

Management of Company Innovations as Intellectual Property According to the Bulgarian Legislation system

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Summary:

The article **Management of company innovations as intellectual property** focuses on product innovations in business and their essence as intellectual property (IP). It addresses the topic of the protection of the product innovations as IP in the **Bulgarian legislation**, making an overview of their strong sides, advantages and alternatives. This piece of research presents the IP protection of product innovations as invention, utility model, industrial design, know-how and/or object of copyright.

The paper is structured in three parts as the introduction elaborates on innovation as an intellectual product. The second part details the various forms of the protection of the product innovations, while the final part is focused on **variants of IP strategy in the field of product innovations**: different strategic alternatives to obtain economic advantages of the company product innovations.

Each intellectual result is presented as an **intangible company asset** with a

specific **economic potential** and **economic instrument for the market success: product identification and differentiation, image and competitiveness.**

Key words: intellectual property, product innovations, management

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Introduction

Innovation is a creation of new consumer value through solutions that serve to meet new or old customer needs and market needs in new or modified ways. This function is performed through the introduction of different or more effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. The concept of innovation suggests a novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Innovations could refer to the product, process or organisation as a whole.

Product innovation may involve the development of a principally new, new

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or upgraded solution with regard to the existing product.

In business and economics innovation is the catalyst of growth. With rapid advancements in transportation and communications over the past few decades, the old world concepts of factor endowments and comparative advantage, which focused on an area's unique inputs, are seen as outdated in today's global economy. The economist Joseph Schumpeter, who contributed greatly to the study of innovation, argued that industries must incessantly revolutionize the economic structure from within, that is innovate by applying better or more effective processes and products, which can be exemplified by the shift from the craft shop to the factory. He famously asserted that "creative destruction is the essential fact about capitalism".¹ Furthermore, entrepreneurs continuously look for better ways to satisfy their consumer base by offering improved quality, durability, service, and price which come to fruition in innovation with advanced technologies and company strategies.

Product innovations per se are the result of the creative endeavor and professional skills of the people working for the company as a result of their intellectual efforts and labor. These innovations could enjoy legal protection as IP.

Generally speaking, IP refers to **creations of the mind**: inventions, literary and artistic works, and symbols, names, images, and

designs used in commerce.

IP is divided into two categories:

- **Industrial property**, which encompasses inventions (patents), trademarks, industrial designs, and geographic indications of source;
- **Copyright**, which encompasses literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs.²

I. FORMS OF PROTECTION OF THE PRODUCT INNOVATION

There are various ways of the legal protection of the product innovations as IP such as invention, utility model, industrial design, know-how or object of author's right (outside the scope of this article are topologies of integrated circuits, plants varieties or animal breed achievements).

1. *Product Innovation as an Invention*

The best way to secure the protection of the principally new product at the technological and scientific level is invention. **Invention** refers to the solution to a specific problem in the field of technology. An invention may relate to a

¹ Schumpeter, Joseph, A., 'Capitalism, Socialism and Democracy', NY, Harper, pp. 82- 85

² www.wipo.int

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product or a **process**. Examples: 6-speed gearbox for the automobile, invented by R. Antonov; method for the production of the new medicine or food.

As Bulgarian patent law envisages³, **Patents shall be granted for inventions in any field of technology**, which are new, involve an inventive step and are susceptible of industrial application. The invention may be protected by the patent.

The protection conferred by the patent is limited in time (generally 20 years).

To obtain a patent the inventors should follow a legal procedure for the patenting of their invention, which should **meet several criteria to be eligible for patent protection**. Hence an invention must be:

1. **world novelty** - An invention shall be considered to be new if it does not form part of the **state of the art**. **The state of the art** shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, anywhere in the world, before the filing date or the priority date, as appropriate, of the application.

Novelty is a fundamental requirement of patentability. It must be emphasized, however, that novelty is not something which can be proved or established; only its absence can be proved.

2. **exhibit a sufficient "inventive step"** - An invention shall be considered to involve an inventive step if, having regard to the state of the art **it is not obvious to a person skilled in the art**.

