

**Monika Wojtkiewicz**

Wroclaw University of Economics and Business

e-mail: monika.wojtkiewicz@ue.wroc.pl

ORCID: 0000-0003-0648-4280

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**INDUSTRIAL PROPERTY MANAGEMENT  
IN MANUFACTURING ENTERPRISES –  
AN ATTEMPT TO CONSTRUCT A DEFINITION  
OF THE CONCEPT FOR USE WITHIN  
MANAGEMENT SCIENCES**

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**ZARZĄDZANIE WŁASNOŚCIĄ PRZEMYSŁOWĄ  
W PRZEDSIĘBIORSTWACH PRODUKCYJNYCH –  
PRÓBA KONSTRUKCJI DEFINICJI POJĘCIA  
NA UŻYTEK NAUK O ZARZĄDZANIU**

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**Abstract:** The purpose of this article is an attempt to define the concept of *industrial property management* based on literature research and the author's own conceptual work devoted to the problem of defining this area. As a result of the conducted analyses, the author concludes that the hitherto and inconsistent interpretations of the notion of *industrial property*, as well as their detachment from management sciences, and giving them a character proper to legal sciences, gives rise to significant problems in the understanding and implementation of management processes in this area, and more importantly, also in the understanding of the importance and significance of this area for the proper management of a manufacturing enterprise. The author presents the view that the concept of *industrial property* must be understood more extensively in management sciences and, at the same time, broadly enough to allow for an unambiguous definition of *industrial property management* that would serve its stakeholders in a key way that does not raise any substantial doubts.

**Keywords:** industrial property, industrial property management, intellectual property resources, company innovation potential, innovation.

**Streszczenie:** Celem niniejszego artykułu jest próba zdefiniowania pojęcia *zarządzanie własnością przemysłową* na podstawie badań literaturowych i własnych prac koncepcyjnych poświęconych problematyce definiowania tego obszaru. W wyniku przeprowadzonych analiz autorka wnioskuję, że dotychczasowe i niejednolite interpretacje pojęcia *własność przemysłowa*, a także ich oderwanie od nauk o zarządzaniu i nadanie im charakteru właściwego dla nauk prawnych rodzi istotne problemy w rozumieniu i realizowaniu procesów zarządczych w tym obszarze, a co ważniejsze, również w rozumieniu wagi i znaczenia tego obszaru dla właściwego zarządzania przedsiębiorstwem produkcyjnym. Autorka prezentuje pogląd, iż pojęcie *własność przemysłowa* musi być rozumiane szerzej w naukach o zarządzaniu i jednocześnie na tyle szeroko, aby możliwe było jednoznaczne zdefiniowanie zarządzania własnością przemysłową, które w sposób kluczowy, niebudzący znaczących wątpliwości służyłoby jego interesariuszom.

**Słowa kluczowe:** własność przemysłowa, zarządzanie własnością przemysłową, zasoby własności intelektualnej, potencjał innowacyjny przedsiębiorstwa, innowacje.

## 1. Introduction

The problem of understanding the term *industrial property management* is, on the one hand, the problem of inconsistent understanding of the term *industrial property* (Kostański and Jyż, 2020, p. 5), and on the other, the lack of an unambiguous distinction of areas that should be subject to this management. The considerations leading to the construction of a definition of *industrial property management* can therefore begin with the term *management* and implement *industrial property* in the domain of this term – which, at least in view of the heterogeneous understanding of the term *industrial property*, seems to be an inappropriate concept, as it may *de facto* lead to at least an incomplete definition. It is also possible to take the opposite direction to the one mentioned above – to start from the notion of *industrial property* and by selecting the elements it covers, but also those with which it is connected, to define a set, subject to *management* of this very area – which seems to lead to a complete definition, or at least a definition closer to reality.

This paper is based on the latter concept. The methodology for deriving the definition is illustrated in Figure 1. The author, on the basis of a review of the available literature and on the basis of own conceptual work, made an attempt to define the concept of *industrial property management* to be applied primarily in management sciences.

