

# THE ROLE OF INTELLECTUAL PROPERTY RIGHTS IN CREATING A COMPETITIVE ADVANTAGE

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## Abstract

The aim of this study is to discuss the advantage of enterprises by intellectual property rights (IPR) in creating and sustaining competitive advantage. As the level and depth of competition increase in national and international markets, the sources of having a competitive advantage also change. The sources of competition gradually slide from tangible assets that can be imitated easily to intangible assets that are again not hard to imitate. In this case, IPR become the most valuable strategic asset for lots of companies. IPR are technical inventions, know-how, commercial secrets, trademarks, designs, works of literature and art and assets which are acquired from innovation, expression and creativity and which are not concrete. These assets enable the enterprises to perform above the average of the sector by leading them to differentiate from the competitors and keeping their differences.

That these assets which are based on an idea/ creativity lead to competitive advantage and sustain it is not the result of their singular effects but their management of trademark not the innovation itself create a competitive advantage that is hard to imitate in the long run. This forms the essence of "information economy" which means that the main vessel feeding competition is gradually sliding towards "information". While the competitive advantage in industrial era is based more on extrinsic factors and barriers to imitation. So, the source of competitive advantage depends gradually on the capacity and speed of the enterprise to produce information rather than the structure of the industry. The difficulty in understanding the process through which the information is produced in the enterprise and legal reservation cause an important barrier to the equating effect of imitation.

In this study, which is carried out in the framework of a theoretical discussion, changing sources of competition and the role of IPR will be evaluated by studying three points which are interrelated with each other; (i) information economy and IPR, (ii) the changing nature of competition and the effect of business, and (iii) the role of IPR in creating a competitive advantage and discussing them in terms of laws.

**Key Words:** Competitive advantage, Intellectual Property Rights, Core Competence, Competition Law, Information Economy

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## 1. INTRODUCTION

To have an advantage in competition and sustain it; these concepts are the sole purposes that companies want to realize in the economies where the game is played in accordance with the rules. We say "the economies where the game is played in accordance with the rules" because, in the economies where the rules are determined clearly and inspected, it is possible to go one step ahead of the competitors simply and solely by developing a new good or service. If the production method or process of the new good or service is certified and registered by the company that develops it, the company will have a more advantageous position compared to its rivals. To do this, companies need creative ideas.

As Drucker (1994) stated, the dynamics of the new world will be shaped by brain power rather than muscle power. In order for the brain power to be a determining factor, there must be a legal restriction to prevent the use of the idea by other people or companies without permission until the people or institutions that worked hard to develop the idea compensate their effort. This problem seems to have been solved for now by IPR.

IPR are the rights allocated to the products of thought that come into being as a result of the intellectual efforts and works of people and that have a creative quality. IPR give the right to the creator of the products which are developed as a result of individual knowledge, research and development activities, intensive work and capital to prevent the use of these products by other people or companies without his/her permission for a particular period. (Tobb, 2004:3; Larry and Edwin, 2004:450)

IPR are protected so as to provide the person developing the product with economic profit in return for his/her efforts during the process and thus to encourage the future creative activities and the development of new products that will be made use of by the society. (Glass and Wu, 2007:393)

## 2. THE ELEMENTS THAT ARE SUBJECT TO IPR

As stated above, intellectual property right is a cover term including both the rights of the owner of the product and related rights and industrial rights. The rights of the owner of the product and related rights are called copyright in classical sense. In this context, copyright can be described as follows. (Tüsiad, 2004; Tobb, 2004)

Copyright; is a right rewarding the creativity of the owner of the product by enabling him/her to reproduce his/her product exclusively for a limited time, to put it up for sale for the first time and to perform before a group. Having this right, the owner of the product can prevent the third persons from reproducing and/or performing the product or service being protected without permission.

Work right is an exclusive right given to produce the expression recorded in a physical atmosphere and ideas within the framework of an original creativity; to prepare different works from the original work; to present or perform the activities of music, drama, choreography and sculpture.

