The intellectual property rights and competitive strategy of multi-national companies

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Abstract: The patent is similar to insurance policy against robbery. Indeed, it is possible that no person needs it till nothing is stolen of him but without insurance, there will be a bitter experience. Robbery is possible, it is better to insure ourselves against theft. In this case, a good artist insures his painting against theft as he has investigated on time, work and money in creating a work and is hoped to sell it. To do this, the artist by knowing that there will be a cheating on his work, he should introduce his work. The artist himself is not the objective and it is the creativity in this art. This type of theft is worse than property theft. The first objective is protection of patent, publishing the works without hiding anything and allowing information distribution without theft intellectual property of the artist. If supporting intellectual property including copy right or patent don’t prevent theft, the artist or inventor lost all his capital and there is nothing for living. Thus, the second aim of supporting patent is being ensured of receiving good wage of inventors for their creativity by avoiding intellectual property theft. It should be said that without supporting patent, there is not progress in research fields. The drugs not including the support of patent are not developed. Supporting patent is considered in great markets that private and research industries use this possibility in competition to provide the costs of research projects.

Keywords: Intellectual property; competitive strategy; Multi-national Companies

1. Introduction

Supporting secrecy as guaranteed legally and nationally is not applied. The secret that is revealed will be globalized. There is not guarantee to reveal knowledge namely in some fields in which state patent is not required to delegate the documents. The effect of support level of patent is different in some countries. The type of the research is less based on the conditions of intellectual property conditions compared to the research design strategies. To act as competitive, we should develop not only the new products but also we should sell them (marketing strategy necessity).

If a product is in the market with different prices in various markets, it avoids parallel imports (unduly international consumption) and competition loses its conception.

The second point is such that supporting patent is the second priority in marketing strategy. The aim of marketing strategy is facilitating the new products distribution as widely in the market without considering the quality of patent support. If the patent helps supporting acceptable price level, it is used and by aiding in achieving the profit optimization is considered as an important element. Supporting patent motivates marketing in facilitating product production to productivity of the advantages.

Protecting the record of data (the prevention of using the data recorded in the second record before its expiration) can complete the support of patent. Thus, marketing exclusion is guaranteed only for a special product. Finally, secrecy namely in production process is considered in production processes as completion criterion and in special conditions to proceed other competitors and supporting wide marketing strategy. The lack of effective protection of patent in some countries didn’t prevent the marketing of the products of the companies. Indeed, in some countries without any protection of patent, we can not eliminate risk insurance against theft. The original pharmacy products are sold there. Where the product is introduced for the first time doesn’t depend upon the effective protection of patent. Now, the aim is the introduction of new pharmacy products to the market in most of the countries. Thus, the effect of effective protection of patent on transferring technology and the consistency of new investment is that the investment in research section of new products in a country with no patent production is void.

The intellectual property rights turns into an important part of competitive strategy. By the increase of global competitiveness, this trend continues. AT&T Company used intellectual property protection in investment decision making in some special countries.

Finally, due to the false law of copy right rules regarding computer software, the only solution is Smigewiril protection. These decisions show that copy right system is not used in the software. (Stamm, 1993)
Until 1920s, company structures were centralized. The centralized organizations were formed as great administrative institutions and were imagined efficient with the standardized work processes. In 1920s, the companies were established with multi-divisional and decentralized structures for being more efficient. By the studies performed by Drucker and Chandler, there are three kinds of corporate structure principles: centralized, decentralized and federal union. These structures were applied by the concept of IT organization and were identified as centralized, decentralized and distributed. Under the context of networking and processing of data, these three hardware structures can be defined as:

- Centralized computing: A system that is based on processors located in one site (except for microcomputers and remote workstations)
- Decentralized computing: A number of processors deployed in different locations, not connected to a common network and functioning autonomously
- Distributed computing: A number of processors deployed in different locations and linked in a common communications network [1].

Despite the growth in the diversification of corporate structure through the 1960's and 1970's, IT structure was mainly centralized. Blumenthal argued, “Computers offer the opportunity to substantially enhance rather than further erode the importance of the individual within the enterprise. In the 1980's, researchers discovered that, with the advent of client-server architecture, the distribution of data processing activities was spreading, and IT resources and responsibility for IT activities had finally begun to be decentralized. Researchers also discovered that not all IT activities devolved and it was concluded that the federal IT management structure was then the dominant structural form in multi-business companies. From a structural perspective, the federal IT management structure is defined as:

“A distributed function, with each business unit containing and largely controlling its own capability. However, there is in addition a central IS unit reporting to corporate management which has responsibility for defined aspects of policy and architecture across the organization and which may deliver some common or shared services.

