INTERNATIONAL REGISTRATION OF IP RIGHTS AND INNOVATION MANAGEMENT IN A GLOBALISED WORLD

Petruta Blaga, Mihaela Daciana Bolos

Abstract
Nowadays the system of international protection of IP (intellectual property) rights offers new possibilities for companies to protect its intellectual assets. From all the IP rights we choose to present the case of trademarks and patents because they represent important assets for companies and sometimes they are subject of IP rights infringement. In the context of the development of the new means of communications and the new informational technologies companies faces new challenges in regards of IP rights protection. Piracy of products, technologies and trademarks is a highly profitable business undermining the rightful owners of Intellectual Property (IP) rights and thus it diminishes the benefits of innovation. The research explores the trends in IP protection at international level and generates some conclusions for innovation management purposes.

Key words: trademarks, patents, innovation management, international registration of IP rights.

JEL Code: F02, O31, O34

Introduction
Intellectual property is a complex concept that embodies the “creations of the mind” (WIPO, 2009). According to the Trade Related Aspects of Intellectual Property Agreement (TRIPS Agreement) IP can be divided in copyright and related rights, and industrial property that includes trademarks, patents, industrial designs, geographical indications, layout-designs of integrated circuits, protection of undisclosed information and the control of anti-competitive practices in contractual licenses (TRIPS Agreement, april 15, 1994). From the treaties administered by the World Intellectual Property Organization (WIPO) a similar clarifications can be found especially if we put together the Bern Convention for the Protection of Literary and Artistic Works of 1886 (Bern Convention, 1886) and Paris Convention for the protection of industrial property adopted in 1883. The Paris Convention establishes the object of industrial property as: “the protection of patents, utility models, industrial designs,
Trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition.” (Paris Convention, 1883).

From all the aspects regarding intellectual property we will analyze the trends in trademarks and patents applications for registration in the last 10 years. Relevant are the databases offered by WIPO regarding international and national registration of IP rights, such as “Patent System. Yearly Review, 2010” (2010), or “WIPO’s report for the Madrid System for the International Registration of Marks” (2011), World Bank for GDP indicators (2011) as primary sources. Then we will analyze these trends in the top countries with high GDP.

From the point of view of innovation management relevant are the researches and articles of Michael E. Porter (Potter & Stern, 2002), (Furman, Porter, & Stern, 2002 ). In Romania the literature is not so rich in this field but some books and articles present a real value in the study of Romanian innovative management (Nastase & Lorent, 2008), (Slatineanu & Dusa, 2002), (Reger & Gerybadzea, 1999).

Trademarks represent a valuable intangible asset for a company that distinguishes the products of different competitors. This is why protecting them is very important especially in a globalizes economy where the internet offers new opportunities for marketing strategies. In this case relevant are marketing studies especially those regarding strategic marketing such as Philip Kotler (1997), Frank Bradley (2001), Wally Olins (2007).

In our analysis we will follow the way the economic crisis affected the trends in patent and trademarks applications for registrations, and if the general trend can be found in the top five states under a GDP criteria. Then we will analyze some time problems that the IP registration process can cause to companies.

1 The international system of trademarks and patents registration

The international registration of trademarks is done trough the international system of protection stipulated in the Madrid Agreement concerning the international registration of marks adopted in 1891 and Protocol relating to the Madrid agreement concerning the international registration of marks 1989. Madrid Agreement has as purpose the creation of an international framework in order to facilitate the international registration of trademarks. The framework regards procedures and institutions necessary in order to apply the Agreement. In basis of this Agreement residents of the contracting parties of this agreement can registrate trademarks trough a request in one or more countries members to the Agreement. The Agreement also stipulates the period of protection offered to an international trademark which
is 20 years with the possibility of renewal (Madrid Agreement concerning the international registration of marks, 1891).

The Madrid Protocol modifies and completes the Madrid Agreement of 1891, this is why many of the Protocol’s articles are identical or similar with that of the Agreement. Modifications are made to the period in which states can raise objections to the international registration and the period of protection is reduced from 20 to 10 years. The Protocol also clarifies the process of registration, applications forms, publications, the international trademark register and the informations that it must contain. The Protocol also allows regional organizations to be part to the international act such as EU (Protocol relating to the Madrid agreement concerning the international registration of marks, 1899).