### 3. THE ELEMENTS THAT ARE SUBJECT TO INDUSTRIAL PROPERTY RIGHTS

The elements that are subject to industrial property rights can be explained as follows:

Patent; is a certification given by the government for inventions in technical field, and it grants its owner the right to use his/her invention in a limited way for a particular time. Patent gives its owner the rights to prevent, for a specific period of time, the use, production, sale and import of his/her invention without his/her permission. However, the owner of the invention has to explain in detail his/her invention in a document accessible to everyone. Patent protection in many countries lasts for 20 years from the date of application.

Trademark; is the group of signs that are used to distinguish the goods and/or services of a company from those of another company. Trademarks enable the consumers to make a distinction among goods and services offered by different companies and to choose the goods or services of the producer or supplier they trust.

Industrial Design; design rights protect the new and original visual qualities of a product or its packaging. The conditions of protection are based on the concepts borrowed from both the patent law and copyright law. A design must have aesthetical qualities and it mustn't be involved in a similar or exactly the same design developed in the past in order to take advantage of design protection.

Geographical Signs; are the signs that show what region, area or district a particular product belongs to, in other words, they show the geographical source of a product.

Integrated Circuit Topographies; Integrated Circuit Topography is a three dimensional view of the layers making up the electronic circuits used in microchips and semiconductor chips. This view is called as integrated circuit design.

### 4. THE RELATION BETWEEN INFORMATION ECONOMY AND IPR

It is the information which forms the basis of information economy. Then, the question is "what is information?". Turkish Language Association defines information as follows: "Reality reached through learning, research or observation; a product of thought which comes out as a result of the performance of human intelligence and finally, the meaning that a person assigns to data by making use of the rules of informatics". As can be understood from the definition, information can be explained as reaching a meaning using the existing information. However, it should be emphasized that having information is of no significance as long as one doesn't utilize it. Therefore, the terms "information management" and "information economy" which makes information precious have been used frequently since 1980s.

Barca (2002a:65-81) describes information management as a system which makes it possible to use efficiently the intellectual capital of an organization, to transform the brains of selected people into a "network union" and thus to share and think collectively. Information economy can be described as the economy formed by a network of technological development in which information is frequently employed especially for the

last 20 years. In this context, systems such as computer operations and data networks, telecommunication and internet databases can be presented as good examples of information economy.

Koçel (2001:378) points out that instead of information economy, terms such as new economy, digital economy, internet economy and network economy can be used and there are confusing ideas about what exactly should be expressed by these terms. Koçel also states that with the term information economy, qualitative and quantitative changes influencing economy and organization and operation of enterprises which are the cells of economic life should come to mind. The common features of these changes are that creation and utilization of "information" with intensive use of communication and computer technologies have come to the fore.

As the main characteristics of the activities called as information economy, the points below can be suggested:

- Creating information, distributing and sharing it are the major feature of these activities,
- Widespread use of computers and distribution of information using the latest interaction techniques,
- Treating and appraising the human resource that produces information as "intellectual capital",
- The existence of a frequent "outsourcing" application in the activities of enterprises,
- Widespread use of strategic partnership between enterprises and network organizations,
- Working and managing on a team basis are usually favored,
- Enterprises deal with service businesses rather than physical production and manufacture.

Koçel names the enterprises bearing the characteristics above as information based enterprises. It is hard to produce information but easy to copy and use it without permission. Hence, information should be protected. That is what the main aim of IPR is.

## **5. THE IMPORTANCE OF THE PROTECTION OF INTELLECTUEL PROPERTY RIGHTS**

The term intellectual property right is a cover term including both the rights of the owner of the work and related rights and industrial rights. (Türkkan, 2001:241-242) The rights known as the rights of the owner of the work include the authority and benefits on works of thought and art such as works of science and literature, works of fine art, works of music and cinema.

Industrial rights, on the other hand, include authority and benefits on industrial products such as patent, commercial trademark, useful model, design, geographical signs, new plant species and integrated circuit topographies.

