



**INTELLECTUAL PROPERTY
RIGHTS CHALLENGES
FACING FOREIGN AND
CANADIAN COMPANIES
IN CHINA:
A SURVEY OF THE
LITERATURE**

Asia Pacific
Foundation
of Canada

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Canada



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Executive Summary

Despite recent improvements in China's regulatory environment, an examination of empirical cases in China suggests that intellectual property (IP) issues continue to be a major problem for most foreign companies.

Although a legal framework to protect patents, trademarks, and copyright is largely in place in China, infringement remains common. Patent protection covers products and methods featuring practical, inventive, and novel technical innovation,¹ and infringement typically occurs when a company or an individual manufactures or sells patented products or uses patented processes without the patentee's permission. Trademarks, which protect brands, are relevant to almost all businesses operating in China and are also widely infringed by mimickers hoping to exploit the reputations of established brands in order to boost sales of their own goods and services. Copyright protects various creative works and infringement is widespread as internet innovations allow for cheap and convenient peer-to-peer sharing of films, music, and other works throughout China without the permission of the authors. Trade secret protection is in a category of its own. The lack of a unified legal framework makes protection extremely difficult. Trade secrets are often misappropriated when employees disclose confidential information to a firm's competitor.

Aside from these common types of infringements, IP-related challenges also emanate from China's indigenous innovation policies. Indigenous innovation requirements force foreign firms to conduct research and development (R&D) or to develop their technology in China and then register their IP in China before they can qualify for government procurement bids. Technology transfer continues to be a requirement for market access. These requirements increase the vulnerability of foreign firms to the theft of their intellectual property. In addition, efforts by the Chinese government to establish domestic technical standards signify that foreign firms seeking to manufacture for the Chinese market not only need to pay domestic firms hefty fees in royalties for the use of standards, but also may experience a decrease in their competitiveness as they incur greater costs associated with meeting both global and Chinese standards.

Cultural, institutional and technological factors explain why Canadian and other foreign firms in China continue to have their IP compromised. Culturally, China's historical traditions continue to shape attitudes toward the ownership of knowledge and information. Both Confucianism and Maoist thought do not perceive knowledge as a form of private property. Institutional factors that stem from political and legal weaknesses account for some challenges in enforcement. Although the central government introduced IP laws, the fragmentation between the central and local governments and among different ministries hinders the effective implementation of IP laws. Moreover, China's judicial system continues to lack independence, as many judges are political appointees without the technical knowledge needed to try IP-related cases. Weaknesses in the legal system have also allowed local courts to exercise a local bias toward Chinese companies. Furthermore, damages awarded by Chinese courts are typically so low that they do not cover the costs of bringing IP cases to court, and the benefits of winning a lawsuit thus are outweighed by its costs. Institutional barriers can also be observed in the challenges of finding a trustworthy and competent business partner in China. Although conducting this due diligence is crucial in doing business in China, it is hindered in part by new laws that restrict the gathering and publicizing of sensitive information. Finally, technological developments such as advancements in transportation and communication and the advent of the internet have facilitated the sale of counterfeit goods while increasing the anonymity of intellectual property rights (IPR) infringers.

¹ The use of the term 'technical innovation' is to differentiate this form of patent from design patents. Therefore, the focus of patents is on technical and practical innovation.

Despite challenges in enforcement, there are measures that firms may take to protect their IP. For example, firms may litigate under administrative, judicial, customs, and criminal law frameworks according to the circumstances of each situation. Firms also often implement non-legal strategies at the company level. These strategies can be further categorized into internal and external company policies and include the following:

- Adequate preparation;
- Price discounting;
- Technological specialization (incorporating such a high degree of technological complexity in products that they will be difficult to imitate);
- De facto secrecy;
- In-house investigations;
- Training company employees and building trust;
- Consumer education;
- Cultivating strong partnerships with local Chinese partners;
- Cultivating networks or relationships; and
- Seeking assistance from foreign governments.

I. Introduction

A. IPR Obstacles to Canadian Businesses in China

For decades, China has been seen as the site of one of the world's worst intellectual property rights (IPR) offenders.² Canada's industries and trademark products are directly affected by these IPR violations. Consumers can buy fraudulent "Made in Canada" Wayne Gretzky hockey jerseys in the markets of Shanghai, and BlackBerry has faced competition from the provocatively named "BlueBerry," a clear knock-off of its BlackBerry line of handheld devices.³ Foreign firms, which shared their technologies as part of their early partnership agreements with Chinese companies, have all too often found themselves competing with their prior partners at a later date.⁴

The constant risk of infringement affects the profitability of foreign businesses operating in China. Not only do firms incur additional legal costs in an effort to protect their IP, but they also need to devote a considerable amount of time and human resources to pre-empt and defend themselves against possible infringement. For these reasons, some companies forgo the Chinese market entirely, choosing instead to focus on the North American market rather than exploring potentially lucrative opportunities in China.⁵

Not surprisingly, surveys of foreign companies operating in China reveal that one of the consistently identified challenges they face is the weak and irregular enforcement of IPR rules and regulations.⁶ A 2012 survey of Canadian businesses engaged in China finds that Canadian businesses consider IPR issues to be a central concern, and "rule of law" issues to be their greatest barriers to doing business in China.⁷ This finding distinguishes Canadian businesses from their United States and German counterparts, which view constraints on human resources as their biggest challenge, and from British and Swiss businesses, which cite global growth as their biggest challenge.⁸

B. Objectives of the Project

In this project, the Asia Pacific Foundation of Canada (APF Canada) worked collaboratively with Industry Canada to identify the major business challenges facing Canadian firms in China, especially related to IPR, and to highlight the ways that firms have been able to successfully navigate the changing IPR environment. This joint research partnership will facilitate Industry Canada's efforts to assist Canadian companies that are entering the

² Clyde Farnsworth, "China Called Top Copyright Pirate," *The New York Times*, April 20, 1989; Kathrin Hille, "Rising Sales Lost to China Piracy Spur Criticism," *Financial Times*, October 25, 2011.

³ Lara Farrar and Yang Wanli, "Blacker than BlackBerrys," *China Daily*, December 24, 2009, accessed February 28, 2014, http://www.chinadaily.com.cn/life/2009-12/24/content_9224691.htm; Andy Hoffman, "Exposing Counterfeits, Pirated Goods and Fakes," *The Globe and Mail*, October 13, 2010, accessed March 5, 2014, <http://www.theglobeandmail.com/report-on-business/exposing-counterfeits-pirated-goods-and-fakes/article4210712/>.

⁴ Massey, Joseph A., "The Emperor Is Far Away: China's Enforcement of Intellectual Property Rights Protection, 1986-2006," *Chicago Journal of International Law* 7.1 (2006), 231-7; *USCBC 2013 China Business Environment Survey Results*, (Washington: US-China Business Council, 2013.)

⁵ Interviews of Canadian practitioners and company representatives, February-April 2014.

⁶ Massey, Joseph A., "The Emperor Is Far Away: China's Enforcement of Intellectual Property Rights Protection, 1986-2006," *Chicago Journal of International Law* 7.1 (2006), 231-7; *USCBC 2013 China Business Environment Survey Results*, (Washington: US-China Business Council, 2013.)

⁷ Asia Pacific Foundation of Canada, "Canadian Businesses in China Survey 2012," 3.

⁸ *Ibid*, 3.

Chinese market or are already operating in China to prepare appropriate IPR strategies.

In order to achieve the goal of enhancing Canada's understanding of intellectual property issues in China, the project examines the following key issues:

1. IPR-related challenges encountered by foreign and Canadian enterprises in China;
2. The causes of IPR challenges; and
3. Successful examples that could point to best practices for mitigating or eliminating these challenges.

The project is composed of two major phases. In the first phase of the project, APF Canada delivered a literature review which provides a summary of major IPR issues that foreign companies are facing in China by drawing on Canadian, Chinese, and international publications related to IPR. The literature review also incorporates results from interviews with practitioners, IP lawyers, and Canadian company representatives with substantial experience dealing with IP issues in China.

In the second phase of the project, APF Canada will conduct a survey of Canadian firms that are active or interested in the Chinese market. Three sources will be used to identify the sample of companies:

- Members and contacts of the Canada China Business Council and equivalent organizations;
- Canadian Trade Commissioner's Offices in China; and
- Canadian firms drawn from Industry Canada's public database.

II. China's Evolving IP Regime

Although some observers will continue to characterize China as the “world’s worst IP infringer,”⁹ there are some recent indications that the regulatory environment in China may be changing. While China’s patent system was non-existent before the 1980s, invention patent applications in China experienced an average annual growth of 17.7% from 1986 to 2007, outpacing average growth in GDP of 10% during the same period.¹⁰ China overtook the United States and Japan to become the world’s top patent filer in 2011. Despite this seemingly impressive achievement, the volume of patents filed must be differentiated from the volume of patents granted. The percentage of patents granted is still lower compared to the US, Japan and European countries. A distinction must also be made between resident and non-resident patent filings. Although 535,313 resident patent applications were made in 2012, less than 27% were granted. On the other hand, more than 62% of non-resident patent applications were granted.¹¹

Nevertheless, figures provided by the World Intellectual Property Organization demonstrate China’s active participation in IP filings:

- 561,377 patent applications (resident and abroad) were filed in 2012, up from 14,159 in 1998.
- 1,605,143 trademark applications (resident and abroad) were filed in 2012, up from 134,335 in 1998.
- As of 2012, a total of 875,385 patents are in force in China, which ranked third globally. In 2005, only 182,396 patents were in force.
- China ranked first globally in terms of resident (1,502,540 filed, 919,951 granted) and non-resident (117,338 filed, 75,173 granted) trademark applications and registrations.¹²

China is now also considered the most IP-litigious country in the world, with almost 350 IP disputes filed every day in 2012, 98% of which were between Chinese parties.¹³ In 2012, there was a 46% increase in the number of civil IPR cases (a total of 87,419 cases) compared to the previous year. Copyrights and trademark cases showed an increase of 53% while the number of patent cases grew by 24%. Criminal enforcement cases experienced a sharp increase as well, with the number of criminal IP cases tried through judicial adjudication growing by 130%.¹⁴ This increase in litigation, driven primarily by local parties, seems to contradict the misconception that IP cannot be protected in China and that infringers cannot be stopped. As China ‘catches up’ technologically and more domestic firms develop their own technology, domestic pressures for the government to increase protection for IP are likely to intensify.¹⁵ Although it is yet unclear how long this process will take, it is evident that in the near future, the biggest source of pressure for stronger IP rules may originate internally rather than externally.

9 Richard Suttmeier and Xiangkui Yao, “China’s IP Transition: Rethinking Intellectual Property Rights in a Rising China,” *The National Bureau of Asian Research Special Report*, no. 29 (July 2011): 21.

10 Hu Angang, *China in 2020: A New Type of Superpower* (Washington, DC: Brookings Institution, 2011), 95–105.

11 Lee Chyen Yee, “China Tops US, Japan to Become Top Patent Filer,” *Reuters*, December 21, 2011, accessed March 3, 2013, <http://www.reuters.com/article/2011/12/21/us-china-patents-idUSTRE7BK0LQ20111221>.

12 “Statistical Country Profiles: China,” *World Intellectual Property Organization*, last modified March 2014, accessed March 5, 2014, http://www.wipo.int/ipstats/en/statistics/country_profile/countries/cn.html.

13 David Bloch, George Chan and Euan Taylor, “Chinese Intellectual Property Litigation,” in “Doing Business in China,” edited by Michael Moser and Fu Yu, (New York: Juris Publishers, 2014), 10.6.01-10.6.02.

14 “Supreme People’s Court Annual Report Shows Continued Meteoric Growth in Litigation and Increasing Professionalism of the Court,” *China IPR*, April 25, 2013, accessed March 3, 2014, <http://chinaipr.com/2013/04/25/supreme-peoples-court-annual-report-shows-continued-meteoric-growth-in-litigation-and-increasing-professionalism-of-the-court/>.

15 Suttmeier and Yao, “China’s IP Transition,” 6.

Improvements in China's IP regime have not gone unnoticed by Canadian practitioners and company representatives interviewed for this project. One company representative described China's IP legislation as being "more advanced than Canada's," while another practitioner emphasized the availability of Chinese legal counsel and expertise. Some companies even declared that it was easier to prosecute in China than in Canada.¹⁶ Yet improvements in China's IP regime and changing local attitudes toward IP may not necessarily equate to better conditions for foreign stakeholders. A fixation on quantity rather than quality fails to reflect inconsistency in patent examination procedures and the high number of low-quality patents, including petty patents and junk patents, being granted.¹⁷ Many of these patents involve only small improvements or take the form of utility models and design patents, which have lower thresholds for inventiveness and require no substantial examination.¹⁸ An overreliance on quantitative measures and quota-like metrics has led to observers describing China's patent strategy as an "innovation-by-the-numbers mentality, much like a student who equates knowledge with scores on standardized tests."¹⁹

Changing attitudes among domestic firms also suggest that Chinese firms may start 'playing the game' and use IP protection laws against foreign companies. Such trends have already started to emerge as the case between Burberry and the Chinese brand Polo Santa Roberta would suggest. In 2013, Lubida Polo Production, the owner of the Chinese brand Polo Santo Roberta won a nine-year trademark dispute after arguing that Burberry's check pattern is not a valid trademark as it is simply a geometric pattern.²⁰ An interview with a Canadian practitioner also indicated that a number of Chinese companies are now suing Canadian firms for IPR infringement.²¹

As of present, the long-term implications of these developments remain unclear. While the evolution of China's legal framework on IP raises cause for optimism, an examination of empirical cases on the ground suggests that IP continues to be a major problem for most foreign companies. The legal framework also suffers from uneven development, with more progress achieved in the field of patents, trademarks and copyright than in legislation protecting trade secrets. Despite these existing problems, it is nevertheless possible for foreign firms to adopt legal and non-legal strategies to protect their intellectual property. Ultimately, China's future trajectory will depend not only on the willingness of the Chinese government to continue to institute reforms of the IP regime, but also the ability of local governments to implement these reforms. It will also depend on the degree to which domestic firms adjust their behavior in response to changes in China's IP regime.

16 Interviews of Canadian practitioners and company representatives, February-April 2014.

17 Suttmeier and Yao, "China's IP Transition," 14.

18 "Patent Applications Surge in China but Quality Remains Low," *People's Daily*, April 25, 2013, accessed April 19, 2014, <http://english.peopledaily.com.cn/90778/8223010.html>.

19 Steve Lohr, "When Innovation, Too, is Made in China," *New York Times*, January 1, 2011, accessed March 3, 2014, http://www.nytimes.com/2011/01/02/business/02unboxed.html?_r=0.

20 Yang Jie, "Why Burberry is Fighting for its Tartan Trademark in China," *Wall Street Journal: China Real Time Report*, September 28, 2013, accessed March 3, 2014, <http://blogs.wsj.com/chinarealtime/2013/11/28/burberry-fights-fo-its-tartan-trademark-in-china/>.

21 Additional details cannot be provided aside from this observation. Interviews of Canadian practitioners and company representatives, February-April 2014.

Key Points: China's Evolving IP Regime

- China's IP regime has experienced significant improvements. China is now considered the most IP-litigious country and top patent-filer in the world.
- Despite improvements, patent examination procedures remain inconsistent. A high number of low-quality patents (i.e. petty patents and junk patents) are being granted.
- The biggest source of pressure for stronger IP rules may originate internally as China 'catches up' technologically and more domestic firms develop their own technology.
- Changing attitudes toward IP may not necessarily equate to better conditions for foreign stakeholders. Chinese firms may also start 'playing the game' and use IP protection laws against foreign companies.

III. Canadian Businesses in China

China presents a unique array of challenges and opportunities for Canadian businesses, according to the APF Canada's 2012 report, *Canadian Businesses in China Survey*. Three major categories of engagement emerged from the 211 participating businesses: 38% export to China; 24% had operations in China; and 20% had no business in China, but were interested in the market.²² The survey showed that most Canadian businesses have only recently engaged China, with 55% of businesses having 10 years or less of experience doing business in the country and only 19% having more than 20 years of experience.²³

The majority of Canadian business establishments are located in either Beijing or Shanghai, and most of these businesses are small- and medium-sized enterprises (SMEs), with 58% of respondents reporting gross global revenues under CAD\$10 million.²⁴ 75% of these China businesses were deemed profitable in 2012, and for 74% of these businesses, business revenue from China accounted for less than 25% of total business revenues.²⁵ In terms of difficulties in engaging China, 39% of Canadian businesses reported that doing business in China was somewhat more difficult than conducting business elsewhere, while 31% indicated that doing business in China was much more difficult.²⁶ Respondents' top five major challenges were:

1. Intellectual property rules and practices in China;
2. Inconsistent interpretation of regulations/laws in China;
3. Weak dispute settlement mechanisms;
4. Lengthy/complicated certification; and
5. Chinese tariffs and other border barriers.²⁷

It is worth noting that in similar surveys conducted in 2012, among American, British and European companies, intellectual property issues have not been included among the top five challenges in doing business in China (see Table 1). However, many of the challenges they have encountered point to a problematic political system and a weak legal system that decrease the Chinese government's ability to enforce IP laws. Moreover, similar surveys conducted in 2010 indicated that companies from the European Union regarded IPR protection as the third major challenge, while German companies considered intellectual property issues as their top obstacle.²⁸

Conversations with Canadian practitioners who have experience dealing with IP issues in China suggest that the challenges that Canadian companies encounter in China with regard to IP are not different from their foreign counterparts, particularly those from other common law jurisdictions. The nationality of the firm does not have any impact on the frequency and scale of IPR infringement. Differences in the perception of challenges may, however, be explained by the size of the firm. Given that a substantial proportion of Canadian companies in China are SMEs, they tend to see themselves as more vulnerable to infringement and as having less access

22 Asia Pacific Foundation of Canada, "Canadian Businesses in China Survey 2012," 8.

23 Ibid, 9.

24 Ibid, 10-11.

25 Ibid, 13-14.

26 Ibid, 16.

27 Ibid, 17.

28 Ibid, 18.

to legal, financial and political resources to protect their IP.²⁹ A Canadian company representative provided a second explanation by noting the lack of experience among Canadian companies, as their experience of doing business internationally has largely focused on the North American market. Thus, many Canadian companies have inadequate flexibility and know-how to adapt to other foreign markets and cultures.³⁰

Table I. Major Challenges Encountered by Other Foreign Firms in China in 2012³¹

Ranking	American	British	European Union
1	Management-level human resources constraints	Global economic slowdown	Unequal implementation of the law and the laws themselves
2	Inconsistent regulatory interpretation/unclear laws	Increased Chinese competition	Over-reliance on fixed asset investment and exports
3	Non-management-level human resource constraints	Labour costs	Failing to move up the value chain
4	Difficulty obtaining required licenses	Inconsistent regulatory interpretation	The slow development of the service industry risk stifling economic development
5	Corruption	Increased bureaucracy	Decline in labour supply

Canadian respondents indicated that optimal strategies to overcome difficulties in China include the following:

- Having a Chinese partner to handle any problems that might arise (28%);
- Getting advice from individuals in Canadian communities who are knowledgeable about China (11%); and
- Building close relationships with Chinese government officials (11%).³²

²⁹ Interviews of Canadian practitioners and company representatives, February-April 2014.; Discussions during an executive roundtable hosted by the Asia Pacific Foundation of Canada, March 2014.

