

IPR Protection in China

An analysis from legal and business perspective

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List of Abbreviations

B2B Business-to-Business

B2C Business-to-Customer

bn Billion

CIETAC China International Economic and Trade Arbitration Commission

CMS Contract Manufacturing Services

CTMO China Trademark Office

e.g. For example (exempli gratia)

GACC General Administration for Customs of China

HR Human Resources

i.e. That is (id est)

IP Intellectual Property

IPR Intellectual Property Rights

m Million

MNC Multinational Corporation

MOFCOM Ministry of Commerce

NCAC National Copyright Administration of China

ODM Original Design Manufacturer

p.a. a year (per annum)

PCT Patent Cooperation Treaty



PRC People's Republic of China

R&D Research & Development

RFID Radio Frequency Identification

CNY Chinese Yuan (Currency of the People's Republic of China)

SAIC State Administration for Industry and Commerce

SIPO State Intellectual Property Office

USD US Dollar

USTR US Trade Representatives

WFOE Wholly Foreign-Owned Enterprises



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References

- A.T. Kearney, The Counterfeiting Paradox, A.T. Kearney Executive Brief 2005a
- A.T. Kearney, Staying Ahead of China's Counterfeiters, in: Executive Agenda Volume VIII, Number 2 2005b
- A.T. Kearney, New Concerns in Uncertain World: The 2007 A.T. Kearney Foreign Direct Investment Confidence Index, A.T. Kearney Business Issue Paper 2007
- A.T. Kearney, The Rise of Emerging Markets in M&A, A.T. Kearney Business Issue Paper 2008
- Chaudhry, P. and Zimmerman, A., The Economics of Counterfeit Trade, Berlin, Heidelberg 2009
- China IP Express, Intellectual Property Battle Between GM and Chery Reaches Settlement, 1.12.2005, 2005
- Chinese State Council, Regulations of the People's Republic of China on Customs Protection of Intellectual Property Rights (Chapter I V). 1.3.2004
- Chinese Supreme Court, Several Issues of Concrete Application of Laws in Handling Criminal Cases of Infringing Intellectual Property. 2.11.2004
- Chow, D.C.K., Intellectual property protection as economic policy: Will China ever enforce its IP laws? Statement before Congressional-Executive Commission on China, http://www.cecc.gov/pages/roundtables/051605/Chow.php, 01.06.2009



- Delios, A. and Beamish, P.W., International Business: An Asia Pacific Perspective, 1. Auflage, Singapur 2004
- Dietz, M.C.; Lin, S. and Yang, L., Protecting Intellectual Property in China, in: The McKinsey Quarterly 6-8, 2005
- Dixon, P. and Greenhalgh, C., The Economics of Intellectual Property: A Review to Identify Themes for Future Research In: Working Paper of the Oxford Intellectual Property Research Centre, pp 1-64: University of Oxford, 2002
- Economist Intelligence Unit, Degree of property rights protection, http://www.eiu.com, 12.05.2009
- Euromonitor, Chinese Retailing: Market Overview Research Report 2007
- European Commission Taxation and Customs Union, COMMUNITY CUSTOMS ACTIVITIES ON COUNTERFEIT AND PIRACY Results at the EU border in 2007,

http://ec.europa.eu/taxation_customs/resources/documents/customs/customs_controls/counterfeit_piracy/presentation2007.pdf, 13.05.2009

- European Commission Taxation and Customs Union, REPORT ON COMMUNITY

 CUSTOMS ACTIVITIES ON COUNTERFEIT AND PIRACY,

 http://ec.europa.eu/taxation_customs/resources/documents/customs/customs_controls/counterfeit_piracy/statistics2007.pdf, 13.05.2009
- Feng, P., Intellectual Property in China, Hong Kong et al. 2003
- Firth, G., IP protection best practice tips, in: The China Business Review 33 18-25, 2006



- Fischer, S.; Eck, R. and Richter, H.-J., Was sich gegen Produkt- und Markenpiraterie tun lässt, in: Harvard Business manager Edition 3 2004 47 57, 2004
- Fuchs, H.J.E., Piraten, Fälscher und Kopierer, 1. Edition, Wiesbaden 2006
- Gassmann, O.; Beckenbauer, A. and Bader, M.A., Massnahmen gegen Produktpiraterie am Beispiel Chinas, in: Innovation Management Nr. 2 März 2008 S. 84 87, 2008
- Havocscope, Havocscope black markets, http://www.havocscope.com, 09.05.2009
- Hopkins, D.; Kontnik, L. and Turnage, M., Counterfeiting Exposed: Protecting Your Brand and Customers, New Jersey 2003
- Kaufmann, L. et al., China Champions: Wie deutsche Unternehmen den Standort China für Ihre globale Strategie nutzen, 1. Auflage, Wiesbaden 2005
- Keupp, M.M.; Beckenbauer, A. and Gassmann, O., How managers protect intellectual property rights in China using de facto strategies, in: R&D Management 39 211-224, 2009
- Lam, N.M. and Graham, J.L., China Now, New York et al. 2007
- *Marx*, *C.*, Einführung in das Internationale und Europäische Immaterialgüterrecht. In: Module II of the M.B.L.-HSG 2008/2009, pp 1-66: University of St.Gallen, 2008
- Mertha, A., The politics of piracy: Intellectual property in contemporary China, Ithaca, NY 2005
- Motion Picture Associate of America, The cost of movie piracy, http://www.mpaa.org/leksummaryMPA%20revised.pdf, 20.05.2009



- OECD, The Economic Impact of Counterfeiting and Piracy, 2008
- Porter, M.E., Competitive advantage: Creating and sustaining superior performance, New York 1985
- PricewaterhouseCoopers, Redefining Intellectual Property Value: The Case of China, PwC Technology Center Publication 2005
- *Qin, J.Y.*, The Impact of WTO Accession on China's Legal System: Trade, Investment and Beyond, in: Wayne State University Law School Legal Studies Research Paper Series 07-15 1-44, 2007
- Schwarz, B. and Wong, V., Counterfeit cures, in: Insight 29–33, 2006
- SIPO, China's Intellectual Property Protection in 2008, http://www.sipo.gov.cn/sipo_English/laws/whitepapers/200904/t20090427_457167.ht ml, 05.06.2009
- Sohm, S.; Linke, B.M. and Klossek, A., Chinese Companies in Germany, Bertelsmann Stiftung 2009
- The Boston Consulting Group, Facing the China Challenge: Using an Intellectual Property Strategy to Capture Global Advantage, BCG Report 2004
- United States Trade Representative, Special 301 report,
 http://www.ustr.gov/assets/Document Library/Reports Publications/2007/2007 Special 301_Review/asset_upload_file230_11122.pdf, 02.06.2009
- USA Today, Copy-protection Gear Sneaks into Products, 16.8.2005, 2005



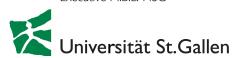
- Wang, J., China's Legal Environment & Comments on the Protection of IPRs In: Module III of the M.B.L.-HSG 2008/2009 (Lecture Notes): Fudan University, 2008
- Werner, S.-M. and Wessing, T., Legal Constraints on Business in China, in: Hofer, M., Ebel, B. (Ed.): Business Success in China, Berlin, Heidelberg 2007, S. 169-178

Wirtschaftswoche, Sonderheft China, 02.10.2006, 2006

World Trade Organization, Trade Policy Review China, 2006

Wrigley, D., China: Intellectual Property Rights, in: The Economist 1 - 32, 2005

- Wurzer, A.J.; Hundertmark, S. and Sullivan, P.H., Patente Mythos und Wirklichkeit, in: Harvard Business manager Juli 2009 62-68, 2009
- Yang, D.; Fryxell, G.E. and Sie, A.K.Y., Anti-piracy effectiveness and managerial confidence: Insights from multinationals in China, in: Journal of World Business 43 321–339, 2008
- *Yu, P.K.*, The Second Coming of Intellectual Proporty Rights in China, in: Occational Paper in Intellectual Property (Cardozo School of Law, Yashiva University) 11 3-65, 2002
- *Yu, P.K.*, From Pirates to Partners (Episode 2): Protecting Intellectual Property in Post-WTO China, in: American University Law Review 55 101-193, 2006



Introduction

China has become a critical element in the strategy of almost every global company. It is important for their future success and serves as sales market, supply market, manufacturing site and even R&D base. However, China offers many challenges to companies operating in the country. Some Western MNCs lost a lot of money in China and finally retreated from the country. Others deliberately chose not to enter the giant Chinese market at all in order to avoid the high risks. According to a 2007 A.T. Kearney survey the most important problem is the effective protection of intellectual property rights (IPR).

The protection of IPR is of fundamental relevance for every manager as it usually protects the core competences and competitive advantages of the company. Hence, it is not sufficient to see this challenge only as a legal issue and to delegate IPR issues to legal departments or legal advisors or – even worse – due of the complexity become a topic that doesn't get managed at all. This work will therefore analyze the critical aspects of IPR protection in China from two perspectives – legal **and** factual. With the improvement of the Chinese legal system each of these two areas should be in focus of attention of executives operating in China. However, due to the higher relevance of factual strategies in practice, this part will be dealt with in greater detail than legal strategies.

Despite all the shortcomings, companies should not see this IPR challenge as a reason to neglect China. The Macroeconomic trends are still in favor of the middle kingdom. By following some recommendations and rules, companies can develop intelligent strategies to benefit from China and mitigate the IPR risk at the same time.

This work combines ideas from academia and practice. Besides the analysis of legal texts, academic journals, press articles, academic and management books; empirical data like case studies and expert interviews were also used. The project experience and existing research of the strategy consulting firm A.T. Kearney, for which IPR issues are particularly prominent in China, has also become part of this work.

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¹ See Appendix for further details on the results of the survey.

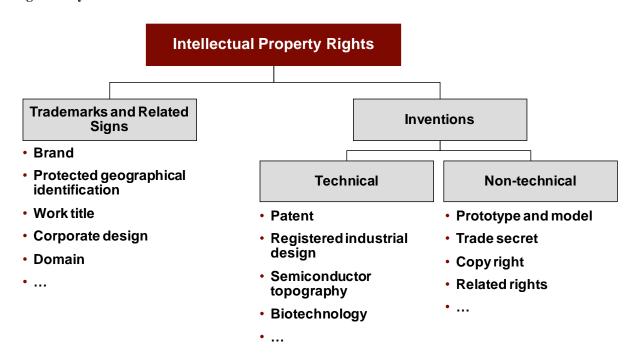


I. Intellectual Property Rights

A. Definition

Intellectual Property Rights (IPR) are legal property rights for creations of the mind. The owners of these IPR are granted certain exclusive rights to a variety of intangible assets. Common types of intellectual property include copyrights, trademarks, patents, industrial design rights and trade secrets. While copyrights tend to focus on creative works (e.g. music, movies, literature), patents are concerned more with technological and scientific innovations (e.g. inventions, technical ideas and designs). The majority of intellectual property rights provide creators of original works economic incentive to develop and share ideas through a form of temporary monopoly. Figure 1 gives a systematic overview of the main categories of IPR.

Figure 1: Systematic overview of IPR³



² See e.g., OECD (2008) p. 42; Marx, C. (2008) p. 2 et seqq.

³ Adapted from Marx, C. (2008) p. 4



B. Economic Rationale

Intellectual property rights are intended to promote investments in new products and processes. The objective is to protect the capital, inspiration and efforts of the originator by providing the creator with rights over the use of the copyright, patent or design. This provides a type of monopoly as it sharply limits competition, permitting rights holders with the means to recover development costs and to earn a return on their investment. Moreover, the intellectual property rights greatly facilitate the sharing of information and knowledge, as they provide incentives to the rights holders to present their creations on the market.⁴

Economists argue that IPRs are usually limited to non-rival goods⁵. Since a non-rival good may be used and copied by many simultaneously with only minimal marginal cost, inventors need (monetary) incentives to create such works. On the other hand the granting of a monopoly is also associated with welfare destruction as the monopolist only maximizes his own gains and not the overall welfare. Therefore the establishment of IPRs represents a trade-off from economic perspective. It has to balance the interest of society in the creation of non-rival goods (by encouraging their production) with the problems of monopoly power.⁶

C. IPR Infringement and Counterfeiting

Counterfeiters, on the other hand, are parties that engage in IPR infringement and exploit without the authority of the economic value associated with the ownership and rights of a trademark, copyright, patent or design right. In other words, they are free-riding on the creative and economic efforts incurred by legitimate right holders in the development of new products and processes and the establishment of markets. This diminishes the overall incentive to invest in product and process innovation and therefore may ultimately lead to welfare destruction.⁷

⁴ See e.g., OECD (2008) p. 42; Marx, C. (2008) p. 5 et seqq.

⁵ Non-rival good are goods which can be used or enjoyed by many people simultaneously (e.g. enjoy a drawing).

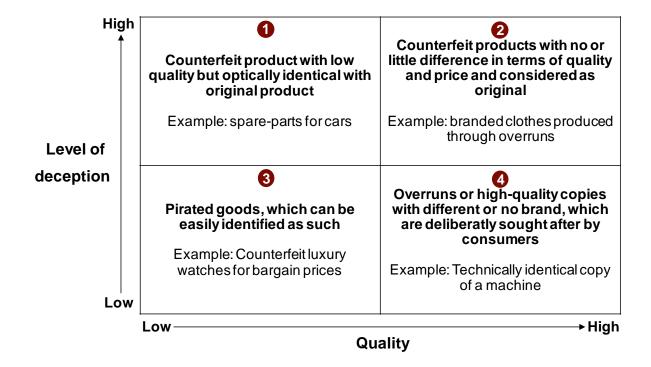
⁶ See Dixon, P. and Greenhalgh, C. (2002) p. 6 et seqq.

⁷ See e.g., OECD (2008) p. 42 et seqq.; Marx, C. (2008) p. 5



The most prominent form of IPR infringement is counterfeiting (or also called product piracy). Here, four different forms can be identified using the Matrix illustrated in Figure 2. In each of the four cases the revenue as well as the brand of the firms is at risk. The pirated products in Quadrant 2 (high quality and level of deception) are especially dangerous for a company as this usually results in significant loss of revenues. Furthermore, counterfeit products in Quadrant 1 (low quality and high level of deception) and 3 (low quality and level of deception) pose a risk of brand dilution. In terms of Quadrant 4 (high quality and low level of deception) the firms may lose some market share but the brand is usually not damaged.⁸

Figure 2: Forms of counterfeiting⁹



II. China as a Challenge

One of the largest risks of the Chinese market is the insufficient protection of IPR.¹⁰ Foreign firms as well as increasingly Chinese companies are suffering from counterfeiting and

⁸ See Fuchs, H. J. E. (2006) p. 30 et seqq.

⁹ Adapted from Hopkins, D. et al. (2003)



product piracy.¹¹ Affected are not only luxury consumer goods like Louis Vuitton, but also daily used fast moving consumer goods like tooth paste. There are even cases in China where services have been copied.¹² Thus, it is no surprise that the Economist Intelligence Unit (EIU) ratings of the degree of property rights protection show no improvement from 1994 to 2005 in China. The country was ranked in that period with the low score of 2.¹³ EIU expects the ratings to show slow improvements over the next years but remain at a modest score of 3 for the foreseeable future.¹⁴ This means that despite all the rapid changes and improvements, IPR protection will stay a highly relevant topic in China.

The following pages give an overview of the current situation of IPR protection in China. It starts with Facts and Figures, explain the Institutional Framework in China and the relevant International Conventions. Afterwards, the National Legal Framework for IPR protection will be illustrated. Finally, this chapter ends with a description of the Theory and Practice of IPR enforcement in China.

