

## Intellectual property rights commercialization: impact on strategic competition

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### Key Words

Intellectual property rights, commercialization, innovation, Strategic Competition and strategic management.

### Abstract

*The research intensive companies have been increasingly emphasizing on the commercialization of their innovations to adopt a central strategy for competitive advantage. During last two decades, many small and medium companies have shifted their focus to technological inventions leading to entrepreneurship and simultaneously they are commercializing their new technologies.*

*Companies investing a huge sum in research for innovation, and when any innovation takes place and is verified attractive to the market, they find competitive edge. But if the competitors start jockeying to grab the innovation, the innovating company may find themselves in a very insecure position. To overcome the threat, the application of Intellectual Property Rights (IPRs) is one of the best solutions. IPRs protect a company's innovation from copying, manufacturing and selling without the permission of the owner. Thus, IPRs works a safeguard for the innovating people and companies. On the other hand, commercialization of IPRs refers to doing business with intellectual property, i.e. some inventions, which are protected under the IPRs, through some sorts of business operations, e.g. joint ventures. For example, the Mc Donald is permitting others in different countries to sell burger using their trademark (an intellectual property) in exchange of huge royalty.*

*In strategic management, there are the four levels of strategies; functional, business, global and corporate. IPRs commercialization takes place at functional, business and global levels of the companies' strategies. Commercialized IPRs may provide the owner a competitive edge in functional operations (new method of production, that reduces cost and share it with few others), or in business level (sharing own IPRs, like trademark) or even in global strategies (to form strategic alliances with the new technology/innovation).*

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### 1. Introduction

The research intensive companies have been increasingly emphasizing on the commercialization of their innovations to adopt a central strategy for competitive advantage (Kasch and Dowling 2008). During last two decades, many small and medium companies have shifted their focus to technological inventions leading to entrepreneurship and simultaneously they are commercializing their new technologies (Gans and Stern 2003).

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the other hand, commercialization of IPRs refers to doing business with intellectual property, i.e. some inventions, which are protected under the IPRs, through some sorts of business operations, e.g. joint ventures. For example, the Mc Donald is permitting others in different countries to sell burger using their trademark (an intellectual property) in exchange of huge royalty.

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True IPRs commercialization opens a new door of trading all over the world. At this point, the competition emerges and urge for a shift in the strategic competition. After clarifying related issues, the research will focus on how IPRs Commercialization affects Strategic Competition through different studies and company cases.

## 2. A Brief Survey of Literature

Intellectual Property (IP) refers to any legal rights, resulting from intellect works in the area of industrial, scientific, literary and artistic (WIPO 2004). It enables to do business with creativity, with security. Countries have laws to safeguard the innovation to ensure moral and economic rights to the creators and for encouraging the fair trade for the social and economic development (WIPO 2004). The IPRs encompasses following areas of inventions (WIPO 2004); 1) Literary, artistic and scientific works, 2) Performances of performing artists, phonograms and broadcasts, 3) Inventions in all fields of human endeavor, 4) Scientific discoveries, 5) Industrial designs, 6) Trademarks, service marks, and commercial names and designations, and 7) Protection against unfair competition and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

The IPRs laws, presently, became some sort of competitive tools. Strategic or competitive advantage is the position over the rivals in generating revenue in a higher degree (Hill, Jones and Schilling 2015). Such advantage can be achieved through superior efficiency, quality, innovation, and customer responsiveness (Hill, Jones and Schilling 2015). Accordingly, innovation is the way to achieve such advantage and it allows them to stay one step ahead of their rivals. According to the competitive forces model (Hill, Jones and Schilling 2015), developed by Michael E. Porter, a major force, 'the intensity of rivalry among established companies within an industry' can easily be settled down with the innovations, protected by IPRs.

The IPRs may become more powerful weapon, when it is being commercialized. Commercialization of IPRs is a technique for bringing the IP to the market so that IP can be exploited more efficiently in terms of maximizing business profit as well as growth (European IPR Helpdesk 2013). Whether IPRs commercialization is financially successful or unsuccessful, it actually depends on the effective choice of commercialization tools, which are based on the organization's business objectives, the form of IP and the economic resources at its disposal (European IPR Helpdesk 2013). For the successful IPRs commercialization, some says that IPRs should be commercialized at the stage of research (McGinness 2003).

When commercializing the IPRs, it is crucial to focus the mode. IPRs commercialization modes ultimately depend on transfer of IP to another/other company/companies or permitting another to utilize (manufacture, copy or sell); in simplest term, granting a license (ACIPA 2006).

In most cases, it is found that license goes to a third party. It occurs when someone invents something and allows/sells that IP to another entity for further development or exploitation. Then right goes to the second party. It can use that IP for its own and/or can grant another (here, third party) through licensing in terms of maximizing profit and/or expanding the venture all over the world.