³⁰ Interviews of Canadian practitioners and company representatives, February-April 2014.

³¹ Asia Pacific Foundation of Canada, "Canadian Businesses in China Survey 2012," 18.

³² Ibid, 19.

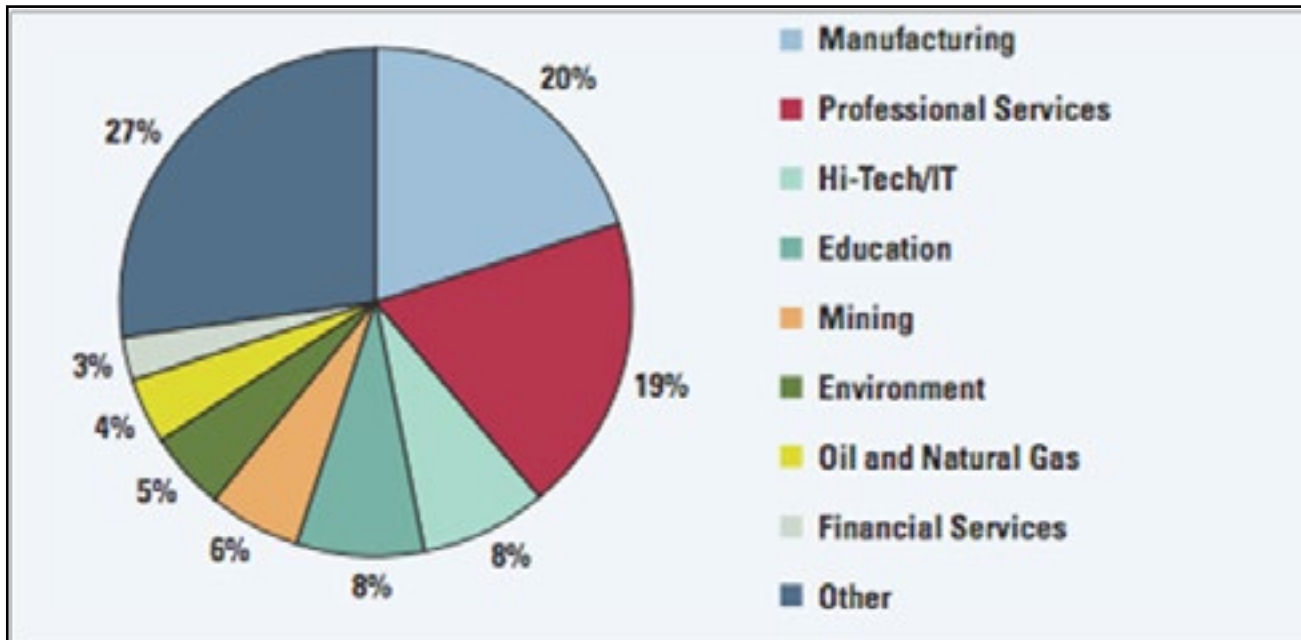


Figure I. Canadian Businesses' Involvement in China by Industry³³

The particular difficulties Canadian businesses have encountered with China's IP regime and related enforcement and dispute settlement issues highlight the centrality of IP issues. However, despite its significance, there continues to be inadequate effort to study the issue in a comprehensive and systematic manner. To date, there have been very few articles and case studies on IP challenges in China written specifically from a Canadian perspective. In addition, Canadian company representatives have been mostly unwilling to participate in interviews discussing IP issues that they have encountered in China. While the reasons for their unwillingness to participate remain unclear, a number of hypotheses are possible based on the researchers' observations.

First, IP-related information may be considered sensitive. Due to the fear of potential information leakage to their competitors, some companies may be uncomfortable sharing their experiences and strategies related to IP. Moreover, some companies may not wish to speak out against Chinese regulations for fear of being targeted by the Chinese authorities. Given that the majority of Canadian companies in China are SMEs, they will not have the same bargaining leverage and recourse in protecting themselves as large multinational enterprises.

Second, there is a lack of incentives for companies to participate. Companies may fail to realize that participation may result in policy changes that will impact the way they conduct business in China. The lack of clear financial incentives also reduces the motivation for representatives to spend time on the interview instead of engaging in other business activities.

Third, IP may not be relevant in all cases. Although project researchers had access to a large database of companies doing business in China, it was a challenge to distinguish IP-intensive companies from non-IP companies.

Because of the insufficiency of available data, the conclusions we have reached need to be verified through further investigation in the second phase of the project.

Key Points: Canadian Businesses in Canada

- Most Canadian businesses seem to have only recently engaged China. 55% have 10 years or less of experience doing business in China. Most Canadian businesses in China are SMEs. 58% reported gross global revenues under CAD\$10 million.
- In 2012, Canadian firms reported IP issues as the top challenge to doing business in China. In similar surveys, IPR protection was not included among the top five challenges in doing business in China for American, British, and other European firms.
- Conversations with Canadian practitioners suggest that IPR challenges Canadian companies encounter in China are not different from other foreign firms. Differences in perception may be explained by company size and lack of experience.
- Despite the centrality of IP issues to Canadian businesses in China, there continues to be inadequate effort to study the issue in a comprehensive and systematic manner. Very few articles have been written from a Canadian perspective.

IV. IPR Challenges to Foreign and Canadian Businesses in China

Challenges that foreign and Canadian businesses encounter in China can be classified into two main categories. The first category consists of common types of violations of IP law – infringements on patents, copyrights, and trademarks, and trade secret misappropriation. The second category of challenges relates to China’s policies promoting indigenous innovation. While these policies may not be directly linked to IPR infringement, they may significantly increase the vulnerability of foreign companies to IPR infringement.

A. Types of IPR Infringement in China: Protection and Challenges

Different types of IP present different barriers and infringement issues in China. The volume of counterfeit goods is extremely high: from 2008 to 2010 almost 70% of counterfeit goods seized globally came from China.³⁴ Infringement of trade secrets is also a major concern. In 2013, 40% of respondents to a United States-China Business Council member company survey indicated that infringement of trade secrets was their greatest IPR infringement concern, followed by fears of infringement of trademarks (27%), patents (20%), and copyrights (8%).³⁵ In the case of China’s software market, the market for illegal software sold in China is US\$9 billion (CAD\$9.5 billion) versus a meager US\$3 billion (CAD\$3.17 billion) for legal software.³⁶

At the same time, companies do not need to have a physical presence in China to be susceptible to IPR infringement. Estimates from Public Safety Canada indicate that the Canadian black market for counterfeits and pirated goods amounts to more than CAD\$30 billion a year.³⁷

I. Patents

a. Nature and Scope of Patent Protection

The *Patent Law* of the People’s Republic of China, amended for the third time on October 1, 2009, establishes the general law on patents in China in conjunction with the *Implementing Regulations of the Patent Law of PRC*.³⁸ China is a member of the Patent Cooperation Treaty, the Paris Convention, and the Agreement on

34 Mark Turnage, “A Mind-Blowing Number of Counterfeit Goods Come from China,” *Business Insider*, June 25, 2013, <http://www.businessinsider.com/most-counterfeit-goods-are-from-china-2013-6>.

35 US-China Business Council, “Recommendations for Strengthening Trade Secret Protection in China,” September 2013, 2, accessed March 5, 2014, <https://www.uschina.org/sites/default/files/2013.09%20USCBC%20Recommendations%20for%20Strengthening%20Trade%20Secret%20Protection%20in%20China.pdf>.

36 Paul Mozur, “Microsoft Retools in Fight Against China Pirates,” *Wall Street Journal*, December 13, 2012, <http://blogs.wsj.com/chinarealtime/2012/12/13/microsoft-retools-in-fight-against-china-pirates/>.

Conversion from US dollars to Canadian dollars is based on the Bank of Canada rates for April 17, 2014, at an exchange rate of 1.0998 using a cash rate of 4%.

37 “Federal Government Studying \$30 Billion Counterfeit Market,” *Toronto Star*, November 1, 2013, accessed March 15, 2014, http://www.thestar.com/news/canada/2013/11/01/federal_government_studying_30_billion_counterfeit_market.html.

38 “The *Patent Law* of the People’s Republic of China,” *State Intellectual Property Office of the PRC*, last amended December

Trade-Related Aspects of Intellectual Property Rights (TRIPS).³⁹ China's patent system is first-to-file, offering three types of patent registration: (1) invention patents, (2) utility model patents, and (3) design patents. Each patent type offers different terms of protection, but all applications generally follow a similar process:

- (1) Preliminary examination;
- (2) Publication and substantive examination for invention patents;
- (3) Voluntary amendments;
- (4) Office action;
- (5) Re-examination; and
- (6) Grant of the patent.

Article 25 clarifies that "patent rights will not be granted for any of the following:

- (1) Scientific discoveries;
- (2) Rules and methods for intellectual activities;
- (3) Methods for the diagnosis or treatment of diseases;
- (4) Animal or plant varieties;
- (5) Substances obtained by means of nuclear transformation; and
- (6) Designs that are mainly used for marking the pattern, color or the combination of the two of prints."⁴⁰

Also stated in China's *Patent Law* are indications that applications involving security interests are to be handled separately, and any invention-creations that are immoral or that harm public interest will not be granted patents. While software itself cannot be patented, software combined with a computer or technique to solve a technical problem may be eligible for patent protection.⁴¹

An invention patent is valid for 20 years from the filing date and applies to products and methods featuring technical innovations that are practical, inventive, and novel, requiring a greater level of inventiveness than a utility model patent. This form of patent protection is analogous to a utility patent in the United States.⁴² Article 22 of the *Patent Law* of the PRC elaborates that an invention patent must not be an "existing technology," must possess "prominent substantive features," and indicate "remarkable advancements."⁴³ From the date of filing, an invention patent typically takes between three and five years to be granted and will incur higher costs to file than a utility model or design patent.

A utility model patent is valid for 10 years from the date of filing, applying to innovations made in relation to shape or structure. A utility model patent is processed more quickly than an invention patent, as the former requires preliminary examination and no substantive examination, allowing the utility model patent to be granted within 6 to 12 months. Furthermore, this patent type is more easily granted, as the threshold for inventiveness is lower, and securing a utility model patent is generally less expensive despite the fact that damages for infringement stem from the same basis as invention patents. Utility model patents are commonly used by Chinese applicants and are less familiar to and more often underutilized by foreign applicants. Applicants may file for a utility model patent simultaneously while applying for an invention patent, allowing applicants to secure more immediate

27, 2008, accessed February 15, 2014, http://english.sipo.gov.cn/laws/lawsregulations/201101/t20110119_566244.html.

39 Bloch, Chan and Taylor, "Chinese Intellectual Property Litigation," 10.6.6.

40 *Patent Law* of the People's Republic of China, Article 25.

41 "Intellectual Property Rights," Embassy of the United States – Beijing, China, accessed March 12, 2014, <http://beijing.usembassy-china.org.cn/iprpatent.html>.

42 Ibid.

43 *Patent Law* of the People's Republic of China.

protection, as the utility model patent will be granted while the invention patent is still under review.

Damages for infringement are determined on the same basis used for invention patents.

A design patent is valid for 10 years from the filing date and applies to new designs that have industrial application with respect to shape, pattern, colour, or a combination of these factors. Colour alone will not merit approval unless the colour is related to a pattern, and the relevant colour(s) must not be naturally occurring. The design must be integrated into a product, and if the product feature has practical applicability beyond aesthetics, then a utility model patent or invention patent would likely be more suitable.

b. Infringement and Empirical Cases

Patent infringement, or exploitation of a patent without permission of a patentee, may include instances in which an infringer manufactures or sells patented products, uses patented processes, uses products acquired through patented processes for business purposes, or imports or exports patented products or products acquired through patented processes. If a dispute arises over infringement, the involved parties are encouraged to consult according to Article 60 of the *Patent Law* of the PRC. If the parties are unwilling to consult or resolve the dispute through consultation, then dispute over the infringement may be resolved according to administrative or judicial dispute resolution mechanisms. These mechanisms are discussed in detail in Section VI of this report.

Compensation is typically awarded in conjunction with an order to cease infringing activities.⁴⁴ Overall, foreign parties have been typically critical of the level of damages provided in successful disputes over infringement. While this is discussed in greater detail in Section V, it should be noted that the simplicity of calculations made to determine compensation often fall short in accounting for how changes to the relevant market may have taken place in the absence of infringement and are typically based on how much unjust enrichment (additional profits) an infringer has gained because of infringement.⁴⁵ Compensation is also assessed in accordance with Article 65 of the *Patent Law* of the PRC, with compensation calculated to include the “reasonable expenses” of the right holder incurred for stopping the infringing act.⁴⁶

Perhaps the best known case of patent infringement concerned Schneider Electric (Schneider), a France-based multinational corporation, and Wenzhou-based Chint Group Co. Ltd. (Chint), in which Chint went on to receive the highest damages (RMB 334.8 million or CAD\$56.82 million) ever awarded in a dispute regarding utility model patents.⁴⁷ Here, a small circuit breaker produced by Schneider was found to fall within the scope of Chint’s utility model patent by the Wenzhou Intermediate People’s Court, resulting in a determination of infringement. While Chinese courts had been criticized in the past for providing awards that did not adequately reflect costs incurred or sufficiently deter infringers, *Chint v Schneider* provides an example in which evidence provided grounds for awarding such high damages. Chint presented detailed tax information revealing Schneider’s profits in relation to the product in question, which was used by the Intermediate Court to determine damages.⁴⁸ Schneider went on to appeal the decision, but the dispute never reached the Higher People’s Courts, as Schneider settled for

44 Kristina Sepetys and Alan Cox, “Intellectual Property Rights Protection in China: Trends in Litigation and Economic Damages,” (January, 2009), 5-6.

45 Sepetys and Cox, 6-7.

46 *Patent Law* of the PRC, Article 65.

47 MWE China Law Offices, “Top Ten Chinese Intellectual Property Cases of 2009,” (August, 2010), accessed February 15, 2014, http://www.mwe.com/info/news/wp_c0810a.pdf.

Conversion from Chinese Renminbi to Canadian dollars is based on the Bank of Canada rates on April 17, 2014, at an exchange rate of 0.1768 using a cash rate of 4%.

48 Shengping Yang, “Patent Enforcement in China,” *Landslide* 4 no. 2 (November/December 2011): 5.

RMB 157.5 million (CAD\$26.73 million).⁴⁹

The importance of evidence in securing adequate compensation is similarly stressed in the dispute between Icon IP and Jinan Yibang Corp. (Yibang), in which Icon IP discovered infringement of its invention patent related to a treadmill at a trade show in 2007. The infringing products continued to be sold after Yibang agreed to halt manufacture and sale of the product in question, ultimately resulting in a lawsuit in which the court issued a injunction and payment to Icon IP of RMB 530,000 (CAD\$89,955), a sum less than the compensatory damages originally requested (RMB 1 million or CAD\$169,728). The court found that Icon IP failed to present evidence showing actual loss and unjust enrichment of the defendants, and so the awarded damages⁵⁰ fell short of the total demanded compensation.⁵¹

Another example concerns a German company, Neoplan, that sued Zhongwei for Zhongwei's infringement of a design patent. Neoplan claimed that Zhongwei's A9 bus design was based completely on Neoplan's Starliner design, while Zhongwei claimed that its design was original. As Zhongwei was unable to prove that neither it nor its parent Zonda Industrial Group had, in fact, designed their A9 bus line, Neoplan was awarded RMB 21.16 million (CAD\$3.59 million).⁵²

In one of the most recent cases, the Belgian company Solvay International Chemical Group (Solvay) sued the Chinese company HySci Tianjin Specialty Materials (HySci). Solvay specializes in the production and sale of rare earth materials used in automotive catalysts. Since 2004, HySci produced and sold 189 tonnes of mixed oxides that infringed on Solvay's patents on rare earth mixed oxides. HySci attempted to file a patent invalidation request against Solvay. The courts, however, ruled in favor of Solvay and in December 2013, HySci was ordered to pay RMB 5.6 million (CAD\$950,476) in damages (based on HySci's profits) and to immediately cease the production of seven of its mixed oxides deemed to infringe on Solvay's patents.⁵³

In sum, these cases highlight the importance of infringement detection, the necessity of evidence to justify compensation, and how foreign and domestic parties have both relied on judicial dispute settlement mechanisms to resolve patent infringement disputes.

c. Industries Affected

Patents are especially important to industries that incur major research and development expenses and whose products are easily appropriated, such as pharmaceuticals, agricultural and industrial chemicals, and biotechnology.⁵⁴ Patents are also relevant to companies dealing in machinery, equipment, and motor vehicles. (See Figure 2 for the breakdown of patent applications according to field of technology.) The more appropriable

49 Lucy Hornby, "Schneider settles 3-year Chint patent suit," *Reuters*, April 15, 2009, accessed February 21, 2014, <http://www.reuters.com/article/2009/04/15/china-france-patent-idUSPEK19580320090415>.

50 In order to be awarded total demanded compensation, the plaintiff needs to show a direct connection between the loss and the infringement; i.e. did the infringement actually cause the loss? Unless evidence can be provided pointing to the infringement as the cause of the actual loss, the compensatory damages rewarded for that loss will generally not be paid out by the infringer.

