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INTELLECTUAL PROPERTY PROTECTION PATHS IN SMALL AND MEDIUM-SIZED ENTERPRISE OF LOWER SILESIA

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Competitiveness based on intellectual resources allow earning higher profits in the long term. It is a better basis for business development than price competitiveness based on low costs of labor or raw materials. However, among companies, especially from the SME sector, intellectual property protection is a specific barrier, which hinders innovation and creativity. The purpose of the article is to present possible intellectual property protection paths as a process and actions aimed to protect resources held by an organization and being strategic for it. These actions are a significant component of managing a modern enterprise. The reference point to such presented goal and scope of the paper was research conducted in the period from May to July 2015 on a sample of 137 enterprises, classified into the group of small and medium-sized enterprises (SMEs) in Lower Silesia¹. The research was supposed to present the condition and level of entrepreneurs' knowledge about intellectual property protection and purposefulness of managing this protection to generate and maximize benefits for organizations and owners of innovative solutions

organization, intellectual property, protection, enterprise

INTRODUCTION

Much has already been written about the meaning of intellectual property for an organization. It seems that Polish entrepreneurs understand better and better the value of intellectual resources to increase their competitive advantage and facilitate creation of products and services with high added value. Not only does competitiveness based on intellectual resources allow earning higher profits, and, in the long term, it is a better basis for business development than price competitiveness based on low costs of labor or raw materials. However, among companies, especially from the SME sector, intellectual property protection is a specific barrier, which hinders innovation and creativity. The purpose of the article is to present possible intellectual property protection paths as a process and actions aimed to protect resources held by an organization and being strategic for it. These actions are a significant component of managing a modern enterprise. The reference point to such presented goal and scope of the paper was research conducted in the period from May to July 2015 on a sample of 137 enterprises, classified into the group of small and medium-sized enterprises (SMEs) in Lower Silesia². The research was supposed to present the condition and level of entrepreneurs' knowledge about intellectual property protection and purposefulness of managing this protection to generate and maximize benefits for organizations and owners of innovative solutions.

1. IMPORTANCE OF INTELLECTUAL PROPERTY FOR AN ORGANIZATION

The contemporary paradigm of economic growth is focused on knowledge and various kinds of intangible components that are often more significant and more valuable than its tangible assets. Key part of intangible assets is protected by a set of rights termed jointly as intellectual property rights. They ensure protection of trade secrets, copyright, utility models and trademarks, patents and other rights. Intellectual property rights transform products of human intellect into goods for sale and deliver a broad range of tools that enable enterprises to achieve successes thanks to the application of innovative business models. Actions focused on obtaining and maintaining a significant competitive advantage on the market must be synchronized with the use of one or more kinds of intellectual property.

Intellectual property rights provide organizations the possibility to create a strong brand identity as a result of distinction of the product by means of strategic use of one or several types of these rights. They

1 Dereń A. M., Knowledge about intellectual property management and protection in SMEs in Lower Silesia, Report, Series: PRE No. 29, Wrocław University of Technology, Wrocław 2015, pp. 1-38.

2 Ibidem.

are an opportunity to obtain valuable market research information, important for building competitive advantage – analysis of commercial and technological information contained in bases of patents, trademarks or utility models may broaden organizational knowledge with regard to various areas and technological trends; help in defining future development directions and examining the current competition. Protected intellectual property is the basis for obtaining revenues as a result of giving licenses or franchise and other similar transactions. This protection also increases the opportunity to obtain financing or high-risk capital – intellectual property assets that can be valued and are protected by law may be used for obtaining necessary funds for further development.

Business importance of intellectual property for an organization is variable and depends on various factors. First of all, it depends on the adopted business model-in some models intellectual property will be a key element, whereas in others its role will be less important. Different intellectual property rights will apply in various business models, e.g. patents, know-how or trade secrets will be the basis for the functioning for technological enterprises, whereas trademarks or utility designs have a greater importance in the sector of the so-called brand products.

The importance of intellectual property is determined also by the market: the importance of various protection tools of intellectual property objects will change depending on market conditions, such as length of product life cycle, risk of breach of intellectual property rights by competition and costs and effectiveness of enforcing intellectual property rights with respect to competition.

It is also necessary to remember that particular categories of intellectual property fulfill different functions (e.g. trademark protects brand; patents are used to protect technological solutions; copyright protects software; right to utility model is used to protect models). These functions, usually along with business development are increasingly complex, especially that the prevailing part of enterprises use more than one type of intellectual property rights.

Despite a growing importance attained to intellectual property, many organizations especially from the SME sector do not fully make use of the opportunities offered by the intellectual property system. It may be believed that often the reason for such state of affairs is misunderstanding of lack of awareness or the importance of intellectual property, especially the issues related to its protection, management and commercialization.

2. THREE PROTECTION PATHS AS AN INSTRUMENT FOR MANAGING INTELLECTUAL PROPERTY IN AN ORGANIZATION

Specific financial benefits are behind an idea, invention, technology or brand: a reasonable author (owner) would like to, firstly, achieve them as soon as possible, and, secondly, obtain them as long as possible. The analysis of intellectual property protection to be carried out by an organization is not an easy process, in particular owing to the fact that decisions made have long-term effects.

Intellectual property protection is strictly related to a decision with regard to the selection of the general model for protection of innovative solutions, knowledge and experience used in an organization. Usually, the problem of intellectual property protection is associated with exclusive rights, such as patents, protection rights for trademarks, rights from registration of industrial models or copyright. However, the above ways of protection are possible and even desired. In the case of patent, protection includes only new inventions, suitable for industrial use and of technical character. It means, among others, that any disclosure of an invention to the general public (e.g. at a conference or in the industry press), before reporting it to the Patent Office, blocks any further possibility of obtaining patent. The scientific discovery alone cannot be an object of invention, but a solution that uses this discovery. An organization that decides to protect its solution by patenting should know that the patent protection is limited in time and is maximum 20 years. As a result, a patent makes it possible to achieve monopoly for economic use of a patented solution, but for a definite time. Along with the end of patent protection a possibility to use an invention becomes common. Also knowledge about a patented solution gets popularized in the period of already 18 months from the date of notification. Hence, competitive entities are familiarized with the essence of an invention, which may be the stimulus to develop new solutions, without breaching patent protection.

In thesis entitled *“Uniwersytet trzeciej generacji. Uczelnia XXI wieku”*, J.G. Wissemai describes the historical development and the evolution of contemporary universities, distinguishing their three types:
- medieval universities, namely the first generation,

- Humboldt universities, namely the second generation, and - the third generation of universities.

An alternative method of intellectual property protection is non-disclosure of the essence of solution or technical, organizational or commercial information to anybody from outside an organization where it has been developed. This method, though in theory unrestricted in time and not requiring any formal registration, is effective only in the event when an enterprise manages to keep such a secret. Technical knowledge, confidential information or commercial or economic information, namely the so-called know-how, can be protected, among others, by means of entering into confidential agreements or by restricted access to them as to business secret. For this purpose, among others, confidentiality clauses of employees, co-workers, and representatives of business entities who have access to this information are applied.

In the free-market economy, the value of business secrets cannot be overestimated. Some information regarding entrepreneur's activities, due to being unknown and unavailable for competitors, allows better market position, which obviously affects measurable material benefits.

According to P. Kozłowska-Kalisz³, presently information has become an autonomous, valuable legal good (since disposing of it may lead to specific material benefits) and is so valuable that requires legal protection. Information constitutes a factor enabling functioning of many processes (e.g. technological processes), as well as ensures, directly or indirectly, functioning of most institutions. Owing to the nature of such information, often containing organizational, technological or process innovations, their owner may gain competitive advantage over market rivals.

Business secret as an intellectual property protection path involves some risk. Firstly, information constituting e.g. the essence of solution may be disclosed by a disloyal co-worker or contractor, secondly, nothing is in the way for competitive entities to analyze the launched solution and, at the same time, discover its secret. The disclosure of confidential information may result in irreversible effects, thwarting effects of a long-term investment process and bases for strategic market advantage.

The selection of business secret as one of intellectual property protection paths depends on many factors, first of all, on the possibility of determining effective protection of solution's secret (ease in restoration, risk of key creators of a solutions leaving a company, relevant contracts between employees and contracting parties) and identification of its market potential (period and amount of obtained benefits under commercial use of a solution). When choosing between patent and business secret, it is required to consider a relation between expenditures sustained on intellectual property protection and expected benefits, analyze factors of risks associated with a particular method, as well as purpose of property protection.

From the point of view of, for example, the process of commercialization, both patenting and protection of a solution by know-how do not rule out effective launching of a given solution. However, in this case obtaining patent protection is often a significant advantage, while the scale of patent protection should be discussed. On an uncertain technology market, a patent granted significantly facilitates dialogue because it allows disclosing to the other party more and authenticates a given invention.

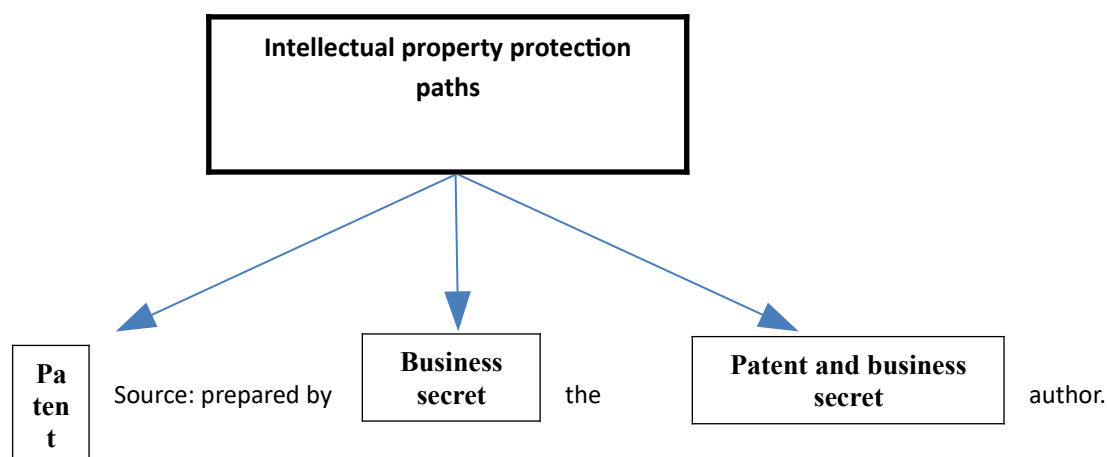
The selection of intellectual property protection path depends also on the model business and nature of the solution protected. In the case of innovative solutions, it is important that the pursuit of protection should not hide activities aimed to launch a solution. Time spent on obtaining patent protection should be adequate to the period when a given solution may have the status of innovation and suitability. It may turn out that the best strategy is fast entry to the market and obtaining of a large group of recipients.

Effectiveness of the process of intellectual property protection management in an organization requires not only considering many factors affecting the choice of a specified protection path, but also understanding of differences between different categories of these resources (patent requires publication whereas know-how is confidential information) and acceptance of the fact that these are two compatible forms of intellectual property. They can coexist and, what is more, be the subject matter of the same license contract or other form of commercialization. Commercialization of patent along with know-how will bring even the synergy effect and will increase the market potential of a protected invention. For this

³Kozłowska-Kalisz P., Odpowiedzialność karna za naruszenie tajemnicy przedsiębiorstwa, Wydawnictwo Zakamycze, Krakow 2006.

reason, it is worth considering cumulative use in the intellectual property protection management process both patent and business secret, as the third path of this protection (see Fig. 1). The cumulative use of patent and business secret provides an extensive range and gives increased safety protection, allowing also using other forms of protection, e.g. copyright⁴. Such definition of intellectual property protection will provide its complete use for the purpose of maximization of benefits.

Fig. 1. Intellectual property protection paths in the company



3. RECOMMENDATIONS FOR INTELLECTUAL PROPERTY PROTECTION MANAGEMENT IN SMEs

The research conducted in the period from May to July 2015 on a sample of 137 enterprises, classified into the group of small and medium-sized enterprises (SMEs), in Lower Silesia were supposed to provide information about the forms of intellectual property protection used in management practice. The obtained results indicate a single-dimensional approach to intellectual property protection management. Most of the surveyed recognized patent and protection rights as an effective protection method. However, definitely, a sparse group of the surveyed pointed to business secret as a form of protection of intellectual resources. This single-dimensional character proves a low level of knowledge about diverse forms of protection and misunderstanding of the essence of intellectual property management in an organization, especially in the category of market effectiveness.

Effectiveness of intellectual property protection of innovative solutions depends on many factors, such as e.g. clear definition of the object of protection, precise determination of the scope of protection and use of various, complementary tools and forms of protection. Maximization of protection of an innovative solution consists in a parallel use of various existing paths of this protection: exclusive rights, granted for different types of intellectual property, business secret and cumulative use of two of the above protection forms. Maximization of protection of a specific innovative solution requires protection strategy to be developed, which includes different paths of this protection. For this purpose, first of all:

- 1) define and specify the character of held intellectual resources,
- 2) set goals, in particular market goals,
- 3) specify the time perspective, in which it is intended to use exclusive rights (patent of 20 years, know-how - indefinite time of protection),
- 4) analyze kinds of intellectual property protection that will be useful to pursuit organizational goals,
- 5) define a set of solutions whose protection will contribute to defending the market offer against competitors,
- 6) prepare a project budget, including all components of protection costs,
- 7) prepare a protection plan, containing, among others, dates of notifications and terms of expiry of exclusive rights,

⁴ Such a broad protection was applied in the case of a microprocessor protected with patent as an invention. Business secret covered any knowledge about the engineering of this invention. The microprocessor's shape was protected as a utility model, and the microprocessor's operating system was protected by copyright. On the contrary, the production process was know-how of the organization – A.M.D.

8) develop principles, rules and procedures of business secret protection including all employees of an organization.

