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IPR Protection and Management Approaches. Insights from the MNCs' Practices in the Automotive Industry in China

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Abstract

Intellectual property (IP) systems and IP related laws do not always provide the optimal level of intellectual property rights (IPRs) protection that companies would like to achieve, especially in emerging economies. Previous research shed light on some companies' strategies aimed to achieve a better level of IP protection despite the drawbacks of IP systems. Yet little is known about the management approaches aimed to enhance the conventional protection, i.e. obtaining and enforcement of registrable IPRs such as patents and trademarks. The present study addresses this issue by investigating six cases of multinational corporations (MNCs) operating in the automotive industry in China. Findings reveal eleven management techniques that differ in the application area (i.e. internal or external) and context (either aimed to improve IP awareness or to settle cooperation on the IP protection issues). The discussion also shows the applicability of some explored management approaches for other industries and their double role to also prevent infringement.

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Abstract

Intellectual property (IP) systems and IP related laws do not always provide the optimal level of intellectual property rights (IPRs) protection that companies would like to achieve, especially in emerging economies. Previous research shed light on some companies' strategies aimed to achieve a better level of IP protection despite the drawbacks of IP systems. Yet little is known about the management approaches aimed to enhance the conventional protection, i.e. obtaining and enforcement of registrable IPRs such as patents and trademarks. The present study addresses this issue by investigating six cases of multinational corporations (MNCs) operating in the automotive industry in China. Findings reveal eleven management techniques that differ in the application area (i.e. internal or external) and context (either aimed to improve IP awareness or to settle cooperation on the IP protection issues). The discussion also shows the applicability of some explored management approaches for other industries and their double role to also prevent infringement.

Key words: intellectual property rights, patents, trademarks, protection, China, automotive industry

1. Introduction

The intellectual property protection from the company's perspective is, first of all, associated with coordinated actions on obtaining and enforcing of the respective intellectual property rights, such as patents, utility models, industrial designs, trademarks, copyright and trade secrets. However, not every national IP system and not every IP related law can guarantee an optimal protection level of the intangible assets a company may desire. The imperfections of an IP environment, especially in emerging economies, should have encouraged the companies' skilled managers to seek for additional and/or alternative ways to protect their intangible assets. Such ways can be described as *management approaches* – strategies developed by managers in order to prevent the abuse of their companies' IP rights or enhance their obtaining and enforcement via legal means.

Unfortunately only a few studies shed some light on these management practices where they are referred as “nonmarket strategies”, “management capabilities” (Somaya, 2012), “corporate actions” (Yang, Fryxel, & Sie, 2008) or “de facto protection strategies” (Keupp, Beckenbauer, & Gassmann, 2010). In particular, little knowledge is available on the management approaches aimed to support and strengthen the obtaining and enforcement of registrable IPRs such as patents and trademarks.

Having China's emerging IP system as a research context, the present study attempts to close this knowledge gap, i.e. to provide a theoretical understanding on how multinational corporations can enhance their patent and trademark protection in the domains of rights obtaining and enforcement using management approaches and to outline the strategic recommendations on how to apply such approaches to achieve a stronger IP protection in the emerging economies.

The controversies of China's emerging IP system, combined with the high attractiveness of its market, suggest a challenging environment which motivates managers to develop and deploy various approaches to attain an optimal level of IP protection.

Moreover, unlike previous studies, this research explicitly focuses on the practices of MNCs operating in the automotive industry. This choice promised rich findings for two reasons. First, the automotive companies usually have large portfolios of patents and trademarks – the protection of which this study investigates. Second, automotive companies potentially experience a high pressure from the growing local competition supported by the Chinese government for which the industry is of high strategic importance. China's 12th Five Year Plan mentions automotive industry among the nine key industries¹ that are historically crucial for the national economy as well as among the “new strategic emerging industries”² that are supposed to become a high-tech booster of the Chinese economy in future. This rationale may have also induced the companies to find ways to maximize the appropriation of their intangible assets and hence, to strengthen their competitive positions.

I outline my study as follows: First, I develop a conceptual framework by (1) reviewing the relevance of patent and trademark protection for the companies and (2) providing an overview of management approaches in patent and trademark protection known from previous research. Next, I explain the methodology used for the research and then present the results of the analysis of the obtained data. Finally, I discuss implications of my findings and their limitations.

¹ petrochemical, shipbuilding, automotive, iron and steel, non-ferrous metals, building materials, equipment manufacturing, light industry and textile

² 7 following selected industries: energy saving and environmental protection, bio-industry, new energy, next generation IT, new materials, clean energy vehicle and high-end equipment manufacturing; for more details see Chapter 10 of the China's 12th Five Year Plan on Economic and Social Development

2. Conceptual framework: IP protection strategies

2.1. The relevance of patent and trademark protection for companies in different IP systems

In developed economies with strong IP systems companies traditionally rely on registered IPR like invention, utility model and design patents as well as trademarks. The violation of rights provided by the formal protection means is to a high degree precluded by the strong IP appropriation regime.