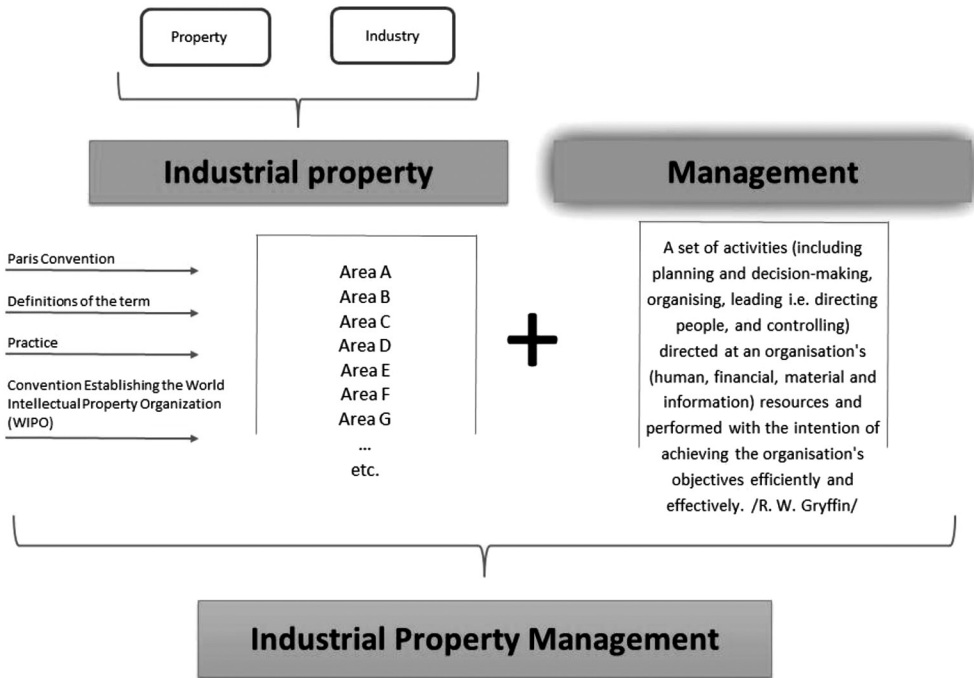


Fig. 1. Methodology for deriving the definition of *industrial property management*

Source: own elaboration.

## 2. The concept of *industrial property*

Despite many attempts to unambiguously define, but also to mark clear boundaries between concepts such as industrial property, intellectual property, industrial property rights, intellectual property rights, scholars have failed to reach a consensus in this aspect (Nowińska, Promińska, and du Vall, 2011, pp. 17-19; Dereń, 2007, pp. 50-52; Skubisz, 2012, pp. 43-68; Hołda-Wydrzyńska, 2017, pp. 271-274; Buchalska, 2009 pp. 366-369; Kostański, Żelechowski, 2020, pp. 2-8; Kostański and Jyż, 2020, pp. 5-7; Szymanek, 1998, p. 9), which, as a result, makes it difficult to understand the concept of intellectual property management or industrial property management. Both The doctrine and literature still have not developed uniform definitions of these concepts, and discrepancies in interpretation often lead to numerous misunderstandings, especially in economic relations between entities, but also in terms of making management decisions in their area. Entrepreneurs, scientific entities, as well as creators are entities that are directly affected by the essence of the interpretation of these concepts, and this is extremely important both for the

development of the enterprise but also the creative entity<sup>1</sup>, and globally important for the economy of the country.

Defining the term *industrial property management*, therefore, requires a review of the known definitions of the term *industrial property*, their evaluation, and the definition of the area in such a way that a framework for managing this area can be established. Hence it is important to propose an understanding of *industrial property* in management sciences that allows the concept of *industrial property management* to be defined in a way that is useful to management sciences.

Thus, what exactly is this *industrial property*? As mentioned above, there is still no uniform definition of the term. However, although it is still interpreted in different ways, it derives from the international agreement of 20 March 1883, namely the Paris Convention<sup>2</sup> for the Protection of Industrial Property<sup>2</sup>, where in art. 1 of that Act specified that the countries<sup>3</sup> concluding it shall form a “Union for the Protection of Industrial Property, and in the Final Protocol of that Act<sup>4</sup> it was laid down that the words industrial property ...are to be understood in the widest sense; they include all production in the field of agriculture (wine, grain, fruit, cattle and the like) and mining (minerals, mineral waters and the like)”. Poland has been a party to the international Union for the Protection of Industrial Property, i.e. the Paris Convention since 10 November 1919, and already in 1918 the Patent Office of the Republic of Poland<sup>5</sup> (hereinafter referred to as the PORP) was established in Poland, which until now has been the only government administration body responsible for granting exclusive rights for objects of industrial property protection. Today, 179<sup>6</sup> countries are members of the Paris Convention. Subsequent acts amending the Paris Convention<sup>7</sup> broadened the meaning of the words *industrial property* given

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<sup>1</sup> “Creative entity”, here understood as a creator-employee or creator-individual from outside the organisation, but also in this sense as a scientific or scientific-research entity that seeks and develops new solutions (through individuals employed in it or cooperating with the entity), business entities that develop new solutions (through individuals employed in it or cooperating with the entity) (own elaboration).

<sup>2</sup> Paris Convention for the Protection of Industrial Property of March 20, 1883.

<sup>3</sup> The countries that have acceded to the Paris Convention currently number 179 (Poland since November 10, 1919) Member countries are listed on the World Intellectual Property Organization (WIPO). Retrieved April 29, 2022 from <https://www.wipo.int/export/sites/www/treaties/en/documents/pdf/paris.pdf>.

<sup>4</sup> Final Protocol, to Article 1 of the Paris Convention for the Protection of Industrial Property of March 20, 1883.

<sup>5</sup> The Patent Office of the Republic of Poland – central organ of government administration competent for matters concerning industrial property protection. Retrieved May 15, 2021 from [uprp.aov.pl/o-urzedzie/informacje-7-podstawowe](http://uprp.aov.pl/o-urzedzie/informacje-7-podstawowe).

<sup>6</sup> Member countries are listed on the World Intellectual Property Organization (WIPO) website <https://www.wipo.int/export/sites/www/treaties/en/documents/pdf/paris.pdf> (retrieved April 29, 2022).

<sup>7</sup> Paris Convention for the Protection of Industrial Property of March 20, 1883, as revised at Brussels on December 14, 1900, at Washington on June 2, 1911, at The Hague on November 6, 1925, at London on June 2, 1934, at Lisbon on October 31, 1958, and at Stockholm on July 14, 1967, and as amended on September 28, 1979.

to them in the original act. Finally, the meaning of the words *industrial property* was introduced into the text of the Convention itself. Thus, on July 14, 1967, in the Stockholm Act<sup>8</sup> amending the Paris Convention Article 1 (3) reads: “Industrial property shall be understood in the broadest sense and shall apply not only to industry and commerce proper, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers, and flour”. The multitude of countries that are signatories to these international acts illustrates their importance to the international economy.