The above actions have significant meaning for execution of a market goal being e.g. launching a product on the domestic market. In case of success on this market, market expansion to European markets or world market. The entrepreneur may expect that the product will be maintained on the market for a long period of time, they may foresee launching of variants/varieties of the product whose life cycle on the market will be shorter than of the basic product. In the period of maintenance of a product on the market, the entrepreneur may use its protection. To ensure complex protection, in which different forms of protection relevant for various kinds of intellectual property will be accumulated, the entrepreneur may apply for patents for inventions, protection rights for utility models, especially in the case of variants of a solution with a shorter life cycle. In this way, the entrepreneur will protect solutions distinguished by new technical features.

On the other hand, solutions relating to the product's individual character (given by characteristics of lines, shapes, structure) may be protected by the entrepreneur by means of rights associated with registration of industrial models (25 years of protection) and protection rights for trademarks (10 and more years of protection). Budget for intellectual property protection actions includes: costs of notifications (e.g. PLN 500 for each electronic notification of invention, utility model or trademark for three goods classes, PLN 300 for electronic notification of industrial model), costs of notification preparation (e.g. fee for patent attorney for preparing the notification and conducting the procedure), costs of protection (e.g. PLN 480 for the first 3 years of protection of an invention, PLN 250 for the first 3 years of protection of an utility model, PLN 400 for each class of trademark for the first 10-year protection period, PLN 400 for the first 5 years of protection of an industrial model).

When building the budget, the entrepreneur may take into consideration the number of notifications in particular types of intellectual property, by trying to link different required solutions to contain their possibly high number in one notification. At this stage, total costs of protection may be significantly decreased. On the other hand, when preparing notifications of industrial models, the entrepreneur may include in one notification up to 10 varieties of one industrial model or more, if these varieties form in full a set of products.

The next step when preparing the budget will be to develop a schedule of costs for years because fees for consecutive protection periods are paid after granting exclusive rights, on strictly specified dates. In the first cycle of developing protection strategy, the entrepreneur is not able to schedule particular activities in time because, in the first place, they must prepare details of the whole set of solutions which may require protection. The next stage will involve a question about a moment convenient to launch additional solutions on the market, which, in turn, will require decisions on the form of protection.

Covering further plans by know-how secret and postponing the moment of notification prevents hostile activities of competitors and allows extending the time of its protection by postponing the beginning of protection period.

The choice of various intellectual property protection paths in an organization, especially the combination of institutional forms of this protection with business secret, has a decisive impact on the system of protection force of intellectual property rights. In the business management process, this protection is a tool for innovation stimulation and knowledge diffusion. Unfortunately, many ideas improving acting of a company are lost for competitive activities as a result of missing knowledge or bad protection of intellectual resources.

FINAL COMMENTS

The research referred to in this paper indicate that for Polish enterprises from the SMEs sector the greatest practical importance is attained to trademarks and industrial models, as asset components, mainly due to their marketing character. On the other hand, in the IT organizations inventions are of crucial importance. Thus in each organization managing intellectual property protection has a crucial importance for its development, since it facilitates and streamlines the process of knowledge transfer and conversion of discoveries and inventions in products and new industrial technologies.

The pace of market changes and intensity of competition often make formal protection of intellectual property ineffective. The life cycle of technologies and products becomes shorter and shorter, which

makes a quick reaction to breach of intellectual property not always possible. In particular, it applies to new finished products. Customer demand for new products of competition obtained on the basis of copied technology, processes and other components may appear faster than the possibility of the owner of a new solution to react. In the case of customer reaction to novelties, trademarks, including a new solution undisclosed by the entrepreneur, are a certain effective form of protection. A registered trademark combined with the strategies of creating product quality, building good image of entrepreneur, brand and product may be effective in the fight against copied products.

In the contemporary economy, competitive advantage and market success are often determined by information held by a given organization as well as the way of its processing. As key assets of an organization, this information has measurable market value and requires particular protection and securities. This protection is ensured by business secret which permits confidentiality of information concerning identity of an enterprise, products it manufactures, their symbols and graphic design, as well as bases of commercial contacts (list of customers, suppliers, employees), set of contract documents (models and actual contracts), used trade terms (sales system, rebate system, CRM), organizational structure and implemented procedures (production quality standards).

In this situation, in the intellectual property protection management process, especially in SMEs, various intellectual property protection paths should be chosen, which will allow those organizations to block competitive technologies or products before being launched; increase income of an enterprise from sale of technologies or new products; will facilitate enforcement of intellectual property rights in the case of breach of property; will reduce investment risk in new technologies and new products; will increase attractiveness investment of an enterprise for potential investors.

The selection of various intellectual property protection paths enables creating the image of an enterprise as an innovative organization; increase prices of technologies or products; increase share of an enterprise in the market sales; change perception of quality of technologies and product, and increase organizational control of information disclosed from it.

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