Patents are regarded in general as the most valuable and hard to obtain IPRs (Gollin, 2008, p.172). Nevertheless, a single patent may not be examined properly due to time constraints or lack of identified prior art, does not provide the holder with an indefinite right to use the technology, and does not exclude the risk of competitors inventing around the patent (Somaya, 2012; Mansfield, Schwarz, & Wagner, 1981). To address these uncertainties of single patent rights, companies deploy various strategies with regard to obtaining and enforcing patents. Somaya (2012) recently provided an integrative overview of the research literature related to these practices. The traditional motive of companies to protect their products from imitation and, hence, secure their competitive advantages implies such actions as building patent fences (Cohen, Goto, Nagata, Nelson, & Walsh, 2002; Gollin, 2008), offensive blockage (Blind, Edler, Frietsch, & Schmoch, 2006; Cohen et al. 2002; Pitkethly, 2001), or persistent investigation of and enforcement against imitations (Polidoro & Toh, 2011) characterized by little likelihood of a suit settlement (Somaya, 2003). Besides, to defend against the patents held by third parties companies resort to defensive blockages (Arundel, van Paal, & Soete, 1995; Blind et al., 2006; Cohen et al. 2002; Duguet & Kabla, 1998), defensive thickets (Rubinfeld & Maness, 2005), strategic patenting (Blind, Cremers, & Mueller, 2009), or use the defensive patent portfolios to file a countersuit and subsequently reach a settlement agreement when accused for an infringement (Somaya, 2003) etc.

The patent protection is however limited to 20 years from its filing date, whereas the trademark protection may last forever. A strong branding can, for example, keep customers' loyalty to the product even if it stopped being exclusive due to the expiration of the related patents. Findings of previous research show a positive influence of trademarks on sales revenue (Doern, 1999, p. 72; Seethamraju, 2003), profit (Griffiths, Jensen, & Webster, 2011) and market value (Bosworth & Rogers, 2001; Greenhalgh & Rogers, 2007; Seethamraju, 2003). Protecting their trademarks' exclusivity, companies may regularly file an opposition against new trademark applications similar to their own (von Graevenitz, 2007). Graham and Somaya (2004) suggest that firms may file trademark litigation when they are targeted by patent enforcement.

Despite of weak IP systems in the developing economies, foreign firms have, nevertheless, a propensity to protect their IPRs in a conventional way – via rights obtaining and enforcement (Chow, 2002; Liang & Xue, 2010; Wu & Liu, 2004; Yang & Clarke, 2005; Yang et al. 2008). In particular, the motivation of MNCs to obtain patent rights in weak appropriation regimes can be explained by market considerations (Liang & Xue, 2010), e.g. competitive threat from other foreign firms (Hu, 2010).

Generally the research on MNCs' IP protection strategies in the weak IP appropriation regimes through legal mechanisms is fragmented and is represented by a limited number of studies. In China, on which the present study focuses, Keupp, Friesike, and von Zedtwitz (2012) revealed a different strategic character of MNC's patenting activities and defined four archetypes of firms' patenting strategies depending on their expectations about the future of the appropriability regime, use of patents as a signaling mechanism and degree of geographic differentiation of their IP policy. A recent quantitative study of Wolfram, Schuster, and Brem (2014) confirms the findings of Keupp et al. (2012) on various strategic patenting behaviors of multinationals in emerging economies. Wang (1998) analyzed some cases of patent litigation involving foreign parties. Clarke (1999) discusses the pros and cons of civil litigation and administrative enforcement for foreign firms. Veer (2013) gives an example of successful judicial actions of a German engineering company toward patent infringement in China.

Some insights on trademark application and enforcement practices of foreign firms can be found in the literature on anti-counterfeiting or brand protection strategies. Some companies had to deal with the rejection of the trademark application of their internationally recognized brand in China and adopted the reapplication strategy characterized by a convincing demonstration of evidence proving their application validity to the relevant authorities (Yang, 2003; Yang, Sonmez, & Bosworth, 2004). MNCs with high managerial confidence in the IP system tend to obtain trademark rights and successfully practice the administrative and judicial actions against trademark infringement in China (Yang et al. 2008).

2.2. Use of management approaches in IPR protection

Besides traditional IP protection strategies related to rights obtaining and enforcement and keeping secrecy, previous research provides some evidence that companies may use strategies based on *management approaches* to deal with some system imperfections and further enhance IPR protection. Such approaches known from the previous research can be divided into two categories: either aimed to *prevent* the IP infringement, or to *enhance* the conventional IP protection via rights obtaining and enforcement.

The existing research reveals a great deal of management approaches that *prevent* IPR infringement both in strong and weak appropriability regimes. Companies may provide training to their customers to demonstrate the advantages of buying the original product (Keupp et al., 2010; Yang, 2003); label the products to enable customers to distinct them from fakes (Chaudhry & Walsh, 1996; Jacobs, Samli, & Jedlik, 2001; Yang et al., 2004; Yang et al., 2008); warn their distributors about counterfeits in the market (Jacobs et al., 2001; Yang et al., 2008); or monitor the manufacturing and distribution networks (Yang., 2003; Yang et al., 2004). The findings of Yang and Frixell (2009) suggest that the right brand positioning is associated with lower volumes of respective counterfeit goods.

As for the management approaches aimed to *enhance* conventional IPR protection via legal means, in strong IP systems a limited number of studies revealed some examples such as lobbying (Kesan & Galo, 2009), approaching particular tribunals or courts (Moore, 2003; Somaya & McDaniel, 2012), and building a reputation to be successful in trademark opposition (von Graevenitz, 2007) and trademark or patent litigation (Li, Wu, Chen, & Ji, 2013). Another few studies discuss the role of companies' internal managers in patent related activities (Somaya, Williamson, & Zhang, 2007; Tietze, Granstrand, & Herstatt, 2006) and outsourcing of patent prosecution and enforcement (Reitzig & Wagner, 2010).

Existing literature on these “enhancing” approaches in weak IP systems is scarce and provides some insights mainly in the trademark enforcement area (Jacobs et al., 2001; Yang et al., 2004; Yang et al., 2008). The findings of Keupp et al. (2010) suggest building effective networks with government authorities, such as Chinese legislators, local governments, administrative authorities and customers to enhance IP protection. However the mentioned authors did not focus on a certain IP right in their study. To the best of my knowledge, no separate study on management approaches in the IP rights obtaining and enforcement has been carried out until now. Furthermore, previous studies on such IP protection strategies are based on data collected from 2000 to 2006, but the changes that have occurred in China's IP system in the last years should have influenced corporate IP protection strategies and management approaches for IP protection in particular. The assumption of this empirical research is, therefore, that managers at MNCs that are actively protecting their IPR, should have advanced old or create new approaches toward IPR protection in response to challenges and opportunities caused by China's new leap in advancing its IP system.

3. Methods

According to Keupp et al. (2010) rich and enduring insights on how the strategies are carried out can be provided by “the close observation of managerial work”, therefore, an exploratory qualitative approach is appropriate for identifying IP protection strategies. Edmondson and McManus (2007), Eisenhardt and Graebner (2007), Farquhar (2012) and Yin (2013) suggest to use a case study

research strategy if the research is posing a “how” question in an unexplored research area and multiple cases for broader exploration of the research question and more robust theory building. A sample size of 4-10 cases is recommended by Yin for this purpose.

The present research uses an inductive logic, i.e. aims to generate a theory from data through a pattern analysis (Farquhar, 2012).

3.1. Sampling of the cases

For the purpose of the present study, six cases were selected, out of which four are automobile original equipment manufacturers (OEMs) and two are automotive suppliers. To derive this final sample I looked for cases promising rich information and insights on the research question (Yin, 2013). An important criterion for the selection was an active involvement of a company in IPR protection related activities in China. I regarded the membership in the Quality Brands Protection Committee³ (QBPC), a coalition of the foreign-invested enterprises in China dealing with IP protection related issues in the country) as a good sign of such involvement. I contacted the QBPC member-companies from the automotive industry using my private network and via administrative staff of the QBPC and sent them my research proposal. Nine managers from eight companies replied positively to my request. At six out of these eight companies, I managed to establish contacts with further managers who agreed to participate in my research and therefore enabled me to conduct the case studies at their companies. At the remaining two companies the further contacts refused to participate, therefore a case study research was not possible.

The six selected companies are MNCs with operations including production and R&D in many countries worldwide, originating from developed countries – USA, Japan and Western Europe. They all started their operations in China more than ten years ago and currently operate both, joint-ventures with a local partner as well as wholly owned subsidiaries. The present research covers only the IP strategies of the wholly owned subsidiaries of those companies in China. Nevertheless, the IP related matters of the joint-ventures were sometimes discussed during the interviews, if it was necessary for the purpose of the present study. The descriptive data about the cases is presented in the Table 1.

Table 1. Cases description

Company	Industry segment	Local operations
A		
B	Automobile OEM	Sales, production (only via joint-venture), R&D, services
C		
D		
E	Tier 1 automotive supplier	Sales, production, R&D, services
F		

3.2. Data Collection

The data for the analysis were obtained from (1) semi-structured in-depth interviews with senior and middle managers responsible for IP protection related issues and activities of their companies in China, (2) notes taken from internal documents provided by the interviewees during/after the interviews for a short review, (3) publicly available secondary data about the participating companies such as information from their official websites, annual reports, patents and trademarks applications data, articles in journals, magazines, newspapers and internet, YouTube videos etc.

³ Quality Brands Protection Committee (QBPC) – a coalition of the FIEs in China dealing with the IP protection related issues in the country. Website: www.qbpc.org.cn

In order to limit the bias, an approach of “using numerous and highly knowledgeable informants” (Eisenhardt et al. 2007) was applied; therefore the semi-structured in-depth interviews have been conducted with at least two experienced managers per company. All the interviewees had positions directly related to the IPR issues of their companies such as IP council, patents/trademark attorney, head of IP department, brand protection manager with an exception for only one contact whose main duty was product management. The majority of the interviewees were Chinese citizens working full time for the respective companies in China; three contacts were expatriates working full time in China; two managers were working in the companies’ home countries while being responsible for IP related issues in China and having frequent business trips there.

To address the confidentiality concerns the non-disclosure letters were sent to each respondent prior to the date of the interview. All interviews were conducted in the English language. They took place between June and September 2013 at the corporate offices of the contact persons in China, except for one manager who was interviewed at his company’s headquarters in Europe. Most of the interviews have been audiotaped and transcribed later. Only for three interviews the transcripts were created during the interview. The interview transcripts were reviewed and confirmed by the contact persons. One interview lasted 60 minutes on average.

For all interviews the same guideline has been used. The managers were asked about their companies’ experiences in the IP protection area in China, about the structure of the IP management of their companies in China, how the companies protect their IPR via legal means, what available administrative and legal actions they take against the infringement of their IPRs, what kind of management approaches they use to further enhance the IPR protection. The interviews mainly reflect the ongoing situation related to the IP protection of the companies, nevertheless, the managers were also asked to describe how the IP protection strategies of their companies have been evolved over the past years and what changes they anticipate in future.

After the data collected from the above mentioned sources were analyzed and interpreted, short follow-up interviews were carried out via phone or e-mail in order to specify some details and/or fulfill the blanks in the data.

3.3. Analysis Strategy and Technique

All transcripts, notes, articles and other materials were coded using the inductive logic. As suggested by Corbin and Strauss (2008) the coding was conducted in three steps: (1) open coding where all the obtained data are simply labeled and disaggregated into units; (2) axial coding where the codes are rearranged in hierarchies and subcategories and (3) selective coding where the categories are integrated into few core categories. The first two steps were carried out using the software program for qualitative analysis ATLAS.ti. At the third step the categories were integrated in a table where a short description of each category to each case was established in order to observe replications, pattern matching and synthesis across the categories and cases. I present my findings for the observed strategies by providing a description to each of them supported by the relevant citations from the above mentioned interviews.

4. Research Findings

The analyzed data provided strong evidences for the assumptions that management at the participating companies has crafted a number of various strategies to support the legal protection of their companies’ IPR. A number of different management approaches was revealed at each company that participated in the present research. The investigated management approaches depend on (1) the corporate IP management structure and (2) the companies’ practices in the area of patent and trademark rights obtaining and enforcement in China that are presented in the Appendices 1 and 2 respectively. The summary on the explored strategies is presented in the Table 2. The names of the strategies were either directly taken from the interview data or given during the data analysis

according to their meaning. Moreover, the strategies were grouped into four major categories according to their context and application area:

- internal awareness – management techniques aimed to improve IP awareness of the company's employees;
- external awareness – actions to improve IP awareness of the external bodies, such as authorities, dealers/distributors and customers;
- internal cooperation – cooperation on IP protection related issues with the internal departments;
- external cooperation – cooperation on IP protection related issues with external bodies, such as authorities, industrial coalitions, dealers/distributors and customers.

A detailed description and analysis for each of the revealed strategies is provided below.

4.1. Internal awareness strategies

IP trainings for engineers

The purpose of this strategy is to improve knowledge on patents of R&D engineers and hence to increase the patent output from R&D activities and to ensure a better formal IP protection of new product solutions. Patent awareness of local engineers is usually low, therefore the trainings are helpful to make them able to recognize a patentable invention in an R&D project they work on and submit an invention disclosure to the IP department or to identify an infringement in a competitor's product:

"We provide trainings to engineering staff at the R&D center: general information about IP, whom they should contact if they have a new idea. We also make trainings on how the engineers can transfer their daily work into a patent." (Case B, head of IP)

"We have several training materials. First of all – the IP awareness training, it is the basic one. Another one is for patent search. For some employees we provide training about what the infringement is." (Case E, patent attorney)

IP trainings for other employees

The same reason of a usually low IP awareness of local staff makes IP trainings with focus on trademarks a good strategy to enhance IP protection. One purpose is to make employees familiar with the company's trademarks and typical cases of trademark rights abuses by other companies. Keeping this information in mind, employees can recognize the infringement being, for example, at a trade fair. Besides, the basic trainings on trademarks are provided to product managers to ensure that they report new product names that should be registered as trademarks to the relevant IP manager in good time, before the products are launched in the market. Such trainings are mainly provided to sales and marketing staff, though it can also be offered to all interested employees:

"We organize internal trainings for the employees 2-3 times a year at our corporate training centers. Human resources department also assists us to improve the brand protection awareness among the colleagues. Trainings are free for all interested employees." (Case B, brand protection manager)

"We provide general IP training to different colleagues. This year we put more focus on sales and marketing colleagues. Sometimes they are not aware that they are infringing some copyright or trademark use. We provide them with the training 1-2 times a year." (Case F, IP manager)

Table 2. Management approaches for the IP protection

Strategy		Cases	Description	Applicable for
Internal awareness	IP trainings for engineers	A-B, D-F	Provide trainings to engineers to improve their knowledge about patents in order to increase the number of patentable inventions and make the engineers able to recognize the infringement by the third parties	Patent application and enforcement
	IP trainings for other employees	A-F	Provide trainings to sales & marketing staff and other employees to improve their awareness on the IPR issues related to their work	Trademark application and enforcement
Internal cooperation	Gaining information on infringement	A-F	Work with sales/after-sales and R&D departments closely to get the information on and evidence of infringement in time and get a better knowledge on the counterfeit products market	Patent and trademark enforcement
	Counterfeit product identification	A-E	Work with sales/after-sales, R&D, product management departments closely to develop knowledge and workflow for recognizing the counterfeit products easily and fast	Trademark enforcement
	Enforcement case selection and preparation	A-F	Work with legal and other related departments closely for better preparation of the enforcement cases to guarantee the success	Patent and trademark enforcement
External awareness	Trainings to dealers/distributors/customers	A-C, E-F	Teach dealers/distributors/customers how to recognize the counterfeit products and let them know how to report the infringement	Trademark enforcement
	Trainings to authorities	A-F	Make the enforcement authorities be familiar with the company's brands and products, show them typical signs of the suspicious products and let them know how to contact you in case of detected infringement	Trademark enforcement
	Lobbying	A-F	Participate in the discussions and provide company's opinion on further improvement of the IP system via membership at / cooperation with IP related non-profit organizations (QBPC*, JETRO**, ECC***, AmCham China****)	Patent and trademark application and enforcement
External cooperation	Cooperation with dealers/distributors/customers	A-C, E-F	Engage dealers/distributors/customers in providing you with information on infringement and collecting the evidence. Cases A-C: organize training for the end-customers together with the dealers.	Patent and trademark enforcement
	Cooperation with authorities / "guanxi"	A-F	Have regular contact with the related enforcement authorities, show them appreciation for the successfully enforced infringement cases and share with them the experience of the previous successful enforcement cases	Patent and trademark enforcement
	Industrial coalition	A-F	Work together with the industry partners/competitors on the enforcement cases to get more attention from the enforcement authorities, share the enforcement costs. Exchange with them the experience on IPR enforcement and take part together in lobbying activities	Patent and trademark application and enforcement

*Quality Brands Protection Committee

**Japan External Trade Organization

***European Chamber of Commerce in China

**** American Chamber of Commerce in the People's Republic of China

4.2. Internal cooperation strategies

This group of strategies goes further than just improving IP awareness of employees, but rather engages relevant departments in certain workflows related to patent and trademark enforcement:

"We have established a workflow coordinating the actions of relevant departments and business units... The IPR protection in China is included into the global process of the IPR protection of the company." (Case B, brand protection manager)

Gaining information on infringement

Though IP managers highly rely on investigation companies in getting information on counterfeit production and distribution networks, sales/aftersales departments, as well as some other employees also may have good market insights and can be of a good help too:

"We have like peak seasons for different product lines. So if the aftersales start getting fakes, they report back to me. What I found earlier was that by the time we're getting the information the season was over and the [counterfeits] production stopped... Let me have an advance notice and we can be sort of in the market... so that we can do something more effective." (Case A, anti-counterfeiting manager)

"To get the information about the infringers we have our own network. We have our sales people, marketing people and other employees. Whenever they find some information they can send it to us." (Case E, trademark attorney)

Counterfeit product identification

Many of the IP managers responsible for the anti-counterfeiting measures have rather a legal than a technical background. Therefore, dealing with a "high quality" counterfeit, they are not always able to distinguish it from the original product and provide an investigation company or a relevant enforcement authority with a feedback on the suspicious goods quickly. Help from qualified colleagues from sales, product management or R&D department is necessary in this case:

"I am a lawyer. When a counterfeit is made very precisely, it's impossible for me to identify it since I'm not familiar with all the technical details of our products. Therefore I have contact persons in our sales and R&D to help me with this issue... Their quick response is often crucial. For example, in case of Customs enforcement you have only 3 days to confirm to the officer if the goods he detected are fake." (Case E, brand protection manager)

Enforcement case selection and preparation

This strategy is usually applied for judicial enforcement. Considering the high costs of civil litigation, companies prefer to maximize their chances to win a lawsuit before filing a complaint. Hence the involvement of other departments is often required to assess the success chances and accurately prepare the infringement evidence:

"We have regular communication with sales and legal departments. For a proper civil litigation preparation it is important to work together." (Case D, head of IP)

"[W]e usually would like to be sure that we have good chances to win... We don't initiate a patent enforcement case if we don't have a very strong position or we have not reserved very strong evidences. Normally we get [relevant] information from the business unit that reported the infringement." (Case E, patent attorney)

4.3. External awareness strategies

Trainings to dealers/distributors/customers

Though the primary purpose of such trainings is to show the potential bad consequences of buying and using counterfeits and hence to convince customers to buy original products, another good outcome is that dealers and customers may report an infringement lately if they recognize a counterfeit. This can give better market insights to the managers responsible for anti-counterfeiting:

“Dealers’ trainings are expanding. We provide some knowledge about brand protection awareness. This year we have already made 18 trainings... they [dealers and customers] may provide us with additional market information that sometimes helps us to coordinate our enforcement actions.” (Case B, brand protection manager)

Trainings to authorities

Considering the high volume of counterfeit goods on the Chinese market, it may provide some advantages to make the enforcement authorities be familiar with the company’s brands and products so that they can put closer attention to the suspicious goods labeled with the relevant brand during their enforcement activities.

“By attending QBPC meetings and also some other meetings we often... give the personal trainings to them [enforcement authorities], especially to the Customs so that they know our brand and could put our case on the “priority list” for the urgent cases.” (Case E, trademark attorney)

Lobbying

Participation in discussions and projects on IP related issues may influence the further development of the IP system and, therefore, bring some advantages for the companies’ IPR protection such as improved legislation or better enforcement:

“Different enforcement agencies for the same problem may have a different attitude. Lobbying work always plays an important role in such cases.” (Case D, head of IP)

“We are... actively involved into the legislation improvement in the IP area. We have joint research projects with SIPO, Shanghai Court, Jiangsu Court and famous universities to give them a good knowledge and experience about the practices in our company’s home country, what the law there tells on a particular case.” (Case E, head of IP)

4.4. External cooperation strategies

Cooperation with dealers/distributors/customers

Whereas trainings to dealers or customers may suggest to them to report an infringement in case they found a counterfeit, the cooperation with them implies their deeper involvement into patent and trademark enforcement activities such as providing market information, helping to collect evidence or, in case of automobile OEMs (cases A-C), organization, of trainings to the end-customers:

“The dealers are very supportive. They know that the infringement has a big impact on their business. They like to transfer the information to us to ask for the protection... We also make the trainings together with our dealers. They invite the customers, - the car owners, to their place to receive the training on how to recognize the counterfeits. We show some videos and provide some brochures.” (Case C, brand protection manager)

“If the relationship with a customer is good we can ask him to provide us with some information on the infringement. In some cases we or even the external law firm cannot get to the product. But our

customers can buy or get a sample because they have some relationship with the infringer.” (Case E, patent attorney)

Cooperation with authorities / “guanxi”

On the one hand, this strategy became possible due to the motivation of the authorities to gain more enforcement experience in order to follow the central government’s policies aimed to improve the IP environment in China:

“Whenever we have a big case, especially a criminal one, when the case is closed we organize an appreciation meeting with the police. We prepare a flag, a plate or a letter. In China the officials have a portfolio to review their work at the end of the year. So if they have an appreciation letter or a prize from a brand owner, it’s good thing for the review.” (Case C, brand protection manager)

On the other hand, networking that often refers to “guanxi”⁴, a distinctive nature of interpersonal relationships in the Chinese society, may help companies to have fewer issues during the enforcement procedures:

“Good relations with the authorities are important. Litigation cases, for example, can run smoothly if you have good relations.” (Case B, head of IP)

Industrial coalition

All six companies that participated in the study are members of QBPC and in particular of its Automotive Industry Working Group. The purpose of the participation in a coalition is to jointly address various IP protection issues to attract more attention from relevant authorities:

“QBPC provides a good platform to communicate with the enforcement agencies and multinational companies. When we approach the authorities as a single company, we sometimes do not get enough attention. If we go as a coalition, then our voice will be loud enough to be heard.” (Case E, head of IP)

Though it may be unusual in other countries to share IP related issues with other companies, the concept of a coalition may ally well with the local culture:

I think, generally this concept of QBPC group is also very accepted in the Chinese culture, - the idea of working together and of the common success. (Case A, senior IP manager)

It is a multi-faced strategy with a number of different advantages. On the one hand, it is a way to take enforcement actions together with other companies operating in the same industry that provides such benefits like cost savings and enforcement experience exchange. On the other hand, it is a platform for joint trainings of authorities and participation in lobbying activities:

“Active cooperation between OEMs for criminal investigation is crucial for our success... We run discussions on coordinated actions, share information etc. In the field of IPR protection we are not competitors, but partners.” (Case B, brand protection manager)

“It’s a way... to attract more attention from the authorities... Also when you make a case for one brand, it costs a lot. But for the joint cases we can share costs.” (Case C, brand protection manager)

“A good thing QBPC provides is trainings for the authorities. The best thing for us is the Automotive Industry Working Group... We work closely on information sharing, multi-brand actions etc. It would be harder without this platform.” (Case F, IP manager)

⁴“guanxi” means “relation” in Chinese

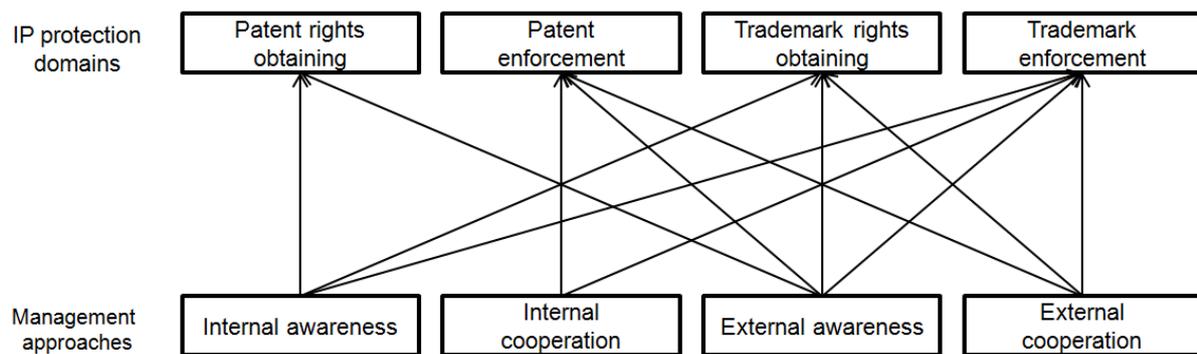
5. Discussion and Conclusion

5.1. Results and managerial implications

The present research has explored management approaches to enhance the patent and trademark protection in the context of China's emerging IP environment. This study has revealed 11 strategies, out of which 6 are applicable for both patent and trademark protection, 4 are implemented for both rights obtaining and enforcement domains and only 3 are only applied in the trademark enforcement area (see Table 2). These findings extend the existing knowledge on IP protection strategies based on management approaches and provide an understanding on how such approaches are crafted and how they can support the conventional IP protection measures.

The explored management approaches differ in (1) their application area – *internally* at the company or *externally*, - involving companies' distributors, dealers, customers and relevant authorities; and (2) the context of involvement of the bodies which they address – making them *aware* of the company's IPR or involving them into *cooperation* on the protection of the company's patents and trademarks. Graph 1 provides an overview of the applicability of different categories of the explored strategies in the four IP protection domains which were the focus of the present study.

Graph 1. Management approaches and conventional IP protection strategies



The existence of several management approaches for each explored IP protection domain shows the tendency of MNCs to catch up the controversial trends in China's IP environment, – to face, on the one hand, the remaining challenges of IP protection and use, and on the other hand, the opportunities occurring from the undergoing changes in the country's IP regime. To deal with high volumes of IP infringement effectively, companies need to have good market intelligence and spend their enforcement budget wisely. The former can be gained by motivating employees as well as dealers, distributors or customers to report infringement during IP trainings. The latter is possible by participating in an industrial coalition and, thus, sharing enforcement costs. The growing interest of authorities in IPR protection is addressed by providing trainings to them, doing lobbying work and cooperating with them in the enforcement area.

