



## **Technology Transfer and IP Licensing in China**

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China's goal for science and technology (S&T) is to change from being a big nation to creating a strong nation by 2020, based on an emerging, innovative society. The government is keen to develop S&T as a driver of the new economy. For example, the Chinese Ministry of S&T launched S&T funding programmes worth €10 billion in 2005. The major part of this is dedicated to high technology R&D, although key basic research gets its fair share as well. China is becoming increasingly competitive in many advanced technology areas, with new technology standards being created by the Chinese for China.

The need to upgrade the country's S&T skills has created demand for technologies and intellectual properties from the West. For example, during the period from 2002 to 2006, there have been over a hundred patent licensing contracts signed and registered with the State Intellectual Property Office each year, involving hundreds of thousands of Chinese patents. These contracts were between foreign companies and Chinese companies, in both directions. Chinese government, state-owned enterprises and universities are the main driving forces for technology transfer. Despite China's poor reputation in the protection of intellectual property rights, there has been an enormous knowledge base improvement regarding IPR and patent licensing in the last two to three years.

### **The Technology Trade Markets**

The so-called "Technology Trade Markets", partly funded by central and regional governments, have been growing steadily in China over the last 10 years, but pure technology transfer is a recent phenomenon. The marketplace has attracted some foreign organisations to participate, although it is still primitive, inefficient and lacking high value transactions. Recent research carried out by [China Business Solutions](#) shows that pure patent licensing and know-how based technology transfer is much more difficult to promote in China than whole system/solutions and commercial-ready technologies, and a significant proportion of the patent licensing deals to China in recent years have been based on patent pools and assertion models.

The challenges of such Technology Trade Markets are mainly the lack of framework in China to commercialise technologies for trading: the overall level of commercialisation is low (roughly 10%) due to low investment and lack of management expertise. The trading platforms are not-interactive or transactional due to inadequate IT systems and infrastructure. There are no established professional Chinese technology trade agents, and the public-funded services only provide an initial level of awareness creation, while private organisations are small and only focus on narrow technology fields. Finally the inadequacy in laws on technology transfer lead to loopholes and irregularities in the market and lack of confidence from IP owners.



### **Legal and Cultural Differences**

Chinese law does not allow restriction on licensees carrying out enhancement. In addition, licensors have to provide warranties, such as guaranteeing the ownership of the technology, no glitches and that the technological objectives will be achieved as described in the contract. Even if a signed contract is subject to foreign law, when it comes to filing lawsuit in China, the Chinese laws and regulations still apply.

There are also other risks and problems associated with licensing technologies in China. In general, know-how (trade secret) is hard to protect in China, and many IP lawsuit cases involve know-how leak from former employees. While there is the well-known different interpretation of the term “contract” between Western and Chinese businesses, some post-contract risks also exist. For example, disputes usually start when Chinese companies become familiar with the technology licensed. There are problems collecting royalties from the licensees and getting the money remitted out of China. Last but not least, there is a cultural and historic mindset about the value of IP that needs to be kept in mind. However, protection of intellectual property rights is possible through a carefully drafted contract and, more importantly, through effective implementation and ongoing monitoring.

### **Best Practices**

I was told by so many Chinese companies, as well as some leading UK universities, that technical collaboration is the best way to initiate technology transfer with China as it is regarded as a “shared risk”. For academic and research institutions, it is beneficial to involve an industrial partner when carrying out technical collaboration with China. According to the International Office at the University of Cambridge, the areas that China is interested in for joint research include pharmacology (application of drugs on a nano scale, stem cells, bio-medical science, biotech and biophysics) and climate change, energy for sustainability, and carbon neutrality.

The challenge remains to find the right research establishment that works in your field, is willing to build research collaboration, and respects the deal and, it goes without saying, the intellectual properties underlined.

To summarise, China is becoming a potentially large market for technology transfer and licensing, but there are risks and problems that IP owners need to be aware of and learn to deal with. Technology transfer into China is not one dimensional but a multi-faceted activity. In my own experience, the critical factors for successfully licensing technology to China include but are not limited to:

- Knowledge about doing business in China
- The right technologies that are valuable to China
- A tailored business model that is based on long-term partnership
- Flexible approaches to cater to the varied needs of Chinese partners
- The right level of “Guanxi” (connections)
- A solution to provide local technical support
- The right partner



On the point of partnership, my advice is to help your Chinese partners develop their knowledge and nurture them. Be cautious, but not because of IP risk. Instead, one should find the right business model to work with the Chinese partners and ensure that there are mutual long-term benefits.

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