A. Facts and Figures

In China the market volume of product piracy and counterfeit products is estimated at 15-20% of the overall production¹⁵ and approximately 20% of total sales revenues for MNCs in China are lost to counterfeiting.¹⁶ Estimates of the total market size differ quite a lot. They range from USD 16 bn (lowest estimation) to USD 140 bn (highest estimation).¹⁷ However, qualitative surveys repeatedly confer the overarching importance of this issue and thereby

¹⁰ See e.g., A.T. Kearney (2005b); Kaufmann, L et al. (2005); Fuchs, H. J. E. (2006)

¹¹ See e.g., The Boston Consulting Group (2004); PricewaterhouseCoopers (2005); Fuchs, H. J. E. (2006); A.T. Kearney (2008)

¹² See Kaufmann, L. et al. (2005) p. 182

¹³ The rating scale is 1–5 with 5 meaning the highest degree of protection. As a comparison, development economies like Germany or USA have scores of 5.

¹⁴ See Economist Intelligence Unit (2007)

¹⁵ See Fuchs, H. J. E. (2006) p. 44

¹⁶ See Euromonitor (2007)

¹⁷ See e.g., Fuchs, H. J. E. (2006); Schwarz, B. and Wong, V. (2006); Havocscope (2007); OECD (2008); Chaudhry, P. and Zimmerman, A. (2009)



indicating that the overall market may be closer to higher end of the range of estimates. For example, the US-China Business Council annual survey repeatedly puts IPR enforcement as one of the top three areas of concern for businesses operating in China. Inadequate protections, driven by loopholes in the Chinese law that undermines the application of criminal penalties to deter piracy, impede US companies in China. Looking at European statistics China is still the largest country of origin for goods violating IPR. In 2007, nearly 60% of the counterfeit and piracy goods collected at the European Union borders have their origin in China. Taking a more detailed look into the products categories reveals that China is especially aggressive in the production of simple consumer goods like clothes but also strong in more sophisticated consumer goods like electrical equipment (see Figure 3).

Figure 3: Overview per product sector of countries of origin (EU customs)²⁰

				2007					
Breakdown of number of articles seized expressed as % by provenance and by product type									
1. Foodstuff,	45,92%	37,35%	5,06%	3,10%	1,50%	1,11%	1,04%	0,97%	3,95%
beverages	Turkey	China	Italy	Georgia	Belize	Bulgaria	USA	Vietnam	Others
2. Cosmetics, personal	32,11%	28,68%	15,86%	5,67%	4,34%	3,55%	2,27%	2,01%	5,50%
care products	Georgia	Turkey	China	Singapore	Korea	Unknown	UAE ²	Algeria	Others
	55,62%	19,44%	9,83%	4,60%	3,21%	0,97%	0,95%	0,71%	4,68%
3a) sportwear	China	Turkey	Unknown	Bulgaria	Algeria	Romania	Poland	Thailand	Others
3b) other clothing	62,58%	10,32%	4,63%	4,51%	2,66%	2,40%	1,79%	1,77%	9,33%
(ready to wear)	China	Turkey	Unknown	Vietnam	Italia	Syria	Bangladesh	UAE	Others
3c) clothing	57,16%	17,54%	11,65%	4,66%	2,55%	1,41%	1,02%	0,65%	3,38%
accessories	China	Italia	Turkey	Unknown	Bulgaria	Hungary	Algeria	Tunisia	Others
	79,67%	7,08%	2,35%	1,81%	1,24%	1,07%	1,00%	0,87%	4,91%
3d) shoes	China	Algeria	Italia	Unknown	Turkey	Russia	Spain	Malaysia	Others
	35,21%	30,73%	12,58%	10,06%	2,57%	2,40%	1,59%	1,17%	3,69%
4. Electrical equipment	Unknown	China	Algeria	Hong Kong	Italia	UAE	Liechtenstein	Turkey	Others
			11,86%						
5. Computer	47,61%	14,15%	Hong	5,41%	4,41%	3,57%	3,06%	1,98%	7,94%
equipment	China	Italia	Kong	San Marino	USA	Algeria	Unknown	Japan	Others
	75,07%	6,53%	3,31%	3,21%	2,65%	2,13%	1,72%	1,26%	4,12%
6. CD, DVD, cassettes	China	Unknown	Poland	Hong Kong	UAE	Italia	Syria	Ukraine	Others
			5,70%						
	52,21%	36,15%	Hong	1,90%	1,04%	0,63%	0,60%	0,28%	1,50%
7. Jewellery	China	Italia	Kong	Unknown	Netherlands	Japan	Thailand	Liechtenstein	Others
	41,59%	36,19%	7,35%	4,73%	2,39%	1,50%	0,92%	0,61%	2,36%
8. Toys, games	China	Tunisia	Italia	Hong Kong	USA	Unknown	Croatia	Canada	Others
	71,14%	8,79%	6,26%	3,28%	2,35%	2,12%	1,74%	0,78%	3,54%
9. Other	China	Hong Kong	Unknown	Italia	Tunisia	Ukraine	Turkey	Pakistan	Others
	55,05%	18,01%	7,30%	4,78%	2,81%	2,41%	1,57%	1,27%	6,80 %
10. Cigarettes	China	Unknown	UAE	Bulgaria	Turkey	Belgium	Greece	Poland	Others
	39,21%	34,60%	14,70%	3,88%	3,28%	2,66%	0,52%	0,30%	0,84%
11. Medicines	Switzerland	India	UAE	China	Hong Kong	Unknown	Mauritius	USA	Others

However, these EU statistics only show the $B2C^{21}$ goods collected at the borders. They do not reflect the problem of IPR infringement in $B2B^{22}$ and high-technology industries like

 $^{\rm 19}$ See European Commission Taxation and Customs Union (2008a) p. 7

¹⁸ See Euromonitor (2007)

²⁰ European Commission Taxation and Customs Union (2008b) p. 20



mechanical engineering.²³ For example, the cases of MICOTROL AG, Braun AG, Stihl AG and Doppelmayer AG, which struggled with IPR infringement in China, show that the B2B-industry is also strongly affected.²⁴ The German association of mechanical engineering firms (VDMA) estimated that Chinese counterfeiters have a 50% cost advantage compared to German manufacturers that legally hold the IPRs. Hence, the loss of revenue associated with this problem ranges from 3% - 50% depending on the industry characteristics. In total, VDMA believes that the damage to German mechanical engineering accounts for approximately EUR 400 - 500 m p.a.²⁵

What might be even more shocking is that counterfeit products have already destroyed some industries in China by claiming a dominating share of the total market and also affected highly sensitive market sectors. For example, a market study for the Motion Picture Association of America estimates that 93% of the potential market for the film industry in China is lost to piracy. The US Software and Information Industry Association claims that nearly 100% of business software in China is pirated. Another example is an inspection by the China Healthcare Association, which revealed that more than 25% of healthcare products in China are fakes and between 200,000 and 300,000 Chinese die every year because of counterfeit or substandard medicine.

Also, if we look at the development over time of Chinese counterfeiters, a clear sophistication of the pirated goods can be identified (see Figure 4). No industry today is too complex or advanced to be safe from Chinese IP infringement. Furthermore, this short collection and summary of facts and figures show that despite efforts of the Chinese government to take more actions against counterfeiters in recent years, the scope and size of the problem is still

²¹ Business to Customer

²² Business to Business

²³ For an overview of the status quo of IPR infringement in different industries See e.g. OECD (2008) p. 261 et seqq.

²⁴ See Fuchs, H. J. E. (2006) p. 16 et seqq. for further information about the cases

²⁵ See Fuchs, H. J. E. (2006) p. 21

²⁶ See Motion Picture Associate of America (2005)

²⁷ See Hopkins, D. et al. (2003)

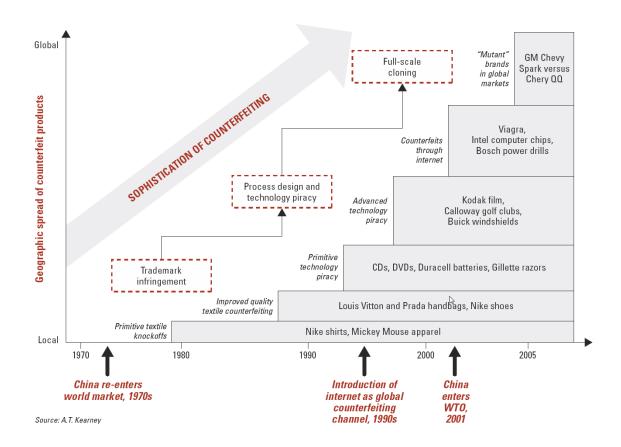
²⁸ See Schwarz, B. and Wong, V. (2006) p. 29 et seqq.



extremely large and hence extraordinary relevant for operations inside and also – as we can see from the EU border customs statistics – outside of China.

Multiple reasons lead to the vast violation of IPR in China: A still underdeveloped legal system combined with (in comparison to positions in the private economy) underpaid state officials; an understanding of IPR, which is still influenced by Communism and Confucianism; Joint-Venture-structures, which can be easily abused for illegal knowledge appropriation and the high rate of fluctuation of employees are some of the reasons that benefit IPR infringement in China and hence explaining the striking facts and figures shown above.²⁹

Figure 4: Evolution of counterfeiting in China³⁰



²⁹ See Kaufmann, L et al. (2005) p. 183. In the chapter "Theory and Practice of IPR Enforcement" the reasons will be elaborated and explained in more detail.

³⁰ A.T. Kearney (2005a) p. 2



However, it should be also noted that some improvement measures in the fight against IPR have also been implemented. For example, in 2006 a nationwide IP complaint hotline was established. The deputy director of the IP Crimes Bureau claimed a 70% increase in criminal IP cases in 2005 and 167,000 cases of illegal production and trade in medicines and medical equipment.³¹ Nevertheless the improvements are minor and not sufficient to solve overall IPR issue in China.

B. Institutional Framework

According to the OECD the legal and regulatory frameworks combating counterfeiting and piracy are key institutional factors since they can have significant impacts on the behavior of counterfeiters and pirates. Legal systems provide right holders with instruments to take action against parties that infringe legally protected IPRs and to claim compensation for the losses suffered as a result of the infringement. Strong frameworks can deter illicit activity, while weak frameworks would be permissive.³²

In China the legal system has undergone many changes and upheavals since 1949 (see Figure 5). Since the 1990s it is to some extent a mixture of the three sources of law developed in the preceding phases of Chinese legal history, i.e. the traditional confusion principles, the highly regulative socialist-style law after the 1949 communist revolution and finally the Europeancivil-law-style laws enacted since the early 1980s.³³ Today the Chinese legal system (see Figure 6 for an overview) is complex with multiple layers but on the other hand still evolving.

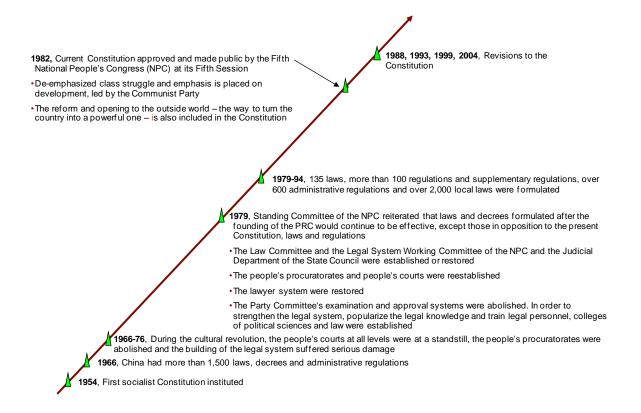
³¹ See Chaudhry, P. and Zimmerman, A. (2009) p. 130

³² See OECD (2008) p. 52

³³ See Werner, S.-M. and Wessing, T. (2007) p. 170



Figure 5: Milestones in the development of China's legal system

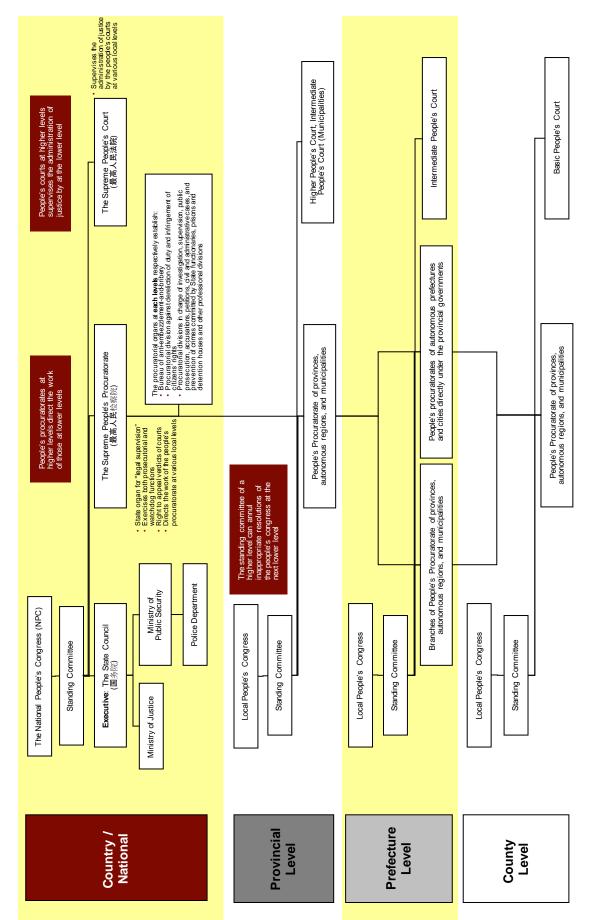


Despite all the recent reforms, it is important to understand the historically-rooted ties between law and politics in China. It has often been said that despite the changes the communist revolution caused in China in 1949, the communist system provides for a strong continuity with imperial China as both systems are authoritarian and law is subject to the superiority of politics. Neither in imperial China nor under Mao Zedong, was law allowed to play an independent and autonomous role. Indeed, quite the opposite was the case. Law was always just an instrument to govern the country and control the society. In addition, education and indoctrination through mass campaigns made sure that the Chinese behave in the expected manner without the ultimate application of external force of the law. Law in China therefore still reflects the political program of the ruling and does not have autonomous validity yet.³⁴

Figure 6: Chinese legal system

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³⁴ See e.g., Werner, S.-M. and Wessing, T. (2007) p. 171; Chaudhry, P. and Zimmerman, A. (2009) p. 126 et seqq.