Thus, IPRs commercialization highly affects competition. Though IPRs and competition policy are two separate systems of law and each has its own goals and methods of achieving, but often there is a considerable overlap in their goals (Anderman 2007). Since both the systems aim in facilitating inventions and economic development, it is natural in overlapping their goals. One of the major specialties of natural competition policy is 'protecting the entrants' against preventative use of incumbent market power (Gans and Lars Persson 2013). Such policy to favor the entrants over the incumbents may be very crucial in this sense that the entrants may be the future incumbents (Gans and Persson 2013). This competition policy, directly clashes with the strategic competition, because in strategic competitive forces model, where the new entrants (a competitive forces) (Hill, Jones and Schilling 2015) are considered as threats and so to be tackled and set out of the market by the existing rivals. Strategic competition is revolutionary, where the natural competition is evolutionary (Henderson 1980). Competitive shifts take place within a very short period, while in natural competition it is time consuming, even for generations. Individual productivity, innovation or IPRs commercialization, may bring revolution in the business and industries, which is relatively a new phenomenon in business (Henderson 1980). With the advancement of IPRs commercialization, there should be a great impact on strategic competition.

### 3. Data and Methodology

The research has been carried out from the secondary data. Different scholarly articles are the main source of data. Qualitative method for data analysis has been used. Different research publications and company/case studies have been extensively examined and explained to draw the conclusion.

### 4. Analysis and Findings

#### IPRs COMMERCIALIZATION AND SHIFTS IN STRATEGIC COMPETITION

Many companies in recent period are changing their primary locus towards IPRs and the statistics on the late 1990s points that the total market capitalization was represented by intangible assets (i.e. patents, copyrights and trademarks) in case of almost 75, out of 100 Fortune Companies (Reitzig 2004). So, IP is a big issue to get strategic attention for competitive environment. Therefore, IP management can no longer be left to technology or legal departments alone (Reitzig 2004); there should be an integrative strategic approach for exploiting it. Companies are investing lots in inventing new products or services that would allow them monopoly under the umbrella of IPRs. Thus, the IPRs laws are adding new dimension in the era of strategic competition. This competition became more interesting and intensive when companies started commercialization of IP within themselves or with others.

The Coca Cola is one of the major companies adopting IPRs as a strategic advantage. The Coca-Cola Company owns the copyright of the design of bottles, it has a registered trademark that distinguishes it from others, it owns a patent on a method of making "barrier coated plastic containers", and the company enjoying the trade secret for making the product (Lawyer of Zvulony and Company 2010). This is the way, how the Coca-Cola is enjoying competitive advantage through IPRs commercialization by its own as well as by commercializing with others through licensing, franchising etc.

Since innovation is not so easily observed; rather it is very much limited. So, the companies even try to procure the IP from others. It occurs frequently, because sometimes there are some innovations which are very costly to exploit. In that case the IP is sold or permitted to copy to other organizations. IPRs commercialization usually takes place through knowledge transfers (European IPR Helpdesk 2013). These transfers may take place through licensing, franchising, joint venture and spin-off, and material transfer agreements. It is assumed here that knowledge transfer includes, even covers more than, technology transfer (European IPR Helpdesk 2013). To be effective in IPRs commercialization, there should be effective technology transfer. For successful technology transfer, the receiving unit has to routinely reproduce the transferred products, services, process or method in accordance with a specification set by the sender (Jain and Sumita Nainan 2012). One thing should be kept in mind that the commercialization must be considered and finalized before starting technology transfer, or at least during the R&D process of an idea or innovation (McGinness 2003).

The IPRs commercialization process is continuous and ongoing, and even it takes place before investing time and money in an idea, without being sure about the sustainability of it (Jain and Sumita Nainan 2012). Studies find that less than 5% of all patented innovations are proven successful in business implications (Jain and Sumita Nainan 2012). Therefore, it becomes very clear that only big companies can go for commercialization of IPRs, because they have strong financial backup and enriched R&D. Thus, through the IPRs Commercialization, the big companies are becoming threats for the small and medium enterprises in the strategic competitive arena.

Focusing on the 3M (known as innovating company), it is found that it deliberately fought to foster innovation within the company by adopting strategies for commercializing technology in the changing environment (Conceição *et al* 2002). Since innovation is not sufficient to attain competitive edge, it demands for proper commercialization. With this ideology, 3M has been continuing through 45 individual units (Conceição *et al* 2002) and during the R&D of each unit, if any innovation is traced, 3M starts commercialization of IPRs. While pointing at the Electronic Market Center (EMC), established in 1997 (Conceição *et al* 2002), to assist 3M position in the electronic market by driving a one company (Conceição *et al* 2002), acceleration in technological commercialization (Conceição *et al* 2002) is found. The EMC approach of 3M amplifies its innovation leadership by changing organizational structure and strategy (Conceição *et al* 2002). Such organizational strategy is more fruitful when there is effective commercialization of IPRs and enhanced networks and connections among existing units (Conceição *et al* 2002).