With regard to the requirement of inventive step (also referred to as "non-obviousness"), the question as to whether or not the invention **"would have been obvious to a person having ordinary skill in the art"** is perhaps the most difficult standard to determine in the examination as to substance.

3. **industrial application** - An invention shall be considered susceptible of industrial application **if it can be made or used repeatedly in any branch of industry or agriculture**.

Nowdays methods of the manufacturing can reproduce an invention. "Applicability" and "industrial applicability" are expressions reflecting, respectively, the possibility of making and manufacturing in practice, and that of carrying out or using in practice. The term "industrial" should be considered in its broadest sense, including any kind of industry.

The following **objects shall not be regarded as inventions**:

- discoveries, scientific theories and mathematical methods;
- artistic work results;
- schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;
- presentation of information.

Legal protection for the patentable invention starts with filing an application for the patent with the Patent office. The right to file an application shall belong to the **inventor** or to **his successor in title**.

³ Law on patents and registration of utility models, Official gazette, 1993, N 27

Where the right to file belongs to two or more persons it shall be exercised by them jointly. The refusal of one or more such persons to participate in the filing procedure or in the patent granting procedure shall not prevent the others from carrying out the acts set out in this Law.

To start the patent procedure the inventor has to prepare a patent description – the most significant paper of documents.

The issuance of a patent is a complex procedure which may take more than 2 years to complete.

If the invention meets the criteria for patentability, the patent office issues a **patent**.

A **patent** is a document, issued by a government office (or a regional office acting for several countries), Patent office in Bulgaria, which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the patent owner.

The patent's term of validity shall be 20 years from the date of filing of the application. The patent is valid on the territory of the country, the patent office of which issues the patent.

The Bulgarian patent office (BPO) issues the patent, which is valid on the territory of Bulgaria.

The exclusive right in an invention shall comprise: the right to **use the invention**, the right to **prohibit other persons from using** it without the consent of the patent owner and the right to **dispose of the patent**.

The right to use an invention shall comprise the following cases: the making, offering for sale, putting on the market of the subject matter of the invention, import included, the intended use of the subject matter of the invention as well as the application of the patented method.

Where the subject matter of the patent is a product (article, device, machine, equipment, substance, etc.), the patent owner shall have the right to prohibit others from performing the following acts: making the product; offering for sale, putting on the market, import included, proper use or warehousing of the product for the purpose of offering, putting on the market or use thereof.

The effect of a patent shall not extend to:

- use of the patented invention for **non-commercial purposes** with a view to private needs, where such use does not cause significant material prejudice to the owner of the patent;
- use of the invention for **experimental or research and development purposes** relating to the subject matter of the patented invention;
- extemporaneous **preparation for individual cases in a pharmacy of a medicine in accordance with a medical prescription**;
- use of the patented invention **on board any foreign land vehicle, vessel or aircraft**, which temporarily or accidentally enters the territory, waters or airspace of the country, provided that the patented invention is used exclusively for the needs of such means of transport.

In most laws, however, there are **three main exceptions** to infringement of exclusive rights to make a patented product, namely: where the patented product is made for the sole **purpose of scientific research and experiment**; where a **third party had started making the product before the date when the patent application for an invention** incorporated in the product was filed and where the **patented product is made under a non-voluntary license or under an authorization granted by the Government on public interest grounds**.

2. The Product Innovation as a Utility Model

At the lower creative level the product innovation should be protected as a utility model (UM).

In a number of countries inventions are also protectable through registration under the name of "utility model" or "short-term patent." An example of such a case is the new wind-driven electric generator invented by Eng. A. Gonov – protected as UM in the BPO.

The requirements for legal protection are not as strict as those for patents, in particular in respect of the duration of protection, which is shorter, but otherwise the rights under the utility model or short-term patent are similar. The fees are lower.

Utility models are intended for products, not methods. In the Bulgarian patent law the certificate for the utility model shall be granted for **utility models** which are **new**,

obtain **inventive step** and **are industrially applicable**.

Utility model protection shall be available to objects with structural and technical features related to the improvement of the design, shape or layout of the elements of products, tools, devices, apparatus or their parts, materials, etc., designed for use in production or in everyday life, and that satisfy the requirements mentioned above.