The Stockholm Act, apart from the aforementioned definition, specifies also a catalogue of objects of industrial property<sup>9</sup>, however it is slightly different from the catalogue of objects of industrial property specified in the Act on Industrial Property Law (Act on Industrial Property Law of 30 June 2000) (hereinafter: the IPL) currently in force in Poland. The catalogue of industrial property objects and rights granted by the IPL for these objects are presented in Table 1. Importantly, some of the Paris Convention regulations were incorporated by the Polish legislator into a separate Act on Combating Unfair Competition<sup>10</sup> (hereinafter: the ACUC). In contrast to the Paris Convention catalogue, Polish law distinguishes the topographies of integrated circuits granted registration rights by the PORP and rationalisation projects, which are not granted exclusive rights but are regulated by the Act IPL, albeit in a narrow sense. Catalogues of industrial property objects or industrial property rights are more often considered to be definitions of the concept of industrial property than a ‘manual’ of understanding of the concept, as explicitly indicated in the Paris Convention.

The following definition of industrial property can be found on the website of the Patent Office of the Republic of Poland:

“Industrial property<sup>11</sup> – A type of exclusive right arising from national, international or regional legislation. of the regional legislation. According to Article 1(2) of the Paris Convention for the Protection of Industrial Property, the objects of industrial property protection are patents for inventions, utility models, industrial designs, trademarks, service marks, trade name and designations of origin or appellation of origin, as well as the fight against unfair competition. According to the Act on Indus-

<sup>8</sup> The Stockholm Act amending the Paris Convention for the Protection of Industrial Property of 20 March 1883, as amended in Brussels on 14 December 1900, Washington on 2 June 1911, The Hague on 6 November 1925, London on 2 June 1934, Lisbon on 31 October 1958, and in Stockholm on 14 July 1967.

<sup>9</sup> Art. 1 paragraph 2 of the Stockholm Act amending the Paris Convention ... in Stockholm on 14 July 1967: The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition.

<sup>10</sup> Act on Combating Unfair Competition of 6 April 1993.

<sup>11</sup> <https://uprp.aov.pl/pl/slownik-terminow?litera=W&nazwa=wlasnosc-przemyslowa> (retrieved on: September 13, 2021).

trial Property Law in force in the Republic of Poland, exclusive rights include e.g. patent, supplementary protection right for medicinal products and plant protection products, protection right for a utility model, protection right for a trademark, right in registration of an industrial design, right in registration of a geographical indication, right in registration of a topography of integrated circuits”.

**Table 1.** Objects of industrial property rights, and type of exclusive rights granted for them

Object of industrial property	Exclusive right
Invention	Patent
Utility model	Protection right
Industrial design	Registration right
Trademark	Protection right
Geographical indication	Registration right
Topography of integrated circuit	Registration right
Medicinal products and plant protection products	Supplementary protection right

Source: own elaboration based on provisions of the Industrial Property Law Act.

From the definition cited above, *industrial property* is a type of exclusive rights. However, this definition causes that the very name of the Industrial Property Law Act, in a literal translation may sound: an Act on the ‘right’ of the type of exclusive rights. Some inconsistency in nomenclature is apparent here. The Stockholm Act, on the other hand, indicates not only what is the “object of protection” regarding *industrial property*, but also how to understand *industrial property*.

The definition of *industrial property* derived from the Paris Convention failed to satisfy many scholars who repeatedly attempted to interpret it also based on the meaning of the words *property* and *industry*. While the word *industry* did not raise so many doubts, nor complex criticism, and today it is simply associated with economic activity (Kostański and Jyż, 2020, p. 6), the word *property* can be described as a ‘Pandora’s box’. The multitude of interpretations of the term *property* both in terms of legal and economic sciences (Niklewicz-Pijaczyńska, b.d.; Okoń-Horodyńska, 2015), and even philosophical ones, makes it difficult to understand the term “industrial property” in an unambiguous way. The purpose of the Paris Convention was to protect specific “creative/intellectual thought.” “Thought” which can only lead to realization in a concrete material object that, for example, may become an object of business trading<sup>12</sup>. However, the Civil Code does not provide under the notion of property the power over something other than an object having a material form, and despite that, exclusive rights granted to objects of industrial

<sup>12</sup> It is noteworthy that the manner or use, as one of the categories of a protectable invention, does not have a tangible form as such (although the manner may lead to a new product which will also be protectable).

property confer subjective rights on their owners, specified in the IPL Act. Exclusive rights granted by appropriate intellectual property offices for objects of industrial property give the holder the right to exclusive use of such an object of protection for professional and commercial purposes within a certain territory (e.g. by obtaining a patent one acquires the right to exclusive use of an invention for professional and commercial purposes within the entire territory of the Republic of Poland<sup>13</sup>). An exclusive right grants the holder a monopoly, limited in time and territory, on the use of a given object of industrial property protection. The holder may prohibit others from using the protected object in the territory in which it is protected.

The literature on the subject points to the possibility of applying a linguistic interpretation to the notion of *industrial property*, which indicates the nature of the rights and their scope (Buchalska, 2009, pp. 368-369) i.e. the protection of a given good in the broadly understood industry.