At first sight, protecting intellectual and industrial property rights may seem to have an affect that prevents competition. Because, protection of these rights leads to barriers to entry. However, despite this drawback, it is essential that these rights be protected for a particular period of time to have a competition based on innovations. Because, research

and development activities cost a lot for a company but copying the resulting product or service when there is no protection costs very little or sometimes it is free for other people or groups. (Furukowa,2007:3645)

If these rights aren't protected, the companies will avoid investing enough money in this field. On the other hand, trademarks provide the companies with advantage in competition as a result of their long lasting advertising expenditure and their struggle to create a positive image. What is more, trademarks involve both creating and sustaining a competitive advantage for a company and putting it under responsibility against consumers.(Mondal and Gupda,2007:26; Greasley and Oxley,2007:649)

In a study by Park and Allred (2007:91) covering 29 countries and 706 companies and examining the relationship between patent protection in manufacture enterprises and investments in innovation; it was stated that there was a very strong relationship between patent protection and investment in innovation.

## 6. APPROACHES CONCERNING THE ROLE OF INTELLECTUEL PROPERTY RIGHTS IN CREATING AN ADVANTAGE IN COMPETITION

Two basic approaches come to the fore in creating and sustaining an advantage in competition. (Barca, 2002b:32) These approaches are Position Approach and Resource-based Approach.

### 6.1. Sources of Differences in Profit According to Position Approach

In his book, named Competition Advantage (1985), Porter suggests that the differences in profit among companies result from:

- Long term profitability potentials of the industry and factors determining the structure of the industry,
- Competition policy of the company in the industry.

Long term profitability potential of the industry is based on the idea that not all the industries offer equal profit opportunities. The table below shows that industries don't have equal profit potential even in long run.

Table-1: Profitability According to the Subsectors of Industry (1971-1990)

Subsectors	Profit from Stock Certificates (%)	Profit from Assets (%)	Profit from Sales (%)
Medicine Industry	21.4	1.8	13.1
Press	15.5	7.1	5.5
Food and Similar Products	15.2	6.6	3.9
Chemical Products	15.1	7.5	7.2
Products of Petrol and Coal	13.1	6.5	6.5
Papers Products	12.5	6.0	5.1
Motor Vehicles	11.6	5.6	3.7
Rubber and Plastic Products	11.6	5.1	3.4
Electrical and Elect. Product	11.5	5.4	4.4
Products of Stone, Clay and Glass	10.4	4.8	4.0
Products of Textile Machinery	9.3	4.3	2.5
Metals Without Iron	8.3	3.9	3.6
Iron and Steel	3.9	1.5	1.3

Source: McGhan:1992

As can be understood from the table above, there are significant and long term (systematic) differences in profit among the industries. For instance, medicine industry in America has earned much more than iron and steel industry on average for period of 20 years. In the light of these data, it can be suggested that long term average profit abilities of firms will vary from industry to industry. According to Porter, industry profitability is not the function of the properties of individual firms such as the appearance of products or whether they have been produced using advanced or old technology, but it results from the "structure" of the industry in question. (Porter,1985:5) So, in order to account for the differences in profit among firms, it is necessary to analyze well the structure and general characteristics or dynamics of the industry they operate in. (Barca, 2002b:33).

## 6.2. Sources of Differences in Profit According to Resource-Based Approach

What are the factors that make a company more successful and profitable compared to others? Low cost, products of good quality, a good distribution, after-sale service, effective promotion, differentiated product, technological support, quick service for the clients and similar factors are the first ones to come to mind when considering the underlying factors. (Koçel,2001:313) These explanations do, in fact, reflect the essence of resource-based approach.

Unlike position approach, resource-based approach claims that differences in profit result from the resource and capabilities peculiar to companies. Position approach takes the structure of the industry as the analysis unit whereas resource-based approach attracts attention to intrinsic factors from extrinsic factors by taking micro-analytic resources and capabilities as the analysis unit. According to this approach, companies having superior resources and capabilities will have high profit in the long run. Resources and capabilities contain production processes, product development models and all types of work methods of a company that are hard to imitate by another company.