A utility model certificate shall not be granted for the methods and the objects that are non-patentable as inventions. A certificate having a term of 10 years maximum as of the filing date shall provide legal protection for utility models and its duration is 4 years as a start – filing date plus 2 periods of 3 years. At the applicant's request, an application for a patent of invention may be converted into an application for a utility model patent until a decision is taken on the application.

3. The Product Innovation as an Industrial Design

The new outlook, esthetical or ornamental decisions for the existing product can be protected as industrial design (ID). Generally speaking, industrial design is the ornamental or aesthetic aspect of a useful article. Such particular aspect may depend on the shape, pattern or color of the article. The Bulgarian ID law (Law on the protection of the industrial design)⁴ says: **Industrial design** means **the appearance** of the whole or a part of a product resulting from the **specific features** of the **shape, lines, contours**,

⁴ Law on industrial design, State gazette, 1999, N 99

ornamentation, colors, or combination of such. **Product** means any **industrial or handicraft article**, including parts intended to be assembled into a complex article, sets or compositions of articles, packaging, graphic symbols and typographic typefaces, but excluding computer programs. Examples of such cases the include outlook of the BMW series 7 is protected as Registered community design /RCD/ fro the territory of 27 countries – members of EC.

The right in a design shall be acquired by registration with the Patent Office as from the date of filing an application for registration. Design shall be registered if it is new and has an originality /individual character/.

1. **novelty** - A design shall be considered **new** if, before the filing date or the priority date, as appropriate, of the application **no identical design has been made available to the public** by means of publication, use, registration or otherwise disclosed anywhere in the world. Designs shall be considered to be **identical** if **their specific features differ only in immaterial details** that do not influence the overall perception of the design.
2. **originality /individual character/** - A design shall be considered to have an **individual character** if the overall **impression** it produces on the **informed consumer differs** from the overall **impression produced by a design that has been made available to the public** before the filing date or the priority date, as appropriate, of the application.
A design must meet both of the criteria

to be eligible for a protection. The design must be at once a world novelty and original in nature.

A design shall not be registered if:

1. The design is **contrary to public policy** or to accepted **principles of morality**.
2. The technical or functional features of the product solely determine the specific features of the design.
3. The specific features of the design are **solely determined by the necessity for the product in which the design is incorporated** or to which it is **applied to be mechanically assembled or put in, around or against another product**, so that **both products realize their technical function**, with the exception of a design serving the purpose of allowing the multiple assembly or connection of interchangeable products within a modular system.

Right to File and Right to Registration

- The right to file an application for a design shall belong to its creator. Where the right to file belongs to more than one person, those persons shall exercise the right jointly. Refusal by one such person to exercise the right shall not constitute and obstacle for remaining persons to file an application. Refusal shall be explicit and in writing.

The scope of legal protection shall be defined by the graphic representation or representations of the registered designs, including each design that does not produce on the consumer an overall impression that is different.

A registered design shall confer on its holder the right to use and transfer the design and the right to prevent any third party without

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the holder's consent from copying the design or commercially using the design included within the scope of protection. As a result the rights of the registered ID are exclusive rights such the rights conferred by a patent. The exclusive right in a design shall comprise:

1. the right to **use the design**;
2. the right to **prohibit other persons from using** it;
3. the right to **dispose of the registered design**.

The right to use the registered design shall comprise:

1. the making the product on the registered design;
2. offering for sale;
3. putting on the market of the subject matter of the design;
4. import included;
5. proper use or warehousing of the product for the purpose of offering, putting on the market or use thereof.

Term of Protection for a registered design shall be 10 years as from the filing date of the application. The registration may be renewed for three successive periods of 5 years each, within maximum 25 years.

Certificate for ID is valid on the territory of the Bulgaria. (Registered community design – on the territories of the 27 EC – countries)

The right of the ID shall not extend to cases in which using the design for private or for experimental purposes or using the design for the purpose of making annotations or teaching, provided that such use is compatible with fair trade practice

and does not unduly prejudice the normal exploitation of the design and that the source is quoted.