51 Arthur Yuan, "Icon IP won patent infringement lawsuit in Beijing," *Chinese Intellectual Property*, February 2012, accessed March 5, 2014, <http://chineseip.jmls.edu/sites/en/icon-ip-won-patent-infrin>.

52 United States International Trade Commission, *China: Intellectual Property Infringement, Indigenous Innovation Policies, and Frameworks for Measuring the Effects on the US Economy*, November 2010, 4-9, accessed February 28, 2014, <http://www.usitc.gov/publications/332/pub4199.pdf>.

53 "Solvay wins two rare earth mixed oxides patent course cases against HySci in China," *Reuters*, January 9, 2014, accessed April 19, 2014 <http://www.reuters.com/article/2014/01/09/idUSnHUGdsyn+70+ONE20140109>.

54 Keith Maskus, *Intellectual Property Rights in the Global Economy*, (Peterson Institute: Washington, DC), 52.

the invention-creation and the more important the innovation is to generation of revenue for a given firm, the more damaging patent infringement will be.

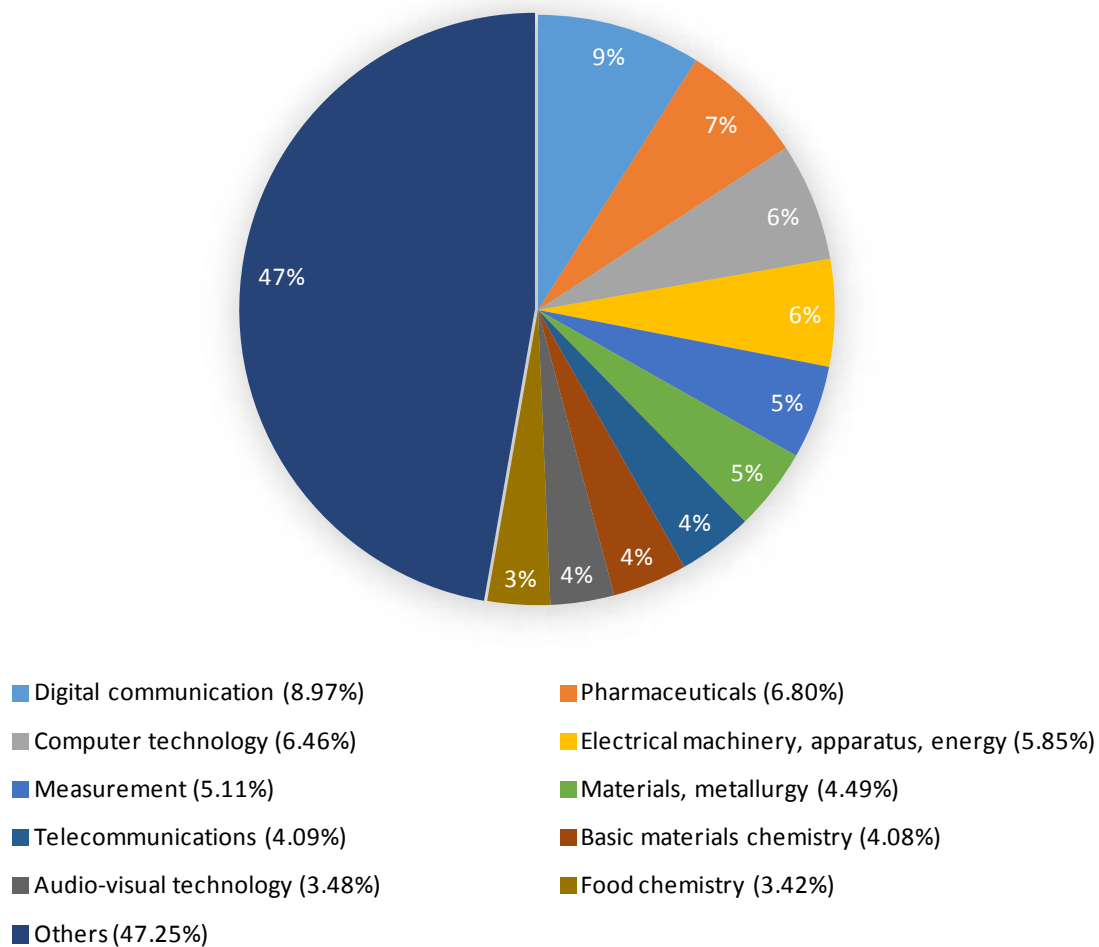


Figure 2. Chinese Patent Applications by Top Fields of Technology (1998–2012)⁵⁵

2. Copyright

a. Nature and Scope of Copyright Protection

The *Copyright Law* of the People's Republic of China, last amended on February 26, 2010, forms the basis of domestic copyright law in China. The law provides that literary, artistic, and scientific works, whether published or not, are considered protected. Article 3 specifies that written, oral, musical, dramatic, choreographed, photographic, cinematographic, and other graphic (e.g. drawings of engineering or product designs, maps,

sketches, and models) works are all protected in addition to works of fine art, architecture, and computer software.⁵⁶ Copyright protection does cover software, but patents may also be used to protect software when software is used in conjunction with computers or when special techniques may render the combined technology patentable.

China is a member of the Berne Convention, the Universal Copyright Convention, TRIPS, and the World Intellectual Property Organization (WIPO). Foreigners of countries that are also members of these frameworks enjoy the same protection afforded to Chinese citizens and legal entities according to Article 2 of the PRC *Copyright Law*. Copyrights are owned by the author of the work, i.e. the person creating the work, and are automatically granted upon completion of the work.⁵⁷ Authors may voluntarily register their works with the Copyright Protection Center of China, which requires completion of an application and payment of a fee. Copyright owners are entitled to a broad bundle of rights similar to those granted under Canadian or United States copyright law: publication, authorship (i.e. connection of author's name to the work), revision, integrity (protection against "distortion and mutilation"), reproduction, distribution, rental, exhibition, performance, presentation, broadcasting, translation, and more.⁵⁸ Canada and China's membership to the Berne Convention means that Canadian authors hold copyright in China for at least 50 years after the death of the author. Works by corporations are protected for 50 years after the first publication.⁵⁹

Given the breadth of rights copyright owners secure, the advent of the internet, mass production and greater availability of mobile phones and computers have allowed for widespread infringement that is cheap, convenient, and difficult to prevent. Developing copyrighted products can often cost millions of dollars, yet illicit distribution, reproduction, and consumption of copyrighted products (e.g. films and music) is typically very inexpensive. In China especially, these reproduction costs are low. This is partly due to lower standards of living in China and economies of scale, but also due to the nature of copyright infringement itself. Variable costs in producing an extra unit of the good (e.g. DVDs, CDs, copies of drawings, etc) are low, while fixed costs in developing the good itself are high. Preventing illicit proliferation of copyrighted material is extremely difficult to implement given the scale of infringement,⁶⁰ and the cases that actually proceed to litigation represent a small fraction of total infringements.

b. Infringement and Empirical Cases

Copyright infringement is widespread throughout China and difficult to control. The landmark case *Educational Testing (ETS) v Beijing New Oriental School* establishes the extent of protection of foreign copyrights under the Berne Convention. Here, ETS sued New Oriental for illegally producing and selling ETS test modules for use in its classrooms throughout China. The Intermediate Court held in ETS's favor, ordering New Oriental to cease infringement, issue a public apology, and pay RMB 5 million (CAD\$848,640) in damages to ETS. New Oriental appealed to the Beijing High People's Court. This court also held that infringement occurred, but lowered damages to RMB 3.74 million (CAD\$634,782.72).⁶¹

Another landmark copyright dispute concerned a Symantec Corporation suit against Ma Jingyi, Li Di, and

56 Standing Committee, National People's Congress, "Copyright Law of the People's Republic of China," Article 13, September 2, 1993, accessed March 10, 2014, <http://www.wipo.int/wipolex/en/details.jsp?id=6062>.

57 Ibid., Article 11.

58 Ibid., Article 10.

59 Bloch, Chan and Taylor, "Chinese Intellectual Property Litigation," 10.6.8.

60 United States International Trade Commission, *China: Effects of Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy*, 3-1, <http://www.usitc.gov/publications/332/pub4226.pdf>.

61 Guan H. Tang, *Copyright and the Public Interest in China*, (Edward Elgar Publishing: Cheltenham), 147-150.

other individuals responsible for the production and sale of over 600,000 CDs containing unauthorized copies of Norton antivirus software between July 2003 and February 2007. Symantec successfully proved before the Shanghai Intermediate People's Court that Symantec was the legitimate copyright owner of the software and suffered severe losses because of infringement. The court's decision was upheld after being appealed, securing Symantec a record sum of RMB 10 million (CAD\$1.7 million) in damages and the defendants' payment of RMB 150,000 (CAD\$25,459.20) in lawyers' fees.⁶²

An ongoing dispute, known as the Joint Action against Online Video Piracy in China, underscores the volume and complexity of copyright infringement occurring in China. A number of Chinese internet firms, including Tencent Holdings, Sohu.com, Inc., and Youku Tudou, along with the Motion Picture Association of America, seek RMB 300 million (CAD\$50.92 million) in damages from Baidu Inc. and QVOD for violation of copyright for hosting video content on their media players. Baidu and QVOD were each slapped with an RMB 250,000 (CAD\$42,432) penalty in 2013, yet the subject in dispute remains contested as of the time of this writing.⁶³ The web of parties involved indicate that Chinese and foreign stakeholders have similar and conflicting interests in copyright protection.

c. Industries Affected

As copyright provides protection for a broad range of works and also covers various rights related to those works, a variety of industries are affected by copyright infringement. As noted earlier, advances in internet access enabling convenient and cheap peer-to-peer file sharing make pervasive the sharing of digitally transferable copyrighted material like movies, music, and software. Consequently, industries dependent on profits from copyrighted material, such as software, film, music, and publishing, are particularly vulnerable. It should be noted that protection of copyrights remains an issue for jurisdictions around the world and that legal reforms are in development to prevent and deter infringement from occurring. China represents one country among many seeking to improve copyright protection mechanisms.

3. Trademarks

a. Nature and Scope of Trademark Protection

Any sign or combination of signs distinguishing goods or services of a business from other businesses qualifies as a trademark.⁶⁴ Trademarks are typically created to promote desirability in a product, with the mark indicating quality in the specified product. Trademark protection in China extends to words, devices, letters, numerals, three-dimensional signs, combinations of colors and sounds (as of May 2014), or combinations of the above.⁶⁵ China has adopted the International Trademark Classification system and is a member of the Madrid Protocol, the Paris Convention, and TRIPS. The *Trademark Law* of the People's Republic of China is the governing law on

62 Fangda Partners, "Record Breaking Judgment in Copyright Disputes in China", *Legal Brief*, May 2012, accessed February 15, 2014 <http://www.fangdalaw.com/files/Fangda%20Legal%20Brief%20-%20Record%20Breaking%20Judgment%20in%20Copyright%20Disputes.pdf>.

63 Li Qiaoyi, "Baidu, QVOD fined 250,000 yuan each for video copyright violations," *Global Times*, December 2013, accessed March 5, 2014, <http://www.globaltimes.cn/content/835030.shtml#UzLp0K1dWUR>.

64 "Trade Related Aspects of Intellectual Property Rights," World Trade Organization, April 15, 1994, Article 15, accessed February 22, 2014, http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm.

65 "Full Text of the 2013 China Trademark Law," *Bridge IP Law Commentary*, September 12, 2013, accessed April 15, 2014, <http://www.chinaiplawyer.com/full-text-2013-china-trademark-law/>.

trademarks, with its last amendment adopted in August 2013 (in force in May 2014). Trademarks are registered on a first-to-file basis and applications may be filed and registered without evidence of use of the mark.⁶⁶ After publication, an opposition period of three months allows third parties time to object to the registration; the registration lasts for ten years and is potentially indefinitely renewable. A three-year non-use period allows third parties to seek action expunging the trademark. While no common law trademark rights exist, “well-known” marks (i.e. well-known in mainland China) are granted additional protection and prior users may challenge “pre-emptive registration” by malicious applicants.

b. Infringement and Empirical Cases

A number of Canadian practitioners have identified trademark (and copyright) infringement as the most common types of IP infringement in China. This can be attributed to the broad scope of trademarks that can cover almost any type of industry.⁶⁷ Infringement of a trademark may occur when a party uses an identical or confusingly similar trademark in relation to products or services identical or similar to products covered by the trademark. Trademark “squatting” is a problem in China and involves parties taking advantage of the first-to-file system by filing a trademark before original owners are able to, preventing the original owners of the trademark from filing successful applications for trademarks. Such squatters may license out their registered trademarks to the original rightful owners or initiate proceedings to oppose alleged “misuse”. Such insidious infringement methods suggest that trademark owners should be vigilant in monitoring potential use of their trademarks and assertive in filing their trademarks immediately, even if they are only contemplating conducting business in China. The cases mentioned below highlight recent trademark infringement issues encountered in China.

The experience of a Canadian luggage company demonstrates how vulnerable companies are to trademark squatting. Although it manufactured its luggage in China for several years, the company did not register its trademark because it was not selling its products in the Chinese market. When the company tried to register its trademark, it discovered that another party had already registered their trademark. In another case, a Canadian business entity reported having its website replicated by a competitor.⁶⁸

BMW’s 2009 suit against Shenzhen Century Baoma Apparel Co. Ltd. (Century Baoma) highlights one instance of trademark infringement involving BMW’s logo, a well-known mark. By 2009, BMW’s aggressive marketing in China had established BMW as a well-known luxury brand. Capitalizing on its brand value, BMW opened a number of “BMW Lifestyle” stores selling BMW-branded garments and accessories, launching its first store in Beijing in 2001. Century Baoma followed soon after, opening 300 “MBWL Lifestyle” stores across China by 2007. The logo and trademarked Chinese characters (寶馬 [Baoma] for BMW) were found to be confusingly similar. Furthermore, the court found the defendant to have intentionally misled the public and violated acceptable business ethics, resulting in a determination of infringement. RMB 500,000 (CAD\$84,864), the maximum award permitted for cases in which infringers’ unjust enrichment derived directly from infringement is unknown, was paid to BMW. Century Baoma’s profits could not be determined because of the company’s practice of selling products blending other brands.⁶⁹

66 Bloch, Chan and Taylor, “Chinese Intellectual Property Litigation,” 10.6.10.

67 Interviews of Canadian practitioners and company representatives, February - April 2014.

68 Ibid.

69 MWE China Law Offices, “Top Ten Chinese Intellectual Property Cases of 2009,” August 2010, accessed February 28, 2014, http://www.mwe.com/info/news/wp_c0810a.pdf, 3.



BMW's Trademark



Infringing MBWL Logo

Figure 3. Comparing Logos: BMW and MBWL

A more recent case decided in December 2013 involves Bridgestone Corporation's (Bridgestone) successful suit against Shenzhen Momentum Star Tyre Co. Ltd. (Shenzhen Momentum) for infringement of Bridgestone's logo. Shenzhen Momentum and its affiliate Hangyou Rubber Products were responsible for the production and sale of "Besttone" tires. These tires used a logo similar to Bridgestone's. The tires were eventually found to infringe Bridgestone's trademark by the Shenzhen Intermediate People's Court in October 2010 and again upon appeal by the Guangdong Higher People's Court. The courts ordered payment of damages and halt of production and sales.⁷⁰

Another well-known case concerns LVMH Moët Hennessy's (Louis Vuitton) suit against Beijing Chaowaimen Shopping Mall Co. Ltd. (Chaowaimen). Chaowaimen, landlord of a shopping mall with vendors selling counterfeit Louis Vuitton handbags, posted a notice prior to the opening of the mall indicating that sale of counterfeit goods was banned in Beijing. Louis Vuitton issued a cease and desist letter, but after Louis Vuitton continued to find handbags with its trademark for sale at Chaowaimen's mall, Louis Vuitton sued Chaowaimen in the Beijing Intermediate People's Court. The court found in favor of Louis Vuitton and held the landlord of the actual infringers liable, ordering compensation to be paid to Louis Vuitton and cancellation of the leases of the infringing vendors.⁷¹

c. Industries Affected

Trademarks are relevant to companies that hope to distinguish their brands from those of others. Such companies are found across all industries, making trademarks broadly relevant as a source of IP rights.

4. Trade Secret Misappropriation and Corporate Espionage

a. Nature and Scope of Protection

Compared to laws protecting other types of IP, China's legal framework protecting trade secrets is the weakest and most underdeveloped. The lack of a unified legal structure to protect against trade secret misappropriation signifies that trade secrets are instead protected by an assortment of judicial interpretations and related laws. Key among these is the *Anti-Unfair Competition Law* which was passed by the Chinese central government.⁷²

70 Bridgestone Corporation, "Bridgestone Wins Trademark Infringement Lawsuit in China," January 24, 2014, accessed February 28, 2014, <http://www.bridgestone.com/corporate/news/2014012401.html?ref=rss>.

71 Chris Noon, "Arnault's Louis Vuitton Wins Lawsuit Vs. Chinese Market," *Forbes*, April 2006, http://www.forbes.com/2006/04/18/louis-vuitton-arnault-cx_cn_0418autofacescan06.html.

72 J. Benjamin Bai and Guoping Da, "Strategies for Trade Secrets Protection in China," *Northwestern University School of Law* 9, no. 7 (Spring 2011): 351–356.