During the early 1980s, the SUN Microsystem (Gans and Stern 2003) directly entered into the workstation market through IPRs commercialization strategy. It was mostly discounted by the established companies of that period, such as Digital, IBM and Apollo Systems, allowing SUN the scope to implement its technological vision 'the network is the computer' (Gans and Stern 2003). Through such intellectual property rights commercialization, SUN emerged as a leading computer hardware company through creating a unique value chain for the customers (Gans and Stern 2003).

Coca Cola, 3M and SUN are private, multinational companies. Now, the attention is being shifted to the governments. The Canadian government launched the Contracting-Out Policy in 1972 to increase the commercialization of government-funded research results (Supapol and Swierczek 1994). As a consequence of it, huge government-funded researches had been contracted out to private sector companies and many researches were commercialized (Supapol and Swierczek 1994).

According to the description of the Thomas Schelling's masterpiece book 'The Strategy of Conflict', strategic move by someone is to influence other's decision to get favor from the other's decision and very essence of the game of strategy is the interdependency among the rivals or competitors (Schelling 1980). This 1960's idea of Schelling is getting stronger appeal in this era of corporate competition, especially in the context of strategic competition. For strategic completion, any corporate to get a better result of its business activities has to respond quickly to its rival firm's activity and form strategic relations within or across the industry. Commercialization of IPRs, or even defensive patenting i.e., restricting other from further innovation, is now a frequently used weapon in the corporate war in the multinational market. At the level of top global corporate who are mainly commercializing the new innovation, the nature of competition is predominantly strategic competition and commercialization is increasingly becoming the center of such competition where the borders of the industries are even changing their length and breath.

The changing face of computer industry, cell phone industry and information technology industry can be taken as an example. The steam of innovation and the strategic competition among the firms makes the boundary among the industries obscured and to get advantage in the strategic competition, Microsoft acquired handset business of the Nokia. Microsoft did not only take control over the Nokia's handset business by \$5b but it also paid another \$2b to get the associate patent licensing for 10 year (Ovide 2013). So, more than a quarter of the total deal went after licensing of the IPR, not for the transfer of the ownership of IPRs. The increasing number of IPR litigation among the top corporate in the Information technology industry as well as other industry also gives a clear indication of the impact of the IPR commercialization on the strategic competition which extended the features of the competition from market war to legal battle.

## 5. Discussion and Summary

Applications of IPRs have introduced a new dimension and opened an opportunity in the business arena, especially in strategic competition. It seems that IP works as the trigger in the competitiveness. From the literature and analysis, a close relationship between IPRs commercialization and strategic competition, has been found. IPRs laws secure the companies with their innovations in different terms, e.g. patent, copyright, trademark, trade secret etc., though for a limited period of time, but the companies enjoy monopoly to some extent. They may get the pleasure of setting the rivals out of the market. Day by day, they develop or differentiate their products or services and register under the IPRs. For example, Coke Zero or Diet Coke, a differentiated product of original Coca Cola, enjoying extra favor in low-sugar drink industry along with the image and goodwill of Coca Cola.

In strategic competitive environment, IPRs commercialization has a great influence. When the companies commercialize their IP, they become capable of doing business by exploring the innovation either by them or through others in forms of licensing or franchising etc. It enables them in growth of the venture and of course in profits. Commercialization of IPRs also makes the companies available over the whole world through strategic alliances or joint ventures. Thus, the companies create monopolistic market and competition over the world instead of monopoly in a comparatively smaller market. For example, once upon a time IBM was the market leader in computer industry with their innovation and brand image. Then IBM started to build strategic partnership with different small and medium organizations all over the world to spread their business and created a monopolistic market through commercializing their IPs. Therefore, it can be said that the major impact of IPRs commercialization on strategic

competition is the changing nature of competition; i.e. creating oligopoly instead of monopoly, covering more and more area with the similar products or services.

Simultaneously, it is seen that commercialization of IPRs is highly cost intensive. According to the stated discussion, the innovation, whether successful or unsuccessful, should be commercialized during the R&D stage to get the maximum benefit from it. Therefore, no doubt that it is risky also, because sometimes the innovation becomes useless. Considering the cost and risk involved in IPRs commercialization, only companies with strong financial capability and enriched high-tech R&D can enjoy the benefits commercialization. Even some innovations occur in small enterprises, or even at personal levels, lack of sufficient finance and R&D, those may not be commercialized. In these cases, big companies procure innovations and make lots of money from it through proper commercialization. Thus, IPRs commercialization is becoming a weapon of the giants, also a threat to the small and medium enterprises. On the other hand, it must be admitted that because of commercialization of IP, innovations are coming at our doors with various comfort that making our life easier and convenient. It is concluding by stating that such commercialization and competition must be encouraged for social and economic developments, and some provisions are required to create room for small and medium entrepreneurs to exploit own innovations, instead of just selling.

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