Using the design on foreign land, air and naval transportation means when they temporarily or accidentally enter the territory of the country and in which the design is used exclusively for their own needs, as well as the importation of spare parts and accessories for the purpose of repairing such transportation means.

4. The Product Innovation as a Know-How

Know-how is practical knowledge of how to get something done, as opposed to "know-what" (facts), "know-why" (science), or "know-who" (networking).⁵

In the context of industrial property (now generally viewed as IP), know-how is a component in the transfer of technology in national and international environments, together with or separate from other IP rights such as patents, industrial designs and other economic assets.

Know-how can be defined as confidentially held, or rather, 'closely held' information in the form of **unpatented inventions, formulae, designs, drawings, procedures and methods**, together with **accumulated skills and experience**.

It gives the possessor a competitive advantage. It can be further supported with privately maintained expert knowledge on the operation, maintenance, use/application of the object product and of its sale, usage or disposition.

⁵ www. wikipedia.org

The inherent proprietary value of know-how lies embedded in the legal protection afforded to trade secrets in general law, particularly, 'case law'. **Know-how, in short, is "private intellectual property"**.

Know-how shall mean technical data, formulae, standards, technical information, specifications, processes, methods, code books, raw materials, as well as all information, knowledge, assistance, trade practices and secrets, and improvements thereto, divulged, disclosed.

Show-how is a diluted form of know-how as even a walk through a manufacturing plant provides valuable insights into the client's representatives into how a product is made, assembled or processed. Show-how is also used to demonstrate technique.

The characteristics of know-how as an object of intellectual property of the company are the following:

- Know-how is the result of research and development of commercial activities or other business;
- Know-how required cost of labor and/or capital receipt;
- Know-how is not universal knowledge applicable only to a specific task;
- Know-how is information, knowledge and experience in one or more of the employees of the company;
- Know-how is available to only a limited number of employees of the company who use it in their activities;
- Know-how can be productive or managerial in nature;
- Know-how is practicable and economically valuable information;

- Often know-how is an asset of the company, which over time is enriched by the collective and personal experience of the employees of the company;
- Know-how is maintained by the mechanism of "confidentiality".

Forms of existence of know-how are the following: recorded documentation and practical experience.

Recorded documentation includes technical and procedural data, instructions, drawings, calculations, production and technological requirements, requirements for appointment and career development, any written organizational governance documentation, including - with contractors and associates with banks and financial lending institutions.

Practical experience is gained and insightful, scattered like writing papers, the result of years of carrying out an activity. It can be production-technological-economic or managerial experience, a personal experience or the experience of a team of associates. It includes also training experience of personnel (past or current).

There are two sets of agreements associated with the transfer of know-how agreement: the disclosure and the non-disclosure agreements which are not separate parts of the principal know-how agreement.

The initial need for 'disclosure' arises from the fact that a licensee firm may wish to know the specific, unique or general 'content' of the know-how that a licensor firm possesses, which promises value to

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the licensee on entering into contract. Disclosure also aids the potential licensee in selecting among competitive offers, if any. Such disclosures are made by licensors only under non-disclosure or confidentiality agreements in which there are express undertakings that should the ultimate license not materialize, the firm to whom the disclosure is made will not reveal - and equally important - by any manner apply, any part of the disclosed knowledge which is not in the public domain or previously known to the firm receiving the information.

Non-disclosure agreements are undertaken by those who receive confidential information from the licensee, relating to licensed know-how, so as to perform their tasks. Among them are the personnel of engineering firms who construct the plant for the licensee or those who are key employees of the licensee who have detailed access to disclosed data to administer their functions in operating the know-how-based plant. These are also in the nature of confidentiality agreements and carry the definition of know-how, in full or truncated part, on the need-to-know basis.

Know-how is not protected by legal monopoly, but by a factual monopoly that provides a set of **legal and organizational means**.

Within the Bulgarian legal system (Law on Protection of Competition), the know-how term is identified with "**industrial or commercial secrets**". Confidentiality

is achieved by using another legal tool, namely the contract of secret. The contract regulates the rights and obligations of the parties in the process of exchange and use of economically significant information.