**Structures for the global economy**

IT infrastructure management: decisions that address the nature of hardware and software platforms, annual enhancement to these platforms, the nature of network and data architectures, and the corporate standards for procurement and deployment of IT assets”

IT use management: decisions that address applications prioritization and (short-term and long-term) planning, budgeting, and the day-to-day delivery of operations and services" Project management: blending knowledge of IT infrastructure capabilities and capacities with knowledge associated for the conceptualization, acquisition, development, and deployment of information systems applications.

There are typically three stakeholders that govern IT decisions: corporate IT, divisional IT, and line management. Governance represents "an organization’s IT-related authority pattern" (Sambamurthy & Zmud, 1999).

Within decentralized firms, IT often implements coordination mechanisms, where a position such as a relationship manager is placed within the business units to understand the technology-related projects that are needed within that specific context.

The move toward context-specific perspectives of governance has resulted in the creation of a different conceptualization of governance, where the objective of research is to understand the managerial rationale for designing and evolving specific organizational arrangements in response to an enterprise’s environmental and strategic imperatives rather than understanding how activities are governed. Lastly, with the rise of the Internet, virtual linkages are being created across organizational boundaries that will prove to be a challenge for IT (Taylor, 2002).

**The exposure of intellectual property with IT**

Among considerable challenges in universities about IT, none of the issues are more challenging than intellectual property. This dispute puts ministries vs. universities, scientists vs. humanitarian people and scientific values vs. financial benefits. According to Denis Thompson, the chief of IT board in Harvard University, the major part of this dispute is wrong. He believed that the changes in intellectual property should be considered more than IT products. On the other hand, it seems that some of the problems of property are beyond intellectual property field.

**A simple approach of perspective**

Is CD mostly similar a text book or an invention? To most of intellectual property policy, the publishing intellectual property rights are granted to the colleges. The selection of the title for most of the patent products (e.g. inventions) is for the university. It is obvious that responding such a problem is not easy. Raising such a question is wrong as this issue takes our attention to the nature of the product and not the method of creation of simple approach of perspective of the type of product to its
production conditions is a considerable step to promote the policy for IT products.

The suitable question is such that: Is the university collaborating in creating the product? If it is so, the university should have a share in it and control it. In some cases, the principle is acceptable and at least in some existing policies in the universities is gradual. In addition, without special participation, some of the factors as the influence on the validity of the universities justify the control on the product.

The participation of the university is evaluated based on three kinds of supports: financial, intellectual and validity. Any kind of support is the basis of the claim of the university on intellectual product. This claim is beyond IT products and is not property right.

Financial support

What is considered as a special and considerable financial participation can be blamed in special cases. On one hand, the common profit of employment as annual wage of the university, office, common library resources, low facilities and staffs and personal computers are not considered. On the other hand, the attributed facilities to the special part of the university including the lab should be considered.

In income division, if the organization participation is taken as important, the best acceptable strategy is the costs, advantages and speech with the source. The important point is such that the negotiations focus on the nature of the university participation and not the product itself.

Intellectual support

The intellectual resources provided by the university students are the university people and common activities of academic life are forgotten mostly in intellectual property issues. The distributed nature of this participation and its hardness to policy is understood. Unless the intellectual support is related explicitly with some special works as a list of special set of an academic museum or an image of orchestra concert of the university. In these cases, the university has legal right. The role of the students in producing the works not only requires special consideration but also paying good wage to them causes their commercial value of the works. It should be considered the role of the students in addition to using the product with academic mission of the university is similar.

Supporting by fame

According to the view of most of the academic members, the value of the trade mark is not less than their fame. Any commercial result arising from the fame of the university helps the next generations of the university, graduates and staffs. Thus, such incomes should be dedicated to the university profit and the present and future members.

The value of the fame of an institution is revealed when the publishers and manufacturers actively –even in production conditions- identify an academic institution to increase the benefits or increasing the power of the content.

Beyond the intellectual property

Referring to the severity of the problems of IT, the intellectual property policy should be in the form of the principles beyond IT.

Such issues are not considered in the policies talking about property and control is not expressed well. The most important question of a severe problem as a temporary issue is mastering the speeches, spelling, exercises of University for various levels being presented as virtual forms to the students in the house or institution. This problem is considered as well not only in university rights conditions to the creative products but in their responsibilities conditions to the students, academic members and institution. Thus, the general policy with contradiction with the profit and commitment is considered a good tool for expressing the problem.

