

## **SURGE IN CHINESE INNOVATION AND THE IP IMPLICATIONS**

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After a long reign as the king of low-cost production, China's current focus on creating a globally competitive innovation-based empire is causing a stir in the global market. Recognizing that independent innovation is "the core of national competitiveness," the president of China set out in 2006 to increase investments in research and development to 2.5 percent of GDP and reduce reliance on foreign technology by 9 percent by 2020. Innovation centers in China are finding robust funding available for their R&D-related expenses, both from the government (through tax credits, grants, and loans) and from private investors (through newly implemented Nasdaq-like boards). These financial incentives have already caused significant reverse brain drain from Silicon Valley and are also inducing many foreign corporations without previous ties to China into opening operations there.

China's plans for 2020 are multi-dimensional – arming its domestic corporations with the intellectual and financial resources necessary to foster indigenous innovation, while strengthening its own patent system and promoting international patent rights to achieve maximum protection in the global market. While the country has implemented various improvements to its patent system in the past in response to demands from World Trade Organization members and foreign investors, never before has it been so intensely driven by domestic demand. Recognizing that internal incentive is the most powerful kind of driving force, former skeptics are paying careful attention to the most recent changes, particularly the Third Amendment to the patent law, and devising strategies to mark their territory in the Chinese patent system.

### **GROWING INTEREST IN PATENT RIGHTS AND THE GLOBAL MARKET**

The current reverse brain drain phenomenon may be contributing to Chinese companies' sudden interest in acquiring patent rights, as native scientists and engineers who return to China bring with them the patent-protective ideologies they have cultivated abroad. As part of China's initiative to promote indigenous innovation, provincial and municipal governments are also encouraging patenting by, for example, providing technical assistance for preparing patent applications or subsidizing patent application fees.

These measures have already made China's State Intellectual Property Office (SIPO), which was established only 25 years ago, the 3<sup>rd</sup> largest patent office in the world in terms of the number of invention patent applications received per year. Although it was established 195 years after the USPTO, SIPO's alarming 20% rate of growth puts it on track to overtake it by 2012 to become the largest patent office in the world.

International patent applications filed under the Patent Cooperation Treaty (PCT) originating in China are on the rise as well. Although it was only 16 years ago that the country became a PCT contracting state and SIPO was designated as a receiving office, China is already sixth in the world in PCT filings. Despite the PCT's 5% overall drop in filings and 14% drop in filings from the U.S. in 2009, applications originating in China increased by 19%, a strong signal that Chinese corporations are serious about globalization. However, China's relatively low average conversion rate of 0.86 national phase entries for every PCT application (compared to the average conversion rate of 2.5 in the U.S.) indicates that Chinese companies may not be getting the full advantage of their PCT applications.

Foreign players in the Chinese consumer market have enjoyed the competitive edge they gain from its economies of scale, and have relied upon it to achieve price-point advantages over competitors focused on

other regions. Chinese corporations — such as current global leaders in their respective refrigerator and microwave markets, Haier and Guangdong Galanz — are demonstrating that they are capable of leveraging these economies of scale to supplant long-term leaders. With the growth in innovation and heightened patenting activity in China, all industries are now working defensively to ensure that they maintain relevant.

Recognizing that China’s emergence as an innovating and patenting superpower poses not only a threat but also introduces certain opportunities for existing market leaders, foreign corporations have responded with creative ways to position themselves to not only stay afloat but also potentially benefit from changing conditions. For example, in response to China’s push for open source software standards that support domestically developed technologies and threatened the status of its platform, Microsoft uncharacteristically relaxed its stance on piracy and offered source code to the Chinese government. By sacrificing profits in the short-term, it was able to ensure that its platform dominates the market.

While a variety of paths are available to foreign corporations for navigating and benefiting from the Chinese market, the following section highlights changes in the patent system that stakeholders of all varieties should keep in mind to maximize the benefits of their innovations and avoid potential losses of their intellectual capital.

## IMPLICATIONS OF RECENT CHANGES IN THE PATENT SYSTEM

Selected provisions of the Third Amendment to China’s patent law are highlighted in the table below. Critics of the country’s former defunct novelty standard and lack of double patenting protection will be pleased to see that these gaps in China’s patent protection have been addressed. However, to anyone with a stake in Chinese innovation, more important aspects of the amendment are the protective mechanisms for innovations generated in the country – in particular, the new inventor compensation and first-filing requirements. Since non-compliance could translate into significant losses, any party generating innovation in China should consult with their counsel to ensure they have procedures in place to protect their intellectual capital.