Organizational refers to ensuring the confidentiality of information and includes: control over the information flow in the professional circle or organization controlling the work of the research base and results, control of the sale of the products/goods and services/company; regulating procedures confidentiality with employees and contractors of the information organization, access control to outsiders.

Violation of prohibitions and restrictions on corporate know-how, proprietary information considered, the offenders being brought to criminal infringement.

5. The Product Innovation as an Object of Copyright

Copyright on the works in the field of the product innovations could be new project, new functional, process or esthetic characteristics, and a new way of use of the existing products. Copyright comes **into force at the moment of its creation. According to the Bulgarian copyright law⁶ exclusive rights on the intellectual property arise for its creator – engineer, designer, other.**

The exclusive author's rights are complex. They include are two types of rights - non – economic /moral/ and economic rights.

⁶ Law on copyright and related rights, State gazette, 1993, N 56

Moral rights are connected to Hegel's concept of the protection of author's right. Its main postulate suggests that the author's work is a natural and logical continuation of the author's personality.

The author shall be entitled to:

- **decide** whether the work created by him **may be made available to the public** and to **determine the time, place and manner** in which this may be done;
- **claim the copyright** over such works;
- **decide** whether such works shall be made available to the public **anonymously** or
- **pseudonymously**;
- **require** that his **name, pseudonym or other identifying sign** be identified in a suitable manner whenever his work is used;
- **require that the entirety of his work is preserved** and oppose any changes therein as well as any other actions that may violate his legitimate interests or personal dignity;
- **make alterations** in the work inasmuch as this does not prejudice rights acquired by other persons;
- **have access to the original of the work** when it is in the possession of another person and whenever such access is necessary for exercising non-economic or economic rights;
- **halt the use of the work due to changes in his beliefs**, with the exception of already implemented architectural works, providing compensation for the damages incurred by persons who have lawfully obtained the right to use the work.

Non-economic rights under items 2 and

4 are non-transferable. Transfer of other non-economic rights may only be explicit and in writing. Non-economic rights are grounded on Hegel's conception of author's rights: the author's personality is continuing naturally into author's work.

Economic rights are connected to the first copyright law in history, namely the British law for the protection of the printer's community. This law is known as a Queen Anne Law. Its original aim was to protect printer's investments and their economic interests.

The author shall be entitled to the exclusive right to use the artwork created by him and to permit its use by other persons with some exceptions. Actions such as the ones listed below shall be considered as use of the artwork:

- **reproduction** of the work;
- **distribution** of the original of the work or copies thereof among an unlimited number of persons;
- **public presentation** of the work;
- **public display** of a work of art or a work created by photographic or similar means;
- **revision of the work**. Revision shall be the use of the work to create a new derivative work;
- **wireless transmission** of the work;
- **transmission of the work by cable** or other technical means;
- **translation of the work into another language**;
- **implementation of an architectural design** through the building or manufacture of the object described in it;

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- **import and export** of the artwork in commercial quantities;
- **disposal of the work for the individual access in a time, place and way, chosen by every user individually.**

The author has the right to receive a reward for every kind of using of its work and for every consecutive using of such kind.

Copyright protection is temporal. The main principle is that **copyright shall be protected for the life of the author and 70 years after his death.** For works having two or more authors the term shall commence from the death of the last surviving author. The terms mentioned above shall commence as of January 1 of the year following the year of the author's death, or, respectively, the year when the work was made, or made available to the public or published.

Every using of the art works without permission is an infringement of law. These activities are called **intellectual piracy.**

The Bulgarian copyright law provides for the following ways of protection: **civil protection, administrative protection and penal protection.**

Bulgarian innovators can use the above-mentioned forms of protection of the innovations as intellectual property in cumulative ways. This is a legal situation named **protection with accumulation.**

6. Comparison of the Ways for IP Protection of Product Innovations

The main features, advantages and disadvantages of the above-mentioned

options for IP protection of product innovations are presented in the form of a table as follows:

II. IP STRATEGY IN PRODUCT INNOVATIONS

This strategy rests on the following basic methodological points:

1. IP is an **intangible business asset**;
2. IP management is focused on IP as a **company source to create economic advantages, benefits and profit**;
3. Managing of the company product innovations as **IP is a part of the complex innovative strategy.**

As a process IP management involves two steps:

1. **A complex analysis of IP** in product innovations;
2. **A form an IP strategy** for product innovations.