Following such strategy, again financial, intellectual and fame considerations are used. Here, the question is not whether the institution takes a support in this regard and it is whether the institution benefits are provided in these lines or not?

An intellectual property policy can express financial benefits of the institution as the benefits claim is granted to the university. When special support is taken for progressing academic levels progress. The most important issue is intellectual profits of the institution: the commitment of the college against creating the levels and their rejection of full consideration to teaching in the institution. We should be ensuring that any arrangements by the college is done in distribution of the levels and doesn’t affect the students’ access to university. Finally, the main consideration on benefits is by fame. The validity of any university is the set of good activities of present and future people even for the loss of other members. Based on the levels, the influence of the name of an institution in the university and its members is controlled by the policy of intellectual property restricting the application of the name of the university. For example, using the name is forbidden unless the college member in participation with the university is involved with the production of the levels with mutual agreement. The universities are encouraged in providing financial support for the college in producing and distributing the levels (Thompson, 1999).

The importance of intellectual property for developing IT in an undeveloped world

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The relation between intellectual property and the development of IT and the relation between intellectual property and full economical growth is an important issue in USA and other countries. Recently, the studies in this field are carried out by beneficiary industries and famous economists not exaggerating in the results. The studies had similar results: intellectual property is vital in USA economy growth namely in export section. For example, the summary of the report of execution board shows that USA intellectual property industries are the most important growth leaders in the present economy of America and about 40% of the growth achieved by total private industry of USA and about 60% of the export growth of the services and considerable products in future growth of America economy depend on it.

The net growth of domestic products in recent 10 years was 30% less than the current predications without the involvement of the industries.

The justified reasons for the relation between intellectual property and economical growth are complex but I emphasize on two main lines of analysis. Generally, USA is recognized as a competitive and unique community. The reality is such that the society is a fully dependent community. Individualism is applied in the framework encouraging collaboration. Constitutional systems are used to achieve this kind of collaboration and combined individual and group attempts to turn into the market and property rights. USA found that the best method is giving the equal role to economy and the society need that the people in the form of corporate can have property rights in innovation and trade freely. The selection of the term “innovation” includes real and non-real properties. Such as the cable in the underground to transfer marks or music and film being transferred from inside the cables and includes its software.

We can not say property rights and the market is not in contradiction with collaboration. Vice versa. There are exact systems by which the advanced communities are collaborating (Delong, 2005).

Without intellectual property in each industry in which initial equipments of production are controlled widely and developing networks destroys management, the production by participation is replaced by old management hierarchy. The network revolution if its potential facilities are identified of re-distribution of power and money of the common rule of the industrial manufacturer of information, culture and communication in 20th century to the combination of distributed population in all over the world and market actors.

### Intellectual property in Iran

Iran is the member of global organization of intellectual property and is related to some contracts of this global organization. Iran in 1959 was the member of industrial property protection (Paris treaty). Iran in December 2003 was the member of Madrid treaty and Madrid protocol for international record of the marks. In 2005, Iran joined Lisbon treaty to protect the name and international record guaranteeing the protection of related geography names of the products. In February 2008, Iran is obliged to join Hague convention to protect industrial plans.

Iran has formal code of intellectual rights protection of the works produced in Iran called the copy right, composers and artists on Jan, 12, 1970. These rules don’t cover abroad works as it is not the owner of Bern treaty of protection of literary and artistic works, versioning right of global organization of intellectual property or the membership of the world trading organization.

The law of patent in 1931 in Iran explained that any logo, design, image, number, alphabet, seal, cover, etc being used to identify the goods and services is mark. This law is applied to record different kinds of marks to identify the industrial, commercial and agriculture products. It is used to record service marks. The introduced mark for registry should be unique.

Patent law, industrial designs and marks were used for the first time on Jan, 23, 2008 for 5 years was used as pilot and was applied on May, 5, 2005 in Iran parliament. The parliament in May, 2001 to recognize and perform international judgment took a decision to grant more protection of the property to the companies.

Based on this treaty, recognizing foreign judgment introduced as New York treaty, Iran approved judgment in other countries. The votes in Iran are applied in other member countries.

According to the new law despite the previous rules, the priority was with patent and industrial plans to the marks and is exact in protecting these equipments as it is one of the intellectual property rights.