In particular, in light of the new inventor compensation requirement, parties generating innovation in China should have a provision in their bylaws specifying the amount and method of compensation for employee-inventors in China and, preferably, a separate contract between the corporation and the inventor that reaffirms those policies. In addition, patent applicants should ensure that, for any invention created in China, the first patent application filed is one of: (i) a Chinese invention patent application, (ii) a PCT application designating SIPO as the receiving office, or (iii) subjected to an administrative examination to ensure the invention does not disclose state secrets.

	Coverage in Third Amendment to Chinese Patent Law (Implemented October 1, 2009)
ARTICLE 16: Inventor Remuneration	<u>SCOPE</u> : employee-inventors in China (invention, utility model, and design patents) In the absence of a contract or corporate policy specifying “reasonable remuneration,” an employee-inventor is entitled to: (i) upon issuance of a patent, no less than 3000 RMB for an invention patent, or no less than 1000 RMB for a utility model or design patent; (ii) during commercial exploitation of the patent, no less than 2 percent of annual profits of an invention or utility model patent, or no less than .2 percent of annual profits from a design patent; and (iii) upon licensing, no less than 10 percent of the licensing fee.
ARTICLE 20: First Filing Requirement	<u>SCOPE</u> : inventions created in China (invention, utility model, and design patents) Applications must first be: (i) filed in a Chinese invention patent application; (ii) filed in a PCT application designating SIPO as the receiving office; or (iii) subjected to an administrative examination to ensure the invention does not disclose state secrets.

	Applications filed abroad without going through one of these three routes cannot later be filed in China.
ARTICLE 22.2: Novelty	<u>SCOPE</u> : invention and utility model patents
(i) Definition of Prior Art	Imposes an absolute novelty standard, defining prior art as art that is publicly known anywhere in the world before the filing date  <u>NOTE</u> : it is unclear how this new requirement will affect patents that were granted under the former novelty standard, which did not consider public use or knowledge outside of China to be prior art and thus allowed third-party applicants to obtain patents on inventions of others witnessed at trade shows or other public events outside of China.
(ii) Double Patenting	Imposes a restriction against receiving two patents on a single invention. However, applicants may still file applications for an invention patent and a utility model patent directed to a single invention on the same day, as long as the utility model patent is abandoned before the invention patent issues.