1. Complex Analysis of IP in the Product Innovations

The complex analysis of the IP in innovations should start with the well-known **marketing tools** of the 'product–place' matrix and SWOT analysis and then the effective specific **IP instruments** of IP research of the patent, utility model and design information and IP score⁷ are to be applied.

First answers should be found to important business questions such as:

1. What is the **business strategy** of the company;
2. What are the **company products for each market niche**;

⁷ IP score is a specific instrument of the IP rights analysis. For more information see www.epo.org

Table 1.

<i>Object of protection</i>	<i>Nature of protection</i>	<i>Characteristics of protection</i>	<i>Term of protection</i>	<i>Relation 'cost – effect'</i>
1. Invention	Legal document – patent. Legal situation on market realization as launch, commerce, license realization and defense in case of infringement	Stable, difficult to circumvent the protection. Sign P in circle.	20 years as a maximum. Need of annually payments of the state fees	Serious costs – valuable result. Appropriate way of protection for a high technological level of product innovations
2. Utility model	Legal document – certificate. Legal situation on market realization as launch, commerce, license realization and defense in case of infringement	Relatively stable. Sign UM in a circle.	10 years as maximum. Need of renewal of the protection in the end of 4-th year. Next renewal – in the end of 7-th year.	Lower costs – good result. Preferable for companies due to the shorter period of expertise, lower fees and good legal and economic effect. Appropriate way of protection for the constructive and functional modifications.
3. Industrial design	Legal document – certificate. Legal situation on market realization as launch, commerce, license realization and defense in case of infringement	Relatively stable. Sign D in a circle. Protection of many variants of product design. /up to 50/	25 years as maximum. Need of renewal of the protection in the end of 10-th year, next – 15-th year, 20-th year.	Lower costs – good result. Preferable for companies due to the shorter period of expertise, lower fees and good legal and economic effect. Appropriate way of protection for the appearance of product, for product modifications.
4. Know-how	No legal document. Assured under confidentiality agreement.	Protect ways of realizing of process for production, designs, schemes, modules, etc.	No legal term. In practice: to the term of confidentiality agreement or to breach of confidentiality.	No state of others official fees.
5. Object of copyright	No legal document, no conditions of registrations.	Legal protection only against direct copying. Sign C in a circle or CR.	Term of protection is: the author's life plus 70 years after his death.	No state of others official fees. In case of litigation – state fees.

3. What is **the compatible position** of each company product;
4. Who are **the direct competitors in the market niche**;
5. What are the **IP rights for these products** – for our company and for the direct competitors;
6. What is **the product life cycle stage** for our product and for the competitor's product;
7. Are there sources **for competitive innovations** of the company products?
As a result, company management will obtain information about the business indicators, given in the table below as follows:

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Table 2.

1.	Business strategy in innovations and IP	aggressive or offensive
2.	Product position for the each product/market niche	good – bad
3.	Compatible position for the each company product	strong – weak
4.	Stage of the life cycle for the company products	introducing, growth, maturity, decline
5.	IP rights for the each company product	patented inventions, registered UM or ID, know-how, object of CR
6.	Company costs and/or resources for the product development in future	Low – high, own - foreign/borrowed

Thus company management obtains a **complete picture of quantified indicators on the product innovation**, given below:

1. **Solutions:** principally new, new and upgraded - an absolute number and relative proportion of each species in the general structure;
2. **Realized production** based on the principally new, new and upgraded solutions - total volume in current prices and relative share of each of the sold products in the general structure;
3. **Expenses** made for the **creation, development, production and market launch of products** based on new principle, new and upgraded solutions - total volume, share the stages of creation, development, production and market launch of products based on principally new, new and upgraded solutions;
4. **Expenses** made for the **acquisition of intellectual property rights** for the new principally, new and upgraded solutions - general and by kinds of intellectual property and the types of decisions;
5. **Revenues generated from the rights to intellectual property** for the principally new, latest and advanced solutions -

- general and by types of the license agreements, joint ventures, sale of rights;
6. **Profitability of the production**, based on the principally new, new and upgraded solutions - total and by types;
 7. **Relative indicator:** The profitability of products based on the product innovation to average profitability of the company products;
 8. **Economic evaluation of the product innovation** - expenses and profit - total and by type of decisions.