The Patent Cooperation Treaty offers to the inventors the possibility to register patents by means of a single application, in as many countries as they are interested in protecting their invention. The Treaty was adopted in 1970 and aims at stipulating the conditions that a patent should meet in order to be registered, the forms that must be filed and what they should contain, the originality of the patent and how the search for similarities or identity must be carried out in order to certify if the patent meets the criteria for registration, the establishment of the International Search Authority. The treaty details the entire procedure of registration in order to clarify the procedure to follow (Patent Cooperation Treaty, 1970).

2. World tendencies in the applications of trademarks and patents

The first data that have to be analyzed are the evolution in the number of applications for trademarks and patents. The data is collected in a stream of ten years, the source is WIPO database of 2011 (Total Trademark Applications by residents and non-residents (1985-2010), 2011), (Total number of patent applications by resident and non-resident (1985-2010), 2011). The data was confronted with the World Bank database and the results are identical.

Tab. 1 Total Trademark Applications by residents and non-residents (1985-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,385,679</td>
<td>2,402,696</td>
<td>2,574,600</td>
<td>2,801,658</td>
<td>3,064,926</td>
<td>3,283,580</td>
<td>3,351,913</td>
<td>3,364,553</td>
<td>3,277,279</td>
<td>3,664,576</td>
</tr>
</tbody>
</table>

Source: WIPO Statistics Database, December 2011

Tab. 2 Total number of patent applications by resident and non-resident (1985-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,456,892</td>
<td>1,440,973</td>
<td>1,483,550</td>
<td>1,569,049</td>
<td>1,701,331</td>
<td>1,792,846</td>
<td>1,865,448</td>
<td>1,915,095</td>
<td>1,845,995</td>
<td>1,979,133</td>
</tr>
</tbody>
</table>

Source: WIPO Statistics Database, October 2011
The data presented above can be represented graphically in the following manner:

**Fig. 1 Evolution of Trademarks and patent applications in the world**

From the previous chart it is obvious that the number of patent registration requests is higher than that of trademarks. Also it is interesting the fact that in 2008 and 2009 both the number of patent and trademarks registrations request diminished, fact that indicates that before the starting point of the economic crisis a tendency to register fewer IP rights can be identified. This idea was also identify in a study regarding trademark registration in Romania (Bolos & Bolos, 2010). Also in 2010 a re-bounce in registration can be noticed. If in the case of trademarks registration the tendency has a limited strength, in the case of patents the year 2010 is a very prodigious one because the number in application of registration reached a new high peak.

**Tab. 3 Trademarks applications by state. Top 12 states.**

<table>
<thead>
<tr>
<th>Country Name</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>364948</td>
<td>446654</td>
<td>581805</td>
<td>659148</td>
<td>741942</td>
<td>681358</td>
<td>669088</td>
<td>808546</td>
<td>1057480</td>
</tr>
<tr>
<td>European Union</td>
<td>542911</td>
<td>538383</td>
<td>530257</td>
<td>559776</td>
<td>550688</td>
<td>552314</td>
<td>521679</td>
<td>448218</td>
<td>423656</td>
</tr>
<tr>
<td>United States</td>
<td>212637</td>
<td>220965</td>
<td>248406</td>
<td>264510</td>
<td>277579</td>
<td>304129</td>
<td>294070</td>
<td>266845</td>
<td>281867</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>107876</td>
<td>110611</td>
<td>113320</td>
<td>123064</td>
<td>130738</td>
<td>141289</td>
<td>137461</td>
<td>134211</td>
<td>129486</td>
</tr>
<tr>
<td>Brazil</td>
<td>94312</td>
<td>95580</td>
<td>94039</td>
<td>99310</td>
<td>95724</td>
<td>104125</td>
<td>121712</td>
<td>112661</td>
<td>125654</td>
</tr>
<tr>
<td>Japan</td>
<td>117472</td>
<td>123393</td>
<td>128851</td>
<td>136050</td>
<td>135865</td>
<td>143236</td>
<td>119448</td>
<td>110622</td>
<td>124726</td>
</tr>
<tr>
<td>Mexico</td>
<td>56237</td>
<td>53724</td>
<td>58553</td>
<td>63899</td>
<td>69781</td>
<td>83216</td>
<td>84287</td>
<td>81937</td>
<td>94457</td>
</tr>
<tr>
<td>France</td>
<td>70809</td>
<td>69410</td>
<td>73654</td>
<td>75564</td>
<td>77166</td>
<td>80034</td>
<td>79206</td>
<td>84213</td>
<td>93187</td>
</tr>
<tr>
<td>Germany</td>
<td>66644</td>
<td>70446</td>
<td>74197</td>
<td>80091</td>
<td>80481</td>
<td>83352</td>
<td>80865</td>
<td>74676</td>
<td>74339</td>
</tr>
<tr>
<td>Argentina</td>
<td>42812</td>
<td>81216</td>
<td>76431</td>
<td>78172</td>
<td>79139</td>
<td>58389</td>
<td>62074</td>
<td>59403</td>
<td>69565</td>
</tr>
</tbody>
</table>
The data in the above table represents applications for trademarks registrations selected from the top 12 countries data extracted from the World Bank database (2011). The data includes resident and nonresident applications and national and Madrid System applications.