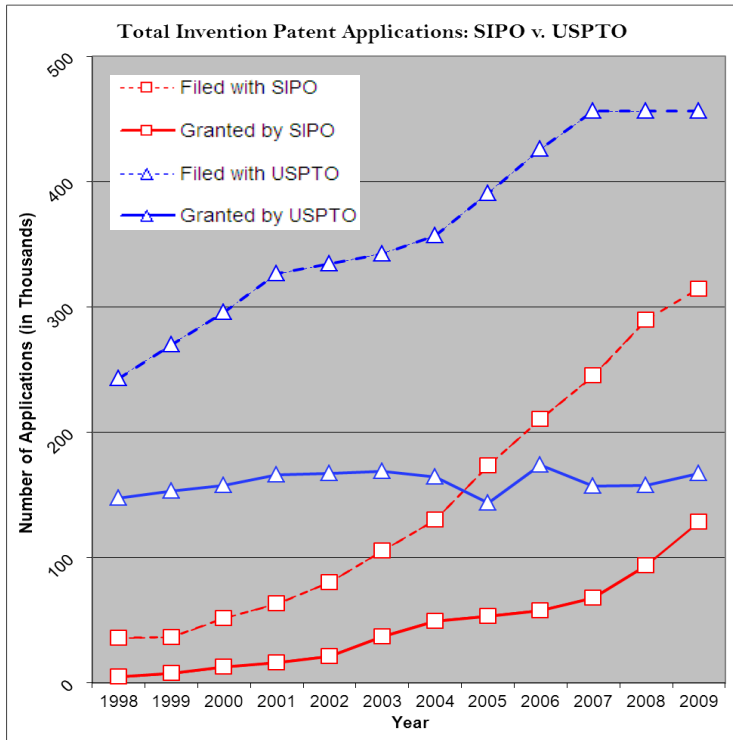
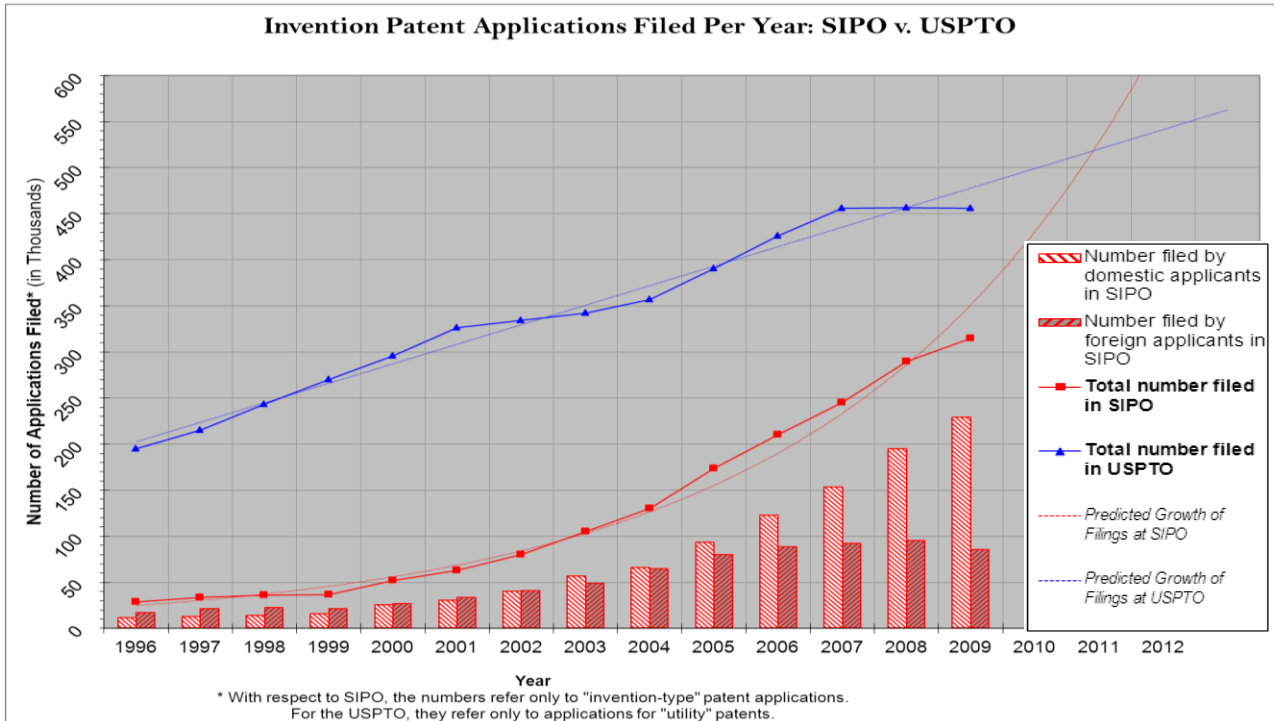
China's enforcement system is still lacking, but significant improvements are inevitable now that demands for stronger protection are coming from its own domestic corporations. In fact, owners of Chinese utility model patents have already seen improvements, in the form of generous settlements from accused infringers. These "non-invention" patents were previously considered to be fairly worthless from a patenting perspective and relatively harmless from an infringement standpoint. However, considering their low stakes (*i.e.*, filing fee of 70 USD and annual fees of 90 to 300 USD) and their recently proved potential for high return (*e.g.*, a recent \$23 million payment to a Chinese electronics manufacturer), patent applicants may want to consider incorporating them into their portfolios if they have not done so already. Aside from their price value, the fact that they usually are granted in approximately six months makes them advantageous tools for covering new technologies with relatively short shelf lives or minor improvements over existing inventions.

Perhaps more importantly, the magnitude of these recent victories also raises an increased infringement concern for anyone manufacturing or selling goods in China. Parties should routinely conduct clearance searches before manufacturing goods in China or introducing products into the Chinese market. Even though SIPO's repository of prior art can be time-consuming to navigate due since most references are published only in Mandarin, the benefit of addressing closely-related patents upfront versus dealing with them in future litigation makes this precautionary measure a worthwhile investment. Both invention patents and utility models can be invalidated by filing a request with the Patent Reexamination Board. However, Chinese courts have discretion to stay infringement lawsuits based on an invalidation request only if the patent at issue is a utility model.

Certain patent holders may also be interested in conducting occasional valuations of their portfolios with respect to Chinese buyers. With licensing and royalty payments to American firms alone currently totaling over \$2 billion a year, Chinese corporations are showing an increased interest in buying existing patent rights to supplement their developing portfolios.

In this changing global environment, innovators in all industries are adjusting their strategies to protect their status in the market. Recognizing that China's leverage to recast the competitive balance in the global market is unparalleled, it will be necessary for all key players in the market to prepare for the changes to come by finding creative ways to leverage their own patent portfolios and existing market power. In this process, changes in the Chinese patent system will become increasingly relevant and will require strategic planning to protect financial stakes in innovations.

## Appendix



Graphs compiled based on data from:  
[http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us\\_stat.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm); and  
[http://www.sipo.gov.cn/sipo\\_English/statistics/](http://www.sipo.gov.cn/sipo_English/statistics/).