Professor Zoll argued that “industrial property is not a uniform concept, and it seems that it never will be, and that it is a misleading name, because it covers various kinds of objects, and again it is inaccurate because industry in the proper meaning of the term is not an intangible good or an object of law, and thus it cannot be a proper subjective term” (Zoll as cited Buchalska, 2009, p. 366)<sup>14</sup>.

Szymanek (2008, p. 20) points out that “industrial property, similarly to intellectual property, is a good of a non-material nature and difficult to define, and finally expresses the view that industrial property is a set of absolute subjective rights whose objects are intangible goods such as inventions, utility models, industrial designs, trademarks, geographical indications and topographies of integrated circuits”. At the same time, the study stresses the broader scope of the concept delineated by the Paris Convention.

It is important to note that the definition of *industrial property* is mainly dealt with by legal scholars. The natural reason for this is that the concept is established in a legal act, hence the origin of the meaning of *industrial property* is closely related to the law and legal language (Kostański and Jyż, 2020, p. 4). However, *industrial property* is used primarily in business trading, thus it also requires consideration in management sciences. Despite differences on the level of definitions, a consensus was reached that *industrial property* refers to intangible goods (Kostański and Jyż, 2020, p. 4). According to Buchalska, “the Paris Convention defines as industrial property a group of subjective rights the object of which are...” specific intangible goods listed in Article 1 (2) of the Paris Convention (Buchalska, 2009, pp. 363, 369). Zoll defined intangible goods as “goods that certain persons or their legal predecessors have created with their genius, labour, cunning or foresight” (Zoll, 1931). As a natural consequence, the definition of *industrial property* is considered,

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<sup>13</sup> Art. 63 paragraph 1 of the Act on Industrial Property Law of 30 June 2000.

<sup>14</sup> F. Zoll – co-author of such legal acts as the Protection of Inventions, Utility Models and Trademarks Act of 1924, the Act on Combating Unfair Competition of 1926 and the Copyright Act of 1926.



on the one hand, as a set of subjective and objective rights related to a specific catalogue of intangible goods (Skubisz, 2012), and, on the other, as “an umbrella term covering that group of intangible goods whose role and importance is evident in industry in the broad sense, regardless of whether the property is the result of creative effort of the human mind (solutions), or – carrying only specific information – is an instrument for the conquest of clients (designations)” (Promińska, 2005, p. 18, as cited in: Kępiński, 2015, p. 11; Nowińska, Promińska, and Vall, 2011, pp. 17-19). Nevertheless, another conceptual problem emerges in the literature, namely, the problem of unambiguously defining the concept of *intangible good*<sup>15</sup>.

The catalogue of industrial property is also being widely discussed, if only because industry looked very different in 1883. As the economy developed, the catalogue of goods specified in the Paris Convention was no longer sufficient. This was answered by subsequent revisions of the Paris Convention, but also by the Berne Convention<sup>16</sup> of 1886, governing copyright protection. However, the concept of *intellectual property* was defined in the 1967 Convention establishing the World Intellectual Property Organization as rights relating to, among others, literary, artistic and scientific works, but also objects of industrial property<sup>17</sup>.

### 3. Industrial property and management

The concept of *intangible good*, considered indispensable in the discussion of intellectual or industrial property, is also a vital and important concept in the aspect of creating management procedures in these areas. Unfortunately, conceptual disputes on the grounds of law more often lead to confusion among managers than bring closer the understanding of the nature of *industrial property* – so necessary to make the right decisions, even in the area of innovation. The features of intangible assets implied to formulate their protection “in a manner different from the model

<sup>15</sup> According to Niewęglowski, two approaches of understanding intangible goods emerge: restrictive and liberal. The restrictive approach is one that recognises that an intangible good can only be a product that is protected by an exclusive right, and the liberal approach is that it can be any ‘intellectual’ product that has the potential to become the object of a right (Niewęglowski, 2015, pp. 24-26). This view has been criticised by A. Kappes (2018).

<sup>16</sup> Berne Convention for the Protection of Literary and Artistic Works of 9 September 1886.

<sup>17</sup> Convention Establishing the World Intellectual Property Organization, Signed at Stockholm on July 14, 1967 and as amended on September 28, 1979 Art. 2 Definitions viii: *intellectual property* shall include the rights relating to:

- literary, artistic and scientific works,
- performances of performing artists, phonograms, and broadcasts,
- inventions in all fields of human endeavour,
- scientific discoveries,
- industrial designstrademarks, 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.



of property law based on the authority over the thing” according to Kostański and Jyż (2020, p. 6), which also requires managers to take a broader view of *industrial property*. The economic perception of *industrial property* is to view it through the lens of the value it holds for the business. If a company is to obtain certain benefits from *industrial property*, then *industrial property* should be treated as a specific group of company resources. Resource management, however, is the domain of management. Thus, *industrial property* in an enterprise must become the object of management<sup>18</sup>. Dereń also points to the resource dimension of intellectual property (Dereń, 2020, p. 11). It seems, therefore, that management sciences can talk about the management of specific *industrial property* resources. Moreover, due to the often long and complicated process from the “creative/intellectual idea”, which leads to a solution that can be protected by an exclusive industrial property right only after meeting statutory requirements, to deriving tangible benefits from this solution, it may be appropriate to divide industrial property resources into primary and secondary resources. Primary resources are, for example, resources that precede obtaining exclusive rights for industrial property goods, among others the creativity of employees, ability of a company to recognize its own industrial property goods, material resources – as they support making e.g. an invention, and secondary resources, e.g. the obtained exclusive rights of industrial property, licences, know-how, but also new production technologies, created according to an invention.