**Fig. 2 Evolution of trademark application in top 5 Countries (GDP)**

A few things must be said about the table and figure presented above. First the top 12 table regarding applications for trademarks registrations contains Korea in the fourth place but occupies 14 place in the GDP hierarchy. We kept the total registration number in the UE as an orientation number for the place the European states occupy together in order to facilitate the comparison with the other great powers. Also Argentina has an outstanding growth in 2003.

From the tendencies point of view France and Japan had in 2008 a more accentuated descent than USA, Germany and China. But in 2009 all percents are growing till 2010. China is at a large distance from every other country regarding the number of trademarks applications. This indicates an emergent economy with a high number of trademarks developers.
In the patent case the first place is still occupied by USA who had a steady growth since 2001. China is growing constantly in the number of patent applications as it can be seen in the graphic below.

**Fig. 3 Evolution of patent application in top 5 Countries (GDP)**

From the tendency that can be observed in the graphic above China is to be expected, in the years to come, to equal and maybe even surpass USA in this aspect. Japan on the other hand has a constant descent in the number of patent registration since 2005 and due to the difficulties that Japan had in 2011 the trend is to be expected to even lower than 2010. France and Germany like in the case of trademark applications have no spectacular growth or decrease.
Conclusion

The statistical data presented in the paper offers a glance at the top economies and their trends in trademarks and patent registration. Some conclusions can be drawn from this data:

- The world trend in trademarks and patent applications follow similar paths.
- In 2008 the number of patent and trademarks requests lowered and pick up in 2009.
- This decrease can be noticed in the top 5 GDP countries: USA, China, Japan, Germany and France.
- China is one of the countries with a spectacular growth from 2001 to 2010 which indicates a developing economy.
- The presence of the Republic of Korea in top 5 trademarks and patents applications.

From the point of view of innovation management the global trends are of high importance because it offers an image over the company’s global movement towards international markets. The data presented in the study is only a small part of the information a company needs in order to develop a strategic management in the field of innovation. Other data such as the number of registration by class of product and services is an indicator of the international orientation of investments.

From the management point of view, in the present globalised context we consider that sometimes companies strategies for innovation management is not enough in order to boost the innovation process. Sometimes a national interest is required. In this context the idea of “national innovative capacity” (Furman, Porter, & Stern, 2002) is of great importance. The concept is defined as “the ability of a country to produce and commercialize a flow of innovative technology over the long term” (Furman, Porter, & Stern, 2002). So the country is as interested in the development of innovative technologies as private companies because this innovations gives an advantage to the company but also to the state. In the China case the application of the concept is visible in the statistical data presented. The Korea case is to be followed, in the next years, because of companies that develop IP rights. Such is the case of Hyundai, Samsung (even if Samsung Galaxy Tab is quite a controversial product in terms of respecting IP rights) or Kia Motors.
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