In China, the responsibility for IPR is entrusted with different entities under the State Council. The State Intellectual Property Office (SIPO) is in charge of patents, the State Administration for Industry and Commerce (SAIC) is in charge of trademarks, while the National Copyright Administration of China (NCAC) is in charge of copyrights. There are two levels for IP protection in China. The administrative bodies under the State Council, namely SIPO, SAIC and NCAC generally examine, grant or register IPR and handle infringement cases of major importance. The local administrative authorities are responsible for the implementation of policies and for administering and enforcing IPR at the local level.³⁵

To improve IP protection, the State Council created the National Working Group on IP protection in 2005, which comprises 17 different administrative authorities and judicial departments. The Working Group is based at the Ministry of Commerce (MOFCOM) and is administered by the SIPO. It is responsible for unified planning and co-ordination of national intellectual property protection and supervises important IPR cases.³⁶

C. International Conventions

In 1980, China became a member of the World Intellectual Property Organization (WIPO). It has patterned its IPR laws on the Berne Convention for the Protection of Literary and Artistic Works and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The PRC acceded to the Paris Convention for the Protection of Industrial Property on 14 November 1984 and became an official member on 19 March 1985. China also acceded to the Madrid Agreement for the International Registration of Trademarks in June 1989. In January 1992, China entered into a Memorandum of Understanding with the United States government to provide copyright protection for all American works and for other foreign works. Several bilateral negotiations have been conducted between the two governments. At some points, trade sanctions were threatened by the two governments over IPRs issues. At the conclusion of negotiations in 1995, the Sino-US Agreement on Intellectual Property Rights was signed. In June 1996, the two governments entered into another agreement protecting

³⁵ See e.g., World Trade Organization (2006); OECD (2008)

³⁶ See OECD (2008) p. 222



American intellectual property in the PRC as the US found the Chinese enforcement of the 1995 agreement less than ideal. Negotiations have continued to this day although the tone since the late 1990s has been less confrontational.³⁷

Figure 7: International treaties and conventions for the protection of IPRs in China

International Treaties and Conventions	Objective	Chinese accession
Paris Convention	Protection of Industrial Property	19.03.1985
Madrid Agreements	International Registration of Trademarks	04.10.1989
Berne Convention	Protection of Literary and Artistic Works	15.10.1992
Universal Copyright Convention	Protection of Copyrights	30.10.1992
Patent Cooperation Treaty	Protection of Patents	01.01.1994
World Trade Organization	Obligation to adhere to international standards of the WTO-agreements incl. the multilateral Annex-agreements like e.g. General Agreement on Tariffs and Trade (GATT), General Agreement on Trade in Services (GATS), Trade-Related Aspects of IPR (TRIPS)	11.12. 2001

Generally speaking these conventions require the member countries to provide adequate and effective enforcement mechanisms within the country and at the borders. They must also provide for both civil and criminal penalties for infractions. Also, TRIPS makes the WTO's dispute settlement mechanism available to address conflicts arising under this treaty and significantly provides for the possibility of cross-sectoral retaliation against countries that fail to abide by WTO's dispute settlement body's rulings. 38

In summary, according to the United States Trade Representative (USTR), China has enacted a relatively good set of laws since its accession to the WTO when the country had to adopt the IP principles of the TRIPS accord.³⁹ In line with that is the assessment of Qin: He also argues

³⁹ See United States Trade Representative (2007) p. 18 et segg.

³⁷ See Chaudhry, P. and Zimmerman, A. (2009) p. 126 et seqq.

³⁸ See Lam, N. M. and Graham, J. L. (2007) p. 317



that as a result of the efforts in adopting the new regulations (see below), China now has in theory an extensive and basically WTO-compliant legal framework for IPR protection.⁴⁰ However, on the other hand the USTR also claims that enforcement has often been ineffective.⁴¹

In the next chapter the actual legal framework regarding the protection of IPR will be explained.

D. National Legal Framework for IPR Protection

In China trademarks; copyright; patents and designs are protected under three major laws and their complementary implementing regulations: the Patent Law, adopted in 1984 and revised in 1992 and 2000 and implemented in 2001 (Implementing Rules); the Trademark Law, which was adopted in 1982 and revised in 1993 and 2001 and implemented in 2002 (Revision of the Implementing Rules); and the Copyright Law, adopted in 1990 and revised in 2001 and implemented in 2002 (Implementing Rules).⁴²

These three kinds of IPR will now be explained in more detail:

• Patent Law: The law protects "inventions-creations", which include inventions, utility models and design (Art. 1 & 2 Chinese Patent Law). The current Patent Law and its implementing rules allow a party to appeal to a special committee for reconsideration of the Patent Office's opinion in rejecting a patent application and further may appeal a Patent Office's decision to the Beijing's Number One Intermediate People's Court (Art. 41 Chinese Patent Law). It also provides that a patent holder may seek injunctive actions via court order to halt patent violations

⁴⁰ See Qin, J. Y. (2007) p. 28

⁴¹ See United States Trade Representative (2007) p. 18 et seqq. This issue will be examined in the chapter "Theory and Practice of IPR Enforcement".

⁴² See for the legal text of the Copyright Law of the PRC:

[&]quot;http://www.sipo.gov.cn/sipo_English/laws/relatedlaws/200804/t20080416_380362.html"; the Patent Law of the PRC: "http://www.sipo.gov.cn/sipo_English/laws/lawsregulations/200804/t20080416_380327.html" and the Trademark Law of the PRC "http://www.sipo.gov.cn/sipo_English/laws/relatedlaws/200804/t20080416_380361.html". See also e.g., Yu, P. K. (2006) p. 106 et seqq. Lam, N. M. and Graham, J. L. (2007) p. 345 et seqq.; OECD (2008) p. 222



pending proceedings of patent prosecution or litigation (Art. 57 Chinese Patent Law). The new law also makes the foreign application procedures conform to the procedures under the WIPO.

Under the Chinese Patent Law two government agencies have the authority to enforce patent rights: the administrative agencies and judicial organs of the people's courts (Art. 3 Chinese Patent Law). The main administrative agency is the SIPO. The Chinese Patent Office under the SIPO is in charge of receiving and examining patent applications, granting patent rights, examining and determining requests for reexamination and invalidation and other administrative functions given by the SIPO under the Patent Law.

Jurisdiction of the courts depends on the type of patent disputes involved. For patent disputes over the validity of a patent or its compulsory license, the Beijing Intermediate People's Court is the court of first instance and the Beijing High People's Court is the court of appeal. For patent disputes over infringement, proprietorship and assignment contract of patent rights and fees to use an invention for a pending patent application, the provincial intermediate people's court where the dispute first arose is the court of first instance and the provincial high people's court where the dispute first arose is the court of appeal. For patent disputes over patent license contracts, the local people's court where the transaction occurs is the court of first instance and the relevant intermediate court is the court of appeal.

Any foreign individual or enterprise that has no regular domicile or place of business in China has to entrust a patent agency designated by the SIPO as their agent in handling patent-related matters (Art. 19 Chinese Patent Law). In case that there is an established business in China, it is qualified as an independent legal entity in China and thus can – like a Chinese legal entity – directly authorize a Chinese patent agency to handle the matter. It is also possible to seek patent protection in China by filing a Patent Cooperation Treaty (PCT) patent application designating China (Art. 20 Chinese Patent Law). The language of the patent in this case has still to be Chinese (and English of course).



Additionally, it should be noted that the Chinese's patent application process – like in Europe – adopts the "first-to-file" rule (Art. 9 Chinese Patent Law). This means that when two or more applicants file patent applications for an identical invention, the patent right shall be granted to the applicant whose application is filed first. The duration of a Chinese patent is 20 years for invention and 10 years for utility models and designs from the date of filing (Art. 42 Chinese Patent Law). 43

• Trademark Law: Registered trademarks (trademarks that have been approved and registered by the Trademark Office) include trademarks, service marks, collective marks and certification marks. These trademark registrants enjoy the exclusive right to use the trademark and are protected by law (Art. 3 Chinese Trademark Law).

With the last revision the Chinese Trademark Law has been made conform to the WTO requirements and the foreign application procedure fall under the guidelines of the WIPO. The revised Trademark Law introduces provisions giving holders of registered trademarks and interested parties the right to seek preliminary injunctions against infringers (Art. 55 Chinese Trademark Law).

The Chinese Trademark protection has a two-tier enforcement system: administrative and judicial enforcement. The Chinese Trademark Office (CTMO) under the SAIC is in charge of the registration and administration of trademarks and the implementation of international treaties and agreements regarding foreign-related trademark matters. The People's Courts where the trademark infringement takes place has the jurisdictional power to hear cases (Art. 2, 53 & 54 Chinese Trademark Law).

Again, here China takes a strict "first-to-file" rule (Art. 29 Chinese Trademark Law), requiring foreign trademark holders to register in China as early as possible. Any foreign individual or enterprise without regular domicile or business in China who intends to apply for the registration of a trademark or for matters concerning a trademark in China shall entrust a trademark agency designated by the SAIC to act as its agent (Art. 18 Chinese Trademark Law). Furthermore, the foreign individual or

⁴³ See Lam, N. M. and Graham, J. L. (2007) p. 345 et seqq.; For a more detailed overview of the Chinese Patent Law application process see e.g. Fuchs, H. J. E. (2006) p. 185 et seqq.



enterprise shall file an application in accordance with any agreement concluded between the PRC and the country to which the applicant belongs or according to the international treaty to which both countries are parties or on the basis of the principle of reciprocity (Art. 17 Chinese Trademark Law).⁴⁴

• Copyright Law: This Law is enacted for the purpose of protecting the copyright of authors and their works, which include works of literature, art, natural science, social science, engineering technology and the like (Art. 1 & 3 Chinese Copyright Law). Similar to the other two laws, the current Copyright Law has introduced many changes to bring it in line with the Berne Convention and the TRIPS. The revisions also made equitable remedies available to victims of copyright infringement so that an aggrieved party may seek a preliminary injunction to preserve assets and evidence (Art. 50 Chinese Copyright Law).

Also here China has implemented a two tier enforcement system: administrative and judicial. As the government administrative agency, the National Copyright Administration of China (NCAC) handles most copyright matters, including the administration of foreign-related copyright matters and approval of establishment of foreign-related copyright agencies. Furthermore, the NCAC supervises all local copyright administration departments (Art. 7 Chinese Copyright Law).

The Chinese Copyright Law adopts the rule of automatic protection and the principle of national treatment applies to foreigners (Art. 2 Chinese Copyright Law). An infringed party must bring the suit within two years from the date of the discovery of the infringement. Considering the time frame and the substantial costs, a foreign copyright owner may want to register the copyright in China to facilitate future enforcement action. To benefit from legal protection, works of foreigners must be either first published in China or published outside China where the author's country and China are both members of an international copyright agreement (Art. 2, 3

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⁴⁴ See Lam, N. M. and Graham, J. L. (2007) p. 348 et seqq.; For a more detailed overview of the Chinese Trademark Law application process see e.g. Fuchs, H. J. E. (2006) p. 193 et seqq.



Chinese Copyright Law). For long-term copyright protection, the copyright owner should ensure that his or her work falls within the scope of copyrightable subject matters and meets specific requirements relating to ownership, duration and other limitations (Section 1, 2 & 3 Chinese Copyright Law).

Copyrights in China can be enforced through three channels: administrative, civil and criminal proceedings. The NCAC and its local copyright offices may apply administrative measures to impose fines or penalties or to confiscate property obtained through piracy.

Through a judicial proceeding or a preliminary injunction, property preservation is available to a copyright owner if he or she has evidence to establish that another party is committing an act of infringement. Upon finding copyright infringement, foreign copyright owners may bring suits in courts for civil remedies or for criminal prosecutions.⁴⁵

In case of IPR infringement, **civil** actions accompanied by monetary fines are included in the Patent, Trademark and Copyright laws. The Patent Law allows fines up to CNY 50,000, or three times the illegal earnings from passing off another person's patent as one's own (Art. 58 Patent Law). The Trademark Law allows for compensation not exceeding CNY 500,000 (Art. 56 Trademark Law). The revised regulations of the Copyright Law authorize fines up to the amount of the unlawful income of the infringer. This also includes the appropriate fees paid by the right holder to stop the infringing act. In case the right holder's actual injury or infringer's unlawful income cannot be determined, the fine is limited to CNY 50,000 depending on the circumstances of the infringing act (Art. 48 Copyright Law).

Under the **Criminal** Law seven specific types of IPR infringement are regarded as a criminal act: counterfeiting registered trademarks; selling goods bearing counterfeit registered trademarks; illegally producing and selling representations of registered trademarks; forging

⁴⁵ See Lam, N. M. and Graham, J. L. (2007) p. 350 et seqq. For a more detailed overview of the Chinese Copyright Law application process see e.g. Fuchs, H. J. E. (2006) p. 199 et seqq.

⁴⁶ See OECD (2008) p. 222



another person's patent' copyright infringement; selling infringing reproductions and infringing commercial secrets. For infringement of trademarks, patents and copyrights the infringer can be sentenced to up to three years of prison and/or a fine. If the infringement has particularly serious consequences – in terms of substandard quality or health and safety of the consumer – the punishment can be up to seven years imprisonment.⁴⁷

Requirements for the criminal procedure according to the Chinese Supreme Court's regulation on "Several Issues of Concrete Application of Laws in Handling Criminal Cases of Infringing Intellectual Property" are for **Copyright** infringement either:

- CNY 50,000 business scale or above, or
- CNY 30,000 illegal profit or above, or
- 500 copies of copyrighted materials.

In case of **Trademark** infringement the requirements are either:

- CNY 250,000 business scale or above, or
- CNY 150,000 illegal profit or above, or
- Counterfeiting more than 2 registered trademarks.

The requirements for **Patent** infringement are either:

- CNY 200,000 business scale or above, or
- CNY 100,000 illegal profit or above, or
- Directly coursing patent-right-holder damage above CNY 500,000, or
- Counterfeiting more than 2 patents and the illegal business scale exceeding CNY 100,000 or the illegal profit exceeding CNY 50,000, or
- Counterfeiting registered famous brands and/or pharmacy products for human beings,
 or
- Counterfeiting leading to the bankruptcy of the right holder (trade secret only) or other serious damages.

⁴⁷ See OECD (2008) p. 222

⁴⁸ Chinese Supreme Court (2004), 2.11.2004

⁴⁹ Adapted from Wang, J. (2008)



The Chinese Customs Law forbids the import or export of goods infringing the IP rights protected by Chinese law. Regulations on "Customs Protection of Intellectual Property Rights" enable customs to seize imports and exports of goods infringing patents, trademarks and copyright-related rights. In order to enhance the efficiency of seizures by Customs, the owner of the intellectual property right may "record" or file their right in writing with the Customs. New regulations issued by the Customs administration in September 2004 regarding administrative penalties in the Customs context provide for fines not to exceed 30% of the value of the good confiscated, or CNY 50,000, whichever is lower. 51

E. Theory and Practice of IPR Enforcement

As explained before, China has a dual mechanism for IPR enforcement. Under this system the responsibility for IPR enforcement is shared between the State Council IPR administrations (SIPO, SAIC and NCAC) and the Supreme People Courts and Procuratorate bodies. However, the majority of IPR cases are handled by the State Council IPR administrative authorities (approximately 80% of the cases in 2005). 52

The **State Council IPR administrations** are empowered to: question the accused infringer; examine documents; search premises; freeze assets; issue an injunction order; confiscate and destroy counterfeit goods and the facilities specifically used in the infringement and impose a penalty. If the infringements are found to be so serious as to have constituted a crime, the case would be transferred to a competent judicial authority for criminal investigation. Regarding border enforcement, a co-operative mechanism has been set up between the General Administration for Customs of China (GACC) and other IP enforcement administrations, including SIPO, SAIC, the Ministry of Public Security and the Supreme People's Court. In addition, customs has increased communication with enterprises to group information resources. Methods for checking and seizing infringement products have been improved. ⁵³

⁵⁰ Chinese State Council (2004), 1.3.2004

⁵¹ See OECD (2008) p. 222 et seqq.

⁵² See OECD (2008) p. 223

⁵³ See OECD (2008) p. 223



In terms of **judicial enforcement** China has progressively established a system of specialized IP tribunals and has developed trained judges to sit on specialized IP tribunal to hear civil cases. An IP holder may request the court to issue an injunction order or an interim injunction before formally lodging a complaint. Preservation of evidence is also available if part of the infringement is in danger of being destroyed. As described before, under the Chinese civil law, remedies for damages are available. They are, however, compensatory, rather than punitive. Damages may be calculated based on profits gained by the infringer or losses suffered by the rights holder. Statutory damages are now also available if a plaintiff is unable to fully quantify its damage. Regarding criminal prosecution, the public security body is responsible for carrying out criminal investigations concerning IPR infringements. Minor criminal cases are heard directly by the People's Court's First Instance, whereas the Procuratorial system is responsible for cases endangering public order and national interest.⁵⁴

In practice, however, China's legal system for protecting IPR remains in the initial stage and the challenges for an effective IPR enforcement are still enormous:⁵⁵

• Cultural traditions: The Chinese culture, strongly influenced by Confucianism and the Chinese interpretation of Communism⁵⁶, hinders the enforcement of effective IP legal structures. Many Chinese have traditionally viewed IP as a common good and therefore to be used by all for free. Therefore, it should not be surprising, that domestic competitors frequently copy each other with impunity and foreign firms from wealthier nations are expected to exchange Know-How for market access.