In determining whether trade secret misappropriation has taken place, there is first a need to determine whether there is an existing trade secret. To this end, the *Anti-Unfair Competition Law* defines trade secrets as “any technology, information or business operation information which is (1) unknown to the public; (2) can bring about economic benefits to the obligee; (3) has practical utility; and (4) about which the obligee has adopted secret-keeping measures.”⁷³ After determining that a trade secret does exist, there is then a need to determine whether the manner in which the information has been acquired or disclosed constitutes misappropriation. The law thus states that the following acts consist of trade secret misappropriation: “(1) obtaining an obligee’s trade secrets by stealing, luring, intimidation or any other unfair means; (2) disclosing, using or allowing another person to use the trade secrets obtained from the obligee by the means mentioned above; and (3) in violation of the agreement or against the obligee’s demand for keeping trade secrets, disclosing, using or allowing another person to use the trade secrets he possesses.”⁷⁴

Aside from the *Anti-Unfair Competition Law*, regulations governing trade secrets have also been incorporated in China’s contract law, company law, labor law, and labor contract law. A key judicial interpretation was also issued in January 2007. *The Judicial Interpretation of Supreme People’s Court on Some Issues Concerning the Application of Law in the Trial of Civil Cases Involving Unfair Competition* reiterated the definition of a trade secret, explained this definition, and addressed other issues including the burden of proof and the calculation of damages.⁷⁵ The calculation of damages for trade secrets refers to the methods used to calculate damages for patent infringement. Calculation of a trade secret’s commercial value can be derived from the company’s investments in R&D and the income and possible benefits stemming from the secret over the duration in which the secret would have given the company a competitive advantage.⁷⁶

Despite existing laws to protect trade secrets, the challenge in protecting trade secrets lies in their inherent volatility. The value of a trade secret is derived from its confidentiality; any breach of this confidentiality implies that its secrecy status cannot be recovered and the company loses all benefits stemming from possession of the secret.⁷⁷ At the same time, unlike traditional forms of IP such as patents, trademarks, and copyrights, trade secrets are not registered and thus, companies have no formal proof that they possess a trade secret.⁷⁸

Moreover, challenges in protecting trade secrets can stem from the fragmented nature of the legal framework covering trade secrets. Because of the lack of a unified trade secret law, determining the specific scope of protection can be a challenge for firms and even regulators. This fragmented nature also creates disincentives for the revision of the law to keep pace with rapid evolutions in technology, as revisions to one law would require the tedious and unappealing task of revising other laws as well.⁷⁹

b. Infringement and Empirical Cases

In 2012, 87,419 new IPR civil cases were filed in China. Of this figure, 1,123 cases, or 1.2%, were considered instances of unfair competition (trade secret misappropriations are filed under this category). Despite the

73 Standing Committee, National People’s Congress, “Anti-Unfair Competition Law of the People’s Republic of China,” Article 10, September 2, 1993, accessed March 10, 2014, http://www.wipo.int/wipolex/en/text.jsp?file_id=125970.

74 *Anti-Unfair Competition Law*, Article 10.

75 J. Benjamin Bai and Guoping Da, “Strategies for Trade Secrets Protection,” 357–361.

76 Bloch, Chan and Taylor, “Chinese Intellectual Property Litigation,” 10.6.22–10.6.24.

77 Natalie Flechsig, “Trade Secret Enforcement after Tianrui: Fighting Misappropriation through the ITC,” *Berkeley Technology Law Journal* 28, (Annual Review 2013), 451.

78 US-China Business Council, “Recommendations for Strengthening Trade Secret Protection in China,” 5.

79 *Ibid.*, 3-4.

small percentage of unfair competition cases, some specialists argue that this may not indicate that trade secret misappropriation is not a problem. Rather, the low percentage reflects numerous problems in providing evidence of misappropriation in court.⁸⁰ A 2013 survey of American companies in China indicated that 40% of the respondents viewed trade secret misappropriation as their most serious intellectual property concern. This has been supported by data from previous years, where 36% and 28% of surveyed companies identified trade secret misappropriation as their greatest concern in 2012 and 2011, respectively.⁸¹ Another study shows that 25% of all American companies in China have encountered theft of their trade secrets in China.⁸²

Trade secrets can be stolen in many different ways, but the most common manner is through a company's employees. Theft often occurs when an employee resigns to work for a competitor company and divulges the secrets to his or her new employer.⁸³ Similarly, in a report published by the Canadian Chamber of Commerce on Canada's economic ties with China, the "theft of IP and other trade secrets by unscrupulous company employees as a result of sub-par protection of sensitive foreign company information" was identified as a serious concern among Canadian companies. The report states that although the theft of trade secrets occurs not only in China, the problem is particularly severe in China and it is "consistently singled out in terms of frequency with which this issue arises."⁸⁴

Theft of trade secrets can have drastic consequences for a company's business and market share, as many empirical cases show. In 2007, for example, the American firm SI Group filed a case against Sino Legend. SI Group alleged that Sino Legend misappropriated its formula for rubber resin by hiring the former plant manager of SI Group's chemical plant in Shanghai. The theft of the formula had allowed Sino Legend to acquire 70% of market share.⁸⁵ In another case, in 2005 the German firm Siemens collaborated with China National Railway Signal (CNR) on a project building trains for the Beijing-Tianjin high-speed railway on invitation from CNR. Siemens trained 1,000 of CNR's technicians. Yet, CNR excluded Siemens in the following project, after the Ministry of Transportation stated a preference for domestic technology. A similar case occurred between Japan's Kawasaki Heavy Industries and the China South Locomotive and Rolling Stock Corporation (CSR).⁸⁶

In another high profile case, Sinovel, a Chinese wind turbine maker, was accused of stealing the trade secrets of American company AMSC (formerly known as the American Superconductor Corporation). Sinovel allegedly stole trade secrets from an American supplier and encouraged an AMSC employee to steal copyrighted source code. AMSC argued that it incurred US\$800 million (CAD\$844.65 million) in losses and that as a result, 500 AMSC employees lost their jobs.⁸⁷

80 J. Benjamin Bai and Guoping Da, "Strategies for Trade Secrets Protection," 354.

81 US-China Business Council, "Recommendations for Strengthening Trade Secret Protection in China," 2.

82 Charles Riley, "One in Four US Firms in China Report Data Theft," *CNN Money*, March 29, 2013, accessed March 11, 2014, <http://money.cnn.com/2013/03/29/news/china-data-theft/>.

83 "Protecting your Trade Secrets in China," *European Commission: China IPR SME Helpdesk*, last modified March 11, 2014, accessed at <http://www.china-iprhelpdesk.eu/en/publications>; Interviews of Canadian practitioners and company representatives, February-April 2014.

84 Canadian Chamber of Commerce, "Advancing our Economic Ties with China," 24.

85 Robert M. Isackson, "United States: ITC Affirms Trade Secret Violation Against Chinese Company for Stealing US Rubber Resin Trade Secrets, Imposes 10-Year Import Ban," *Orrick, Herrington and Sutcliffe LLP*, January 23, 2014, accessed March 10, 2014, <http://blogs.orrick.com/trade-secrets-watch/2014/01/23/itc-affirms-trade-secret-violation-against-chinese-company-for-stealing-u-s-rubber-resin-trade-secrets-imposes-10-year-import-ban/>.

86 "China and Intellectual Property," *New York Times*, December 24, 2010, accessed March 10, 2014, <http://www.nytimes.com/2010/12/24/opinion/24fri1.html>.

87 "US Charges Chinese Wind Company with Stealing Trade Secrets," *Reuters*, June 28, 2013, accessed March 10, 2014, <http://www.reuters.com/article/2013/06/28/us-sinovel-doj-idUSBRE95R0FM20130628>; Charles Riley, "US Says Chinese Wind Turbine Firm Stole Trade Secrets," *CNN Money*, June 28, 2013, accessed March 10, 2014, <http://money.cnn.com/2013/06/28/news/companies/>

Despite the problems encountered by foreign firms in China, the General Electric (GE) v Xi'an Jiuxiang Electrical Technology (Jiuxiang) case demonstrates that foreign firms can still succeed in protecting their trade secrets through the legal system. In 2007, GE filed a complaint against Jiuxiang and its former employee Wang Xiaohui at the Intermediate People's Court of Xi'an. As an employee at GE, Wang served as one of GE's key maintenance engineers focused on the after-sales service and maintenance of medical devices, most particularly, GE's CT scan machines. Wang received specialized internal training and had access to the "Red Service Disc" which contained confidential technical information. Upon resignation in 2002, Wang established Jiuxiang, which provided after-sales services and maintenance of medical devices at prices 40% to 70% lower than those of GE and other manufacturers. At the same time, Jiuxiang conducted training workshops on servicing techniques of CT scan machines. As part of the workshop, GE's 'Red Service Disc' and other training materials were disseminated.⁸⁸

The court ruled against Jiuxiang and awarded damages of RMB 900,000 (CAD\$152,755) to GE for trade secret misappropriation and copyright infringement. GE's success can largely be credited to two primary factors: (1) GE's ability to prove that the technical information Wang misappropriated and circulated was considered a trade secret, and (2) the court's ability to determine Wang's liability. In terms of proving that the information in question was a trade secret, GE demonstrated that the information adhered to the definition of a trade secret as being unknown to the public, of economic and practical utility and protected through a number of secret-keeping measures. The contents of the Red Service Disc were a result of GE's in-house R&D and manufacturing efforts, thus they were difficult to acquire and not publicly known. The use of the information has provided economic value to users such as GE and Jiuxiang. GE had also taken measures to protect the confidentiality of the information, by marking the information as confidential, signing a confidentiality agreement with Wang, and limiting access only to its maintenance engineers.⁸⁹

In terms of establishing Wang's liability, the court determined that Wang disregarded GE's demands to keep the information confidential by violating the confidentiality agreement he signed as an employee. Jiuxiang was also deemed guilty for the utilization and disclosure of information that they had known to be misappropriated.⁹⁰ In this case, both factors contributing to GE's success were based on GE's strict observance of the legal provisions related to the protection of trade secrets and GE's ability to document this process carefully.

c. Industries Affected

The broad definition of trade secrets can be interpreted to cover a wide scope of information, including: "formulas, blueprints, product designs, manufacturing processes, customer lists, sales strategies, and management techniques."⁹¹ This broad scope implies that trade secret misappropriation can impact a variety of industries. This complexity poses additional challenges in seeking judicial remedies for trade misappropriation, as judges may not necessarily possess the technical knowledge necessary to try a particular case.⁹²

china-wind-sinovel/.

⁸⁸ J. Benjamin Bai and Guoping Da, "Strategies for Trade Secrets Protection," 372–374; Liu Rong, "Focus on Trade Secret – GE vs. Jiuxiang (I)," *China IP Magazine* 24, (June 2008), accessed March 10, 2014, <http://www.chinaipmagazine.com/en/journal-show.asp?id=388>.

⁸⁹ J. Benjamin Bai and Guoping Da, "Strategies for Trade Secrets Protection," 372–374; Focus on Trade Secret – GE vs. Jiuxiang, *China Intellectual Property Issue* 24, June 2008. <http://www.chinaipmagazine.com/en/journal-show.asp?id=388>.

⁹⁰ Ibid.

⁹¹ US-China Business Council, "Recommendations for Strengthening Trade Secret Protection in China," 5.

⁹² Ibid.

Key Points: The most common types of IPR infringement*Patent infringement*

- An infringer manufactures or sells patented products, uses patented processes, and/or uses products acquired through patented processes for business purposes.
- An infringer imports or exports patented products or products acquired through patented processes.

Copyright infringement

- An infringer reproduces and distributes copyrighted material.
- The advent of the internet, mass production, and greater availability of mobile phones and computers have allowed for widespread infringement that is cheap, convenient, and difficult to prevent.

Trademark infringement

- An infringer uses an identical or confusingly similar trademark in relation to products or services that are identical or similar to products covered by the trademark.
- Trademark ‘squatting’ occurs when an infringer registers a trademark as his or her own and prevents the original owners of the trademark from filing successful applications.

Trade secret misappropriation

- Theft often occurs when an employee resigns to work for a competitor company and divulges the secrets to his or her new employers.
- Because trade secrets are not registered, companies often have no formal proof that they possess a trade secret.

B. Indigenous Innovation: An Emerging Trend in China’s IP and Innovation Policies

The infringement of intellectual property rights and the inadequate enforcement of IP protection in China are not completely novel issues, but date back several decades. In the past, however, problems of IP infringement stemmed directly from the lack of existing legal frameworks to protect IP and from the actions of the national government itself. As demonstrated above, China has introduced the necessary legal frameworks, in part to comply with the TRIPS Agreement as part of China’s accession to the World Trade Organization. Instead, the primary problems can be traced to the failure of the government to enforce its obligations to protect IP.⁹³

Despite improvements in China’s IP laws, the constant risk of changes in national government policies that may impact upon its IPR regime has not completely disappeared. Prominent examples include China’s recent policies to promote indigenous innovation. This raises the question of whether the central government’s desire to promote innovation among domestic firms may lead to the introduction of policies that directly or indirectly

contradict its laws on IP protection.

China's indigenous innovation policy is formally termed as the 2006–2020 Medium to Long Term Plan for the Development of Science and Technology (MLP). Its rationale is based on the need to decrease China's dependence on foreign technology and summed up precisely in the words of then-president Hu Jintao, who emphasized the need for the development of a “path of indigenous innovation with Chinese characteristics” (*Zhongguo tese zizhu chuangxin daolu*). Hu also stated that international competitiveness can only be derived from the ability of domestic firms to acquire core technologies indigenously rather than through foreign acquisitions.⁹⁴ The MLP is primarily defined through three components. The first is the invention and development of new technologies. The second is the reintegration of existing technologies into the creation of new technologies, while the last consists of the assimilation and improvement of foreign technologies.⁹⁵

The MLP has an impact on practices including: government procurement bids, technology transfer, and the establishment of domestic technical standards. These new practices not only place foreign firms at a competitive disadvantage but may also increase the risk of IPR infringement.⁹⁶

The MLP provides a rather controversial definition of indigenous innovation. Aside from the usual requirements of novelty and innovation, intellectual property needs to be developed and registered in China. It needs to be fully owned by the Chinese enterprise and it must not have been registered in a foreign jurisdiction. The 2006 Trial Measures for the Administration of the Accreditation of the National Indigenous Innovation product state that “products possessing indigenous intellectual property refer to intellectual property that the applying unit has acquired through its own technical innovation activities and legally possesses full ownership rights in China; or the Chinese enterprise, institution or citizen must legally possess, through transfer, full ownership or usage rights of intellectual property in China.”⁹⁷

At the same time, the MLP has encouraged the linking of eligibility for government procurement contracts with indigenous innovation. The key role of government projects in encouraging domestic innovation has been captured by the policy, which declared that “major national construction projects must be used as a vehicle to enhance indigenous innovation capabilities” and that such national projects may be implemented in order to “digest and absorb a number of advanced technologies, to capture a number of key technologies related to national strategic interests and to develop important equipment and key products possessing indigenous intellectual property”.⁹⁸

In addition, the MLP also called for the drafting and publication of the National Indigenous Innovation Product catalog list, which lists accredited indigenous innovation products. At the same time, catalog lists at the provincial

94 胡锦涛在全国科学技术大会上的讲话Hu Jintao zai Quanguo Kexuejishu Dahui shang de jianghua – Quanwen (全文) [Hu Jintao's Speech at the National Conference on Science and Technology – Complete text], *Xinhua Net*, January 9, 2006, accessed March 5, 2014, http://news.xinhuanet.com/politics/2006-01/09/content_4031533.htm.

95 United States International Trade Commission, “China,” 5.4.

96 Ibid, 5.5.

97 国家自主创新产品认定管理办法 (试行) Zhongguo Zizhuchuangxin Chanpin Rending Guanlibanfa (Shixing) [2006 Trial Measures for the Administration of the Accreditation of the National Indigenous Innovation Products], *Zhengfu Caigou Xinxiwang [Government Procurement Website]*, February 11, 2007, accessed February 25, 2014, http://www.caigou2003.com/law/mfr/20070218/mfr_1515.html.

98 国家中长期科技发展规划纲要(2006—2020) Zhongguo Zhongchangqi Kejifazhan Guihuangangyao [2006–2020 Medium to Long Term Plan for the Development of Science and Technology] *Xinhua Net*, May 11, 2006, accessed February 25, 2014, http://news.xinhuanet.com/tech/2006-05/11/content_4663155.htm.

and municipal level have also been published.⁹⁹ Products listed in these catalogs are given preferential treatment in government procurement bids and such preferential treatment has been incorporated in formal legislation. For example, the 2007 Evaluation Measures on Indigenous Innovation Products for Government Procurement had specific articles detailing the evaluation criteria for indigenous innovation products.

- Article 13: “in cases where the bidding project is evaluated using the lowest bidding price, indigenous innovation products may receive a 5–10% deduction from its bidding price.”¹⁰⁰
- Article 14: “in cases where the bidding project is evaluated using a comprehensive scoring method, indigenous innovation products must be assessed according to indigenous innovation factors. Under the pre-requisite of meeting the basic technical conditions, the product may be given additional points of 4–8% based on the evaluation of price and technology.”¹⁰¹

Hence, although any Chinese legal person is eligible to bid for government procurement contracts, the bias towards indigenous innovation largely excludes foreign firms from the process. Moreover, although foreign firms are theoretically permitted to apply for accreditation for indigenous innovation, the definition of indigenous innovation itself – that firms must have full ownership of IP in China, that IP must have been developed and registered in China, and that it must not contain any foreign IP, excludes foreign firms which are likely to have registered their IP in other jurisdictions.¹⁰² These laws have prompted the Canadian Chamber of Commerce in China to express its concern that indigenous innovation policies “would have closed access to public procurement for foreign-invested ventures in China whose intellectual property is not developed and owned in China.”¹⁰³

Preferential treatment to domestic firms in the process of government procurement bids is certainly not a new phenomenon. The novelty lies in linking patent and trademark registration in China as a prerequisite to eligibility in bidding for government procurement contracts.¹⁰⁴ This discrimination against foreign firms has led industry groups representing the world’s major technology firms and international trade associations to pressure the Chinese government to delink government procurement policies from indigenous innovation. As a response, then-President Hu promised that the government would delink procurement from indigenous innovation during a United States-China Summit in January 2011. However, problems continue to linger. Although the government has ceased to issue national catalogues, enforcement at the provincial and local levels continues to be problematic as provincial and municipal governments still adhere to local catalogs.¹⁰⁵ These local catalogs reflect problems similar to national catalogs. As an example, only 2 out of 525 accredited indigenous innovation products in Shanghai’s catalog are owned by foreign firms. In Beijing’s catalog, only 1 out of every 42 accredited

99 United States International Trade Commission, “China,” 5.4–5.6.

100 自主创新产品政府采购评审办法 Zizhuchuangxin Chanpin Zhengfu Caigou Pingshenbanfa [Evaluation Measures on Indigenous Innovation Products for Government Procurement]. *Zhongguo Zhengfu Menhu Wang [The Central People’s Government of the People’s Republic of China website]*, February 5, 2008, accessed February 25, 2014, http://www.gov.cn/ztzl/kjzfg/content_883671.htm.

101 Ibid.

102 The US-China Business Council, *Issues Brief: China’s Domestic Innovation and Government Procurement Policies*, March 2011, accessed January 5, 2013, https://www.uschina.org/public/documents/2011/innovation_procurement_brief.pdf.

103 Canadian Chamber of Commerce, “Advancing our Economic Ties with China: Three Priorities for Canadian Businesses,” January 2012, 34.

104 Seamus Grimes and Debin Du, “Foreign and Indigenous Innovation in China: Some Evidence from Shanghai,” *European Planning Studies* 21, no. 9, (2013), 1357–1373.

105 Stanley Lubman, Changes to China’s Indigenous Innovation Policy: Don’t Get Too Excited, *Wall Street Journal: China Realtime Report*, July 22, 2011, accessed February 25, 2014, <http://blogs.wsj.com/chinarealtime/2011/07/22/changes-to-chinas-indigenous-innovation-policy-dont-get-too-excited/>.

products is foreign-owned.¹⁰⁶

Aside from its impact on government procurement, China's indigenous innovation policies have also encouraged linking market access to the transfer of technology. Despite aiming to decrease China's dependence on foreign technology, a component of China's indigenous innovation policies consists of the assimilation and re-innovation of foreign technologies.¹⁰⁷ The MLP has encouraged international technical cooperation and stated that China should "make full use of the favorable conditions of opening to the outside world," "expand international and regional scientific and technological cooperation and exchanges," and encourage the establishments of joint R&D centers.¹⁰⁸

In practice, however, this has translated into technology transfer requirements as a precondition to market access. Foreign firms, particularly in high-technology sectors, are often required to establish joint ventures with Chinese firms, which are usually selected by the Chinese government and are oftentimes state-owned enterprises.¹⁰⁹ This requirement is based on the inherent belief that the transfer of intellectual property will help Chinese firms gain global competitiveness.¹¹⁰

The industries most often targeted for technology transfer include IT, power generation, transportation, high-speed rail, aviation, and automobiles. In newly-formed joint ventures, the foreign parties are only allowed to hold a 49% equity stake. The foreign party must commit to sharing its latest technologies, with at least 70% to be manufactured locally.¹¹¹ Without a technology transfer clause in the agreement, it is difficult to secure final government approval for the joint venture. In exchange for sharing their technology, the foreign party is often compensated by the Chinese party through royalty fees.¹¹² However, foreign companies often complain that royalty fees are too low, with most ranging between 2% to 6% of revenue. Although the government does not officially regulate royalty fees, Chinese parties typically would not accept an agreement if rates were not lower than market standards. Moreover, rates higher than 5% can be questioned by tax authorities.¹¹³

Although technology transfer requirements are neither new nor uncommon, particularly in Asia, what is new in China's indigenous innovation policies is the degree of aggressiveness, scale, and extent of participation among various Chinese agencies that gave rise to perceptions of "a blueprint for technology theft on a scale the world has not seen before," as stated in a United States Chamber of Commerce document.¹¹⁴ The Canadian Chamber of Commerce also noted that "this would pressure foreign companies to transfer and license their latest technologies for re-innovation by Chinese companies."¹¹⁵ With the recent global financial crisis highlighting the importance and attractiveness of the Chinese market, the Chinese government has gained additional bargaining leverage that allows it to take a harder line in terms of conditions for market

106 Ibid.

107 United States International Trade Commission, "China," 5.5.

108 2006–2020 Medium to Long Term Plan for the Development of Science and Technology.

109 Thomas Hout and Pankaj Ghemawat, "China vs. the World: Whose Technology is it?" *Harvard Business Review*, (December 2010), accessed January 5, 2013, <http://hbr.org/2010/12/china-vs-the-world-whose-technology-is-it/ar/1>.

110 Ibid.; Seamus Grimes and Debin Du, "Foreign and Indigenous Innovation in China," 1357–1373.

111 Thomas Hout and Pankaj Ghemawat, "China vs. the World."

112 United States International Trade Commission, "China," 5.33–5.38.

113 Thomas Moga, "Tech Transfer Turning Point," *China Business Review*, September 2010, accessed April 19, 2014, <http://www.chinabusinessreview.com/tech-transfer-turning-point/>.

114 James McGregor, "China's Drive for Indigenous Innovation: A Web of Industrial Policies," *The Global Regulatory Cooperation Project: US Chamber of Commerce, Global Intellectual Property Center and APCO Worldwide*, July 27, 2010, accessed February 25, 2014,

https://www.uschamber.com/sites/default/files/documents/files/100728chinareport_0_0.pdf.

115 Canadian Chamber of Commerce, "Advancing our Economic Ties with China," 34.

access.¹¹⁶ Yet technology transfer requirements often raise the costs of protecting IP as firms face greater risks of “unplanned technology transfers,”¹¹⁷ theft of trade secrets, and other types of IPR infringement. As a result, technology transfer requirements are very controversial. A survey conducted by the *Economist Intelligence Unit* demonstrates that 49% of foreign firms and 52% of larger foreign companies in China have expressed their concerns that they may have to trade IP for market access.¹¹⁸

China’s indigenous innovation policies also have far-reaching implications on its policies toward technical standards. The cornerstone of China’s standardization strategy consists of the development of domestic standards that would incorporate indigenous intellectual property. Through this strategy, China aims to cease its dependence on foreign technology and to avoid paying high royalty fees to foreign standards holders. At the same time, standards serve to protect strategic domestic industries and give domestic firms a competitive advantage over foreign firms.¹¹⁹ By developing domestic technical standards, foreign firms seeking to manufacture for the Chinese market not only need to pay domestic firms hefty fees in royalties for the use of standards, but they also decrease their competitiveness by having to adhere to both global and Chinese standards. Hence, foreign firms lose the advantage of global economies of scale, and need to invest instead in additional R&D in order to conform to Chinese standards. Moreover, domestic standards often necessitate R&D collaboration between foreign and domestic firms, further facilitating the transfer of technology.¹²⁰

In the short-term, China’s indigenous innovation policies, with their impacts on practices related to government procurement, technology transfer, and establishment of domestic technical standards, have increased the vulnerability of foreign firms to theft of their intellectual property and reduced the competitiveness of foreign firms in China. However, the long-term implications of China’s indigenous innovation policies for Canadian businesses remain to be seen. On the one hand, it suggests the central government’s willingness to introduce innovation policies that violate the spirit, if not the letter, of multilateral agreements regulating IPR protection, and increases the risk of IPR infringement for foreign firms. On the other hand, as the ability of foreign firms to pressure the Chinese government into revising its government procurement policies has shown, foreign firms continue to have some influence on China’s innovation policies.

116 Seamus Grimes and Debin Du, “Foreign and Indigenous Innovation in China: Some Evidence from Shanghai,” *European Planning Studies* (2013), Vol. 21, No. 9, pp. 1357–1373.

117 United States International Trade Commission, “China,” 5.5.

118 “Multinational Companies and China: What Future?” *Economist Intelligence Unit*, November 2011, accessed March 5, 2014, <http://www.economistinsights.com/countries-trade-investment/analysis/multinational-companies-and-china>.

119 Richard Suttmeier, Xiangkui Yao and Alex Zixiang Tan. “Standards of Power? Technology, Institutions, and Politics in the Development of China’s National Standards Strategy,” *The National Bureau of Asian Research Special Report*, (2006), 1–16.

120 Anne Stevenson-Yang and Ken DeWoskin. “China Destroys the IP Paradigm,” *Far Eastern Economic Review*, 168, no. 9, (March 2005), 9–18.; Dan Breznitz and Michael Murphree. *Run of the Red Queen: Government, Innovation, Globalization and Economic Growth in China*, (New Haven, Connecticut: Yale University Press, 2011), 35–85.

Key Points: The Effects of China's Indigenous Innovation Policies

- China's indigenous innovation policy (MLP) has important implications for (1) government procurement bids, (2) technology transfer, and (3) the establishment of domestic technical standards.
- The MLP has encouraged linking eligibility for government procurement contracts with indigenous innovation. The definition of indigenous innovation (firms must have full ownership of IP in China, IP must have been developed and registered in China, and it must not contain any foreign IP) excludes foreign firms which are likely to have registered their IP in other jurisdictions.
- Technology transfer requirements and joint ventures with Chinese firms, often a precondition to market access, raise the costs of protecting IP as firms face greater risks of "unplanned technology transfers," theft of trade secrets, and other types of IPR infringement.
- China's standardization strategy promotes the development of domestic standards incorporating indigenous IP. Foreign firms manufacturing for the Chinese market need to pay domestic firms royalty fees and also decrease their competitiveness by having to adhere to both global and Chinese standards.

V. Sources of IPR Infringement Challenges

As section 4, IPR Challenges to Foreign and Canadian Businesses in China suggests, the legal framework for the protection of intellectual property is largely in place. However, having their IP compromised continues to be a challenge for most Canadian and foreign firms in China. This is due a number of cultural, institutional and technological factors, many of which are specific to China.

A. Cultural Factors

Despite improvements in the degree to which China incorporates international norms of IP protection in its laws, China's cultural and historical traditions continue to shape attitudes toward the ownership of knowledge and information.

According to Confucianism, knowledge is not perceived as a form of private property. Rather, knowledge is seen as the advancement of virtue. To impede the dissemination of knowledge is to hinder the advancement of virtue in society and is therefore immoral. In Imperial China, in order to promote virtue and social order, the emperor had the right to appropriate and disseminate knowledge. Learning consisted of emulation rather than independent thinking and critical analysis. Hence, copying and memorization were seen as natural and core elements in the process of learning. Chinese traditional thought also considered innovation to be the product of society. A person's intellect is attributed less to individual talent and more to the influence of his or her surroundings (e.g. family, neighbours and teachers). Accordingly, an individual's invention is a product of all the societal forces that have shaped his or her intellect and creativity. To claim an invention as one's own is a selfish or even immoral act.

As China transitioned from imperialism to communism, Maoist thought further shaped Chinese perspectives toward intellectual property. Intellectuals were seen as a part of the capitalist class and to protect intellectual property was therefore equated with promoting capitalism. The refusal to protect intellectual property parallels the current Chinese Communist Party's refusal to acknowledge property rights in general.

As China embarked on economic reform, the status of intellectuals was once again redefined as being a part of the working class. As a part of the proletariat, intellectuals were allowed to enjoy the fruits of their labour. This shift in perception paved the way for the establishment of China's legal framework for protecting IP. Nevertheless, China's cultural and historical traditions that eschewed the protection of IP continue to shape public perception and practices.¹²¹

B. Institutional Factors

Institutional barriers to the effective protection of IP in China include challenges in enforcement, low damages awarded in lawsuits, and the impediments to effective due diligence among Canadian companies.

121 Michel Oksenberg, Pitman Potter and William Abnett, "Advancing Intellectual Property Rights: Information Technologies and the Course of Economic Development in China," *The National Bureau of Asian Research Analysis* 7, no. 4 (1996), 10–15; Suttmeier and Yao, "China's IP Transition," 5.

I. Challenges in Enforcement

Canadian practitioners and company representatives interviewed for this project agree that difficulty enforcing China's IP laws is one of the primary reasons foreign firms continue to face infringement challenges in China. A number of factors impede effective enforcement of the law. Enforcement begs the question of enforcement against whom, and in many cases, the perpetrators of infringement are difficult to identify. A survey of European businesses in China indicated that in 27% of infringement cases, the perpetrators were unknown. 'Unknown entity' is considered the second largest category of perpetrator, after 'Chinese competitors', which accounted for 66% of infringement cases in the survey.¹²² The internet has contributed to the anonymity of perpetrators. Difficulty in enforcement also stems from political and legal sources. Contrary to the common perception of China as a monolithic, authoritarian entity, an examination of Chinese politics demonstrates a phenomenon known as 'fragmented authoritarianism'. Scholar Andrew Mertha summarizes fragmented authoritarianism as a phenomenon wherein "policy made at the center becomes increasingly malleable to the parochial organizational and political goals of various vertical agencies and spatial regions charged with enforcing that policy. Outcomes are shaped by the incorporation of interests of the implementation agencies into the policy itself."¹²³ This also translates to outcomes where the success of policy implementation is often impeded and undermined by non-central government actors.

Few cases highlight the dynamics of fragmented authoritarianism better than the enforcement of intellectual property protection. Authority in China is split along two axes. The first axis is the split between central and local government. Although laws are passed by the central government, local governments implement them. Efficient implementation of IP law is often absent due to a number of reasons. First, the goals of the central government and local governments may not be aligned. While central government officials may wish to enhance IP protection, local government officials may prioritize other goals such as economic growth and job creation.¹²⁴ Second, because of the scarcity of resources, local governments often pursue a type of 'selective enforcement' where most resources are directed against counterfeits and pirated products that potentially threaten social and political order and stability. Second, many provincial and local officials are offered financial incentives in the form of kickbacks and bribes to turn the other way and to allow illegal operations to continue. The third reason, which applies mostly to copyrights, is that the proliferation of inexpensive audiovisual products can divert the attention of the people away from existing political problems and social ills. In this manner, piracy is seen as indirectly preserving social stability. This has been described as the "contemporary equivalent of imperial Rome's 'bread and circuses'" strategy.¹²⁵

The second axis of fragmentation is related to jurisdictional fragmentation. Different types of IP fall under different bureaucratic clusters termed as 'xitong', or group of ministries. These bureaucracies have parochial interests that are shaped not only by organizational goals and official incentives but also the personal interests of its leaders. It is difficult, if not logistically impossible, to coordinate the implementation of IP laws when patents fall under the jurisdiction of the science and technology bureaucracy cluster, copyright under the propaganda and culture cluster, and trademarks under the finance and economics cluster. Moreover, the goals and objectives of these three bureaucratic networks often vary and may conflict with one another, resulting in jurisdictional turf wars and varying degrees of willingness and success in implementing IP law.¹²⁶ Jurisdictional fragmentation

122 Juan Antonio Fernandez et al, "Business in China Survey 2013," *China Europe International Business School* (2013): 27.

123 Andrew Mertha, "Fragmented Authoritarianism 2.0: Political Pluralization in the Chinese Policy Process," *China Quarterly* 200, (December 2009), 996.

124 Interviews of Canadian practitioners and company representatives, February-April 2014.

125 Andrew Mertha, *The Politics of Piracy: Intellectual Property in Contemporary China*, (New York: Cornell University Press, 2007), 19–20, 26–29.

126 Attempts by SIPO to resolve fragmentation issues and the lack of coordination among ministries and bureaucratic networks

is a key factor in weakening the authority of the State Intellectual Property Office of China, which would have to function as a ‘super bureaucracy’ encompassing starkly different disciplines and competing bureaucracy networks to effectively manage IP issues.¹²⁷

In addition to political fragmentation, difficulties in enforcing IP law can be attributed to a weak legal system in China. This weakness, in turn, stems from the strong influence of the general political environment in which the legal system is embedded. Rather than introducing a uniform legal standard, law is often implemented according to how party members interpret law based on their political interests and needs. As a result, the judicial system continues to lack independence and while it is becoming increasingly less common as more specialized IPR courts are established, many judges are still political appointees with little technical knowledge¹²⁸ to try IP-related cases.¹²⁹ This weakness in the legal system has also allowed local courts to exercise a local bias, with judgments favoring local firms over foreign plaintiffs.¹³⁰

2. Low Damages

Even in cases where firms successfully win infringement lawsuits, damages awarded by Chinese courts are typically so low that they do not cover the costs of bringing a case to court. Not only do plaintiffs shoulder the burden of proving damages, but damages awarded typically average US\$30,000 (CAD\$31,674).¹³¹

A famous example is the case between the Italian luxury goods maker Gucci and Ningbo Outlets in 2010. Gucci sued Ningbo for trademark infringement after Ningbo misled consumers by using Gucci’s logo in its shop and online advertisements. Although this was the first time that Gucci successfully won an IP case in China, Gucci was only awarded RMB 50,000 (CAD\$8,486) in damages – 10% of the original amount that it sought.¹³²

Several reasons account for the low amounts of damages awarded in China compared to those awarded in Western countries. One primary reason is the challenge in measuring damages. Because it is often difficult to measure theoretical losses owing to infringement, damages are often measured based on the disgorgement method or the infringer’s illegal gains rather than the right holder’s actual losses. Since profits tend to be lower in China, damages awarded will also be lower. In cases when damages are not measured according to the disgorgement method, damages may be calculated according to statutory damages. Under such a scenario, damages are also limited by the typically low statutory damages provided under the law.¹³³

Second, the amount awarded for damages is influenced by China’s existing standard of living. While China

included the establishment of the ‘Mechanism of Inter-ministerial Joint Meetings for the Implementation of the National IP Strategy,’ which was chaired by SIPO. The meetings included senior officials from 28 government agencies and ministries. The mechanism was established in October 2008 with its first meeting held the following month. However, the impact of the joint meetings would be hard to measure accurately.

“Strategic Advancement and Protection Administration,” *2008 SIPO Annual Report*, accessed April 23, 2014, <http://english.sipo.gov.cn/laws/annualreports/AnnualReport2008/200906/P020090623339077075454.pdf>.

127 Andrew Mertha, “Fragmented Authoritarianism,” 26–29.

128 While the lack of technical knowledge is also a problem in other jurisdictions, the lack of technical knowledge among judges in China is exacerbated by the weak rule of law and the strong influence of politics.

129 Pitman Potter, *China’s Legal System*, (Cambridge: Polity Press, 2013), 2–3.

130 “Intellectual Property in China: Still Murky. Is the Middle Kingdom Getting Serious about Protecting Intellectual Property?” *The Economist*, April 21, 2012, accessed March 15, 2013, <http://www.economist.com/node/21553040>.

131 Andy Hoffman, “Exposing Counterfeits, Pirated Goods and Fakes.”

132 Ibid.

133 Bloch, Chan and Taylor, “Chinese Intellectual Property Litigation,” 10.6.15; “Develop Your China Enforcement Strategy,” *Managing Intellectual Property* 175 (2007-2008), 50.

has experienced rapid economic growth, the level of economic development experienced within the country is uneven. Although development in urban areas such as Beijing and Shanghai can be considered at par with other Western countries, many areas, especially in China's interior, continue to lag behind. Hence, overall, China has yet to achieve the same level of economic development experienced in most advanced economies. Consequently, damages awarded will also be lower compared to those awarded in more advanced economies.¹³⁴

Third, to a certain extent damages are supposed to reflect the costs of litigation. Given that costs of litigation are lower in China when compared to American civil cases, damages are expected to be lower, too. Moreover, as opposed to American IP litigation procedures where 50% to 65% of the costs of the trial can be attributed to costs accumulated by pretrial discovery, China follows the European model which largely limits pretrial discovery, with the effect of reducing costs as well.¹³⁵

3. Due Diligence Issues

In their 2012 Canadian Businesses in China Survey, APF Canada found that having a Chinese partner was ranked as the number one strategy for overcoming difficulties to doing business in China. Whether looking for a buyer or seller, a partner for a joint venture, a licensee, or some other business relationship, finding a trustworthy and competent business partner is crucial when engaging China.



Figure 4. Canadian Companies' Strategies to Overcoming Difficulties of Doing Business in China¹³⁶

The ability to conduct sufficient and appropriate due diligence is hindered, in part, by new laws that restrict the gathering and publicizing of sensitive information. A 2009 amendment to Article 253 of the Chinese criminal code banned "government, financial, telecom, education and health institutions" from "selling or unlawfully transferring personal information."¹³⁷ The 2009 amendment and ensuing arrests of due diligence professionals

¹³⁴ Bloch, Chan and Taylor, "Chinese Intellectual Property Litigation," 10.6.15.

¹³⁵ Ibid.

¹³⁶ Asia Pacific Foundation of Canada, "Business in China Survey 2012", 19.

¹³⁷ Ana Swanson, "China's Chilling Crackdown on Due-Diligence Companies," *The Atlantic*, October 2013, <http://www.theatlantic.com/china/archive/2013/10/chinas-chilling-crackdown-on-due-diligence-companies/280787/>.

have created difficulties in conducting diligence while following China's investigatory laws.¹³⁸ In a high-profile case during the summer of 2013, British national Peter Humphrey and his wife Yu Yingzeng, an American national, were detained and arrested over charges of violating personal privacy. As owners of the Hong Kong-registered due diligence company ChinaWhys, which performs due diligence and anti-fraud investigations for multinational corporations in China, Humphrey and Yu were accused of profiting from the sale of personal information of ten Chinese nationals. Yet the crackdown on due diligence companies is based not only on the alleged need to protect the privacy of Chinese citizens, but more importantly, on the desire among Chinese officials to protect secrecy, limit information, and prevent public exposés that may potentially have a destabilizing effect on China's social order. New rules on limiting information-gathering activities included restricted access to company records from local industry and commercial bureaus, thus severely limiting the ability of due diligence companies to detect fraud. Presently, the long-term implications of these new rules remain unclear. However, the arrest of Humphrey and Yu has served as a deterrent against other due diligence companies.¹³⁹

An internet search of a company and request for documents to prove the identity of a potential Chinese partner may not always be enough, but for firms lacking resources and knowledge on China, payment for more in-depth due diligence may not be an option. For such firms, having long-established connections with China-based partners can be of help, as these Chinese partners are able to explore options in their networks to collect information and help firms decide where due diligence must be performed (e.g. whether a potential business partner is trustworthy).¹⁴⁰

C. Technological Factors

Improvements in global transportation and communications systems have enabled Western and other foreign companies to outsource and set up manufacturing facilities in other parts of the world with ease. With added mobility and the transfer of technology, however, comes the increased risk of IPR infringement as transferred know-how of the production process combines with low costs to create cheap replicas of foreign goods. These low costs increase the profitability of counterfeiting, thus creating greater incentives for criminal groups to engage.¹⁴¹

At the same time, the advent of the internet has facilitated the online sale of counterfeit goods. It has become harder for consumers to distinguish legitimate sellers from illegitimate sellers of goods. Small price differences may not be substantial enough for consumers to distinguish between a good deal and counterfeit products, especially in cases where counterfeit goods are sold through legitimate-looking websites.¹⁴² As a result, consumers may unknowingly purchase counterfeit products. The internet has also expanded the reach of counterfeiters, as individuals all around the world can be targeted and counterfeit products shipped in quantities small enough to escape detection.¹⁴³

While these problems are present not only in China but in many advanced economies, they may be particularly acute in China. China has the world's largest internet population, with an estimated 590.56 million users in

138 James Areddy, "Investigator Tells Media He Regrets Trafficking in Personal Information," *The Wall Street Journal*, August 2013, <http://blogs.wsj.com/chinarealtime/2013/08/27/investigator-tells-media-he-regrets-trafficking-in-personal-information/>.

139 Ana Swanson, "China's Chilling Crackdown on Due-Diligence Companies."

140 Pitman Potter, "Negotiating in China: Practical Approaches and Local Contexts," *The Canada China Business Council Magazine*, Summer 2010, 37, http://www.ivey.uwo.ca/centres/engaging/outreach/CCBC_2010_article.pdf.

141 United States International Trade Commission, "China," 2.6.

142 "Online Piracy and Counterfeiting Overview," Global Intellectual Property Center, US Chamber of Commerce, last modified March 30, 2010, accessed at <http://www.theglobalipcenter.com/online-piracy-and-counterfeiting-overview/>.

143 United States International Trade Commission, "China," 2.9.

2013.¹⁴⁴ China has also recently become the world's second largest e-retail market, with revenues of US\$210 billion (CAD\$221.72 billion) in 2012.¹⁴⁵ These figures suggest the scale and intensity of IP-infringement that can occur online. A study conducted by the United States International Trade Commission shows that counterfeit Chinese products are sold in a number of online marketplaces, and "online counterfeiters in China reportedly operate through thousands of separate platforms and domain names, auction sites, and trade portals, which offer a wide variety of infringing products and provide discounts."¹⁴⁶ Online marketplaces that have allegedly sold counterfeit products include popular online giants such as Alibaba, Taobao, and DHgate. To reflect the extent of the problem, Alibaba reported having to remove 87 million infringing products from its website in 2012 alone.¹⁴⁷ Although IP rights holders can use notice and takedown procedures to combat the sale of counterfeit goods online, it is easy for infringers to post their goods on another website after receiving a takedown notice. Moreover, with the huge number of websites engaged in the sale of illegal goods, only a small percentage of websites selling counterfeits are detected and served with take down notices.¹⁴⁸

The internet and the invention of new digital media have further facilitated the theft of trade secrets. Information can easily be stored, transferred, or transported through the internet or high-density storage media such as CDs, DVDs, and USB flash drives.¹⁴⁹

144 Drew Desilver, "China Has More Internet Users than Any Other Country," *Pew Research Centre*, December 2, 2013, accessed March 12, 2014, <http://www.pewresearch.org/fact-tank/2013/12/02/china-has-more-internet-users-than-any-other-country/>.

145 Richard Dobbs et al, "China's E-Tail Revolution," *McKinsey Insights and Publications*, March 2013, accessed March 15, 2014, http://www.mckinsey.com/insights/asia-pacific/china_e-tailing.

146 United States International Trade Commission, "China," 2.10.

147 Ned Levin, "China's Counterfeits in the Spotlight," *Financial Times*, November 26, 2013, accessed March 15, 2014, <http://www.ft.com/intl/cms/s/0/8ab95c8e-4c7c-11e3-923d-00144feabdc0.html#axzz2vylnCPDi>.

148 United States International Trade Commission, "China," 2.10–2.11.

149 Natalie Flechsig, "Trade Secret Enforcement after Tianrui," 451.

Key Points: Sources of IPR Infringement Challenges

Cultural Sources

- Confucianism does not perceive knowledge as a form of private property.
- Maoist thought perceives intellectuals as a part of the capitalist class, therefore, protecting intellectual property is equated with promoting capitalism.

Institutional Sources

- Implementation of IP law has been impeded by the local government due to (1) conflicting goals between central and local governments, (2) lack of resources, (3) corruption, and (4) aim to divert people's attention from large issues with cheap entertainment.
- Different types of IP fall under different bureaucratic clusters. The interests and objectives of these clusters often vary and conflict with one another, leading to jurisdictional turf wars and varying degrees of willingness to implement IP law.
- Law is often implemented according to how party members interpret law based on their political interests and needs. Many judges continue to be political appointees with little technical knowledge to try IP-related cases.
- Damages awarded by Chinese courts are typically so low that they do not cover the costs of bringing a case to court. Not only do plaintiffs shoulder the burden of proving damages, but damages awarded typically average US\$30,000 (CAD\$31,674).
- Due diligence is hindered by new laws that restrict the gathering, publicizing and selling of sensitive information. New rules also include restricted access to company records from local industry and commercial bureaus.

Technological Sources

- The mobility of setting up manufacturing facilities in other parts of the world has increased the risk of IPR infringement as transferred know-how of the production process combines with low costs to create cheap replicas of foreign goods.
- The internet has promoted the online sale of counterfeit goods, expanding the reach of counterfeiters and facilitating shipments in small quantities that escape detection. The internet makes it harder to distinguish legitimate sellers from illegitimate sellers of goods.

VI. Strategies to Protect Intellectual Property in China

This section discusses legal and non-legal strategies that companies may pursue to protect their intellectual property in China. Legal strategies will focus primarily on institutional mechanisms and frameworks that the Chinese government has provided while non-legal strategies will focus on practices adopted mostly at the company level.

While all these strategies are, theoretically, available to all companies, the ability of firms to adopt these strategies depends, to a large extent, on the size of their businesses. SMEs may have less access to financial resources to fund more costly options. Nevertheless, one Canadian company representative stated that size should not be an excuse for SMEs not to protect their IP, given the amount of information and advice that Canadian government websites and services are able to provide. Another Canadian practitioner highlighted that a number of Canadian companies that entered the Chinese market as SMEs have been able to expand in size because of their operations in China and their willingness to devote substantial resources to protecting IP.¹⁵⁰

The choice of IP-protection strategies will also depend on the other party involved. For example, when a foreign company is dealing with a larger-sized Chinese company, it may mean that the company has more resources to engage in a court case. However, it may also mean that the company will have more stake in protecting its international reputation and would refrain from engaging in infringing behavior in the first place.¹⁵¹

A. Legal Strategies

Preventive legal strategies to avoid IP infringement typically involve taking initiative in filing patent and trademark applications. As noted above, different patents provide different levels of protection, but invention patents can be filed simultaneously with utility model patents. From filing to grant, an invention patent takes three to five years, while a design patent typically takes six to nine months; in filing simultaneously, a company can secure at least *some* level of protection with a design patent many months before the invention patent is granted. While copyright is bestowed upon creation of a work, registering a copyright with the Copyright Protection Center of China allows the government to confirm the nature of the copyright and ownership of that right, which can be presented as evidence in the event that dispute arises. As trademarks are registered on a first-to-file basis, a firm looking to protect its brand would be prudent to file its trademark immediately, even if the firm is only considering conducting business in China in order to avoid issues that may arise from the activity of trademark “squatters” (those who file a foreign company’s logo as a trademark in China before the company attempts to file, often forcing the company to buy rights to the trademark or enter lengthy and/or expensive disputes). Prices vary between filing patents and trademarks or registering a copyright with the Copyright Protection Center of China, but the costs of filing protection for any of these types of IP are generally much lower than the costs such processes incur in North America, generally making pre-emptive filing a cost-effective option. Whether dealing with patents, copyright, or trademarks, taking the initiative to begin IP protection by filing if any possibility of infringement arises is more often than not a cost-effective strategy, as this deters infringers and positions the filer in a favorable position if an infringement dispute arises. The concept of unregistered rights is not well-established in China, and unregistered IPR is generally not enforceable.

¹⁵⁰ Interviews of Canadian practitioners and company representatives, February-April 2014; Discussions during an executive roundtable hosted by the Asia Pacific Foundation of Canada, March 2014.

¹⁵¹ Ibid.

If infringement occurs, several enforcement paths are available for action: administrative proceedings, judicial/litigation proceedings, customs enforcement, and criminal procedures. The optimal route is generally determined on a case-by-case basis, but determining which path is more advantageous relates largely to timeframe (the administrative route is generally more expeditious), costs (the administrative route is also cheaper), and damages awarded. Administrative action is typically more popular and is often used to resolve simpler cases. When an IP owner seeks to recover damages, however, a judicial route may be preferable.

Among Canadian interviewees who participated in this project, the best way to seek legal remedies is a contested matter. Some respondents stated that they have chosen to settle disputes in Chinese courts with the assistance of local counsel, but some respondents declared that it was preferable to pursue legal action in a foreign jurisdiction with a better rule of law. While some will not hesitate to pursue infringers in China, others argued that it is less effective to target Chinese infringers and the focus should instead be on the infringers' partners located in a different jurisdiction (e.g. Canadian importers of Chinese counterfeits).¹⁵²

I. Administrative Route

The State Intellectual Property Office (SIPO) promulgated the *Measures for Administrative Enforcement of Patent*, the law governing procedure for actions brought before local Intellectual Property Offices (IPO). Article 5 indicates that a patent holder must file a written request to administrative authorities clearly identifying the respondent and the matter at issue while specifying that proceedings have not already been brought before the court (i.e. administrative and judicial actions cannot be initiated simultaneously). Administrative authorities handling the dispute will then make a determination as to whether the request will be accepted within 7 days for patent actions and within 15 days for copyright actions.¹⁵³ Within 14 days of the request, the accused infringer will be contacted. After the date of contact, the respondent infringer will have 15 days to submit a written defense or institute legal proceedings within the People's Court.¹⁵⁴ Failure to answer within a given time will cause the action to proceed without the respondent's participation, and the IPO will generally issue a decision within a few months.¹⁵⁵ If the administrative agency determines that infringement has been proven, the IPO may order the responsible party to cease manufacturing and selling the infringed products, destroy existing products, and/or confiscate illegal earnings.¹⁵⁶ While the plaintiff cannot be awarded monetary damages, a request can be made for the IPO to mediate resolution of claims for compensation.¹⁵⁷ If an infringer fails to comply with an administrative order, the administrative authority may request an order from the People's Court for cessation of the activity in question.

Aside from IPOs, the Administration for Industry and Commerce (AIC) also handles administrative action against infringement, primarily for trademark and copyright cases. While the AIC's powers may be limited

152 Interviews of Canadian practitioners and company representatives, February-April 2014; Discussions during an executive roundtable hosted by the Asia Pacific Foundation of Canada, March 2014.

153 *Measures for Administrative Enforcement of Patent*, Articles 8 and 13, http://www.chinaipr.gov.cn/lawsarticle/laws/lawsar/patent/200608/232971_1.html.

154 Jeffery M. Duncan, Michelle A. Sherwood and Yuanlin Shen, "A Comparison Between the Judicial and Administrative Routes to Enforce Property Rights in China," *John Marshall Review of Intellectual Property Law*, no. 529 (2008): 538-539, <http://repository.jmls.edu/cgi/viewcontent.cgi?article=1161&context=ripl>.

155 In this case, the plaintiff will not automatically win, but the case may proceed even without the participation of the respondent. The court may still find that the plaintiff's claim should not win.

156 *Measures for Administrative Enforcement of Patent*, Article 33.

157 Lin Yasong, M.T. Connor, "An overview of the judicial protection of patents," *Journal of Intellectual Property Law & Practice* 3, no. 3 (March 2008), 168.

compared to the police, it has the authority to initiate inspections and raids, either based on its own suspicions or after a party is able to present some proof of infringement. As in the case of the IPO, the plaintiff cannot be awarded monetary damages. However, the AIC can impose administrative fines (a maximum of RMB 100,000 or CAD\$16,972), order the infringing party to stop all infringing activities, and destroy all the equipment used to produce counterfeits. With more than 3,000 AIC offices scattered across China staffed by approximately half a million employees, seeking assistance from the AIC is a relatively accessible option.¹⁵⁸ An example of an administrative case involves the American motorcycle manufacturer, Harley-Davidson. Aside from filing lawsuits in court, the company also sought assistance from the Jiaonan City Administration of Industry and Commerce (located in Shandong Province). This division conducted a raid and uncovered more than 3,200 counterfeit Harley-Davidson clothing items and 2,700 fake labels.¹⁵⁹

A major disadvantage of the administrative route stems from restrictions on issuing damages. Compensatory damages cannot be awarded to the plaintiff, but can be awarded in a mediation or by appealing to the People's Court. If a case is complex and likely to be disputed by an infringer and the plaintiff seeks compensatory damages, the judicial route may be optimal. IP holders should not discount, however, that taking the administrative route allows for more immediate cessation of the infringement with options to appeal and recover compensatory damages after resolution of the administrative action. Overall, the administrative route provides an expeditious, inexpensive path to cease infringement and is especially effective when infringement has clearly occurred, is clearly connected to the accused infringer, and the infringer is unlikely to vigorously challenge the accusations of infringement. The timeliness of this form of resolution presents a major advantage over judicial enforcement for IP holders: fixed time limits and streamlined processes for requests allow cases to be resolved and infringement to cease within months rather than in the one to three years typically required in the People's Court.

2. Judicial Route

China's court system consists of four levels of courts. From the bottom up, these are the (1) County or District Courts, (2) Intermediate Courts, (3) Higher Courts, and (4) the Supreme People's Court. Cases are typically brought before Intermediate Courts, and appeals can be brought to the Higher People's Court. The Supreme People's Court will rarely accept appeals from the Higher People's Court, but is able to do so at its discretion. Lawsuits involving patents usually involve two prior parties, differing from the administrative route in which disputes are resolved in terms of a private party and SIPO or a local intellectual property office.¹⁶⁰ A plaintiff may initiate proceedings with the People's Court where the infringer is located or where the infringing act occurred (e.g. where the product in question was sold or where a patent was used in production).¹⁶¹ The plaintiff and defendant must then produce evidence to support their claims (e.g. showing ownership of the patent, instances of infringement, and losses incurred due to infringement). After public prosecution is initiated, neither party may withdraw the case unilaterally and no mediation or deals may be concluded.¹⁶²

158 Brandy Baker, "Protecting Your Intellectual Property in China," Presentation conducted during the Intellectual Property Protection in China Seminar, *Department of Foreign Affairs, Trade and Development*, February 28, 2014, Vancouver, British Columbia; "Intellectual Property Guide China," *Baker & McKenzie*, January 2012, accessed March 16, 2014, http://www.bakermckenzie.com/files/Uploads/Documents/China%20Update%202012/bk_china_intellectualpropertyguide_jan12.pdf.

159 "Harley-D Revs Up IPR Protection," *China Daily*, April 6, 2009, accessed April 23, 2014, http://www.chinadaily.com.cn/bw/2009-04/06/content_7650925.htm.

160 Jeffery M. Duncan, Michelle A. Sherwood and Yuanlin Shen, "Comparison Between the Judicial and Administrative Routes to Enforce IP in China", 534.

161 Samir B. Dahman, "Protecting Your IP Rights in China: An Overview of the Process," *Entrepreneurial Business Law Journal*, no. 63 (2006): 63, <http://moritzlaw.osu.edu/students/groups/oseblj/files/2013/04/1-3.pdf>.

162 Jeffery M. Duncan, Michelle A. Sherwood and Yuanlin Shen, "Comparison Between the Judicial and Administrative Routes to Enforce IP in China," 537.

The main disadvantages of the judicial action route are the high cost and length of proceedings.¹⁶³ Another disadvantage of the judicial route stems from the courts' inability to authorize the invalidation of patents, which must be done by the Patent Reexamination Board under the jurisdiction of SIPO, slowing the process of patent invalidation.¹⁶⁴ Mixed advantages and disadvantages also characterize this route of enforcement. Plaintiffs are allowed to forum shop and choose more experienced courts, typically placing defendants at a disadvantage. For example, an infringement may take place across several jurisdictions if the patented product (or any other product protected by other types of IP law) is designed, produced, and sold in different provinces. The judicial route also allows for award of damages, but victims of infringement often complain that calculated damages are typically much less than actual damages incurred, typically because the infringing products are sold at significantly lower prices and because there are difficulties in calculating actual losses incurred as a result of infringement.¹⁶⁵

3. Customs Enforcement

Copyright, trademark, and patent rights may also be enforced at the customs level. The *Customs Law* of the People's Republic of China prohibits export and import of goods that infringe an IP holder's rights. China examines both imported and exported goods. The holder of the IP may make an application and pay a recordation fee to the General Administration of Customs (GAC), with a separate application and fee filed for each IP right.¹⁶⁶ Recordation of the goods (i.e. registration of the good with customs) is valid for a 10-year term and may be renewed for one additional 10-year term, but recordation cannot be extended past the validity of the IP right in question (e.g. past a patent's date of expiry). If the detained goods are found to be infringing, the goods will be disposed of (possibilities of disposal include donation, sale to rights holder, or destruction) and a fine of up to 30% of the value of the goods will be imposed.¹⁶⁷ Furthermore, if the infringement exceeds a certain level, customs authorities will initiate criminal proceedings against the infringer. Recordation of IP rights with the General Administration of Customs is typically straightforward and inexpensive, making recordation a simple and effective method of hindering movement of infringing goods and becoming aware of potential infringers.¹⁶⁸

4. Criminal Enforcement

Criminal procedures also act to deter IP infringement. Articles 213-219 of the *Criminal Law* of the People's Republic of China capture a number of infringement activities, including the following:

- Counterfeiting registered trademarks (Article 213);
- Selling goods bearing registered trademarks (Article 214);
- Forging another person's patent (Article 216);

163 Lin Yasong and M.T. Connor, "An overview of the judicial protection of patents," 172.

164 *Patent Law* of the People's Republic of China, article 46.

165 Chun-Hsien Chen, "Explaining Different Enforcement Rates of Intellectual Property Protection in the United States, Taiwan, and the People's Republic of China," *Tulane Journal of Technology & Intellectual Property*, no. 10 (2011): 462.

166 The fee is nominal (RMB 800 or CAD\$135.78) and the researchers have not encountered any known applications or recordations that can be made without paying the fee. The system may be susceptible to bribery, but it is difficult to make a determination thereof based solely on secondary sources or to collect information on this subject – individual cases are unlikely to be reported, regardless of whether they are detected.

167 China IPR SME Helpdesk, "Roadmap for Intellectual Property Protection in China," *EU-China Project on the Protection of Intellectual Property Rights*, Summer 2008, accessed February 25, 2014, <http://www.ipr2.org/roadmap>.

168 China IPR SME Helpdesk, "Guide to using customs to protect your IPR in China," *EU-China Project on the Protection of Intellectual Property Rights*, 2012, <http://www.china-iprhelpdesk.eu/docs/publications/Customs.pdf>.

- Copyright infringement (Article 217); and
- Infringing commercial secrets (Article 219).¹⁶⁹

While the *Criminal Law* captures a broad range of activities, very few instances of infringement are prosecuted under criminal law. In 2004, for example, 41,163 instances of trademark law violations were recorded, yet only 96 cases (0.2%) were processed according to procedures under criminal law. The threshold for triggering criminal enforcement is criticized as being too high to allow more cases to be brought under criminal proceedings, and discrepancies in determining what administrative cases can be referred to criminal prosecution make it unclear whether certain infringements may be actionable under criminal proceedings. Lastly, more types of IP infringement are capable of being brought to action under civil proceedings (despite the broad language in the *Criminal Law*). Even though a plaintiff may have the option of recovering civil damages in criminal proceedings, it is not clear when such damages are available according to this route of enforcement.¹⁷⁰ Under almost all circumstances, actions brought under customs enforcement or administrative or judicial proceedings are more likely to yield an outcome that either causes infringement to cease or awards the plaintiff compensatory damages. Criminal enforcement is the least desirable enforcement route of those mentioned here.

Key Points: Legal Strategies

- The administrative route provides an expeditious, inexpensive path to cease infringement. Cases can be resolved and infringement ceased within months. However, damages cannot be awarded.
- The judicial route allows for award of damages, but victims of infringement have often complained that calculated damages are typically much less than actual damages incurred. High costs and the length of proceedings are its main disadvantages.
- Copyright, trademark, and patent rights may also be enforced at the customs level. The *Customs Law* of the People's Republic of China prohibits export and import of goods that infringe an IP holder's rights.
- The Criminal Law captures a broad range of IP-infringing activity, but the threshold for triggering criminal enforcement is too high to cover more cases. Criminal enforcement is deemed as the least desirable enforcement route.

¹⁶⁹ *Criminal Law* of the PRC, <http://www.asianlii.org/cn/legis/cen/laws/clotproc361/>.

¹⁷⁰ Tim Browning, "Protecting and Enforcing Your Intellectual Property in China," *United States Patent and Trademark Office*, <http://www.wtcak.org/China05PDF/TimothyBrowningPresentation.pdf>.

B. Non-legal Strategies

Apart from remedial measures that can be sought with the aid of the government, firms can implement IP-protecting strategies at the company level. These strategies are often sought with the recognition that government agencies and the judicial court system may not be able to provide satisfactory solutions due to bureaucratic impediments and a weak legal system.

The type of non-legal strategy adopted depends to a large extent on the type of industry and the nature of infringement. In some cases, consumers are victims of IPR infringement – often in the case of pharmaceutical products where counterfeits pose health and safety risks to consumers. Under such scenarios, strategies should be directed against producers of counterfeit goods. On the other hand, in the purchase of luxury goods and software, consumers often consciously encourage infringement by knowingly purchasing counterfeit products. In such cases, strategies geared towards the education of consumers can be as important as targeting producers of counterfeits.¹⁷¹ At the same time, these strategies are not mutually exclusive and companies often pursue a combination of these strategies.¹⁷²

Non-legal strategies can further be categorized as internal and external company policies. Internal policies are strategies implemented within the company while external policies are strategies implemented through the company's interaction with other external actors such as the general public, Chinese government officials, or other foreign governments.

I. Internal Company Policies

Nothing has been emphasized more strongly than the importance of adequate preparation before entering the Chinese market. Canadian interviewees stressed the need for companies to register their IP even before entering the market or initiating negotiations with potential Chinese partners. Other preparatory steps highlighted by Canadian practitioners and company representatives include: (1) the incorporation of IP-protecting clauses in contracts, (2) conducting a background search on potential Chinese partners, (3) understanding the local culture, language, business environment and political dynamics, and (4) providing accurate translations of all documents and contracts. Companies are also encouraged to seek other Asian partners from Hong Kong or Taiwan that may be more familiar with the Chinese market. Larger-sized firms are also encouraged to consider expanding to other locations in Asia first as a stepping stone to entering the Chinese market.¹⁷³

Another popular strategy for many firms to combat the proliferation of cheap counterfeits is price discounting. In a study conducted by the United States International Trade Commission, more than a quarter of firms that have experienced infringement also lower their prices in China relative to their prices in the United States. However, it is unclear whether the decision to lower prices is shaped primarily by the need to combat lower prices from counterfeit goods or the need to adapt to the lower standards of living in China. However, price discounting as a strategy is often considered ineffective. First, it is impossible to lower prices to the extent that they will be competitive against counterfeits produced at extremely low marginal costs of production given the absence of high R&D and marketing costs. Second, because IPR infringers in China seldom respond by discounting their own prices, legitimate producers, by lowering their own prices, narrow the price margin between legitimate and counterfeit goods, further making it more challenging and confusing for consumers to distinguish counterfeits

171 “Develop Your China Enforcement Strategy,” *Managing Intellectual Property* 175 (2007-2008), 48.

172 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, “Enforcing Intellectual Property Rights in Weak Appropriability Regimes,” *Management International Review* 50, (2010): 115.

173 Interviews of Canadian practitioners and company representatives, February-April 2014. Discussions during an executive roundtable hosted by the Asia Pacific Foundation of Canada, March 2014.

from their original counterparts.¹⁷⁴

A third strategy for firms in protecting their intellectual property is to take technological measures to make theft harder. A survey of European companies showed that 39% of respondents took such measures.¹⁷⁵ These measures often involved technological specialization wherein companies incorporate such a high degree of technological complexity in their products that they will be difficult to imitate, and in cases where infringers do succeed in imitating their technology, the costs would be so high that there would be little financial incentive to do so. While there can be a variety of ways to achieve technological specialization, examples include the use of encryption keys and specialized packaging. Some companies also assemble their products using numerous modularized components. Thus, even when infringers succeed in imitating one component, they still cannot imitate the final product because it would be too difficult or expensive to imitate all of the components needed to build the final product.¹⁷⁶ Continuous innovation is another important method. By continuously improving the technological features of its products, a piece of technology would have lost its cutting edge quality by the time it has been imitated by infringers. A Canadian company representative provided the example of an Intel chip, wherein a newer product has been developed by the time infringers can successfully reverse engineer an earlier product. Within his own company, the representative reported adding additional confusing features in the company's products. These features serve no other function other than to confuse potential infringers who are likely to assume that the features serve an actual function.¹⁷⁷

A fourth important strategy is termed as the 'de facto secrecy' of a company's technologies. De facto secrecy has two important aspects. First, all the information must be kept confidential within a small circle of people. None of the important information can be documented or recorded in writing, and unlike trade secrets, the information is not protected by nondisclosure agreements. Second, information is fragmented. The key to information fragmentation is to prevent third parties from seeing the technological 'big picture'. Key data vital to the functioning of the final product is withheld and kept confidential among a small group of people. Technology is 'modularized' into smaller pieces so that in the case of information leakage, leakage is confined only to a particular section of production. Information fragmentation is particularly useful when the company needs to partner with a local firm.¹⁷⁸ In such cases, partner firms are only allowed access to a small piece of the technological big picture. A Canadian company representative reported the use of such methods in protecting the company's IP. In manufacturing the company's electronic equipment, different contractors were asked to manufacture different parts of the final product, with the key technology separated from the rest of the components. Through this method, Chinese partners are not able to access all the technologies and techniques required to reproduce the final product. The company representative further added that instead of patenting the final product, which would require substantial disclosure of important know-how, his company instead patented all techniques and components that could possibly serve as a technological pathway to reproducing the final product.¹⁷⁹ De facto secrecy can also be used in conjunction with patent registration, where components are patented but the procedures for manufacturing the product itself and assembling the final product are kept secret. This strategy, however, carries the risk of information leakage when knowledge is entrusted to an untrustworthy person.¹⁸⁰

Fifth, the education of company employees must be considered, as employees often play a role in facilitating

174 United States International Trade Commission, "China," 3.24–3.25.

175 Juan Antonio Fernandez et al, "Business in China Survey 2013," *China Europe International Business School* (2013): 25.

176 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, "Enforcing Intellectual Property Rights," 115–117.

177 Interviews of Canadian practitioners and company representatives, February-April 2014.

178 Ibid, 117-118.

179 Interviews of Canadian practitioners and company representatives, February-April 2014.

180 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, "Enforcing Intellectual Property Rights," 117-118.

IPR infringement and the theft of trade secrets. Company employees are trained to understand the impact of IPR infringement, not only on the company but also on the employees. Such training is combined with the building of trust and relationships to encourage loyalty towards the company.¹⁸¹

Finally, some companies choose to conduct in-house investigations. These investigations can range from tracking down infringers to identifying the weak spots in the company's distribution channel. In-house investigations can enhance the effectiveness of criminal investigations. Although IPR owners can seek assistance from the police or other administrative agencies, these agencies follow time-consuming procedures that allow infringers to escape by the time investigations have started. Traditionally, law enforcers start an investigation following a raid and an inventory confirming that the threshold amount has been reached to warrant an investigation. This procedure can take weeks or even months and the delay is often enough to allow suspects to escape and cover their tracks.¹⁸²

2. External Company Policies

As briefly mentioned earlier in this section, public education is also an important strategy. Although attitudes towards intellectual property have slowly been evolving, these changes have yet to permeate all levels of society. Education can warn consumers of the risks and dangers involved in purchasing counterfeit products.¹⁸³ This strategy is often pursued when the costs of tracking down infringers and bringing them to court pose financial disincentives. Public education is particularly useful when counterfeits are of poor quality. Under these circumstances, counterfeits can serve as 'advertising' for the producer and boost the company's reputation. After buying low-cost, low-quality products that require replacement after a short period of time, consumers are more likely to buy the more expensive, high-quality original products.¹⁸⁴

Canadian company representatives also point to another important strategy, which is to cultivate mutually dependent business relationships with local Chinese partners. Although Chinese partners are often potential perpetrators of IP infringement, they may also be a source of valuable information and networks when the business relationship is cultivated in the right manner. A Chinese partner may help its foreign counterparts in enforcing IP protection. One of the interviewed practitioners raised the example of a Quebec-based energy company that entered China. Because the company was manufacturing its motors not only for the Chinese market but also for global distribution, its Chinese partner refrained from infringing its IP and helped protect it from infringement by other parties for the sake of earning profits globally.¹⁸⁵

In line with the importance of social relationships (*guanxi*) in the Chinese context, many companies also actively cultivate networks and relationships with local government agencies and their officials. Although these agencies may not deal with intellectual property issues directly, their *de facto* power can bring about results more effectively than the weak legal system. When companies successfully gain the status of an 'old friend', officials and law enforcers are quicker to offer assistance and pursue IP infringers.¹⁸⁶ As an example, a Canadian company in China's Shandong province had its trade secret stolen by a former employee who was blackmailing the company. The former employee threatened to sell the trade secret to the company's competitor if that company did not pay RMB 1 million (CAD\$169,728). Initial attempts to seek help from the local police served futile. Yet, after

181 Ibid, 118-119.

182 "Develop Your China Enforcement Strategy," 48.

183 Paul Mozur, "Microsoft Retools in Fight Against China Pirates."

184 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, "Enforcing Intellectual Property Rights," 121-122.

185 Interviews of Canadian practitioners and company representatives, February-April 2014.

186 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, "Enforcing Intellectual Property Rights," 119-121.

calling the office of the governor of Shandong, the local police proactively contacted the Canadian company to set up a sting operation, consequently leading to the arrest of the former employee.¹⁸⁷ In another example, a foreign company alerts the government immediately every time it discovers that counterfeits of its products are being sold in the Chinese market. Government officials take action quickly by citing potential harm to public safety. As representatives of this company would admit, however, this would not have been possible if the company had not taken the time to cultivate relationships with government officials over the years. Reliance on social relationships is often more cost-effective, simpler, and faster than filing a lawsuit against infringers. Other companies also cultivate relationships with customs officials, who have the authority to block the shipment of counterfeit goods. However, this strategy also has its limitations. In cases where the infringer is a state-owned enterprise, foreign companies are less able to seek assistance from government officials who have a stake in boosting the growth of SOEs and facilitating technology transfer to these entities.¹⁸⁸

Finally, foreign companies often seek assistance from their home governments. One possibility is to seek a political solution by lobbying their governments to exert pressure on the Chinese government. Such action is evident in the strategy of Interdigital Communications and three other American firms which filed a complaint with the United States International Trade Commission (USITC) on the grounds that Huawei and ZTE infringed patents related to wireless, 3G, and 4G capabilities. Should investigations show that Huawei and ZTE infringed upon the complainants' patents, the United States could retaliate by imposing a ban on the products in question. Although the USITC ultimately ruled against Interdigital Communications, the case nevertheless reflects the availability of political measures for foreign corporations.¹⁸⁹ In another significant case, the American firm Amsted, which manufactures railroad components, was able to seek assistance from the USITC after Tianrui Group allegedly misappropriated Amsted trade secrets by hiring employees from an Amsted licensee. In response, the USITC blocked the infringing products from entering the United States, despite the fact that misappropriation had occurred overseas.¹⁹⁰ Similarly, the Canadian government has also sought a political solution by negotiating a Foreign Investment Promotion and Protection Agreement which includes provisions allowing business owners to seek remedial measures for IPR infringement overseas.¹⁹¹

Assistance from home governments may also come in the form of information provision, which benefits SMEs in particular, given their limited resources. A number of Canadian government agencies provide free information on the protection of IP in China, including the Canadian Trade Commissioner Service and the Department of Foreign Affairs, Trade and Development. The type of information provided includes advice on dealing with Chinese companies, examples of infringement cases, information on China's IP law and lists of Chinese law firms and IP lawyers.¹⁹² To aid Canadian companies in acquiring patent protection in China more easily, the Canadian Intellectual Property Office signed a Patent Prosecution Highway Agreement with SIPO, which came into force on September 1, 2013. Signing the agreement enabled both parties to implement a pilot program

187 Discussions during an executive roundtable hosted by the Asia Pacific Foundation of Canada, March 2014.

188 Marcus M. Keupp, Angela Beckenbauer and Oliver Gassmann, "Enforcing Intellectual Property Rights," 119-121.

189 "China Opposes "Politicization" of Intellectual Property Disputes by US," BBC Monitoring Asia Pacific, March 4, 2013.

190 Natalie Flechsig, "Trade Secret Enforcement after Tianrui," 449-482; "Tianrui Group Company Ltd vs. International Trade Commission," Trade Secrets Institute, October 11, 2011, Docket Number 2010-1395, accessed March 10, 2014, <http://tsi.brooklaw.edu/cases/tianrui-group-company-ltd-v-international-trade-commission>.

191 Jameson Berkow, "Cautious Approach to China; Companies Must Take Intellectual Property Protection into Own Hands," Financial Post, November 4, 2011.

192 "Protecting your Intellectual Property in China," *The Canadian Trade Commissioner Service*, last modified April 9, 2014, accessed April 20, 2014, <http://www.tradecommissioner.gc.ca/eng/document.jsp?did=118683>. The DFATD offers information sessions on IPR protection in China, such as the "Intellectual Property Protection in China Seminar" held on February 28, 2014 in Vancouver, British Columbia.

to reduce processing and examination time for applications for corresponding patents.¹⁹³ While the Canadian government is putting strategies and policies in place to help protect Canadian companies' IP, one of the Canadian respondents noted that mechanisms for preventing the entry of counterfeit goods into Canada remain underdeveloped.¹⁹⁴

3. Case Study: Microsoft

The case of Microsoft is a popular example of a foreign company pursuing many of the non-legal strategies discussed above to protect their intellectual property in China. To educate Chinese consumers of the harms of utilizing pirated software, Microsoft conducted a study of pirated versions of Windows in China and publicized the results. The study showed that 91% of the computers contained malware or similar security vulnerabilities while 72% had browser settings that are likely to lead consumers to fraudulent sites. At the same time, Microsoft has increasingly shifted its focus towards cloud computing as it is more difficult to use pirated software with the cloud model.¹⁹⁵ The company also incorporated other security features such as security threads and holographic films in their packaging to make it harder for counterfeiters to copy.¹⁹⁶

Furthermore, Microsoft actively conducts in-house investigations. These investigations seek to discover the weaknesses of the distribution channel and determine the phase along the channel when pirated software is actually installed. Microsoft also set up operations that allowed it to track down large-scale counterfeiters with some success. In 2007, Microsoft provided assistance to the Chinese Public Security Bureau to track down counterfeiters in what was historically one of the biggest software busts ever in Southern China. During the raid, investigators uncovered US\$2 billion (CAD\$2.11 billion) worth of counterfeit Microsoft software in 11 languages. Given Microsoft's economic clout, it has also been quite efficient in pressuring the Chinese government and law enforcement officials to pursue software counterfeiters.¹⁹⁷ In addition, Microsoft also sought the assistance of attorney generals in American states by establishing the linkage between pirated software and job losses in the United States, as exports from China gained an unfair cost-advantage by utilizing pirated software. As a response, attorney generals from Oklahoma and Louisiana filed lawsuits against Chinese exporters for the use of pirated Microsoft software.¹⁹⁸ These strategies achieved some success. Although losses from piracy continue to run high, the Chinese central government has made substantial progress in the legalization of software used in government offices.¹⁹⁹

193 "CIPO's Patent Prosecution Highway Agreement with China Began September 1, 2013," *Canadian Intellectual Property Office*, September 3, 2013, accessed April 19, 2014, <http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr03688.html>.

194 Interviews of Canadian practitioners and company representatives, February-April 2014.

195 Paul Mozur, "Microsoft Retools in Fight Against China Pirates."

196 Ashlee Vance, "Chasing Pirates: Inside Microsoft's War Room," *New York Times*, November 6, 2010, accessed March 17, 2014, http://www.nytimes.com/2010/11/07/technology/07piracy.html?pagewanted=all&_r=0.

197 Paul Mozur, "Microsoft Retools in Fight Against China Pirates.," Vance, "Chasing Pirates: Inside Microsoft's War Room."

198 James Hagerty and Shira Ovide, "Microsoft Pursues New Tack On Piracy; Software Maker Forges Alliances with State Attorneys General," *Wall Street Journal*, March 16, 2014, accessed March 17, 2014, <http://online.wsj.com/news/articles/SB10001424052702303287804579443442002220098>.

199 Office of the United States Trade Representative, "2013 Special 301 Report," accessed March 17, 2014, <http://www.ustr.gov/about-us/press-office/reports-and-publications/2013/2013-special-301-report>.

Key Points: Non-legal Strategies*Internal Company Policies*

- Adequate preparation, including: gaining sufficient knowledge of the local environment, incorporating IP-protecting clauses in contracts, and finding the most appropriate business partners;
- Price discounting;
- Technological specialization (incorporating such a high degree of technological complexity in products that they will be difficult to imitate) and continuous innovation;
- De facto secrecy;
- Employee training; and
- In-house investigations.

External Company Policies

- Public education;
- Mutually dependent business relationships with Chinese partners;
- Relationships and networks with Chinese government agencies; and
- Assistance from foreign governments, including lobbying foreign governments to exert pressure on the Chinese government and seeking information and advice.

VII. Conclusion

Canadian businesses continue to face major IP challenges in their engagement of China. As mentioned above, “intellectual property rules and practices, inconsistent interpretation of regulations and laws and weak dispute settlement mechanisms” comprise the top three major challenges that Canadian businesses in China face.²⁰⁰ These challenges are interrelated. Weak dispute settlement mechanisms and inconsistent interpretation of laws in China are both manifestations of strong political influences and a weak legal system at the heart of the Chinese central government’s inability to enforce its own IP laws.

In addition to this survey, the Canadian Chamber of Commerce cites “weak intellectual property protection and enforcement” as one of the top irritants in Canada’s economic relationship with China, together with “trade restrictions on goods and services” and “unfair competitive practices.”²⁰¹ Again, these challenges can be linked to IP issues. Key among “trade restrictions on goods and services” are non-tariff barriers (e.g. regulatory standards designed to protect strategic domestic industries and discriminate against foreign competitors).²⁰² Such barriers are embedded in China’s indigenous innovation policies that aim to introduce domestic technical standards containing indigenously-invented IP. These domestic standards erode the competitiveness of foreign firms by requiring them to adhere to both global and Chinese standards, incurring additional costs in the process. Additionally, China’s indigenous innovation policies have often been criticized as promoting unfair competitive practices. China’s indigenous innovation product requirement has largely excluded foreign companies from participating in government procurement bids, while technology transfer requirements boost the competitiveness of domestic firms to the disadvantage of foreign investors required to exchange core technologies for market access. At the same time, subsidies given by the Chinese government to strategic, high-technology firms are given with the aim of stimulating innovation in domestic firms.²⁰³

The linkage between IP issues and other challenges encountered by Canadian firms in China highlights the centrality of intellectual property issues and the urgency of finding a satisfactory solution to the protection of Canadian intellectual property in China. Despite this importance and urgency, there remain inadequate efforts to conduct an in-depth study of the issue. The challenges we have encountered in the execution of this study have brought to light the dearth of literature on IPR infringement in China written specifically from Canadian perspectives. While IP issues are consistently mentioned in various reports and articles as one of the main challenges confronting Canadian firms in China, there is, at present, no comprehensive and systematic study that evaluates actual losses resulting from IPR infringement.

Despite the lack of information publicly available on Canadian businesses’ IP issues in China, we are able to draw some general inferences considering information on the nature of Canadian businesses in China, China’s IP landscape, and the nature of most Canadian businesses’ engagement with China. These inferences are largely speculative and require hard evidence for verification. If evidence (e.g. reports from interviewed businesses) confirms these conjectures, then policymakers should proceed to design policy to address these issues.

First, most Canadian businesses engaging China are SMEs that do not have the same resources that are available to larger firms to address their IP issues.²⁰⁴ For example, multinational corporations based in the United States that have substantial in-house counsel who are experienced in dealing with complex domestic

200 Asia Pacific Foundation of Canada, “Business in China Survey 2012,” 17.

201 Canadian Chamber of Commerce, “Advancing our Economic Ties with China,” 21-28.

202 Ibid.

203 United States International Trade Commission, “China,” 5.5.

204 Asia Pacific Foundation of Canada, “Business in China Survey 2012,” 9-11.

and international IP problems are more able to cost-effectively deal with similar problems in China. Smaller Canadian firms have difficulty affording the costs incurred by keeping up with China's rapidly changing IP system.

Second, most Canadian companies are new to China's market. The majority of Canadian businesses appear to have 10 years or fewer of experience with China.²⁰⁵ More established firms that have been heavily involved with China's economic development since the opening of China to trade and investment in the 1980s and 1990s may be familiar enough with China's business practices that relate to IP to navigate China's IP system with relative adeptness. Canadian businesses new to the market have a steep learning curve to climb before they can operate effectively within China's IP framework. Canadian businesses' lack of long-term, trusted business partners in China presents similar difficulties in being able to extend their involvement in IP.

Finally, a lack of information publicly available to Canadian companies creates difficulty for Canadian companies looking to engage China and develop an IP strategy suited for the idiosyncrasies of particular companies. Readers should again note that these generalizations still require evidentiary verification.

The need for evidentiary verification, due to the lack of literature written from a Canadian perspective, highlights the rationale and importance of the second phase of this project. By conducting a wide-reaching survey of Canadian companies doing business in China, this project aims to fill the gap and serve as the first comprehensive and systematic study assessing the impact of IPR infringement on Canadian companies in China. The current literature review will serve as a meaningful guide to the design of the survey for the second phase of the project.

Going forward, results from the survey will serve two purposes. Survey results will first be used to produce a stand-alone report providing an analysis of key findings for wider audiences who are interested in Canadian business activities in China. The major findings related to IPR issues will then be incorporated into the current literature review to produce a more comprehensive assessment of IPR challenges encountered by both Canadian and other foreign firms in China.

205 Ibid.

Appendix

A. Chinese Government Structure²⁰⁶



Ministries, commissions and other key organizations all fall under the State Council. Based on this structure, all these entities supposedly enjoy the same level of authority. Bureaucratic clusters termed as ‘xitong’ (discussed in Section V) are composed of groups of ministries. A detailed list of all ministries and commissions is provided below.

IP-related agencies such as the State Intellectual Property Office, State Administration of Industry and Commerce, National Copyright Administration, and Standardization Administration of China all fall under the category ‘Other Key Organizations’. A detailed list of all key organizations is also provided below.

Ministries and Commissions

1. Ministry of Agriculture
2. Ministry of Civil Affairs
3. Ministry of Commerce
4. Ministry of Culture
5. Ministry of Education
6. Ministry of Environmental Protection
7. Ministry of Finance
8. Ministry of Foreign Affairs

²⁰⁶ “Chinese Government,” US-China Business Council, 2013, accessed April 20, 2014, <http://www.uschina.org/resources/chinese-government>.

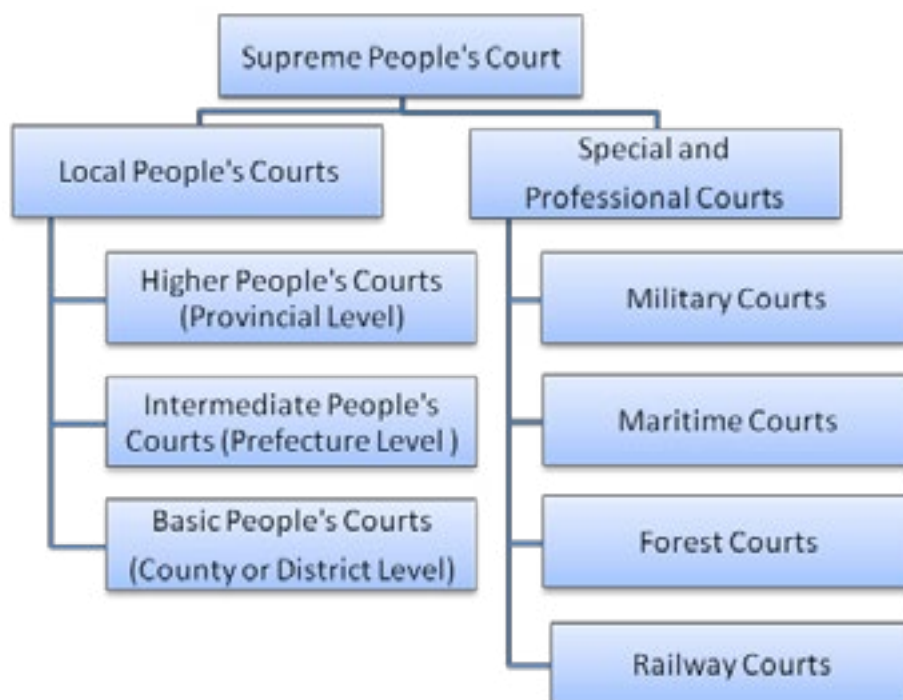
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9. Ministry of Housing and Urban-Rural Development
 10. Ministry of Human Resources and Social Security
 11. Ministry of Industry and Information Technology
 12. Ministry of Justice
 13. Ministry of Land and Resources
 14. Ministry of National Defense
 15. Ministry of Public Security
 16. Ministry of Science and Technology
 17. Ministry of State Security
 18. Ministry of Supervision
 19. Ministry of Transport
 20. Ministry of Water Resources
 21. National Audit Office
 22. National Development and Reform Commission
 23. National Health and Family Planning Commission
 24. People's Bank of China
 25. State Ethnic Affairs Commission

Other Key Organizations

1. Administration of Quality, Supervision, Inspection and Quarantine
2. Bureau of Government Administration Affairs
3. Bureau of Religious Affairs
4. Certification and Accreditation Administration of China
5. China Atomic Energy Authority
6. China Banking Regulatory Commission
7. China Earthquake Administration
8. China Food and Drug Administration
9. China Insurance Regulatory Commission
10. China Internet Network Information Center
11. China Meteorological Administration
12. China National Space Administration
13. China National Tourism Administration
14. China Securities Regulatory Commission
15. Chinese Academy of Engineering
16. Chinese Academy of Governance
17. Chinese Academy of Sciences
18. Chinese Academy of Social Sciences
19. Civil Aviation Administration of China
20. Counselor's Office under the State Council
21. Development Research Centre of the State Council
22. General Administration of Customs
23. General Administration of Sport
24. National Bureau of Statistics
25. National Copyright Administration
26. National Energy Administration
27. National Natural Science Foundation
28. National Security for Social Security Fund
29. Standardization Administration of China
30. State Administration of Coal Mine Safety
31. State Administration of Cultural Heritage

32. State Administration of Foreign Exchange
33. State Administration of Foreign Experts Affairs
34. State Administration of Grain
35. State Administration of Industry and Commerce
36. State Administration of Press, Publication, Radio, Film and Television
37. State Administration of Taxation
38. State Administration of Work Safety
39. State Asset Supervision and Administration Commission
40. State Bureau of Surveying and Mapping
41. State Council Hong Kong and Macao Affairs Office
42. State Council Information Office
43. State Council Legislative Affairs
44. State Council Overseas Chinese Affairs
45. State Council Research Office
46. State Council Taiwan Affairs Office
47. State Forestry Bureau
48. State Information Centre
49. State Intellectual Property Office
50. State Oceanic Administration
51. State Postal Bureau
52. State Tobacco Monopoly Administration
53. Xinhua News Agency

B. China's Court Structure²⁰⁷



All courts below the Supreme People's Court are classified under two categories: Local People's Courts and Special and Professional Courts. Trials in China may occur in two instances. Any level, including the Supreme People's Court, can serve as the court of first instance. Should the Supreme People's Court serve as the court of first instance, any judgment is final. Otherwise, parties can appeal the decision in the next higher level of courts (considered as the court of second instance). The second instance is normally the last, unless the Supreme People's Court agrees to hear the case.²⁰⁸

IP issues are not covered by special and professional courts. However, the Supreme People's Court, all Higher People's Courts, and a majority of Intermediate People's Courts have specialized IPR divisions.²⁰⁹

²⁰⁷ "Chinese Legal System," *Harvard Law School*, 2010, accessed April 20, 2014, <http://guides.library.harvard.edu/chineselegalresearch>.

²⁰⁸ Brandy Baker, "Protecting Your Intellectual Property in China."

²⁰⁹ *Ibid.*

C. China's Local Administrative Levels²¹⁰

Central Government				
First	Provinces (23)	Autonomous Regions (5)	Directly-controlled Municipalities (4)	Special Administrative Regions (2)
Second	Prefecture level administrative units which include prefectures and prefecture-level cities (300)			
Third	Counties and county-level cities (est. 3,000)			
Fourth	Townships and towns (est. 40,000)			

The term 'local government' generally refers to all administrative levels below the central government. This includes the provincial, prefecture, county and township levels.

There is no clear hierarchy between local administrative levels and ministries, commissions and key organizations that fall under the State Council. This contributes to political fragmentation, as discussed in Section V.

D. Interviews

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* All views expressed are the participants' own and do not represent the views of the companies listed.

E. About the Asia Pacific Foundation of Canada

Since its foundation in 1984, The Asia Pacific Foundation of Canada (APF Canada) has been a leader in research and analysis on Canada's relations with Asia. Our mission is to develop ideas for action by business, governments and Canadians to help them seize the vast opportunities unfolding in Asia. We do this by offering clear, specific and actionable policy advice and leadership based on sound research and analysis. The Foundation's current thematic priorities include trade and investment, energy and the environment, and international education. Engaged in research and convening, APF Canada has developed strong ties with policy-makers, business leaders, academics and opinion makers in Canada and throughout the Asia Pacific region.

210 Susan Lawrence and Michael Martin, "Understanding China's Political System," *Congressional Research Service*, March 20, 2013, accessed April 20, 2014, <https://www.fas.org/sgp/crs/row/R41007.pdf>.