As a next step the company management board should pay attention to the process of analyzing the IP management in innovations. It is a simple two-step process whereby:

1. **The obtained level** in IP for the company product innovations is defined in terms of:
 - **IP portfolio:** patented inventions, utility models, designs, know-how or object of copyright (absolute and relative indicators);
 - **national, European and international documents for protected IP rights** in inventions, UM and designs (number, relative share and respective protection periods);
 - **Recent actual value** of the IP portfolio (Value of IP should be updated at least annually by an IP assessor).

2. The company needs to **extend the IP portfolio** are identified with regard to:

- Objects (I, UM, ID, others);
- Costs for their protection /costs for obtaining of IP protection and for sustaining of IP protection/;
- Forecast of the future economic benefits from new objects /well based on market, product and IP research/;
- What are the expectations of value for the future IP portfolio and of profit of their realization.

As a result the company management board obtains a good overall picture of its market position, IP portfolio, profitable products and prospective innovations for the purpose of the company's future sustainable development.

2. Form an IP Strategy for the Product Innovations

The development of an IP strategy in product innovations is based on important assumptions such as:

1. IP is a business tool explained with the basic economic functions.

IP is an object of implementation in the company activities. In this case IP is a source of:

- revenue generation;
 - cost reduction;
 - strategic market position.
2. IP is targeted at achieving the following business goals:
- to minimize risk, or explain how to protect IP objects;

- to realize cost reduction and receive a profit or explain what, when and how to implement and invest IP objects in business;
- to sustain the strategic market position or explain what products are appropriate for which market niches.

For the company management board the main business indicators of the obtained IP objects are as follows:

1. **IP as complex of different objects**, their relative share and significance, evaluation and forecast for the economic benefit;
2. **IP as an intangible asset** – the financial value and the market value for IP as a whole and for the each object of the IP portfolio;
3. **IP as a source of the competitive innovation** based on differentiation⁸ for the company in the future.

More often the practical task for the company management is **how to use effectively IP and whether to convert it into economic benefit or a cash flow.**

There are many alternatives in this respect:

- Sell it;
- License it;
- Use it as a basis for a joint venture;
- Use it for a strategic alliance;
- Use it in order to extract premium price and profit;
- Create a new spin-off department based on IP object.

The company management sets the following major business goals for the obtained IP objects:

⁸ See Porter, M., Competitive strategy, The Free Press, NY, 1980

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1. To **implement** IP object in production and trade – direct innovation;
2. To **license** some of the IP objects – to obtain an additional economic benefit such as license payments;
3. To **take part in the business cooperation** with IP object;
4. To **sustain** the good market position and company goodwill;
5. To **develop** the obtained level in the future R&D process and results;⁹
6. To **increase** the company competitiveness.

The company management can use all those alternatives in a cumulative way and obtain a **synergic business effect**.

The choice of strategic options will take into account a set of criteria:

- **market criteria:** demand for product, development, perspectives of the market competitiveness of the product;
- **product criteria** - product characteristics, price and signs of protected intellectual property;
- **production criteria** - availability of material, financial, human resources and innovation sources;
- **orientation of the formed variants** to the achieved company profile, consisting of the **general company strategy and mission, goals and image**.

In addition it can perform valuable economic functions such as achieving a steady identification and differentiation of the company, boosting its positive image and competitiveness.

Conclusion: By using the proposed methodology for the analysis and evaluation of the intellectual property in the field of product innovations owned by the company and the opportunities for its sub-strategies, the company management could sustain its competitiveness in the knowledge-based economy.

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