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⁵⁴ See OECD (2008) p. 223

⁵⁵ See e.g., The Boston Consulting Group (2004) p.7 et seqq.; A.T. Kearney (2005a); Chow, D. C. K. (2005); Mertha, A. (2005) p.3 et seqq.; PricewaterhouseCoopers (2005) p. 8 et seqq.; Wirtschaftswoche (2006) p. 57; United States Trade Representative (2007); Lam, N. M. and Graham, J. L. (2007) p. 325 et seqq.; Chaudhry, P. and Zimmerman, A. (2009) p. 129 et seqq.; and the interview with Meiting Zhu in the Appendix

⁵⁶ Confucianism required control of information and a traditional Chinese belief is that inventions draw on past knowledge which belongs to all citizens. The basic beliefs of Communism harmonize with these traditional attitudes. Censorship was more important than copyrights and inventions belonged to the state.



Additionally, often "Guanxi"-networks, save of face and national identification play their role in favor of the Chinese IPR infringer.

- Patent registration process: The SIPO lacks sufficient qualified manpower to
 process the steep rise in patent applications. Given their higher complexity,
 applications for high-tech patents typically take a lot of additional time to process.
 Although SIPO is adding staff and offered Internet-based application services the
 problem is still not yet sufficiently solved.
- International law: Inconsistencies and gaps with international laws still exist. For instance, in contrast to Germany, China trademark protection can be obtained only by means of an entry in the trademark registry and not, as in Germany, on account of prevalent usage ("Verkehrsgeltung"). Another example is the difference in the law relating to industrial design which is often a source of legal disagreement. For example, when evaluating the danger of confusing a product, it is of decisive importance in both China and Germany whether or not the overall aesthetic impression of the product under attack is identical or similar to the design. However, the essential difference is how the product which violates a design is put on the market. Including such products in a product catalogue or exhibiting them at a trade fair does not in itself constitute a violation of the design and is not illegal in China. In contrast to Germany, one is breaking the law only when it has been demonstrated that the advertising is intended to promote the sale of a certain product.
- Application to domestic and foreign parties: It appears that the protection laws are not always equally applied to domestic and foreign firms. For example, in response to extensive copyright and trademark theft, Chinas has devised a "Famous Brands" system for accelerated trademark approval. This system favors the protection of Chinese brands. Additionally, foreign patent applications must pay higher fees than Chinese applications and foreign applicants without a legal Chinese presence must use a Chinese agent.



Government ties and conflict of interest: Chinese state-owned-enterprises (SOE) or private firms with strong links to governmental institutions are a big challenge for the Chinese legal systems. With China's ambition to build their own global players in forms of "National Champions", acquisition of knowledge and technology is a primary objective of the government. However, this happens pretty often in forms of illegal knowledge appropriation in Joint-Ventures. In such cases, the local jurisdiction is often judging in favor of the Chinese company. In addition, the illegal activities of counterfeiters often provide jobs and generate revenues and therefore may be vital to the local economy. Feng explains this as follows: "[I]n the case of state-owned and collectively-owned enterprises, the cost of compensation is ultimately borne by the state or collective, which traditionally has the responsibility to take care of the employees' livelihood. As one judge commented concerning the compensation policy in a case of patent infringement before him, the innocent workers did no wrong; they expended labor and skill in producing the infringing products on which they earn their meager livelihood. The court should not shut it eyes to reality by depriving the workers of their only income."57

In addition, the administrative bodies have limited enforcement powers and also conflicts of interest as their priorities sometimes run counter to the interest of foreign companies. For instance, the SAIC, which can conduct raids, investigate violations, impose fines and close factories, has its main role in promoting economic development. In some provinces counterfeiting is a huge industry and employer. Therefore it may not act on behalf of foreign complainants. In addition, all of these agencies have the right to sell confiscated goods to finance their operations. There can also be conflicts if these organizations have any social ties to the violators.

• **Burden of proof:** Chinese authorities can annul claims for compensation if they have initiated administrative action on the basis of incorrect information. On account of the uncertain chances of success of action taken against a violator, the authorities insist on

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⁵⁷ Feng, P. (2003) p. 48



high standards in regard to the evidence. For the holder of the rights this can mean that the burden of proof is considerably high.

- Legal power for enforcement: The enforcement of protection laws is difficult. SIPO only registers patents, although it was established to integrate official bodies responsible for patents, trademarks and copyrights. Outside of this, it remains largely a policy-setting body with limited investigation and enforcement powers. The China Trademark Office (CTMO) and the National Copyright Administration of China (NGAC) remain separate bodies, while still another entity, the MOFCOM administers technology transfer issues. Beyond the problem of fragmented authority, remains the problem that none of these bodies enjoys any legal power to actually enforce regulations.
- Court system: China's court system still struggles with handling IP issues. Although China's courts do have the ability to enforce laws and most provincial courts have established IP sections, many judges have no adequate legal training. Additionally, foreign parties cannot initiate legal action in China as they must persuade the courts to pursue a case. The law requires proof of illegal sales for criminal action and they base penalties on a percentage of illegal sales. This is often a futile effort as even legal sales are usually not recorded accurately. Hence, fines are low and hardly a deterrent. Some Chinese firms just consider them to be necessary cost of doing their (illegal) business.

III. Legal Strategies for IPR Protection

Legal Strategies for IPR protection follow a three step approach: First, the firm has to take **preventative measures**. This should be then complemented by **explorative measures**. Finally, in case counterfeit products were discovered, legal **countermeasures** against the pirates can be taken.

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⁵⁸ See previous chapter "National Legal Framework for IPR Protection"



A. Preventative Measures

Despite the enormous issues in the practice of IPR enforcement, companies must apply legal strategies as the necessary basics of IPR protection in China. To ensure this basic protection firms should apply the strategies described in the following:

- In the beginning, the best means of prevention is to engage local legal representation and diligently register IP with the appropriate local agencies as described in the previous chapter. In addition, it is important to work together with experienced external lawyers that have in-depth knowledge of the Chinese laws and regulations. In fact, failure to do so usually result in problematic legal disputes. An example is e.g. the settled dispute between General Motors and Chery Automobile in which General Motors claimed that the Shanghai-based carmaker copied its Chevy Spark in designing the Chery QQ. Because General Motors did not have patents in China for its car designs, it sued Chery for trade secrets infringement. Had the American automaker filed Chinese patents in the first place, as it did in its home market, it would have had a much stronger claim and might had not required the assistance of the Chinese government to secure the final out-of-court settlement.
- Also, a firm should make sure that their IPRs are registered with the customs administration. As mentioned, customs officials have powers to enforce IPR, including by administering fines and confiscation of merchandise in cases involving foreign trade. However, they can exercise these powers only if a company has first registered its IPR and then applies for action to be taken. Customs officials in jurisdictions like Shanghai and Guangzhou have demonstrated greater willingness and ability to crackdown on IPR violations in customs trade in recent years.⁶¹
- Seeing it from an international and more strategic perspective: Firms should apply for patents, trademarks and copyrights in all significant markets, including China. By

⁵⁹ See Fuchs, H. J. E. (2006) p. 184 et seq.; Lam, N. M. and Graham, J. L. (2007) p. 353

 $^{^{60}}$ See China IP Express (2005), cited in Yu, P. K. (2006) p. 147

⁶¹ See Wrigley, D. (2005) p. 25



doing so, the company can build a protective fence around key markets in order to avoid counterfeit goods in the Chinese market and also in other relevant international markets. Additionally, it is advisable to think about filing for patents in China early in the R&D phase.⁶²

- Companies sometimes create IP licenses in order to find license users and to collect fees. Contracts with Chinese Joint-Venture partners should clearly state that they must have IP licenses in order to ship products inside and outside of China or otherwise the firms needs to enforce its IP rights.⁶³
- The entire organization and any contractors or partners should be made aware of critical IPR issues, IP protection measures and process for reporting of violations though compliance rules, company's code of conduct, etc. This means that clear internal processes and policies for the protection of IPR should be established and included in employee contracts.⁶⁴
- An in-depth (legal) due diligence should be conducted for all outsourcing providers, licensees and Joint-Venture partners, etc. and thereby covering issues such as their security processes, internal IPR policies, IPR training, employee retention rates, litigation histories, insurances, etc. Contracts with these business partners should specifically define the geography of the conferred right. For example, this means that contracts with partners outside of China should cover any possible future activity in China as well. In addition, these contracts should include the option of arbitration in Hong Kong with results binding in China to ensure the fairest arbitration possible. 65

B. Explorative Measures

Explorative measures include actions like the use of private investigators to oversee the market and the permanent monitoring of competing third-party IP applications. Efforts of

⁶² See The Boston Consulting Group (2004) p. 16; Fischer et al. (2004) p. 48 et seqq.; Gassmann, O. et al. (2008) p. 85

⁶³ See The Boston Consulting Group (2004) p. 16

⁶⁴ See The Boston Consulting Group (2004) p. 16; Gassmann, O. et al. (2008) p. 85

⁶⁵ See The Boston Consulting Group (2004) p. 16



other companies to secure similar patent, trademark or copyright rights should be critically observed. New patent and trademark applications are published in the Chinese Trademark Gazette (Shangbiao Gongbao) or the Chinese Patent Gazette (Zhuanli Gongbao). The management of a company should have a protective IP portfolio and needs to be regularly informed about the developments in the relevant markets. In addition, regular screening of professional publications such as the magazine "China Patents & Trademarks" of the China Patent Agency in Hong Kong and catalogs of competitors can offer insightful hints about the activities of pirates. ⁶⁶

Often neglected, but crucial is the professionalization of the internal investigators, the legal department and corporate security. The core problem in the search for counterfeit products is that nobody can say exactly how many of them exist on the market and where they are distributed. A possible solution can be only be the above mentioned permanent market monitoring. Often companies find themselves unable to quantify the total damage from counterfeiting as the damage is not limited only to the obvious current financial losses but also includes potential future revenue losses and costs through reputation damages and unsatisfied customers. Therefore, this should be done very diligently or otherwise it can be a great obstacle when it comes to taking legal countermeasures.⁶⁷

C. Countermeasures

The legal system in China is expected to stay weak in the near future. Consequently, firms should see legal disputes as one of the last options for IPR protection. However, if violations occur or if competitors capitalize on loopholes created when the basic protective steps illustrated above where not taken, it can be useful to try some of the following strategies:

 Estimate the success of the three legal remedies available in case of IPR infringement: administrative proceedings, civil proceedings or criminal proceedings.⁶⁸
 Administrative proceedings are generally considered to be cheaper, quicker, more

⁶⁶ See Fuchs, H. J. E. (2006) p. 185

⁶⁷ See Fischer, S. et al. (2004) p. 53 et seq.

⁶⁸ For possible fines see the chapter: "National Legal Framework for IPR Protection"



flexible and less antagonistic, while litigations (civil or criminal proceedings) protects the rights holders from corruption and local protectionism and allowing for damage compensation and pre-litigation remedies.⁶⁹

- Disputes have to be settled either by the local administration or a national court. As a general rule, the administrative track is likely to be more rapid and effective than going to the courts in stopping IPR infringements. The effectiveness of administrative enforcement, however, varies enormously from jurisdiction to jurisdiction. In addition, administrative enforcement will only be applied locally, whereas a court decision can have national application. Resorting to judicial review is likely to be more expensive, take much longer and courts often require the presentation of high level of evidence before even accepting a case for consideration. In the Chinese flagship provinces like Shanghai, Beijing or Shenzhen, the jurisdiction has greater willingness and ability to intervene in case of IPR violations. This means a fair verdict is more likely in those provinces owing to a general higher proficiency with IP laws. In addition, any government relation, e.g. built through previous investment or technology transfer, should be activated and used. According to Yu, "with the introduction of specialized courts with judges possessing IP expertise since the 1990s, courts in major cities have greatly improved". 1
- Independent external investigators should be used to investigate the infringement and collect the necessary information⁷² for the court. Despite the higher costs, this is a popular choice as the opinions of outsiders are a more solid information base and evidence in front of the court or in negotiations with Chinese authorities.⁷³

⁶⁹ See Yu, P. K. (2006) p. 143 et seq.

⁷⁰ See Wrigley, D. (2005) p. 25

⁷¹ Yu, P. K. (2006) p. 144

⁷² According to Wang, J. (2008) the basis for calculation of IPR infringement damages in China is: 1.) The damage incurred by IP right holders, or 2.) The profit earned by the infringer, or 3.) Statutory damages up to CNY 500.000 (when 1.) or 2.) do not work; damages can also be calculated using appropriate patent license royalties as reference)

⁷³ See Wrigley, D. (2005) p. 19



- The protective fence (should they have been build) can be used to immediately deny violators to access other key markets when a possible IPR infringement case in China has been recorded. This helps to prevent that the IPR issue spreads to other important international markets of the firm and thereby multiply the possible damage.⁷⁴
- Foreign distributors of counterfeit goods should be blocked by threatening to make them responsible for the violations of IPR committed by their customers.⁷⁵
- In case the rival is a Chinese company with foreign exposure one may also fight in foreign legal systems where IPR protection is strong, like the US or the EU. For example, Sony persuaded Apex, a major supplier of Chinese-made DVD players in the US, to pay royalties on DVD technology after beginning a lawsuit in the US. US-based Cisco, the world's largest manufacturer of hardware for Internet infrastructure, filed suit in Texas against a leading Chinese internet hardware provider that was also a rapidly growing rival, in the US in January 2003 for allegedly violating its patent rights. The Chinese firm exported goods worth USD 500 m a year. The two companies reached a settlement in July 2004 after the Chinese firm had stopped sales of the products at issue in the suit, modified certain parts of its user manuals and source code and allowed a third party to review its products. ⁷⁶
- Also, alternative ways of dispute resolution should be considered: Arbitration is traditionally perceived in the international community as an effective method to resolve commercial disputes. The official international arbitration tribunal in China is the China International Economic and Trade Arbitration Commission (CIETAC). The CIETAC is headquartered in Beijing and has branch offices in Shanghai and Shenzhen. Based on the Chinese Arbitration Law, arbitration agencies are not part of state administrative agencies and do not depend on courts. However, it should be noted, that arbitration is subject to state supervision in China. The state can intervene

⁷⁴ See The Boston Consulting Group (2004) p. 16

⁷⁵ See The Boston Consulting Group (2004) p. 16

⁷⁶ See Wrigley, D. (2005) p. 25 et seq.



through courts at the pre-arbitration stage, during the arbitration process and after arbitration. Disputing parties may also apply to courts on issues such as validity and enforcement of arbitral awards. Thus, arbitration proceedings are interrelated with litigation.⁷⁷

The strategies described above may serve you well in a dispute situation. However, China is the country where flexible, informal and unconventional strategies work quite well. Hence, in some special cases, when a legal dispute appears very unpromising, it should be considered weather to acquire or to form a Joint-Venture with violators will create more benefits from market access that will offset the losses recurring from violations of your IPR in other markets. A prerequisite for this approach is that the counterfeiters reach almost the same quality as the original product. Certainly, this strategy is only suitable for exceptional cases. However, Walt Disney Company, as a Best-Practice example, successfully practiced this approach in China for years. Only when the counterfeiters could not be integrated into the firm's own value and production chain, the company started to initiate legal action. More generally speaking, this means switching from a legal strategy to a factual strategy to deal with the problem of IPR infringement. This marks a good link to the next chapter in which the later approach will be elaborated in detail.