The convention for protection of cultural property (Aka, Paris convention) 1959. Iran was one of the signers of international convention of protection of cultural property (Paris convention). Paris convention obliges Iran to protect industrial property of the nationalities of the members of convention including Iranian nationality.

Iran was the member of WIPO since 2002 and adopted some intellectual property convention. Iran is not a member of the signers of versioning rights convention of this organization.

Madrid agreement about international registry of marks, 2003

The board of ministers issued H24303T/6921 on Dec 2003 and approved Iran membership in Madrid agreement about international registry of the marks and protocol. According to this agreement, the contracting countries protect the marks in all the countries by registering them in global organization of intellectual property.

Lisbon agreement for the protection of appellations of origin and their International registration in 2005, Iran joined Lisbon agreement for protection of appellations of origin and their International registration guaranteeing the protection of geography names related with the products. Lisbon agreement was necessary in March 2006. Thus, Iran custom office prevented the entrance of the goods produced in the abroad but it had Iranian commercial names, versioning right rules of world trading organization

Iran government didn’t approve versioning rules of world trading organization and supported allowable distribution of software without certificate. Linux that is published even in the countries with strong rules of intellectual property freely and are increased in all over the world.

If Iran gets the complete member of world trading organization, it changes its position. The organization members encouraged to observe the rules of organization versioning.

USA already vetoed 22 times Iran ascending to world trading organization. Since 2007, actively avoided the support of complete membership of Iran in the world trading organization. Iran determined that its benefits are not met. The benefit of its independent right is not a threat for the rules. Indeed external versioning rights are not performed by Iranian authorities (Wikipedia, 2009).

**Intellectual property, competition and IT**

The general view of Professor Varian used "IT economy" dealt with various competitive strategies by advanced companies. Such strategies including personal pricing, lock-in and fully integrated standards is based on intellectual property namely versioning rights or patent. As Professor Varian didn’t investigate this issue, we complete his work on focus on this issue. At first, we present some examples to explain the deep effect of intellectual property rights on competitive strategy in IT.

Microsoft Company used three strategies of Professor Varian, personal pricing, Lock in and using network resources via controlling good relations. The protection of versioning improved Microsoft motivations to improve their software. The protection for versioning right is of great importance for new music and film industry.

IT made varied the competition conditions among the artists vertically or horizontally. Horizontally, IT improved the effect of increasing return of super star.

Vertically, IT is opposite and makes competition progressive and reduces the entrance barriers by international audiences. Regarding the film of a digital film costing 500$ and an internet site can make the film maker works for global audiences. The music has less audience.

As its performance in internet had considerable audiences in all over the world. IT companies including IBM, Intel, Hewlett Packard and Motorola received annually 100 patents. These companies applied patent to avoid its competitors in definite markets and negotiations as defensive with patent companies or as profit centers by accepting the approval creating the main incomes. By increasing patent and making double the increase of incomes, patent had increasing role in competitive strategies in semi-conductive industries, computer hardware and software. The role of patent in these industries is different from single-invention economy literature describing pharmacy products. As pharmacy products are not IT, it shows how intellectual property supports price difference in various countries. Intellectual property rights for long-term in industries with the experience of rapid change in IT plays important role (Farell, Shapiro, 2004).

**The integrate model of IT helping the company's performance**

This model was proposed by Spanos and Lioukas to depict the role of IT in explaining the business performance. The current model refers to two major models. At first, more than being dependent on strategy and company performance, it shows the relation between IT support, the company strategy and incomes and business performance. Second, although Spanos and Lioukas model didn’t show any comparison between strategy, property, industrial forces and market performance, the profiling model is not including such inference properties.

The concept of IT support has two aspects. In terms of strategy, various studies showed the
strategic consistency of IT and business as an important role in describing trading performance (Bergerun Reymond, 1995; Chan et al., 1997; Bergerun, Reymond and Rivard, 2001). Generally, these studies defined consistency as the priorities, abilities, decisions and measurements of technology system supports the strategy. Second, in terms of assets, by the profits of IT resources via organization resources, took strategic necessity attitude (Kelmons and Ro, 1991).

The system supporting qualifications of marketing planning (Wilson and McDonald, 2001) or a system supporting capability management (Hustad and Mankold, 2005) are some examples of this type of supporting of organization capabilities.

According to the strategic necessity attitude, technology support of the works of companies' assets (type three) is depending upon the effect of IT support of the property resources. The first relation between IT support of company assets and strategy.