While some of these capabilities can be protected as know-how, the other elements will be protected for a long time by legal methods such as patent, useful model and copyright. Thus, company will be able to reach its aim to create advantage in competition against their rivals and sustain it via IPR. In 1984, Wernerfelt put forward the resource-based approach not against position approach but as a view completing it. However, in 1990s, Prahalad and Hamel (1990) , Grant (1991), Rumelt (1991) and some other strategy authors tried to transform the resource-based approach to an alternative approach.

The common thesis of the resource-based studies is that competitive advantage results not from the structure of the industry but from information, capability, core competence and hidden assets which are peculiar to companies and hard to imitate. (Barca, 2002b:36) One of the important points emphasized by the ones defending this thesis is that differences in profit among the companies operating in the same industry are higher than those among industries. So, one should concentrate on the differences among companies. The empirical study below supports this thesis.

Table-2: Intra-sector Differences in Profit

Sector	High Profit	Profit	Low Profit	Profit
Airline Transport	Rolls Royce	21.0	British Aerospace	-3.6
Beer	Allied- Lyons	26.5	Whitbread	3.0
Construction Equipment	Tarmac	11.9	RMC Group	9.5
Food	Unilever	13.9	Associated British	7.0
Fashion Retail	Burton Group	14.9	Next	-2.6
Food Retail	Kwik Save	34.0	Asda	8.2
Petrol	Burman Castrol	12.6		4.9
Pharmacy	Smith Kline Beech	38.4	Wellcome	24.7
Publishing	Pearson	13.3	Thomson Corp.	5.1
Supermarket	Marks and Spencer	17.2	Storehouse	3.1
Cigarette	Rothmans	27.5	BAT	16.4

Source: Craig and Garant: 1993

As is shown in Table 2, it is possible to see companies making high profit in the industries which have a low profit potential and companies making low profit in the industries which have a high profit potential.

Based on this reality, the argument that resource –based approach wants to develop and defend is that operating in the industries which have a high or low profit potential isn't the ultimate determinant that determines profitability in the long run; the ultimate determinant is the productive resources and capabilities that the company has. Then, the degree of profitability is directly proportional with superior/inferior resources and capabilities that a company owns. According to Grant, resources of a company are “the inputs in the production process including means of production, abilities of the employees, patents and trademark names” and capabilities are “what the resources can do as a result of working all together as a team”. (Grant, 1991:118-120) In other words, resources refer to the individual assets that a company “has” and capabilities refer to the ability of these resources “to perform” a task collectively.

Then, the question is what distinguishes strategic resources from the ones that are not strategic? Hamel (1994), who is one of the forerunners of resource-based approach lists the properties of the core competencies based on strategic resources as follows;

1. Competence is the integration of capabilities. Core competence is not just one or independent capability and technologies but a synthesis of technology.
2. Competence is more than an asset. Core competence is not an “asset” in terms of accounting. Competence is not inanimate but an activity and the cumulative sum of irregular learning. For instance, quality management is a competence not the quality itself. Competencies can be both hidden and open.
3. Competencies must contribute a “benefit” based on the perception of the client. Competencies must enable the companies to provide their clients with “benefits”.
4. Competencies must enable the companies to differentiate from the rivals. A capability available in all companies cannot be construed as a competence. Competence mustn't exist everywhere and mustn't be imitated easily by the rivals.
5. Competencies must be passages allowing the companies to enter new markets. If the core competence of a company is trademark management, it can make use of it eas-

ily as a bridge to operate in different sectors. For example, the case of Marlboro, which has applied its competence in cigarette trademark to clothing trademark management, is a good example of this.

As can be understood from the points above, among the capabilities a company has, the number of the capabilities that can be construed as “core competence” is not many. To have a more concrete understanding of the term core competence, a viewpoint like the following will be useful. Companies should regard themselves not as the units producing particular products but as the units having the required information and capabilities that enable them to produce those products. (Koçel,2001:314) In this way, they can build castles that provide them with competitive advantage.

The real sources of competitive advantage of a company lie in the success of management concerning the core competences of the company, technology, know-how and production skill. What is important is not just having technology and other capabilities. Using learning processes combination and coordination of resources which are considered as additional benefit by the clients when they are utilized in the market and which contribute to the strategic achievement of the company are also important.