IV. Factual Strategies for IPR Protection

Factual strategies can be separated into two categories: Business strategies and Technological strategies. Both have in common that they use specific non-legal measures to factually protect the IPR of a firm. However, while the Business strategies focus on the value chain and operations of the firm, Technological strategies usually try to protect IPR by using advanced – but sometimes also simple – technologies.

⁷⁷ See Lam, N. M. and Graham, J. L. (2007) p. 355; Wang, J. (2008) Chapter 9

 $^{^{78}}$ See The Boston Consulting Group (2004) p. 16 $\,$

⁷⁹ See Fischer, S. et al. (2004) p. 56



A. Business Strategies

Business strategies can be very effective in protecting the IPR of a firms operating in China. Often technologies and Know-How of a firm are stolen by business partners like the Chinese JV-partner, suppliers or B2B clients that have multiple interfaces with the firm. Another very prominent threat are the own employees that work in sensitive functions of the company.

A good way to structure the different strategies that can be used for IPR protection is the classic "Value Chain" framework developed by the Harvard Business School Professor Michael E. Porter⁸⁰ (see Figure 8). His concept helps to systemize the primary functions of a firm and thereby gives a roadmap for different measures that can be applied at each step of the value chain to ensure a factual protection of the IPR inside and outside of a firm. Every firm has primary functions in his value chain, which according to Porter can be clustered into: Inbound Logistics, Operations, Outbound Logistics, Marketing & Sales and Service:

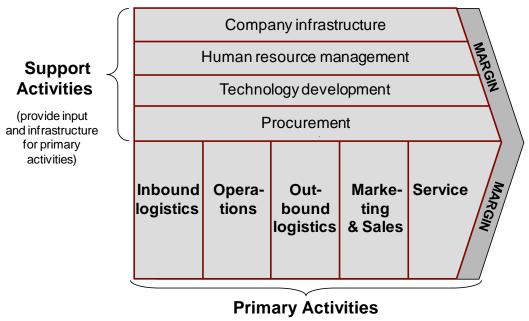
• Inbound Logistics: The control of the inbound logistics is an important step in securing the overall supply chain. The primarily issue here is quality assurance: First, manufacturers must prevent counterfeit products as possible input materials for their own production system. Secondly, the firm has to prevent that essential product Know-How becomes available to any potential counterfeiters. Hence, it is necessary that the Procurement Department works in close cooperation and collaboration with the Legal Department in negotiations about supply contracts, which should include clauses to secure the guaranteed IPRs. Additionally, the Quality Management Department has to continuously monitor the suppliers and their processes. The control of the inbound logistics is a core element in the overall protection of IPR in China.⁸¹

⁸⁰ For more information see Porter, M. E. (1985)

⁸¹ See Fischer, S. et al. (2004) p. 51



Figure 8: Value Chain of a firm⁸²



(transform inputs and deal with sales and customers)

• Operations: The internal operations are one of the main sources for the illegal appropriation of IP. Here the protection starts with the HR management and employee selection. For example, a mid-sized German technology firm operating in China deliberately chose to exclusively employ expensive German expatriates in Management and sensitive Know-How functions rather than cheaper Chinese M.B.A. or Ph.D. graduates. For them the protection of their IP has highest priority. Although this might be an extreme case, a very selective access to sensitive knowledge combined with a thorough screening of Chinese job candidates and their references is a good advice for any firm operating in China. Also, establishing a good working atmosphere is important in China as high employee fluctuation is one of the main risks for knowledge appropriation. Successful firms managed to establish corporate identification and loyalty among its employees through financial incentives combined with great recognition of successful work and above-average development

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⁸² Adapted from Porter, M. E. (1985)



opportunities.

Besides HR the management of the organization and processes are in focus. For example, teams with sensitive Know-How should be grouped into one organizational unit where highest security and compliance standards are ensured. Additionally, sensitive internal processes should be made as transparent as possible using e.g. automatic electronic protocols, so that in case of an incident the responsible person can be immediately identified.⁸³

- Outbound logistics: Many manufacturing companies have outsourced their distribution to specialized logistics service providers. Consequently, here the focus is very much on the right selection of a reliable logistics service provider. Regarding the threat of piracy and counterfeiting one has to ensure that counterfeit products cannot get into the logistics chain and/or replace original products. Hence, the selected logistics service providers should pay a lot of attention to the reliability and quality of their HR. They should not use anonymous and quickly recruited backup drivers, but only their fully-employed driving staff, which had to undergo special security trainings and checks first. In case the firm has not outsourced its outbound logistics this recommendation apply for the own driving staff. Additionally, it can be of advantage to use only respected logistics service providers, which already have a proven track record in the industry the firm is operating in, as they have also a certain reputation to lose in case of counterfeit products.⁸⁴
- Marketing & Sales: There are often security gaps in the sales distribution that offer pirates opportunities to take advantage of. A large part of the imitations are distributed through the official channels to the end customers. Therefore, the continuous monitoring and careful selection of distribution channels is crucial. A preventive defense against counterfeiting and piracy is to use only a small number of distribution points. For example, the Italian company Hunting World distributes its products in only 80 stores worldwide. That makes it easy to control. The strategy of selective

⁸³ See Fuchs, H. J. E. (2006) p. 229 et seqq.

⁸⁴ See Fischer, S. et al. (2004) p. 51



distribution ranges from the exclusive supply to independent retailers, franchise, to own retail stores. However, even in the own retail systems counterfeit products may appear. It is therefore important that the Sales Department continuously monitors the products at the point of sale and immediately informs the other potentially involved departments about counterfeit products. Additionally, another duty of the Sales Department is to continuously train the sales personnel about how to distinguish original from counterfeit products. 85 However, there is also a certain trade-off in the restriction of distribution channels that needs to be considered. The American firm Dell, one of the world's largest personal computer manufacturing firms, is a good example of direct sales in China. Through its build-to-order and Internet sales model, they are significantly better protected against counterfeit products than the competition. This model also gives Dell the advantage of price flexibility. It holds the leading position in the business-oriented servers market in China, which was historically dominated by local players. However, this restrictive sales strategy makes a widespread distribution in China without the support of a Chinese partner almost impossible and therefore less suitable for reaching the broad consumer market. Besides, most companies lack the organizational capacity to run Dell's model, although some are trying to adopt it in part. For example, the other US computer maker HP, after its merger with Compaq, has opted for a multiple channel distribution strategy in China. This involves both direct and indirect sales through distributors such as system integrators, value-adding resellers and other dealers.⁸⁶

• Service: Another instrument to fight piracy and counterfeiting is by offering highly valued support and other services in combination with the related pricing policy. This gives an informed end-user a rationale for the premium price paid for purchases of legitimate goods from authorized channels. Examples can be found in the software industry. Some firms offer upgrade versions for relatively cheap price to the existing customer to prevent them from acquiring pirated software. One example is a producer

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⁸⁵ See Fischer, S. et al. (2004) p. 51 et seq.

⁸⁶ See Wrigley, D. (2005) p. 16



of anti-virus software who provides daily updates to license-holders to ensure their computer systems are capable of warding off the latest viruses. It is worth examining the cost structure and possible locations in the channel of after-sales services, like repairs. Where highly trained technicians and large inventories are required, it is worth considering using a manufacturer's own sites or specialist third parties, rather than resellers. So in general, after-sales-services like e.g. technical support, warranty service, replacement guarantees and free upgrades can be only provided when the customer has the required data, serial numbers and is a registered client. 87 For example, Microsoft limited the downloading of updates to customers who have purchased genuine Microsoft products.⁸⁸ Another model is used in the digital entertainment industry, where firms have encouraged Chinese game players to migrate online. Players need a legitimate subscription to be able to log on to online games run by central servers. Also, training is an additional kind of valued after-sales service, allowing users to make much better use of its product. However, there is still some risk; even for training services, grey market operators had emerged in China using copies of official training manuals for their sessions.⁸⁹

The next step is to look at the so called "Extended Value Chain" of the firm (see Figure 9) and examine possible strategies to protect the IPR. Besides the value chain of the firm, this includes also the suppliers, customers and competitors of the firm:

• Suppliers: The necessary measures for the control and protection of the supply have already been discussed in the previous sections dealing with inbound logistics. In addition to that, another IPR risk is associated with the quite frequently made decision of third party manufacturing. This is usually done using contract manufacturing services (CMS) to produce goods according to their own design. Careful selection of CMS partners is one way to mitigate this risk. However, vendors should also look closely at their IPR portfolios to decide which designs and technologies are core to

⁸⁷ See Fischer, S. et al. (2004) p. 56

⁸⁸ See USA Today (2005); cited in Yu, P. K. (2006) p. 148

⁸⁹ See Wrigley, D. (2005) p. 23

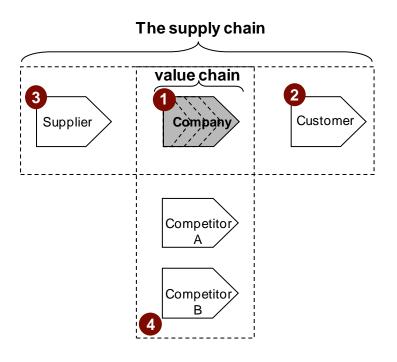


their businesses. The design and manufacturing of other parts or stages of production that are not core can be outsourced to original design manufacturers (ODM), while retaining core designs and processes in-house. ODM firms differ from CMS companies in the form that they carry out design as well as production of goods that are branded under the contracted vendor's specifications. The vendor then handles the distribution, retailing and marketing of the products. This was what mobile phone firms like Motorola and Panasonic did for some of their low-end handsets. They judged their strengths to lie in cutting-edge technologies and marketing. Their ODM partners, like Taiwanese firms Compal Electronics, BenQ and Anima Communications, all have factories in China's Yangtze River Delta. Domestic Chinese firms will no doubt become competitive in the CMS and ODM markets for more products. Already they are strong in home appliances and cathode ray televisions. However, the more technology a vendor gives out to its manufacturing partners, the more likely will those partners boost their own technological capacity, including in research and development. This will allow present partners to become potential competent competitors. For instance, not long ago, Chinese mobile phone makers licensed out virtually all of their designs from foreign telecommunication firms. Today companies like TCL and Ningbo Bird design many of their own handsets.90

⁹⁰ See Wrigley, D. (2005) p. 17



Figure 9: Extended Value Chain⁹¹



• Competitors⁹²: Although the competition is usually considered to be the enemy, which one has to beat; in the case of IPR protection they can be also valuable allies. Usually counterfeiting is a problem of a whole industry and not a single firm. Hence, there can be some mutual value creation, when the companies affected by piracy form an industry association that allows them to jointly fight against piracy and counterfeiting. In this case the main advantage is that individual interests can be bundled into a serious interest group with stronger lobbying power at national and international level. In addition, collaborative information exchange across companies in the same industry and also across-industries can be a good measure to identify organizations that act as manufacturers of counterfeit products and may also facilitate the diffusion of best-practice Know-How in fighting against IP infringement in China. The associations can also be used for joint press releases on IP and consumer

⁹¹ Adapted from Porter, M. E. (1985)

⁹² This refers to the companies that are present in your market and are competing with their own brands and technologies and not the pirates that simply copy your products.



education campaigns. This collective IPR monitoring has often brought together business partners, as they can share information about unscrupulous manufacturers that are often producing goods without licenses. In some cases, this can even help in minimizing misunderstanding and mistrust. The cooperation with competitors does not necessarily have to be limited to other Western firms. Chinese companies are more and more also suffering from piracy and therefore may be potential allies as well. Some local companies will share an interest with foreign firms in stronger IPR protection. For instance, members of the Godson Industrial Alliance, all IT companies or institutions, own high-tech IPR. Other Chinese consortiums are also involved in developing standards in mobile telephony, DVD and radio frequency identification technologies. In fact, local companies and groupings may well have more clout than foreign companies with local authorities. Hence, these firms could even use their "Guanxi"-networks with e.g. Chinese authorities and local knowledge that is sometimes more efficient in fighting against counterfeiting. They may also know how best to get through the complicated enforcement system. 93

• Customers: The communication policy of firm needs to educate consumers with the goal to prevent them from conscious or unconscious purchase of counterfeit products. First, buyers need to be informed about how to distinguish between fake and original products. For example, Rolex and Hennessy use newspaper ads and television spots to inform about special security markings and authentication features of their products. The disadvantage of such an active information policy is that the counterfeiters become aware of the special features of the original product at the same time and therefore may try to copy that as well. Secondly, another objective is to reduce the conscious purchase decisions of customers for counterfeit products. Conscious purchases of counterfeit products are particularly prominent in the luxury industry, i.e. luxury watches, jewelry, textiles, etc. Many consumers are happy to use only the counterfeit product and benefit from the high brand image and prestige, but at same

93 See Fischer, S. et al. (2004) p. 55; Wrigley, D. (2005) p. 23 et seq.

⁹⁴ Technological protection measures will be discussed in detail in the next chapter.



time are unwilling to pay the high price. What may help to prevent counterfeiting spread to neighboring developed markets (e.g. Hong Kong, Macau, etc.) is an active communication strategy by the Public Relations and Communications Department in those countries. Here the company should try to educate the potential consumers about the bad consequences of counterfeiting (e.g. loss of local jobs, injuries due to quality deficiencies, etc.) and the potential legal consequences. Fin China itself, this approach should be complemented with a redesign of the product package: the perceived value gap between the original product and the counterfeit product should be kept minimal. For example, PricewaterhouseCoopers recommends expensive foreign brands to increase the perceived product value through complementary excellent service in order to make the performance difference to counterfeit products clearly evident. Customers can be also used as a source for information about counterfeit products. An example is Beiersdorf AG (among others, the manufacturer of "Nivea" branded products), who has established a special customer hotline where consumers can report about counterfeit products in the market.

In addition to the business strategies elaborated above, there are other innovative strategies to fight against counterfeiters. For example, Yu suggest to see the pirates as welcoming challenge and to engage into direct competition with the counterfeiters. In an illustrative case study concerning a publisher of popular comic books he showed how this strategy may work: "Immediately after the books were published, unauthorized copies appeared in the market – some even before the publication of the originals. [...] [The publisher] chose to compete directly against the pirates. To do so, it wrapped the comic books in hard-to-reproduce plastic, upgraded the quality of the graphics and paper, and included inexpensive educational prizes with each issue. Although its action no doubt increased production costs, the additional preparation made the comic books more expensive and difficult to copy. As the pirates turned

⁹⁵ See Fischer, S. et al. (2004) p. 54 et seq.

⁹⁶ See PricewaterhouseCoopers (2005) p. 10

⁹⁷ See Wurzer, A. J. et al. (2009) p. 64



to other, easier targets, subscriptions and profits increased."⁹⁸ His underlying logic is that counterfeiters are rational business people that are looking for profits and opportunities. So, when the profit margins of the counterfeiters are shrinking due to competitive measures, the products of the rights holder will become a less attractive piracy target. Another aspect is the strong message sent to the counterfeiters that they would make more money by choosing a more vulnerable target and drive the pirates to the products of the competition (assuming that they had been less protective) and hence "killing two birds with one stone" by beating both the pirates and the competition.⁹⁹

Yu recommends also another strategy, which is public shaming. He considers it to be is an effective strategy in China as from the standpoint of Chinese psychology; public shaming causes the infringer to lose "face" ("mianzi" in Chinese). The embarrassment caused by the public apology will create a significant deterrent. Therefore, Chinese companies have insisted on public apologies from the infringers. In light of this Chinese tradition, Chinese copyright law, unlike its Western counterparts, includes specifically the remedy of apology¹⁰⁰. Additionally, going to public may have another advantage besides shaming: By bringing in the local media, it is possible to attract large-scale public attention, which in turn may create domestic pressure on the local authorities by drawing the local community to the side of the foreign right holder.¹⁰¹

As already discussed in the Chapter "Legal Strategies for IPR Protection", cooperation with the counterfeiters can be another innovative and very effective strategy, as it has the potential for converting a pirate into a future partner. Moreover, according to Yu, "this strategy would allow the Western manufacturer to create goodwill in the local community. [...] Government officials outside of major Chinese cities often have to deal with not only intellectual property problems, but also other seemingly more pressing problems, like unemployment and social

⁹⁸ Yu, P. K. (2006) p. 145 et seq.

