help to understand the special and unique character of intellectual property and facilitate the future research. The lack of methodological backgrounds and cooperation between economics and law in their creation may provoke creating improper rules which influence intellectual property markets and make them less efficient.

## References

- Aplin, T., & Davis, J. (2017). *Intellectual property law: text, cases and material*. Oxford: Oxford University Press. doi:10.1093/he/9780198743545.001.0001.
- Barnes, D.W. (2011). Congestible intellectual property and impure public goods. *Northwestern Journal of Technology and Intellectual Property*, 9(8).
- Bochańczyk-Kupka, D. (2017). The measurement of intellectual property value at the microeconomic level. *Organizacja i Zarządzanie*, 114.



- Bochańczyk-Kupka, D. (2018). *Specyfika, pomiar i znaczenie własności intelektualnej i jej ochrony. Perspektywa ekonomiczna*. Katowice: Wydawnictwo UE w Katowicach.
- Holcombe, R.G. (2000). Public goods theory and public policy. In: J. Narveson, & S. Dimock (Eds.), *Liberalism: new essays on liberal themes*. Dordrecht: Springer. doi:10.1007/978-94-015-9440-0\_8.
- Khemani, R.S., & Shapiro, D.M. (1993). *Glossary of industrial organization economics and competition law*. Retrieved 03.05.2018 from <http://www.oecd.org>.
- Koppius, O. (1999). Dimensions of intangible good. *Proceedings of the 32nd Hawaii International Conference on System Sciences*, 5. doi:10.1109/HICSS.1999.772916.
- Lindberg, V. (2009). *Intellectual property and open source: a practical guide to protecting code*. Sebastopol: CA O'Reilly.
- OECD. (2008). *Glossary of statistical terms*. doi:10.1787/9789264055087-en.
- Ostrom, V., & Ostrom, E. (1977). Public goods and public choices. In E.S. Savas (Ed.), *Alternatives for delivering public services: toward improved performance*. Boulder: Westview Press.
- WIPO. (1967). *Convention establishing the World Intellectual Property Organization*. Retrieved 30.05.2018 from <https://www.wipo.int>.
- WIPO. (2016). *Understanding industrial property*. Retrieved 30.05.2018 from <https://www.wipo.int>.
- WTO. (2018). *What are intellectual property rights?* Retrieved 13.04.2018 from <https://www.wto.org>.
- Yu, P.K. (2016). Five decades of intellectual property and global development. *The WIPO Journal*, 8(1).
- Zalta, E.N. (Ed.). (2011). *Stanford Encyclopedia of Philosophy*. Stanford: Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University.

## Acknowledgements

**Author contributions:** author has given an approval to the final version of the article.

**Funding:** this research was funded by the University of Economics in Katowice, Faculty of Economics, Department of Economics statutory sources.

**Note:** the results of this study were presented at *Second Scientific Conference Institutions: theory and practice* (June, 19–20 2018, Toruń, Poland).