In sum, according to resource-based approach, each company develops competencies peculiar to itself. These core competencies form the basic sources of the dynamism of companies. Core competencies give an idea about not only what sectors the company is good at but also what market the company should try to enter. In short, according to resource-based approach, core competencies determine what strategy the company should choose, to what extent they will apply it successfully and what markets the company should turn to. (Barca, 2002b:38) As a result of this, the company is expected to have higher profitability compared to its rivals.

Intellectual and industrial property rights consolidate the ideas of Wernerfelt (1984) who supports competitive advantage based on resources. That is, a company introduces a new product or service into the market spending large sums of money and goes one step ahead of its rivals by getting its patent. Relying on the legal protection the patent provides, it has the opportunity to get back the money spent for investments in a short time.

## **7. LEGAL ASPECT OF COMPETITIVE ADVANTAGE OBTAINED THROUGH INTELLECTUEL PROPERTY RIGHTS**

The problem in terms of competition law is caused by the use of IPR rather than their existence. The positions of the enterprises in the market which use these rights is also important. The outcomes in market caused by the use of IPR by these enterprises can be inconvenient, for example, the market can be divided and horizontal and vertical restrictions may exist. Therefore, while technological innovations are encouraged in the application of these rules of law, sustaining a well-functioning competition atmosphere shouldn't be neglected. (Pinar,2005:30-85)

The aim of the Law on Protection of Competition numbered 4054 is defined in the first article as follows; “to prevent agreements, decisions and practices preventing, distorting or restricting competition in goods and services markets, and the abuse of dominance by the undertakings dominant in the market, and to ensure the protection of competition by performing the necessary regulations and supervisions to this end”.

In order to reach the aims explained above, competition law prohibits “concordant activities and decisions restricting competition” in article 4 and “restriction of competi-

tion by abusing the dominant position in the market” in article 6.

However, the law states that there can be an exemption from the prohibition mentioned in the 4th article under some conditions. According to the law, concordant activities and decisions restricting competition among enterprises can be exempt from the prohibition mentioned in the 4th article for a particular period of the time and this period can be extended later if;

- New developments and improvements, or economic or technical development in the production or distribution of goods and in the provision of services are ensured,
- Consumers benefit from them,
- Competition isn't hindered in a considerable part of the market concerned and
- Competition isn't limited more than what is compulsory for achieving the goals set out in sub-paragraphs (a) and (b).

Thus, competition law allows, under some conditions, the agreements restricting the competition among companies which encourages innovation and development. On the other hand, it doesn't allow a company that has become a monopoly due to the protection of IPR to abuse its dominant position.

## 8.CONCLUSION

Every society owes its development to the products of thought that come into being as a result of the creative characters of people. Products of thought both improve the society they were born in and strengthen social relationships by spreading rapidly among the societies.

The most important factor that prevents companies from spending the required effort to develop their creative power is the fact that new inventions realized by spending large sums of money can easily be imitated by competitors.

In this context, it is important to protect industrial property rights in terms of preventing unfair competition.

Protection of intellectual and industrial property rights involves the protection of trademarks, patent rights regarding inventions, original design and useful shapes. So, laws regarding intellectual and industrial property rights prevent any imitation and regulate that permission is required and the price must be paid to use new inventions.

IPR can, at first sight, be perceived as regulations that equip their owners with exclusive rights and restrict competition since they make it possible to exclude its rivals from the competition due to their structure. But, it is quite natural that a person who invests a particular amount of money to create a new product or service taking lots of risks wants to get back benefits from his/her investment. So, the activities, which make the competition hard for the competitors, of an enterprise that has become dominant because of IPR should be excused with the competition law on condition that it doesn't abuse it.

Finally, a judge in Federal Trade Commission in USA, where being a monopoly is prohibited, has emphasized the importance of commercial intelligence (intellectual property) and suggested that it should be admitted by everyone that one can't object to the monopoly of a business based on innovation saying that “If being a monopoly results from enlargement and development as a result of superior product, commercial intelligence or historical coincidence, it can't be objected. It is not correct to make a competitor which has been forced to compete regret competing. (Aslan, 1999:73).

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