⁹⁹ See Yu, P. K. (2006) p. 145 et seqq.

¹⁰⁰ Chinese Copyright Law, Art. 46 and 47

¹⁰¹ See Yu, P. K. (2006) p. 148 et segq.



welfare. Because of their dual, or multiple, capacity, they are often more receptive to a cooptation proposal than to one that requires factory closures. While the latter would create a more serious problem for the local community, the former would reduce two problems – piracy and social welfare." However, it should be noted that this strategy has also its risk and does not work in every situation. As in the mentioned case of the Walt Disney Company, the abilities, motives, plans and reliability of the counterfeiters should be examined in detail.

Another case study suggests the following: "To protect its key technology, the manufacturer separated the high-technology components of its products from their low-technology counterparts, producing the former in the United States while manufacturing the latter and assembling the finished products in China. In doing so, the firm was not only able to resolve the dilemma, but also benefited from the growing Chinese market." This case illustrates, that physical distance and technological barriers is the probably most effective defense against piracy, but with an intelligent organization one can at the same time benefit from the Chinese market. Additionally, it highlights that it is important to distinguish a business decision to relocate manufacturing and research facilities to a country from one that seeks to establish a market for its finished product. Finally, the case study illustrates how the type of business structure a firm adopts may affect its ability to protect intellectual property. For example, wholly foreign-owned enterprises (WFOE) are in a better position to protect intellectual property than Joint-Ventures as they allow them to protect key technologies by either isolating them or preventing comprises by mistakes made by local partners who are unconscious, or have limited awareness of intellectual property protection. While this isolation strategy has many benefits, its effectiveness has been undermined in recent years as technological capacity in China has greatly improved and most products and technologies, except for very advanced ones, can now be reverse engineered in China. Thus, even though it may be still useful to isolate critical technology from China, the effectiveness of the strategy has been greatly reduced in regards to all but the very latest technologies. ¹⁰⁴

¹⁰² Yu, P. K. (2006) p. 156 et seq.

¹⁰³ Yu, P. K. (2006) p. 161

¹⁰⁴ See Yu, P. K. (2006) p. 160 et seqq.



B. Technological Strategies

The use of (advanced) technology helps to reduce the risk of counterfeiting and is in focus of mainly scholars and practioners dealing with the issue of IP protection. For example, the book "Counterfeiting exposed: Protecting your brand and customers" provides an entire chapter describing anti-counterfeiting technology solutions. Hence, it is generally recommended to use new and clever packaging and marking of products, including e.g. special spouts which discourage refilling of bottles, the use of holograms and covert chemical fingerprints and other hidden markers, and even recently the use of DNA to give unique identification to textiles. In fact, there are a number of firms which sell product identification technologies and the software used to track sales to contractors and through retailers. These technologies are designed to verify for consumers or IP owners that products are genuine. The techniques can be overt such as a hologram, which is readable without any special device. Or they can be covert. Covert technologies do require some kind of reading device such as a decoder or lens. These technologies include "invisible" printing, RFID (radio-frequency identification) or various types of "taggants" which may be chemical or biological and can be read only by special detectors. RFID is an identification method which stores and retrieves data using a device called an RFID tag. This tag is an object that can be applied to or incorporated into a product for the purpose of identification. Some tags can be read from several meters away and even beyond the line of sight of the reading device. An example of covert technology is the addition of minute levels of chemicals into fuels to prevent counterfeiting or dilution of the product. A subset of the covert approach is machine-readable technologies which allow highspeed authentication of a large number of products. A combination of overt and covert technology is the best way to protect IPR and this concept is used by many firms. Establishing a well-designed system based on the above technologies but adding serial number data and RFID allows a company to track and trace its product. This is useful for reducing counterfeiting as well as for combating gray market diversions. ¹⁰⁶

¹⁰⁵ For more information see Hopkins, D. et al. (2003)

¹⁰⁶ See Chaudhry, P. and Zimmerman, A. (2009) p. 155



The importance of new technologies can be, for example, illustrated by a new Californian regulation 107 which requires that prescription drug manufacturers must be able to record the movement of every product from manufacturing to sale. This new law requires a unique serial number on the smallest retail unit. Although the law does not specify a method, RFID is considered superior to barcoding. RFID has a few advantages. First, a unique serial number is electronically written into a chip at the pharmaceutical plant. To copy that, a pirate would need to be able to make semiconductors rather than a simple photocopier which is all that is required for reproducing a bar code. Another major advantage is that the reader can penetrate sealed boxes and scan multiple labels in a very short time. Newly available inexpensive scanners can read nearly-invisible bar codes printed with special inks. Very sophisticated cryptographic memories embedded in a labeling device provide a very high level of authentication as this approach allows unique information to be transmitted for each transaction. 108

To be more specific, companies in China can use these technologies mainly for two parts of their value chain:

• **Product development:** Here the focus is to achieve a clear identification of original products: Through the use of technology the products receive relatively forgery-proof characteristics. New product marking technologies make it considerably more difficult to copy a product and also facilitate the distinction of the imitations from the originals. Very common methods for this kind of marking are e.g. holograms, which are quite difficult to copy because of the large technical effort required. The automaker Daimler AG is a good example. The firm has equipped approx. 50,000 of its most important spare parts out of its total 400,000 with this kind of technology. However it should be noted that the product marking technology is continuously improving. The sports goods manufacturer Puma AG has equipped its holograms, which it uses in his shoes, bags and textiles with an extended security code that can only be read and deciphered under a special microscope.

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¹⁰⁷ Known as "ePedigree" law

¹⁰⁸ See Chaudhry, P. and Zimmerman, A. (2009) p. 155 et seqq.



There are many other procedures in the product development phase that can be used and are considered to be tamper-proof. However, these technologies are usually associated with relatively high costs. In addition, even high-tech markers only offer a temporary protection as technology advances. Furthermore, invisible markers offer a high protection standard, but can usually only be identified by experts, but not by retailers or consumers. Hence, this strategy is useful in China especially for high-priced goods (e.g. luxury brands) where the customer is willing to pay a lot of money for the expected quality. ¹⁰⁹

• Packaging: Among the frequent manifestations of IPR infringement is the sale of counterfeit and pirated goods in a well designed fake or even in the original packaging. In China this issue is especially relevant in the pharmaceutical industry. These products have a few distinctive characteristics except the exterior packaging. Unlike watches, perfumes or textiles, where consumers sometimes deliberately buy imitations, this cannot be the case with medicine and drugs. To prevent possible damages to the reputation of a firm, the exterior packaging must clearly differentiate the products from any possible imitation by using innovative markings (e.g., thermo labels, specialty papers). This ensures that patients and professionals can identify possible counterfeits easily by the packaging. As both the pharmaceutical industry as well as most other industries have outsourced the manufacturing of packaging materials, it is important to screen these suppliers and their processes in great detail and with diligence. The design of forgery-proof packaging is essential in the pharmaceutical industry, but can be also used e.g. in the software, music and video industry.

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However, there are also limits to the use of technology. For example, Microsoft installed popup notifications to identify non-genuine copies of Vista. One notice says: "This copy of Windows is not genuine. You may be the victim of software counterfeiting." However, the

¹⁰⁹ See Fischer, S. et al. (2004) p. 49

¹¹⁰ See Fischer, S. et al. (2004) p. 50



counterfeiters seem to be quite familiar with the advanced technology as well. In the case of Microsoft, recommendations for removing this annoying notice were on the web almost immediately upon the release of Vista. Another drawback to technological strategies is often their high costs, not only involving the extra production cost per item, but also of IT systems to monitoring and tracking goods. Such expenses have deterred CPU chip makers from using such systems, despite growing incidence of grey markets, counterfeit products and theft. Therefore, in summary, it should be said that despite the promising features of new technologies, the use of technology should not be seen as the single winning solution to be applied to fight against IPR infringement. ¹¹¹

C. Implementation

For the implementation of business and technological strategies three managerial actions and principals are necessary. These are Dynamism, External monitoring and Internal monitoring.¹¹²

First, **Dynamism** suggest to use factual strategies for IPR protection, but to be always ready to immediately refine and adapt them should circumstances change. Imitators' efforts are dynamic, and so have to be the factual protection.

Secondly, **External monitoring** means to continuously monitor your customers, suppliers, competitors and the development of the legal IPR system. Sudden changes may affect the performance of the applied business and technological protection strategies.

Thirdly, **Internal monitoring** means to continually monitor how indigenous competitors and employees react to the business and other factual protection strategies. One should expect countermeasures and needs to be ready to quickly respond to them.

In addition, IPR protection is not simply an administrative function. Failure to protect IPR can have implications for brand and asset protection. Hence, sufficient resources should be dedicated for IPR protection. For example, a standalone IPR budget is needed to pay for the

¹¹¹ See Chaudhry, P. and Zimmerman, A. (2009) p. 156

¹¹² See Keupp, M. M. et al. (2009) p. 220



monitoring of rival products in the market and of JV partners and firms associated with partners. Also, large companies should consider appointing a dedicated IPR manager to coordinate the relevant teams for brand protection, in the legal, marketing, licensing and distributor fields, along with and other business partners, sales and senior management. 113

Without successful implementation the best strategies are useless. Hence, a lot of attention should be paid to this process.

V. Towards a Holistic Strategy for IPR Protection

When it comes to IPR protection, companies cannot expect a purely legal approach to be as effective in China as it is in Europe or the USA. That's why leading companies, like Microsoft, HP and 3Com, have developed "holistic" and integrated IPR protection policies that have proved more effective. Hence, to effectively protect the IPR in China a company needs to combine legal and factual strategies for the protection of strategic intellectual resources. 114 Lian Hoon Lim, a partner in the Hong Kong office of A.T. Kearney recommends a "portfolio approach" using a combination of secrecy, research about local partners, new technology and business strategies as well as legal enforcement of patent and trademark rights. Also, Wurzer et al. have pointed out in their current research on shortcomings in IP management that an IP strategy that solely relies on lawyers to manage patents is one of their seven main pitfalls. They estimated that the damage caused through this one-sided approach accounts for approx. EUR 10 bn of economic value destruction in Germany. 115 As the Chinese economy has now roughly the same size as the German, this number may also give an indication for China. Adding to this point, Yang et al. claim that the key element for the effectiveness of anti-piracy strategies is the attention the management pays to IP and their confidence in the intellectual property system in China. These are prerequisites for the success of anti-piracy strategies. Using data from 128 multinationals, their findings reveal that three

¹¹³ See Wrigley, D. (2005) p. 15

¹¹⁴ See e.g., The Boston Consulting Group (2004); A.T. Kearney (2005a); A.T. Kearney (2005b); Dietz, M. C. et al. (2005); Wrigley, D. (2005); Fuchs, H. J. E. (2006); Gassmann, O. et al. (2008)

¹¹⁵ See Wurzer, A. J. et al. (2009) p. 66 et seq.



strategies are positively related to the effectiveness of countering piracy: administrative supports, judicial actions, and private eyes and investigators. On the other hand, especially media exposure and public awareness has a negative relation with the effectiveness. Therefore, they suggest managers to be mindful in taking this action against piracy. The paper argues that this finding may be unique to China and reasons may lie in cultural norms which are not always wholly supportive of protecting IPR. Finally, as mentioned the confidence of the management in the Chinese intellectual property system is supportive for the three strategies named above. Yang et al. argue that higher confidence leads to more proactive and positive actions against counterfeiters. 116 Besides, what is most important is that the IPR protection strategy needs to be linked with the overall business strategy in China. For example, it might seem logical to use an antidumping lawsuit or a customs seizure to block a Chinese competitor's (counterfeit) product in foreign markets, but such a move could also embarrass the Chinese company (in case it is a SOE or has strong governmental support) and in the end also the Chinese government. This unintended result might then lead to reprisals in China and thereby hindering a company's operations there by e.g. making it difficult to obtain investment approval, new factory permits or meetings with key government agencies. Hence, at the end of the day, this may lead to internal tensions because the interest of the Western headquarter could conflict with those of its Chinese operations. 117

In summary, we can therefore conclude that IPR should be one of the key tasks of a manager in China and the protection should follow a holistic and strategic perspective. Below, some practical tips, tools and frameworks will be explained that might help to deal with this issue.

One prominent list of recommendations that synthesizes the requirements of effective IPR protection was created by Firth. He suggests 10 practical measures – containing both legal and factual strategies – to protect IP in China:¹¹⁸

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¹¹⁶ See Yang, D. et al. (2008) p. 321 et seqq.

¹¹⁷ See The Boston Consulting Group (2004) p. 13

¹¹⁸ See Firth, G. (2006) p. 18 et segq.



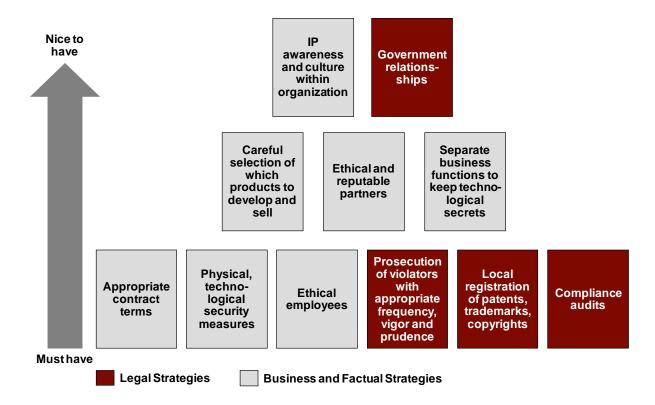
- 1) Craft a corporate IP protection strategy
- 2) Employ legal measures
- 3) Control the production process
- 4) Focus on human resources
- 5) Be choosy when selecting suppliers and distributors
- 6) Keep a close eye on competitors
- 7) Take legal action
- 8) Conduct surveillance of suppliers and distributors
- 9) Control what walks out the door with departing staff
- 10) Advocate aggressively

He advises that when it comes to IP protection much more than an ounce of prevention is necessary today. He recommends a thorough review and updating of all company operations and internal policies, the development of a corporate IP protection strategy and the use of offensive and defensive actions. The former include surveillance, education and legal activity while the latter encompasses registering patents and trademarks and regularly reviewing IP security.

There are many measures to protect IPR in China. However, due to this complexity many firms had to invest years of hard-fought experience before they can successfully cope with the challenging issue of IPR infringement. The following frameworks may give managers some guidance on how to holistically structure their efforts in this field and benefit from experiences of best-practice firms in China.