While some conceptual discourse is perceived in legal sciences, it seems that the views presented are not only combinable at the level of management sciences but are also necessary. Industry is a broad term, encompassing a number of activities, including innovative activities which lead to the creation of intangible assets, as defined in the catalogue of the Paris Convention or the IPL Act, their use and the manner of protection, regardless of whether these catalogues are considered closed catalogues by one group of scientists, or open catalogues according to other positions. When talking about *industrial property management*, it is important to recognise its broad context, going beyond the dimension of legal disputes on the basis of the definition of *industrial property*. Regarding *industrial property management*, this cannot be limited only to managing a catalogue of industrial property objects or the rights related to these intangible goods, and the term should be treated broadly enough in management sciences to also include everything connected with industrial property objects in every manifestation of an enterprise’s activity, and most importantly, in the dimension of the cause-and-effect relation. Although, as pointed out by Zoll, *industry is not an intangible good*, the success of industrial operations performed on tangible goods is often dependent on successful operations on intangible goods. The complexity and multifaceted nature of *industrial property* must therefore be taken

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<sup>18</sup> “Intellectual property must also be considered through the lens of management, and in this aspect it becomes the object of management” (Okoń-Horodyńska, 2015, p. 334).

into account in the overall operations and processes of the organisation, and thus be reflected in the constructed definition of *industrial property management*.

When creating management processes in the field of industrial property, it should be borne in mind that they have to take into account the intangible nature of the managed collection, i.e. the unlimited use of intangible assets both in terms of time, territory and identity (Kostański and Jyż, 2020, p. 6), and on the other hand, the nature of granted industrial property rights, the multifaceted use of them, such as: the manufacturing and marketing of tangible objects according to e.g. an invention, enhancing the prestige by informing about the origin of a given product (e.g. trademarks), gaining profits on account of the right to a given intangible asset, including in the form of acquiring financial resources for development and further research (e.g. grants making the allocation of funding dependent on the industrial property rights already held or increasing the chances of receiving a grant (resulting from the scoring)).

Thus, the role of management sciences becomes indicating the ‘place’ of *industrial property* in the management of a manufacturing enterprise.

#### **4. Industrial property management**

The management of industrial property can be certainly viewed as a component of intellectual capital management, which is carried out, as a rule, at three levels i.e. at the level of managing human capital, relational capital and structural capital (Banasiuk and Rutkowska, 2012; Beyer, 2012; Kasprzycki, Matczewski, Okoń-Horodyńska, du Vall, and Wisła, 2008; Słowik, 2016; Stosik and Kowalewski, 2011).

Management sciences increasingly discuss the need to integrate intellectual property management with knowledge management (Gando Manuel, 2016; Heao-Calad, Rivere Montoya, and Uribe Ochoa, 2017; Panar, 2019), risk management (Yurievna Bulatetskaya, 2019), and innovation management (Bal-Woźniak, 2020; Gawlik and Adamczak, 2006; Jasiński, Głodek, and Jurczyk-Bunkowska, 2019).

Due to its specificity, strongly influenced by the legal requirements but also by the external environment, *industrial property management* needs to be separated, addressed and carefully treated in management processes. It is the institutionalised protection of objects of industrial property, and the protection by exclusive right granted on the basis of an administrative decision (as opposed to copyright arising at the moment of fixation of a work in any form, even if it has not been completed) that justifies treating this area in a special way in management processes. This specificity also relates to the geographical scope of the entity, its territorial expansion plans and designated development paths, i.e. domestic, European or international. Thus, the scope of dependence on legal requirements increases with the legislation of countries in which a given entity operates, e.g. by marketing its products in a given market. Therefore, *industrial property* cannot be managed properly without taking into account the conditions set by national legislation or international treaties and

agreements. It is the law that determines what can be protected and how long it can be protected, which companies must comply with if their goal is to properly protect their interests and rights on the one hand, and to conduct legitimate business among protected solutions for the benefit of other entities in a given market on the other. As a result, companies need to introduce such management processes in this area which, taking into account the legal conditions, will make it possible to achieve objectives, in particular long-term business objectives which often originate in innovative activities.

However, in order to talk about *industrial property management*, first it is necessary to identify the key components that comprise or may comprise this process. This is not an easy task (Kasprzycki et al., 2008). It is important for the selection of these elements, but also for the construction of the definition of *industrial property management* that the network of links, interference and interdependence of the activities of the enterprise can be isolated and can become the subject of this management. In the face of well-known definitions of *industrial property*, the literal understanding of *industrial property management* becomes somewhat troublesome, as it could be understood that *industrial property management* is limited to the management of objects of industrial property, or industrial property rights, or otherwise the disposal of rights to inventions, utility models, industrial designs, trademarks, topographies of integrated circuits, geographical indications or know-how.