According to the view based on resources, in terms of the completion of view on resources and market-oriented attitude and strategic necessity of this model showed IT support degree of company resources which organization, marketing or technology make organized the company in providing better support of IT of the strategies in terms of leadership of costs (Rivard, Raymond, verreault, 2006).

The companies have two kinds of IT orientation: Strategic and operation

The companies by IT strategic orientation on IT as a competitive level and creating new opportunities of business are focused. The companies by operational orientation on cutting operation costs and decisions based on IT met the business requirements (Banker, Hu, Pavlou, 2004).

**Patent, commercial secrets and versioning rights**

Regarding the intellectual property rights, the economists considered versioning rights, patent of commercial secrets. Any kind of intellectual property is unique and important. Publishing the book without the permission of the author or distribution of songs in internet channels without the permission of Music Company. Version rights are considered as granting a partial monopoly. If a book or song has monopoly shows a different and unique product. Historically, versioning rights are not powerful in the market. There is a substitute for each book, a song. When versioning rights are threatened to power exchange in the market, its protection is underestimated. If versioning rights are exact, it is more stable.

The risk is when versioning is consisting of computer software and power exchange in the market is more compared to versioning rights of book and music. There are two reasons, first computer software under versioning rights as Microsoft Windows is economically important compared to book, music and film. Second, versioning rights were in interaction with network links and make the free selections to necessary selections. Now, we observe a considerable discussion about the role of versioning right and the necessity of changing the rules in digital era. Some of the stakeholders were concerned about the unduly offending by new IT and considered internet as a big machine stealing the new information from the authors, musicians and artists. These people were looking for access to the technologies to prevent unallowable versioning.

In worst state, media companies were looking for the development of versioning rights and complain unduly offending and the digital freedom activists emphasized on free use of information and criticized the greediness of the companies.

Regarding the intellectual property, the economists emphasized on versioning rights of patent and commercial secrets. Any intellectual property was unique and important. Versioning right is used to protect the special expression of a belief. Compared to patent registry, versioning rights had deep concept as it doesn’t prevent the creation of similar works. Historically, versioning rights are threatening power exchange in the market and its protection is underestimated (Darling, Friedlander, 1997).

**Competitive strategy of integrated model of IT in companies' performance**

IT is important in achievement of the enterprises to the objectives and is considered as an important management issue. The studies are the source of strategy management literature and referred the necessity of market force and considering the enterprises as a set of strategy activities with the consistency aim with industrial environment follow attractive conditions in market field. The dominant model of this perspective is Porter strategy framework. From the view of Porter and Miller (1985), IT is a tool by which the enterprises and by the aid of changing competitive forces causing industrial profiting and achieve competitive advantage. IT via the reduction of costs or increase of difference helps the change in competitive forces. From the second view, economical enterprises as a set of resources, assets, processes, knowledge are valuable. Commercial institutions are the only resources determining the strategy nature (Spanos and Lioukas, 2001).

Ayus and Lonamon t (1984) emphasized on the application of IT in improving the relations between institutions and customers. Their recommendation was on "long-term cycle of
“customer resources” as a tool to determine the application of IT institution to distinguish themselves of other competitors and turning into a manufacturer with low costs or determining the market gap (Rivard, Raymond, Verreault, 2006).

**Integrated model of IT share in productivity of the companies**

The model proposed by Spanos and Lioukas was designed as it can depict the role of IT in explaining the business performance. At first, instead of keeping the influences strategy and assets on companies’ productivity, this model shows the relations between IT support of the strategy and the company's assets and water productivity and work. Second, Spanos and Lioukas model regarding the strategy, assets, industrial forces and market productivity and profitability don’t define any priority while the proposed research model shows this priority. The selection of IT support is for two reasons: At first, in terms of strategy, many studies showed that strategic consistency between IT and business have important role in explaining business productivity (Bergerun Reymond, 1995; Chan et al., 1997; Bergerun, Reymond and Rivard, 2001). Second, in terms of the company's assets it is a strategic necessity vision (Kelmons and Ro, 1991) by which the benefits of IT resources via its support of organization the IT capabilities are achieved.

**Conclusion**

Intellectual property have been becoming an increasingly importance part of firms’ competitive strategy and IT. Patent Law and policy are under pressure as the number of patents grows rapidly in the information technology sector of the economy.

To meet the challenges set by developments in information technology, attention should focus on the significant financial, intellectual and reputational interests of firms.

For the public and void firms, seeing to suitable exploitation of its intellectual property rights is no less a bonded duty than managing its financial gift.

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