Figure 10: Priorization of legal and factual strategies to protect IPR¹¹⁹



As mentioned, it is quite common that multinational firms in IP-sensitive industries¹²⁰ relied their IPR protection solely on legal terms and sometimes even only after the property had already been stolen. According to Diez et al., consultants from McKinsey, successful companies should, however, use a combination of legal and factual strategies before the IPR violation happens. They should of course register their trademarks and patents with local authorities and prosecute violators with vigor and prudence. According to their research, legal strategies are most effective when combined with a good overall IPR protection strategy. The law alone isn't enough to protect IP assets. For achieving the right mix of legal and business and factual strategies the Framework in Figure 10 can be used as guidance. Their research suggests that appropriate contract terms; physical, technological security measures; ethical employees; prosecution of violators with appropriate frequency, vigor and prudence; local

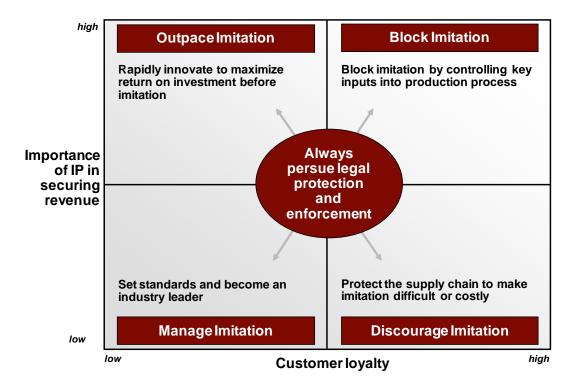
¹¹⁹ Adapted from Dietz, M. C. et al. (2005) p. 7

¹²⁰ Dietz, M. C. et al. (2005) studied ten multinational firms in the consumer electronics, medical equipment, pharmaceuticals, semiconductors and software industry



registration of patents, trademarks, copyrights and compliance audits are absolute "must-haves" for IPR protection in China. ¹²¹ In the previous chapters on legal and factual strategies we have already discussed how these measures may look like.

Figure 11: Clustering of IPR and strategies to protect them ¹²²



Another important issue is to take a strategic perspective to IPR management and protection. In other words, it is effective to understand the importance of the IPR for the overall company. Although as seen above there are some "must-haves" in IPR protection, a "one-size-fits-all" definitely is not the most efficient strategy for combating IPR infringement in China. The portfolio of measures for a company depends on the type of IPR risk it is facing.

The framework of A.T. Kearney, illustrated in Figure 11, helps to link strategies to the importance of IPR by clustering them into four different fields using the criteria "Importance

¹²¹ See Dietz, M. C. et al. (2005) p. 6 et seqq.

¹²² Adapted from A.T. Kearney (2005b) p. 17



of IP in securing revenue" and "Customer loyalty". Hence, depending on the importance of the IPR one of the four different strategies as described below is suggested.

The left side of the matrix (see Figure 11) represents products for which customer loyalty is low, such as consumer electronics. Products in this group are usually commodities and a certain degree of imitation, whether in the form of reverse engineering or duplication can be expected.¹²³

Outpace imitation: (Importance of IP in securing revenue: high and Customer loyalty: low)

One of the most intuitive ways to counter IPR violations is to outpace imitation. This means to quickly introduce new products, improve existing products as often as possible and build brand image. This forces rapid evolution of customer markets reduces products lifecycles and interrupts competitors' ability to respond. Examples of this strategy can be found e.g. in the cell phone manufacturing industry. To recapture lost market share global companies used their strong product development capabilities to add new features to the cell phone like the case of Apple's iPhone. 124

Manage imitation: (Importance of IP in securing revenue: low and Customer loyalty: low)

Instead of waiting for a Chinese firm to copy your product, it can be useful to manage the situation by offering licenses or Joint-Ventures to these firms. In this way, the multinational company continues to secure revenues and control while giving locals a chance to compete. Some multinationals have taken this a step further by selling production expertise to the Chinese firms. If done properly, the company gets insights into the processes the Chinese have in place, which on the other hand can prove quite valuable in keeping ahead of the competition. The attraction for the local company is that it becomes a legal user of the IP and may potentially increase revenues as a result. A classic example of this strategy is how

¹²³ See A.T. Kearney (2005b) p. 17 et seqq.

¹²⁴ See A.T. Kearney (2005b) p. 17



Pilkington, a leader in the global glass industry, entered into a joint-venture to produce its float-glass technology (to make glass perfectly flat) with Shanghai Glass Company. 125

The right side of the matrix represents products for which customer loyalty is high. Imitation is often (although not always) lethal for this group as it devalues the premium the manufacturer charges or destroys trust in the product or brand. Products in this group are goods with premium brand image. 126

Block imitation: (Importance of IP in securing revenue: high and Customer loyalty: high)

Companies can block IPR imitation by identifying and controlling core competencies or subproducts within the supply chain. Examples are e.g. the secrecy that surrounds formulas used by brands like McDonald's, KFC and Coca-Cola. However, this approach is not restricted to chemical mixes. For example, the details of critical production processes can be kept confidential by using preloaded software algorithms in any machinery that resides in an offshore manufacturing plant. Some companies protect their business by using manufacturing modules. In this approach, the company keeps critical IP in a separate location and then skips the modules to their offshore operations for final processing or assembly. Multinational firms in industries as diverse as auto parts and power equipment favor this strategy. Many firms additionally engage "professional watchers" to monitor counterfeits and trigger legal actions promptly. This is especially true for consumer goods companies because their products are often distributed over a large geographic footprint. Li-Ning, China's homegrown athletic footwear and apparel company has three full-time employees whose sole function is to track counterfeit shoe manufacturers. 127

¹²⁷ See A.T. Kearney (2005b) p. 19

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¹²⁵ See A.T. Kearney (2005b) p. 18 et seq.

¹²⁶ See A.T. Kearney (2005b) p. 19



Discourage imitation: (Importance of IP in securing revenue: low and Customer loyalty: high)

This can be achieved by raising barriers across the entire supply chain. For example, using tracking technology such as radio frequency identification (RFID) will separate genuine products from the imitations. Companies can follow up by taking legal action against customers against customers and end-users in Western countries that purchase the counterfeit products. This forces buyers in these companies to pay attention, i.e. to make sure they purchase only genuine products, and is yet another obstacle for counterfeiters. A specialty materials manufacturer, which moved all of its global manufacturing to China, has found this approach to be very effective. Another way to discourage imitation is to bundle products and services. This will increase customer loyalty and redefine the market to one that values a bundled service. Customers move away from buying the product that is easily pirated, e.g. photocopiers, to the more valuable lease maintenance service. A related approach is to use bundled warranty and maintenance programs for machinery and equipment sales. ¹²⁸

Finally, how should a firm approach the IPR issue in China? First, it should start with carefully analyzing and studying the different legal and factual strategies previously described and understanding how they might fit for their specific case. Then, the firm should take a step back and look from a holistic and strategic perspective at the firms' position and how the different strategies may fit. Using one of the tools and frameworks illustrated above or also different ones that might have been also independently developed by the firm, the company should then select the strategies it thinks fit best with the company and the IPR situation. Finally, when it comes to implementation, the recommendations and rules previously described should be carefully considered.

Although case examples have been already used in the previous pages, in the next chapter some selected best-practice cases from firms in the Chinese market will be explained in greater detail to give a better feeling for how to successfully manage the IPR risk.

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¹²⁸ See A.T. Kearney (2005b) p. 19



VI. Selected Best-Practice Examples

The following case study firms face all different IPR challenges and therefore chose different IPR protection strategies. However, they have in common that their holistic strategies have been quite successful in their efforts to combat knowledge appropriation and counterfeiting.

The Japanese company **Nintendo** illustrates how a firm can successfully use a holistic strategy to fight IPR violation in China: Already in the product development phase the company paid a lot of attention to the effective protection against pirates; i.e. considering this specific problem of the Chinese market well before it began to distribute its products in China. The company is considered to be a successful example also because its usage of the latest technology to make copying of hardware (console) and software (games) very hard. For example, it uses country codes programmed into the hard- and software so that pirated Nintendo products cannot be exported and used outside of the region where Nintendo intends to sell the product. Additionally, the firm applies a very exclusive distribution strategy in China; selling only through trusted partners. This is then combined with uncompromising legal and political actions against pirates. However, the company points out that the key to success was primarily analyzing the problem of piracy well before market entry and taking the challenges of the Chinese market very seriously. 129

The US software giant **Microsoft** is an example of a foreign company that has learned from its initial mistakes and then completely revised its strategy for IPR protection in China. In the late 1990s the company followed a strategy of head-on confrontation, seeking to protect its IPR by litigation in the courts. This led to adverse publicity and thereby alienated the Chinese officials. China's entry to the WTO brought its IPR laws in line with international standards. However, the government was able to counter Microsoft by promoting the use and development of a Chinese edition of Linux, a free operating system. Microsoft has since changed its strategy, reorienting it towards the long term and accepts that it is likely to make substantial profits in China only in 10-20 years. It has begun to take a gentler and softer approach. It also now sees China as a research and production base, and not just as a final

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¹²⁹ See Delios A. and Beamish, P.W. (2004) p. 74



market. In June 2002 the company committed USD 750 m in measures over three years to build up the Chinese software industry. The hope is that Microsoft-sponsored research programs, fellowships and university research laboratories will boost the company's public image in the eyes of future software programmers. Microsoft has established one of its world's five major research facilities in Beijing. This location will serve as an advantage for Microsoft in developing Chinese language software and enable Microsoft's researchers to access Chinese academic institutions and local software companies. With this shift the firm managed to secure contracts for computer services and software for state institutions like the police force, the Ministry of Inspection and two of the major land-line telecommunications providers, China Telecom and China Unicom. To assuage Chinese government concerns about security, Microsoft signed an agreement in late February 2003 under which officials were allowed controlled access to Windows source code and other requisite technical information. Although the shift in strategy has reaped preliminary rewards, Microsoft has a long way to go. However, with the change in long-term strategy the firm showed that it is able to learn from previous mistakes, adapt to characteristics of the Chinese market and has a long breath. Thus, Microsoft may in the long run come up as the winner in the important Chinese software market. 130

An example for IPR management in a very difficult industry is **Sony BMG**. The local music industry is nearly non-existent because of piracy – only approx. 5% of recorded music for sale in China is legitimate – and a retail environment that is not conducive to protecting IPR. Apart from blatant piracy, an additional problem was that licensees would continue to produce recordings after the license had expired, and it would be extremely difficult for the record company to get the licensee to stop. Sony BMG used to license out its content to local music companies for distribution and sale as other foreign music labels. In 2001, Sony BMG changed its strategy, setting up a Joint-Venture with the Shanghai government and stopped licensing out music to local companies. It was the first JV to invest in the Chinese music industry, taking advantage of China's WTO commitments. Its JV produces local content – Sony BMG is hoping to tap into local talent and act as a catalyst for the rebirth of the local

¹³⁰ See Wrigley, D. (2005) p. 27 et seq.



industry – distributes local content and overseas licensed content, and replicates content into various formats. Sony BMG chose Shanghai as its base because of its relatively strong legal environment, conscientious workforce (as mentioned employees can be major source of IPR losses) and trustworthy government in regard to IPR protection. The firm does not have any illusions of being able to rapidly make large amounts of money by selling music recordings in China. However, it has succeeded in getting music fans to pay around 80% more for music than the market price of USD 1. This price increase was at least an indication that consumers can be persuaded to value the content in a society where until 20 years ago nearly all media content was propaganda and free of charge. Although China poses special problems for Sony BMG, in some ways it is not unique. Record companies around the world are facing declining sales and margins for traditional business, the sales of recorded media. As a consequence they are considering new business models, for instance, revenue generated through web-based sales or artist management fees. In China Sony BMG is talking with mobile phone companies about potential new distribution channels. Such companies are large enough to be likely responsible corporate partners when it comes to IPR, unlike small retail outlets.¹³¹

Best-practice examples in the Chinese IP study of McKinsey revealed that the ten multinationals operating in the consumer electronics, medical equipment, pharmaceuticals, semiconductors and software industry use a multitude of strategies to protect their IPR. These firms reduce the chance that competitors steal their IP by carefully selecting which products and technologies to sell and manufacture in China. For fear of IP theft one pharmaceutical company withholds its most innovative, high margin drugs from the Chinese markets altogether. The company, however, is willing to introduce lower-margin products, such as mature, off-patent drugs that are sold over the counter. In another example, one large equipment manufacturer delivers the essential software with a hidden source code. Chinese engineers just plug them readily into the system. By separating functions and keeping technological details secret in this way, the manufacturer significantly reduces the possibility of an IP leak. Additionally the best-practice firms cultivate an awareness of IP and screen all job candidates for high ethical standards. One firm, for example, prefers employees with

¹³¹ See Wrigley, D. (2005) p. 29 et seq.



international experience (e.g. foreign Ph.D. for R&D scientists) and reinforces IP awareness by requiring non-competition clauses in the employment contracts for all positions. Finally, these successful firms frequently monitor the activities of their Chinese business partners for potential leaks. For instance, a high-tech component manufacturer closely scrutinizes its business partners and routinely verifies that the number of components delivered to its costumers matches the number in products subsequently sold. ¹³²

A.T. Kearney recently helped a **manufacturer of specialty materials**¹³³ to define the strategies needed to protect its business IPRs. This company was torn between ignoring the vast opportunities of the Chinese market and risking an IPR nightmare by moving all of its global manufacturing to China. Instead, A.T. Kearney helped the company to create a consistent strategy to discourage imitations so that it could move selected manufacturing to China while still limiting its exposure to risk. By raising barriers across its entire supply chain – including tracking device technologies such as radio frequency identification (RFID) – the company distinguished its products from imitations in the market. It also alerted buyers to the potential downsides of counterfeit products by raising obstacles such as legal actions that could be taken against customers and end-users. With this approach the firms managed to benefit from the Chinese market but containing the risk of IPR violation at the same time.

VII. Conclusion and Outlook

IPR protection is the most difficult challenge in the promising Chinese market. Statistics prove that billions of USD is lost to inadequate protection of patents, trademarks and copyrights. It is beyond doubt that China is the main global source of counterfeit goods. Products counterfeited in China range from motion pictures to pharmaceuticals to cigarettes, including nearly every industrial and consumer product. In recent years, China has amended its IPR laws and has modified regulations. What is looks promising is that after having focused on the improvement of the legislation, the government's focus is now shifting to enhancing law enforcement, the obvious weakness in the Chinese IPR system. Also,

¹³² See Dietz, M. C. et al. (2005) p. 6 et seqq.

¹³³ Due to confidentiality reasons the name of the client is kept secret. This case has been published in A.T. Kearney (2008).



spectacular enforcement campaigns with crackdown operations targeted towards trademark infringement (e.g. continuation of the so called "Mountain Eagle" Campaign), copyright infringement (e.g. operation "Sunshine" for audio-visual products) and towards combating infringement at trade shows (e.g. Operation "Blue Sky") have been initiated. So in summary, some noticeable improvement in a fairly short time for IPR enforcement has been made. One should consider that the noticeably improvement in IPR protection in China took the developed countries several decades and even over a century to attain.

However, despite these national anti-piracy campaigns, there is still a long way to go. In a large developing country with a population of 1.3 bn, still in part relatively backward economy, suffering from local corruption and a rather low level of inventions, creativity and entrepreneurship; the IPR protection system face multiple problems when it comes to enforcement. As elaborated in this work there is still a certain indifference of the importance of IPR in Chinese society as a whole. China has fragmenting IPR protection mechanism, lack of enforcement and tactics and there is distrust over Chinese court system.

It seems that by now the Chinese leaders have also noticed the importance of IPR. For example, Premier Wen Jiabao said, "One thing necessary to stress is to concretely strengthen IPR protection. In the new era, competition of world science and technology as well as economy is mainly competition of IPRs. Underscoring IP protection is underscoring and inspiring innovation." ¹³⁴

With the support of foreign nations a quicker success in this field may be achieved. Yu made several suggestions by which, in their case USA, can help China to change their efforts in IPR protection. Lam and Graham selected 10 suggestions out of his article that appeared most promising to them:

¹³⁴ SIPO (2008)

¹³⁵ For more information see Yu, P. K. (2002)

¹³⁶ See Lam, N. M. and Graham, J. L. (2007) p. 337 et seqq.