However, it seems that this approach is overly limited from a management perspective. In order to manage the catalogue of already owned industrial property, or even already granted exclusive rights, the entrepreneur must take a number of complicated and complex steps. The complex process begins at the stage of activities aimed at broadening the awareness of employees and managers and motivating them to create and submit innovation projects in the company, including the company's activities related to the execution of research and development work by external parties. The subsequent handling of the filed projects and the acquisition of industrial property by an outside company is also a component of the overall process. At this stage, it is necessary to analyse and evaluate the innovation projects to be implemented in the enterprise. Such an assessment must be conducted not only from the perspective of the needs of the enterprise, but also from the perspective of the possibility and legitimacy of industrial property protection. For this reason, it must be carried out in cooperation with many other departments of the company which, among others, are responsible for production technology, the strategy of introducing new products on the market or can evaluate implementation costs and expected economic effects. It is also indispensable when managing a company in the field of industrial property to safeguard the interests of the entrepreneur within the framework of concluded contracts (cf. Szczepanik and Szewc, 1993; Szewc and Ziolo, Grzesiczak, 2011), and in terms of avoiding the infringement of the exclusive rights of others. The development of new solutions, for filing with the relevant

intellectual property offices, and the monitoring and processing of ongoing industrial property matters is another extensive aspect of managing this area. If a given entity may decide to protect its own industrial property resources, it cannot do so in relation to observing the exclusive rights of third parties on a given market, which makes it automatically and independently of its will a ‘user’ of the provisions of the IPL Act or the ACUC, since granted and binding exclusive rights to industrial property are effective *erga omnes*. This clearly demonstrates how important *industrial property* is in the management of a company, and how widely it interferes in the company’s processes.

Hence, when talking about *industrial property management*, how widely should the term be understood? Is it possible to treat the sentence in the Paris Convention “industrial property shall be understood in the widest sense” so broadly that it will allow to define *industrial property management* in such a way that it will not be limited only to legal aspects or management of the catalogue of rights listed in the IPL Act? Is it possible, using the formulation of *industrial property*, to propose such a definition of management of this area which, in light of the current legislation, will be understood by entrepreneurs sufficiently and uniformly enough that its use will be as common and as comprehensible as, for example, human resources management? Or would it make more sense, however, to add a keyword that does not violate the definitions already formulated under the law in the literature? This will perhaps minimise criticism of the proposed, properly interdisciplinary definition of *industrial property management*. The author suggests two possibilities. One is to use the whole phrase *industrial property management* in management sciences, and the other – supplemented with the word ‘area’, i.e. *industrial property area management* – which seems to allow for a broad approach to *industrial property management*. Whether it is *industrial property management* or *industrial property area management*, it is necessary to identify the areas that will be subject to this management. These were selected by the author in Table 2, with the possibility of narrowing or expanding this set to include others, depending on the needs of the enterprise. In its pure meaning, *industrial property* is primarily for the benefit of economic operators (Kostański and Jyż, 2020, p. 6). It seems reasonable, therefore, not only to have a uniform understanding of the concept of *industrial property*, but also one that would serve business units so that it can be taken into account in management processes as broadly as necessary for the proper management of the industrial property area in achieving the objectives of the organisation. The author isolates the elements of *industrial property* and defines them as one area of *industrial property* to illustrate its relevance in the overall process of business management and to be able to derive a definition of the management of this area.

It seems that the formulation in the Paris Convention allows defining the area of *industrial property management* in a way necessary to achieve the objectives of the enterprise (organisation) based on industrial property resources, processes related to industrial property, but also *protection of industrial property objects*, or *disposal of industrial property rights*.

**Table 2.** Areas of industrial property in a manufacturing enterprise

No.	Industrial property area
1	2
1	Industrial property in the creation of intellectual potential of the enterprise
2	Industrial property in creating innovative attitudes in the enterprise
3	Motivating employees to creative activities
4	Employee training on industrial property
5	Rewarding creators for innovative activities
6	Industrial property in the implementation of research and development work
7	Consideration and substantive evaluation of submitted innovative projects (by employees and external entities) (examination of patent or protection capability, and examination of the legitimacy of their use in the enterprise's activities, etc.)
8	Industrial property in obtaining funds for the development of the enterprise (research works, subsidies for the protection of industrial property objects, etc.)
9	The area of decisions concerning: applying for exclusive rights, refraining from applying for rights, making industrial property subject to secrecy, maintaining obtained rights in force, refraining from maintaining rights in force
10	Cost-benefit analysis for the protection of objects of industrial property
11	Industrial property in the long-term activity of the enterprise
12	Industrial property in risk management
13	Obtaining formal and legal protection from the relevant intellectual property offices
14	Industrial property in disputes before industrial property offices, court proceedings, settlement proceedings
15	Disposal of exclusive rights held (use of rights in the course of business, licensing of rights, sale of rights, other forms of transfer of rights)
16	Industrial property in contracts (various types)
17	Enforcement of industrial property rights against third parties
18	Acquisition of industrial property rights from outside the organization
19	Implementation of non-exclusive solutions into enterprise operations
20	Industrial property in market monitoring
21	Avoiding infringement of industrial property rights of third parties (patent research, market research)
22	Industrial property – strategies for protection
23	Industrial property in brand management (product designations)
24	Industrial property in knowledge management
25	Commercialisation of industrial property rights
26	Industrial property in project management
27	Dealing with inventions, utility models, industrial designs, trademarks, geographical indications, topographies of integrated circuits, know-how within and outside the enterprise, but also with rationalisation projects

1	2
28	Compliance with the rules of fair competition
29	Industrial property in the corporate image
30	Industrial property as an element of company value
31	Industrial property in the overall corporate strategy
32	Industrial property as an element of competitive advantage
33	Industrial property in production planning
34	Industrial property as an element of intellectual property
35	Industrial property in manufacturing technologies
36	Industrial property and launching new products

Source: own elaboration.

Adopting both a view that *industrial property* is a certain part/area of intellectual property, and also the one that indicates that industrial property is nevertheless a separate field, it is impossible to detach oneself from the feature common to them, namely, that intellectual thought, creation, creativity, etc. lies at their basis. Thus, at the basis of every intangible good, there is a person or a team of people<sup>19</sup>. Therefore, a legal entity cannot become a solution developer under any circumstances. Thus protection is granted to manifestations of human activity, although *de facto* rights may, for example, only be granted to legal persons, depending on the civil law relationships established, for example between employees-creators and the employer. Therefore, entrepreneurs must manage not only the monopoly granted by industrial property rights but, first of all, the sources of their creation, as well as the sources of inflow of industrial property to the enterprise. At the root of creation, as already shown above in principle, is Man. This can be an employee, a contractor, but also an individual not associated with the enterprise at all. At the source of the inflow, however, will be, besides humans, also other entities with legal personality, scientific, scientific-research units, or other organisations. The area of *industrial property*<sup>20</sup> management as understood by an entrepreneur cannot therefore be limited to the management of the rights themselves or compliance with the requirements set by the legislator. Managing this area will always involve more for an entrepreneur than applying a legal norm. The concepts used in this area must be understandable and useful for management. Business is also the source of law in this area, just as creators are the source for the creation of an invention. The entrepreneur sees a broader aspect that directly or indirectly relates to functioning in trading. Hence,

<sup>19</sup> There are a few known cases of creativity among animals, however so marginal that they have been left out of these considerations (a photo was accidentally taken by a monkey – who owns the copyright?).

<sup>20</sup> Industrial property area – all that is industrial property, and all that is related to industrial property in a cause-and-effect sense as part of doing business (own elaboration).



when talking about *industrial property* in management sciences, it is not possible to limit oneself only to the legal aspects that give meaning to this concept, and it seems necessary and important to derive a definition of *industrial property management*, by giving the term *industrial property* a broader meaning.

Summing up the above considerations, *industrial property* as an object of management in a manufacturing enterprise should therefore be understood as broadly as possible, not only in the context of the disposal of industrial property objects or rights to them, but also as an area strongly coupled with a number of other processes occurring in the enterprise. Management processes in this area should comprehensively consider the interrelationships, and at the same time take into account the key legal aspects that determine the rights, determinants and limitations of an organisation in the management of the resources involved.

Griffin defines management as: “A set of activities (including planning and decision-making, organising, leading i.e. directing people, and controlling) directed at an organisation’s (human, financial, material and information) resources and performed with the intention of achieving the organisation’s objectives efficiently and effectively” (Griffin, 2004, p. 6).

Griffin also points to four basic functions of management: planning and decision making, organising, leading (motivating) and controlling. Therefore, it should be noted that in order to manage industrial property, all the mentioned management functions proposed by Griffin must be fulfilled. This opinion is also held by Okoń-Horodyńska (2015, p. 336) who points to the preservation of these functions under the management of intellectual property, whereas Banasiuk and Rutkowska describe the importance of industrial property management (Banasiuk and Rutkowska, 2012). Bearing in mind the aspects discussed above, industrial property management can therefore be seen as the management of a set of elements with a certain property (characteristic) that can be attributed to all the activities that are listed in the cited definition of management. This attribute is the specificity that requires and allows to extract this area from the entire management process, not only to increase the efficiency and effectiveness of activities in this area but also, above all, in other areas of management, on which it undoubtedly has an impact. Thus, a strong feedback loop between numerous processes in the enterprise and the area of industrial property becomes apparent (Figure 2). The multitude of complex interrelationships, dependencies, and complexities highlight the extent of the scope and intrusion of industrial property into enterprise processes. In this era of innovation, entrepreneurs are increasingly aware of the strong impact of industrial property protection on the development of an organisation or the day-to-day operations of an enterprise. Okoń-Horodyńska even points out that competition between organisations now comes down to competition for intellectual property (Okoń-Horodyńska, 2015, p. 334). However, the intricacy and complexity of the processes in this area means that companies still do not devote sufficient attention to it, which often boils down only to responding to suddenly appearing needs of the company, resulting from it finding



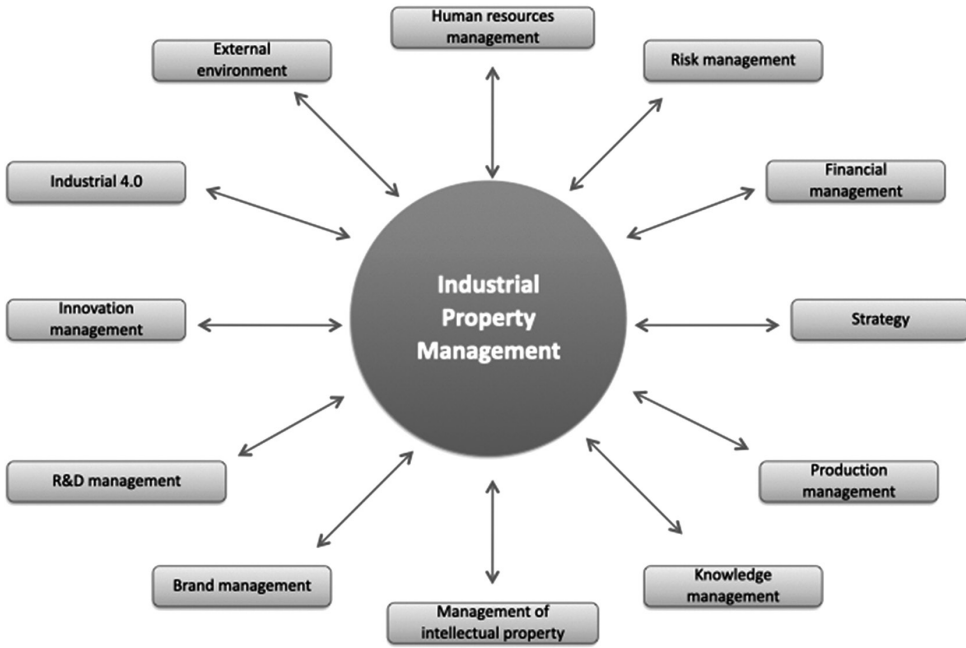


Fig. 2. Feedback between different areas of enterprise activity

Source: own elaboration.

itself in a situation threatening the presence of its products on the market or their imitation by competitors. Actions taken in this area, as well as their effects, often condition actions in other areas of activity, e.g. in production, and translate into economic results of the organisation. Therefore, it is impossible not to agree with the view of Okoń-Horodyńska, that “the management of intellectual property must be a component of the overall management process, and at the same time, the location of intellectual property units in the structure of the organisation should ensure proper linking of specific activities in this area with the basic functions and areas of activity of the enterprise” (Okoń-Horodyńska, 2015, p. 340; cf.: Chithra Chansdreaeskharan and Jiji, 2019; Kotarba, Okoń-Horodyńska, and Żurawowicz, 2010, p. 341 et seq.; Procedura..., 2010; Stryzhak, Akhmedova, Suceno, and Pokolodna, 2020; Trzmielak and Byczko, 2010). Moreover, this author points out that the innovation activity of an enterprise “involves the interaction of different functional areas of the enterprise”. Thus, entrusting specific activities to IP units in enterprises is highly relevant. While many authors indicate important aspects that should be covered by the management of industrial property, or more broadly intellectual property, it is difficult to find a definition of industrial property management. Szewc indicates that the management of intellectual property rights includes the acquisition of

intellectual property rights, the organisation of intellectual property matters in an enterprise, the protection of these goods and their exploitation, and the trading of intellectual property rights (Szewc, 2006, pp. 113-114). Okoń-Horodyńska describes the essence and “basic components of intellectual property management” (Okoń-Horodyńska, 2015, p. 335, fig. 1), i.e. “intellectual property development, market analysis (vigilance), intellectual property exchange, and intellectual property rights protection” which she details in her other academic publications. It is noteworthy that patent attorneys who are professionally engaged in providing assistance in industrial property matters, employed in manufacturing enterprises according to Article 4(4) of the Patent Attorneys Act, report to the head of the organisational unit, which also proves the importance of this area for the whole enterprise. The industrial property unit should be similarly situated. The tasks assigned to this unit should be performed on the basis of a network of connections and information exchange with other areas of the enterprise. The result of cooperation coordinated by such a unit should be providing not only key information necessary to make business decisions at the highest management level, but also feedback guidelines for these areas resulting from the decisions made.

## 5. Definition of *industrial property management* for the purposes of management sciences

The assumptions in Table 2 and Figure 2 were used to construct the definition of *industrial property management*.

Proposed definition:

*Industrial property management in a manufacturing enterprise*<sup>21</sup> should be understood as a set of coordinated and structured activities of the enterprise in the field of industrial property, taking into account any feedback from those areas of the enterprise' operation, implemented at the level of strategic, operational and functional management, and which are: 1) conditioned by the recognition, protection and use of intellectual potential, created or acquired by the production enterprise, ultimately revealed in the form of industrial property goods, i.e. rationalisation projects, inventions, utility models, industrial designs, trademarks, geographical indications, topographies of integrated circuits, know-how, and also are conditional on avoiding infringement of the exclusive rights of third parties, and also which activities 2) condition decisions in the following areas: applying for exclusive rights for industrial property and maintenance of granted rights, covering industrial property with the corporate secret or deliberate resignation from any protection of such property, as well as broadly understood disposal of exclusive rights in business trading, and which set of activities will ensure effective and efficient use of primary and secondary industrial property resources, implying an increase in

<sup>21</sup> Or Industrial Property Area Management in a manufacturing enterprise.

*competitiveness, minimising the risk of losing intellectual potential and the risk of infringing exclusive rights of other participants in a given market.*

## 6. Conclusions

*Industrial property management* is a complicated, complex and multi-faceted process. Many of the management problems affecting this area relate to a lack of understanding of the concept itself, on the one hand, and on the other, on its impact on a range of activities undertaken by the company. This often leads to the failure to exploit an enterprise's intellectual potential, loss of competitive advantage despite innovations, or long-standing litigation. As a result, it significantly slows down the growth of the business. The management problems in this area certainly require further research, which will perhaps uncover other and significant relationships, detail and verify those presented here, and their results should help to refine the proposed definition.

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