Moreover, several strategies in the automotive business investigated by the present study were previously observed by other researchers in other industries that has two important implications. First, this confirms the universality of such approaches among different industries. For example, the cooperation with authorities⁵ is known to be applied by an IT company (Yang et al., 2004) and firms operating in the power and automation, pharmaceuticals and electronic industries (Keupp et al., 2010). Second, the research revealed a double role of some management approaches, such as trainings to

⁵ mentioned in the articles as “the government hand strategy” (Yang et al., 2004) and “external guanxi” (Keupp et al., 2010)

engineers, other employees, distributors and customers. Keupp et al., 2010⁶, Yang et al., 2004⁷ and Yang et al., 2008⁸ interpreted these strategies as a measure to prevent infringement, whereas the companies participated in this research also use them to support the formal protection and enforcement of their IPRs.

Though this research is solely focused on the automotive industry, I claim that the explored strategies can be adopted in a wider range of industries. By implementing such strategies, firms can effectively protect their IPRs by registering and enforcing them in an IP regime where relevant laws' internalization has not happened yet. Moreover they may enjoy the cost benefits, getting other experts' experience and may even influence the future shape of the country's IP regime.

However there are some preconditions for the implementation of the explored management approaches. First is the local IP management. As suggested by Yang (2003) an assignment of a local IP manager could have a positive effect on IPR protection. As shown in Appendix 1, IP management is fully or partially localized at the six analyzed cases. Most of the strategies would be impossible to conduct efficiently without significant physical presence of an IP manager in China since many personal interactions as well as mobility within the country are expected.

Besides, the effectiveness of some management approaches highly depends on the cultural competence of the responsible managers, which conforms to the earlier findings of Keupp et al. (2010). The majority of the respondents interviewed for the present study are Chinese citizens for whom language or cultural barriers are not an issue. Such an advantage may significantly ease the building of effective internal and external networks.

Furthermore, financial considerations must be taken into account. Implementing and practicing these management approaches require a certain budget and human resources. It would be more reasonable to adopt time-consuming and costly strategies for large-size companies (Keupp et al., 2010) or companies with significant local operations in China.

5.2. Study limitations and further research recommendations

Commenting on the limitations of the present research, first of all, it needs to be pointed out that the findings depict only a limited sample of management approaches among all those that can possibly exist. The study is based on the experiences of six companies operating in the automotive industry which choice anticipated rich research results. Therefore, the management approaches of other automotive companies as well as companies in other industries could not be investigated.

Given that it is probably not easy to conduct a company-level study on such a sensitive topic as IPR protection and this opportunity often depends on the researcher's network in the business world, the phenomenon of management approaches in the IPR protection remains relatively unexplored. Hence, the present study can set a threshold for several possible further research directions.

First, a separate detailed research on management approaches focused on a single IP protection domain could provide a deeper understanding of their phenomenon. For example, only two companies in the present research sample practice patent enforcement in China and developed a couple of management approaches in this domain. Therefore a study of companies known for more intensive patent enforcement activities would promise more interesting insights.

⁶ mentioned in the article as "internal guanxi" and "educate the customer"

⁷ mentioned in the article as "consumer campaigns"

⁸ mentioned in the article as "public awareness" and "warning distributors"

Second, it would be interesting to study management approaches in different countries and IP regimes. The present research focuses on operations in China, therefore the explored management approaches are proven to work in certain legal, economic and social settings specific for this country. Studies in other economies, emerging and developed ones, and comparative studies between them may further extend the knowledge on this topic and provide an understanding on which approaches are universal and which are unique to a certain country.

Third, the effect of certain management approaches on a firm's performance in a relevant IP protection area can be analyzed with the introduction of some quantitative measurements. For example, a study can be conducted to investigate the effect of IP trainings on the patent output, in particular, by comparing companies or R&D divisions within the same company where IP trainings were provided with the ones where they were not offered. A research on how the relevant management approaches influence the rate of successful litigation cases could be assessed in a similar way.

Finally, a study on which management approaches might have a stronger effect or what a cumulative effect of a combination of these approaches might be can be carried out. A quantitative work of Yang et al. (2008) on anti-piracy effectiveness can be taken as a benchmark in this case.

The internationalization of business is accompanied with pressure on the strategic choices companies make tackling with different socio-economic and legal frameworks in different countries worldwide. The availability and effectiveness of legal instruments for the protection of intangible assets always depends on the IP regime of a country which may be not mature enough or be discriminatory. Hence, the phenomenon of corporate approaches aimed to increase IP appropriation using alternative resources encompasses a promising research field for the academics.

Appendix 1. IP management at the analyzed cases

Table 3 summarizes the main characteristics of the IP management of the six cases. All the analyzed companies have at least one local employee in China responsible for IP issues. The rationale for the localization (at least partial) of the IP management was the changes in China's IP environment:

"I was among the first people in the company who said: "We need someone here in China to develop a mature IP response in the Chinese market". The approach to IPR in China has been changing, and we needed someone who could personally guide it through the changes." (Case A, senior IP manager)

Table 3. Organization of the IP management

Company	IP Management Staff	IP Management Functions	Outsourced services
A	foreign and local	localized*	
B	local	localized*	
C	foreign and local	centralized / localized for anti-counterfeiting	Prosecution, investigation, litigation
D	foreign and local	partly localized / fully localized for anti-counterfeiting	
E	local	localized*	
F	foreign and local	partly localized: approval at the HQ for many decisions required	

*means that most of the operative decisions are made by the local IP management in China

Companies A, B, D and E have local IP departments responsible for patent and trademark prosecution and litigation as well as separate managers or departments responsible for anti-counterfeiting (brand protection management) issues. Company C has a local brand protection management team, whereas other functions are carried out at the headquarters. Company F has one local IP manager responsible for all IP related issues who is strongly backed by the central IP department in the home country.

All six companies outsource the IP related services at external law firms and investigation companies. The former are used for IP prosecution, i.e. application, prolongation and cancellation of patents and trademarks and the civil litigation procedures. The latter investigate counterfeit (trademark infringement) cases, collect evidence and represent the companies during the administrative and criminal enforcement procedures.

Appendix 2. Conventional IP protection at the analyzed cases

1. Patents

The overview of the patent protection strategies via rights obtaining and enforcement practiced by the companies is provided in the Table 4.

Table 4. Patent protection via rights obtaining and enforcement

Strategy	Cases	Description
Patent applications	A-F	Substantial portfolio growth over the last years; Increasing local filings; Higher weight of utility model and design patents in the patent portfolio in China; compare to developed countries.
Civil litigation	D	Only for design patents
	E	For all three kinds of patents
	A-C	Not practiced, direct negotiations with the infringer preferred
Administrative enforcement at IPO (design patents)	F	Not practiced due to budget and capacity considerations
	E	Several complaints each year
	A-D	Not considered
Administrative enforcement at Customs (design patents)	F	Planned if infringement will be detected
	D-E	Several complaints each year
	A-C	Not considered
	F	Under discussion

The patent application behavior looks similar among all six analyzed cases. All companies set a high priority to the patent portfolio growth in China. Aside from secondary applications of patents already filed in the developed countries, the companies make big efforts to increase local filings coming from their R&D centers in China. The increasing respect to the IPR in China, growing IP awareness and patent filings of local competitors and government incentives were named by the managers as major reasons for building a strong local patent portfolio.

The peculiarity of the patenting behavior in China shared by the six cases is in that the utility model and design patents have higher importance and weight in the portfolio compared to the developed countries.

Not that similar picture was observed in the patent enforcement area. The civil litigation of all three kinds of patents is practiced only by company E, an automotive supplier. Company D, an OEM, enforces only design patents via the judicial procedure. The non-practicing of the civil litigation was explained by the responsible managers at the OEM companies A, B and C as a kind of tradition in the automobile industry to solve such conflicts via direct negotiations with the infringing company and keeping the civil litigation option as a last resort. Company F, another automotive supplier does not betake to the judicial enforcement due to budget and capacity considerations.

Besides civil litigation, which is a common way for solving patent conflicts in the developed countries, the Chinese legal system offers two other ways of enforcing patents. First is an administrative complaint before the local Intellectual Property Office (IPO). Though legally it is allowed to file a claim on all three types of patents – inventions, utility models and designs, practically only the design patents complaints can be considered due to the lack of qualification of the IPO’s officials.

For similar reasons as in case with the civil litigation, OEMs do not practice administrative enforcement either. As for the automotive suppliers, companies F and E, the first one is using this option regularly, whereas for the second one it was not possible until recently since the company’s products were not protected by design patents. Nevertheless, company E will take an administrative complaint for recently obtained design patents into consideration in case of detected infringement.

Another way that concerns only design patents is the administrative enforcement at Customs with which the design patent owner should register them at this authority. Only companies D and E use this way to protect their designs, whereas company F was discussing this option for the previously mentioned design patents in the period when the follow-up interview with its IP manager was conducted.

2. Trademarks

Table 5 presents the companies’ practices for trademark application and enforcement.

Table 5. Trademark protection via rights obtaining and enforcement

Strategy	Cases	Description
Trademark applications	A-F	Diversified portfolio of global and local trademarks
Trademark opposition at TRAB	A-F	The new trademark applications at the STMO are regularly monitored. If an infringing new trademark is detected, the complaint is filed.
Administrative enforcement at AIC and TSB (case value <50.000RMB)	A-F	The most frequent way of trademark enforcement. Up to 100 cases per year
Criminal enforcement at PSB (case value >50.000RMB)	A-F	1-20 cases per year on average
Administrative enforcement at Customs	A-F	1-15 cases per year on average
Civil litigation	A-F	1-7 cases per year on average

Unlike the patent protection related area, the companies demonstrate the similarity in all trademark protection related practices. The trademark portfolios consist of global trademarks as well as local ones – registered only in China.

In order to prevent some local Chinese companies’ attempts to speculate on their famous brand names by registering confusingly similar trademarks, all the six companies regularly monitor new trademark applications at the State Trademark Office (STMO) and file an opposition before its Trademark Review and Adjudication Board (TRAB).

The administrative enforcement has been remaining the most frequent and common way to punish trademark infringers among the six companies. The advantages of this practice are a relatively simple and fast enforcement procedure and low costs. However, the penalties issued by the Administration of Industry and Commerce (AIC) are not high enough to stop infringers from further production and distribution of the counterfeit goods after they’ve been punished once.

The criminal enforcement at the Public Security Bureau (PSB) is regularly practiced at the selected companies and was regarded by the managers as more efficient compared to the administrative one since infringers, if considered guilty by the criminal court, are sentenced to imprisonment.

The trademark civil litigation practices vary among the cases. Companies A, B and F file at most one lawsuit per year, whereas cases C, D and E select a number of targets annually. Except for company B, all other five admitted a growing attention to this way of enforcement due to the improved courts decisions.

Besides, all companies have registered their major trademarks at the Customs to prevent the shipments with counterfeit goods abroad. When a suspicious shipment is detected by a customs official, the responsible manager is contacted in order to confirm if the goods are illegal copies. Up to 20 cases per year were reported by the interviewed managers.

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