- 1. Abandon the coercive American IPR policy
- 2. Foster a better understanding of China by the American people by joint conferences, research awareness, etc.
- 3. Convince the Chinese leaders why IP protection will benefit China
- 4. Promote a local China IP industry
- 5. Promote individual rights and the rule of law in China
- 6. Educate the Chinese officials about IPRs
- 7. Educate the Chinese populace about IPRs
- 8. Be patient with the Chinese during the transitional period
- 9. Assist China to reform its IP laws
- 10. Develop a new and harmonized international IP regime

The suggestions have one thing in focus, which is the perception of the Chinese people and government that the IPR system imposed by the West is moral, legitimate and supportive of Chinese economic growth. The proposition has the underlying Confucian logic that a law that is perceived as moral and fair will be also respected by the people. Although this view can be seen as a little bit too idealistic, it does point out a possible way for foreign countries to actively influence the development of IPR in China. Again, like the entry of China into the WTO, a foreign impulse together with the internal motivation of the Chinese leaders, can help the Chinese IPR system to reach the level required for one of the leading economies of the world.

Nevertheless, foreign companies can do little to improve the efficacy of China's legal and administrative system. So, instead of relying on the threat of punitive legal sanctions to potential intellectual property thieves, companies can use other strategies to prevent IPR infringement from occurring. First, this means taking some basic choices in the overall business strategy and understanding the role IPR plays for the overall success of the firm.



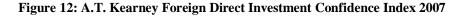
This means that it may make perfect sense for e.g. a Western niche player with a technological advantage to ignore the Chinese market at all. But once one firm decides to move operations to China it is very important to have a holistic approach for IPR protection. This means avoiding the tendency to tackle IPR protection issues in isolation from related areas of business activity, such as partner relations, international pricing and marketing policy and inventory management and to rely solely on legal and not on factual strategies. IPR considerations should be built into the decision-making process of the senior management. Following this integrated approach of IPR protection a firm may capture the benefits of the Chinese market and improve the overall global corporate performance.

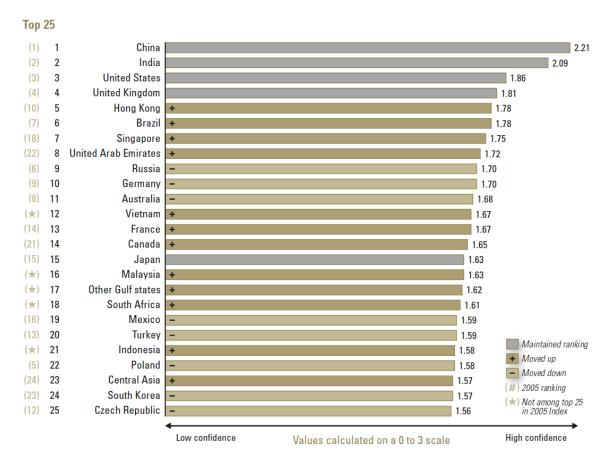


VIII. Appendix

A. China-related Excerpts from A.T. Kearney FDI Confidence Index 2007 Survey¹³⁷

In the biannual evaluation of the attractiveness for FDI, China continues to rank at the top of the 2007 A.T. Kearney FDI Confidence Index (see Figure 12). This survey is one of the most prominent of its kind. Global executives spanning six continents, 60 countries, 17 industry sectors and representing for more than 75 percent of global FDI flows were surveyed.





Despite topping the charts in FDI attractiveness, China's FDI inflows fell slightly from \$72.4 billion in 2005 to \$69.5 billion in 2006. Estimated inflows for 2007 are at \$67.3 billion.

¹³⁷ A.T. Kearney (2007)



Starting in February 2006, China's Ministry of Commerce stopped reporting deal values, hoping to keep officials from inflating deal sizes to reap bonuses. The decline, or apparent decline, in inflows may be an unintended consequence of this effort.

In the longer term, however, the government in Beijing has taken steps that should encourage future FDI. Past restrictions on foreign participation in Chinese capital and investment markets, as well as on foreign ownership of large enterprises, have loosened. The new enterprise income tax law, which took effect on January 1, 2008, replaces the different tax rates for foreign and domestic companies with one common rate of 25 percent. Tax incentives for venture capital and social investment were also announced in 2007. These changes will likely help to reduce the "round-tripping," or double-counting, of domestic Chinese capital which refers to "FDI" first sent through tax havens such as Hong Kong and later reintroduced back into the country as FDI —inflating Chinese investment figures. Beijing has also instituted new rules that should allow greater access for foreign banks to operate in its capital markets. UNCTAD, in its Investment Brief No. 2, published in 2007, estimates that FDI inflows to the financial sector grew nearly fourfold from 2004 to 2005, and that FDI in real estate was nearly \$8.8 billion, or more than 10 percent of total inflows and an estimated 15 percent of the total Chinese real estate market. Major financial institutions such as Citigroup have begun acquiring assets in the prime markets of Shanghai, Guangzhou and Beijing. Merrill Lynch targeted \$30 million for a residential project in Nanjing, and Hutchison Whampoa shifted \$5 billion into investments in several major Chinese cities.

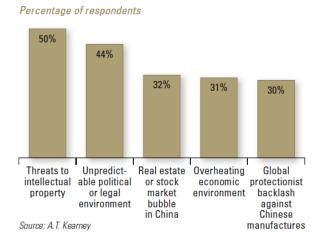
This flurry of investments has raised fears of an asset bubble. To dampen such fears, the government began in 2006 to restrict foreign investment in Chinese real estate markets, part of a broader series of moves designed to rein in the overheating credit market. Whether it can maintain these restrictions in the face of regional pressures from Shanghai and other cities to attract foreign direct investment is unclear. Shanghai announced in May 2007 that it would loosen some of Beijing's restrictions on foreign property ownership to avoid discouraging foreign investors.

The effects of China's changing banking regulations, stemming from its commitment under the WTO to liberalize the banking sector, are already visible. Financial services sector



investors rank China as their top FDI destination. Indeed, 2006 marked significant foreign investment in the Chinese financial services sector, even as investment in traditional manufacturing and textiles sectors remained flat. Among the investors were HSBC and Citigroup. Each received permission from the government to incorporate domestically and tap into Chinese savings. ABN Amro, Bank of East Asia and Hang Seng Bank have also entered the market. As China continues to open its domestic financial markets to foreign firms, investment in the financial sector should accelerate.

Figure 13: Top risks to further investments in China during the next five years



Of the respondents whose firms are invested in Asia, nearly two-thirds include Chinese assets in their FDI portfolio. Wholly owned enterprises in China are preferred by a nearly two-to-one ratio over either equity or contractual joint ventures with Chinese firms. Greenfield investment is less common, however, and is the favored mode of entry of only 7 percent of respondents.

While investors' attitudes toward China are generally positive, several drawbacks were noted. Intellectual property rights remain a concern for 50 percent of investors in China (see Figure 13). The political and legal regime, in a state of flux as it attempts to adapt to China's rapidly changing economy, concerns 44 percent of respondents. Meanwhile, the symptoms of an overheating economy – a real estate bubble and a tight market for high-skilled Labor – concern 32 percent and 31 percent of respondents respectively. Thirty percent of respondents



with investments in China noted the foreign protectionist backlash against Chinese manufactures, and troubles with adulterated raw materials have received wide publicity.

B. Interview with Meiting \mathbf{Zhu}^{138} , German Lawyer and Expert on \mathbf{IPR} in \mathbf{China}^{139}

Ms Zhu, China has the reputation that the majority of legal infringements are in the area of intellectual property. What in your opinion are the reasons for what we might consider to be a lack of respect for the law?

Many people claim that what is to some extent unrestrained product piracy in China has cultural roots, because product piracy is "Confucian" in character. Copying an "old master" is done as a mark of respect, and certainly not in order to break the law. In my opinion this explanation is insufficient. It makes more sense to trace infringements of intellectual property rights back to the fact that China's economy is currently still in a phase in which it is moving away from the old planned economy, and trying out the new market economy. Up to the opening of China 30 years ago the state-run economy left little room for private initiative. Private individuals who sought to make a profit were deemed to be immoral, and sometimes what they did was illegal. However, the economic reforms at the end of the 1970s unleashed an enduring mood of optimism. The private striving for profit was suddenly no longer anathema, and has now become the most important item on the agenda. In contrast to this the importance of the rule of law has receded into the background. In China neither the holders nor the violators currently perceive intellectual property rights to be worthy of protection.

The activities of private medium-sized and small businesses in the Zhejiang region are a typical example of this. As in many towns and cities, numerous companies which specialize in making a certain product, for example, ties, pens or socks, or a range of products such as iron or leather goods, have been set up here. The concentration of similar companies in one

¹³⁸ Meiting Zhu specializes in commercial legal protection in Germany and China. In addition to her legal advisory work she gives lectures on the subject of "Protecting Intellectual Property in Germany and China" at corporations and industry associations in both countries

¹³⁹ Interview was published in Sohm, S. et al. (2009) p. 76 - 81



place makes it possible not only to lower costs, but also to copy one another. If it becomes apparent that a product is selling really well, the companies immediately begin to imitate it en masse. All this is reminiscent of the typical way of doing things in the early years of the industrial revolution, when people imitated and copied each other in a completely unrestrained manner. This comparison does not of course justify acts of imitation, but it may help to explain why they happen.

How has the legal framework for the protection of intellectual property rights in China developed?

The legal framework for the protection of intellectual property rights was created in the PR China in the middle of the 1980s and at the beginning of the 1990s. The Trademark Law was promulgated in 1983, the Patent Law in 1984, and the Copyright Law in 1990. Finally, in 1995 these were followed by the Law against Unfair Competition. Since then, these laws have been refined step by step. The most important reforms of the laws concerning intellectual property rights, which affected the Copyright Law, the Trademark Law, and the Patent Law, occurred before China joined the World Trade Organization (WTO) on 11 December 2001. China had to introduce them in order to be in compliance with the Agreement on Trade Related Intellectual Property Aspects (TRIPs). In addition to the legislation itself, China is faced with the task of establishing or remodeling the judiciary and the administration for the enforcement of intellectual property rights on the lines of the TRIPs principles -"transparency" and "predictability." It is a tremendous task, very time-consuming, and work is still in progress to this day. In China people often quote a statement made by the former secretary general of the World Intellectual Property Organization (WIPO), Arpad Bogsch, who praised China because, with regard to the protection of intellectual property, it has traversed the path within 25 years for which the industrialized nations needed more than 100 years. In my opinion, western countries, with their head start of several decades in dealing with property rights, should be aware of the fact that what they consider to be self-evident principles when it comes to dealing with intellectual property rights cannot be applied to China or implemented without further ado.



In China membership of the WTO has accelerated the transformation process from a planned to a market economy and intensified China's relations with other countries. What effect has this had on the development of the protection of intellectual property?

As a result of membership of the WTO the protection of intellectual property has become far more important both in China and abroad. Since then Chinese courts have dealt with about 15,000 civil cases, more than 3,000 criminal cases and about 500 administrative cases annually in the area of intellectual property rights. About 80 per cent of these cases are concerned with violations of property rights, whereas cases with references to other countries, for example in which a foreign party is involved, amount to about 5 per cent.

At the same time the number of lawsuits against Chinese companies abroad, especially in the U.S. and in the countries of the European Union, is on the increase. For example, in April 2007 the U.S. government instigated a WTO lawsuit relating to copyright violation against China on an institutional level. On a private level the number of lawsuits against Chinese companies in other countries has increased dramatically. In the electronics industry alone (above all for DVDs, televisions, mobile phones and MP3 players) Chinese companies have paid more than one billion US dollars in damages on account of violations of intellectual property rights between China's accession to the WTO and 2007. Whereas it is true that there are no precise official statistics about lawsuits against Chinese companies in other countries, the very fact that the Chinese government, in the "Action Plan on IPR Protection 2007," envisaged the provision of a hotline and an online service platform for companies which are affected by claims for damages, makes clear how serious the situation is.

Can you name examples of where legal rulings on intellectual property in China and Germany resemble each other, and where there are differences which might explain the way in which Chinese companies deal with intellectual property rights in other countries?

There are similarities and there are differences. For example, the application procedure for patents in China is similar to the German one. However, in contrast to Germany the word "patent" ("zhuan li") is construed both as an inventor's patent and also as protection for utility models and industrial design.



Obtaining trade mark rights is also different in the two countries. In China trademark protection can be obtained only by means of an entry in the trade mark registry and not, as in Germany, on account of prevalent use.

The differences in the law relating to industrial design are often a source of legal disagreement. For example, when evaluating the danger of confusing a product, it is of decisive importance in both China and Germany whether or not the overall aesthetic impression of the product under attack is identical or similar to the design. However, the essential difference is how the product which violates a design is put on the market. Including such products in a product catalogue or exhibiting them at a trade fair does not in itself constitute a violation of the design and is not illegal in China. One is breaking the law only when it has been demonstrated that the advertising is intended to promote the sale of a certain product. For this reason, for example, many Chinese exhibitors at trade fairs believe that merely advertising the protected products of a third party does not represent a violation of the law. Thus they are often very surprised when in Germany this leads to a cease-and-desist order.

What are the differences between the two countries when it comes to enforcement, and where does China stand on its way towards creating effective legal protection?

Enforcing intellectual property rights in China is considerably different from the usual kind of enforcement in Germany. A telling example of this is the temporary injunction procedure. In Germany it is indispensable in the field of commercial legal protection, whereas in China it is used only reluctantly. This is partly due to the fact that temporary legal protection was first introduced when China joined the WTO and many holders of rights are still unfamiliar with this legal instrument.

In China, in contrast to Germany, the administrative agencies have traditionally played an important role in the protection of intellectual property. Together with the courts they form the so-called "dual system." When intellectual property rights have been infringed upon, holders of rights as a rule turn to the administrative agencies, since in the investigation and enforcement of claims for protection they can do far more than a private person or a company.



It is partly for this reason that the U.S. is asking China to make greater use of the administrative agencies in the fight against the infringement of intellectual property rights. However, there is still legal insecurity about how administrative decisions are implemented, how competences are distributed and what discretionary powers can be used. Furthermore, there is the fact that the resources of the administrative agencies are limited. As a result the enforcement of administrative decisions continues to be a problem. Further proof of the ineffective nature of the administrative agencies is afforded by the fact that in poorer regions or in the Chinese hinterland one has to fight local protectionism when attempting to enforce intellectual property rights. Besides, Chinese authorities can annul claims for compensation if they have initiated administrative action on the basis of incorrect information. On account of the uncertain chances of success of action taken against a violator, the authorities insist on high standards in regard to the evidence. For the holder of the rights this can mean that the burden of proof is considerable.

Cooperation between the institutions on the one hand and the executive and the judiciary on the other still needs to be improved in order to reinforce intellectual property rights in China throughout the country.

Chinese companies are embarking on more and more international business partnerships, are keen on establishing themselves in foreign markets under their own name, and are trying to improve their image. How would you assess these aspirations in the light of the lamentable subject of "product piracy"?

In the foreseeable future intellectual property rights will have a similar position in China as in the industrialized nations. Many companies have already recognized that cheap imitation leads nowhere. Export-oriented companies in particular have learned the hard way in other countries. The number of applications for the protection of industrial design rights within China and in other countries continues to grow. It is also noticeable that Chinese companies are beginning to defend themselves in other countries against charges of breaking the law. At the moment the number of lawsuits in Germany initiated by Chinese holders of rights is still small. However, I believe that it is more than likely that in the foreseeable future China will also begin to play a more active role in this area. In China, in my opinion, it is only a question



of time until an awareness of what is legal and illegal in regard to intellectual property rights develops and becomes firmly established.



CV

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Erklärung / Declaration

Ich erkläre hiermit, dass ich die vorliegende Arbeit ohne fremde Hilfe und ohne Benützung anderer als der angegebenen Hilfsmittel verfasst habe.

Ort, Datum: Düsseldorf, 28.08.2009

I hereby declare, that this work was compiled without the help of other persons and without the use of any sources other than those cited.

J. H.C.

Location, Date: Düsseldorf, 28.08.2009

Unterschrift/ Signature: