Protection of know-how and legal management for hi-tech enterprises in China

LI Shi-jian¹, James Fowler²
(1.Economic and Management School of Southeast University,
Nanjing 210096, China; 2.The Office of the Chinese Economic
Area in U.S. Department of Commerce, Washington D.C., USA)

Abstract: Considering the legal system as it stands in China, protection of business know-how or hit-tech proprietary knowledge is primarily based on proactive measures adopted by the owner. Unless steps are taken to preserve know-how in the Chinese business world, the owner of this specialized knowledge is regretfully left without effective legal recourse. This note introduces theories and regulations concomitant to the protection of know-how in China for local and U.S. firms. Using a number of legal frameworks as a backdrop, this paper analyzes the unique characteristics of know-how protection in China, and further proposes the establishment of legal management systems in hitech enterprises operating there. This paper advices to set up a perfect legal management system, including: formulating and effectively executing a company know-how protection policy; signing a trade secret security contract; providing contractual incentives; clearly defining employee confidentiality responsibilities through trade secret security clauses in labor contracts; and paying attention to physical security matters.

Key words: know-how protection; hi-tech enterprise; legal management system

CLC number: DF 523 Document code: A Article ID: 1006-6047(2006)12-0096-06

0 Introduction

Know-how, also termed as technology secret or unpatented technique, falls into the category of trade secret. Know-how connotes it is legitimately possessed by its owner, that it is not open to the general public, that it is protected as intellectual property even before application for a patent can be made, and that it has practical economic value. The legal protection of know-how in the PRC of China), as opposed to (People's Republic patenting or other forms of IP(Intellectual Property) protection, is primarily based on practical protective measures taken by its possessor. While know-how watched over by a proprietor that can prove his implementation of security measures will obtain effective legal redress, obtaining relief for pirated know-how that is not secured properly, or not secured through well-documented means, is very difficult to achieve through legal recourse. This paper analyzes shortcomings inherent in China's know-how

protection regime and further suggests systematic legal measures to protect know-how despite those shortcomings.

1 History of know-how protection in the PRC: gradual improvement

Know-how is a type of trade secret and generally indicates non-public information. It includes all of the technological secrets and strategies that go into product creation and production. Know-how by and large manifests itself as technological blueprints, data, or specifications that represent a product's design, procedure, chemical formula, technical process, manufacturing method, material process, maintenance method, or quality control information.

Among China's currently effective laws, the earliest legal document to use the phrasing "know-how" is the September 1983 State Council promulgation of the Rules for Implementation of the Law of the People's Republic of China on Chinese - Foreign Equity Joint Ventures. Aside from delineating know-how as a form of possible foreign investment, the joint venture rules do not address the protection

of know-how. China reached two important milestones in the protection of IPRs(Intellectual Property Rights) when in March of 1984 it issued the Patent Law of the People's Republic of China, and again in September of 1990 when it issued the Copyright Law of the People's Republic of China. It was through these laws that the Chinese IPR protection regime began to be formulated. Thereafter, further regulations were implemented to protect computer software, new plant varieties, new medicines, integrated circuit designs, etc...

In January 1992, China and the U.S. signed a Memorandum of Understanding on the Protection of IPRs. In order to guarantee compliance with article 14, clause 2 of the 1883 Paris Convention for the Protection of Industrial Property stipulation to prevent unfair competition^{[1]46}, the memorandum's fourth article states that the Chinese government agrees to stop all unconventional disclosure, acquisition, or use of trade secrets by a second party without the consent of the proprietor. This agreement also applies to third parties who know or should know that attaining, using, or revealing such information constitutes a violation of the memorandum.

The Anti-Unfair Competition Law of the People's Republic of China was passed in September 1993. Its tenth article prohibits the violation of trade secrets by management ^① and further defines trade secrets as "technical information and operational information which is not known to the public, which is capable of bringing economic benefits to the owners of the rights, which has practical applicability and which the owners of the rights have taken measures to keep secret". In November of 1995, the State Administration for Industry and Commerce issued the Rules on Prohibiting Acts of Trade Secret Violation regulating the protection of trade secrets, including know-how, from the vantage point of an executive administrative organ.

In March of 1997, an important amendment to the Criminal Law of the People's Republic of China made violation of trade secrets a crime. Article 219 reads: whoever engages in one of the following activities which encroaches upon commercial secrets and brings significant losses to persons having the rights to the commercial secrets is to be sentenced not more than three years of fixed-term imprisonment, criminal detention, and may in addition or exclusively be sentenced to a fine; or is to be sentenced to not less than three years and not more than seven years of fixed-term imprisonment

and a fine if he causes particularly serious consequences; acquire a rightful owner's commercial secrets via theft, lure by promise of gain, threat, or other improper means; disclose, use, or allow others to use a rightful owner's commercial secrets which are acquired through the aforementioned means; in violation of an agreement with the rightful owner or the rightful owner's request of protecting commercial secrets, disclose, use, or allow others to use the commercial secrets he is holding.

By providing criminal sanctions above and beyond civil compensation and administrative punishment, this rule further deters potential know-how thieves. In March, 1999, the unified Contract Law of the People's Republic of China was passed. The 18th Chapter of this law on technology contracts regulates the transfer of trade secrets. Thereafter, in 2001 the Supreme People's Court issued its interpretation of Chapter 18 trade secrets. This interpretation ² has become the most important basis for trying know-how cases in Chinese courts. According to the Court, trade secrets must satisfy three essential requirements.

- **a.** They must be unknown to the public. This means that secret know-how information in its entirety, in any permutation or combination, or any key element thereof, is not universally known or easily attained by people in associated business circles.
- **b.** They must bring economic benefits to their rightful owner. The undisclosed nature of trade secrets gives their possessor a competitive advantage, and as such they are commercially valuable.
- **c.** They must be usable, and protectible under normal circumstances via reasonable measures taken by the rightful owner.

2 Beyond patent protection

Traditionally, many companies operating in China have relied strictly on patents to protect their business secrets. According to China's 1984 Patent Law, these companies have a lengthy process of disclosure ahead of them. The procedure requires submitting a request form, a description and synopsis of the technology to be patented, a claims form, etc.. The description should give a clear and complete explanation of the invention

① It is important to note that the scope of China's competition law is limited to "business operators". Thus, when seeking remediation for trade secret violations perpetrated by a low-level staff member, for example, other legal frameworks must be considered.

② See Minutes of the National Court IPR Adjudication Work Session on Questions Regarding Technology Contract Dispute Trials, Zuigao Renmin Fayuan Gongbao, June, 2001.

or innovation according to industry standards. The description is thus the basis of the claims form and gives reason for the scope of patent protection requested. Thereafter, the publishing of description and claims by the patent office is in fact a revelation of the patented technology or product. Once the patent is authorized, this disclosure of the technology comes as an announcement to the world that the owner has rights protected by a patent.

In view of the acceleration of technological innovation and development, as well as the lengthy patent application period, more owners of new technology are inclined to adopt measures other than patents to keep their trade secrets safe. In this way, hi-tech companies operating in the PRC can avoid IPR violations that result from disclosure required by the patent process and ensure that before any counterfeit versions of their goods appear on the market they have done everything possible to maximize their economic benefit.

The protection afforded by PRC Patent Law thus should be regarded merely as an element of a company's know-how protection system. For companies that choose not to patent their secrets, but to keep their know-how in-house, China's Competition Law and Criminal Law can provide a mild safeguard. However, as will be explained below, there exist numerous pitfalls in China's trade secret protection regime that the proprietor of know-how must be aware of.

3 PRC legal remedies for know-how infringement

If a hi-tech firm doing business in China realizes its trade secrets have been compromised, it has a select few legal remedies to choose from. Different legal frameworks are better suited for different circumstances. China's Competition Law, for example, only applies to administrative management, so a different framework must be selected to prosecute a lay employee. Although China has made rapid progress over the years in IPR protection, its trade secret protection regime needs additional bolstering. For domestic Chinese firms, it may be some time before know-how "pirates" can be deterred effectively.

Among China's body of law, its Criminal Law is arguably the best deterrent against trade secret infringement. Article 219 of China's criminal law states those who cause "significant losses" or "particularly serious consequences" will be sentenced cri-

minal punishments. Although recent judicial interpretation has set the standard for "significant losses" and "particularly serious consequences" at 500 000 RMB (\$60 000 USD) or bankruptcy, and 2.5 million RMB (\$300 000 USD) respectively [2]74, it is still difficult to grasp the exact loss caused by trade secret pirating, and thus difficult to verify whether or not criminal recourse is applicable.

With respect to determining total loss, legal scholar Xu Wenwu proposes a number of considerations: size of market share held by the trade secret; number of trade secret's owners, including rightful users; production capabilities of the perpetrator; production capabilities of the rightful owner; the trade secret's life span, namely its duration of viability in the market; costs of researching and developing the trade secret; and other factors including means of violation, scope of disclosure, effects of violation, violation time span, etc.. Mr. Xu acknowledges, however, even with these considerations taken into account, determining concrete losses and consequences are elusive at best, and even harder to apply in court.

If the IP infringer can be classified as a "business operator", then administrative legal recourse is possible under Article 25 of China's Competition Law, which states, "if any party who infringes the business secret of another ··· the relevant control and inspection authority shall order that party to desist from the illegal act(and according to circumstances may) impose on the party a fine of more than \$1 200 USD and less than \$25 000 USD" [1]16. According to legal scholar Nathan Greene, Article 25 "gives Chinese authorities a lot of wiggle room in deciding whether or not to enjoin an infringer..."[3]444. Furthermore, the miniscule fines provide little disincentive for a competitor to pirate trade secrets that could bring much more than a free \$ 25 000 boost.

In addition to criminal and administrative frameworks outlined in China's Criminal and Competition Laws respectively, the last, perhaps least effective option available to Chinese companies are civil remedies based on Contract Law. The civil approach is least useful in that it often results in the disclosure of the disputed trade secrets. In his article on managing IP protection decisions, Robert Bejesky makes a few important distinctions between the civil option and the administrative one [4]; when a trade secret violation occurs involving a breach of contract, the aggrieved party may seek either an administrative or court-based civil remedy. However,



if no contractual relationship exists, a party may seek an administrative remedy, which must be enforced by the government under (article 3 of) the Unfair Competition Law … the administrative remedy is more rapid and effective as opposed to a court based remedy, but may be prone to more "local favoritism" and corruption.

In other words, if no contractual relationship exists, the aggrieved party must opt for administrative avenues. If, however, the perpetrator is neither a "business operator" (see supra footnote 1), nor has he caused "significant losses" punishable under Chinese Criminal Law^{[2]74}, the Chinese firm is left without an effective legal remedy.

4 Know-how management systems for the tech industry in China

Considering local Chinese businesses and U.S. companies alike have only piecemeal laws sporadically enforced to rely on if their know-how is misappropriated, their establishment of a preventative trade secret protection system is the most important step in preventing an unwanted transfer of know -how to competitors. Any company that intends to establish a legal management system for the protection of know-how should implement special measures throughout the company's entire structure, business plan, and control mechanism. Moreover, it should ensure the effective operation of the system through adopting appropriate incentives and punishments. As a subordinate part of a company's overall legal management strategy, management systems for the protection of know-how should include the following measures.

a. Formulate and effectively execute a company know-how protection policy; this should be the commanding regime for the entire know-how protection subsystem. When devising the content of such a policy, it is vital to contemplate these questions: "What is(are) my possible recourse(s)? Who would my recourse be against, and what agencies, if any, would I have to traverse to gain a remedy? How do I prove breach of confidentiality or theft of trade secrets? How do I prevent the theft or breach in the first place? "[3]463 The policy answers to these questions ought to guide the company when drafting operational contracts, labor contracts, or any other legal documents signed conjointly with non-company personnel.

b. When signing various kinds of operational contracts, especially R & D contracts, technology service

contracts, etc., be sure also to sign a trade secret security contract, usually in the form of a nondisclosure agreement. Separate tech information security contracts, or as part of the main contract under a tech information security clause, must delineate the security responsibilities of the parties that will encounter sensitive technological information vital to maintaining the company's profit margin. If the other party ever violates the agreement, your company will easily stand under the burden of proof in court with regard to the other party's duty to protect the trade secret. For U.S. firms, Greene further proposes including a contract element vital to effective know -how protection in China: "Write the contract in terms that a U.S. court would enforce, but also include pertinent Chinese law that will, at the very least, have a deterrent effect in showing that you understand the rights provided, even if at the present enforcement is difficult."

c. Greene also argues that providing contractual incentives is perhaps the most important consideration in protecting know-how in China: "Incentives can include granting access to future improvements on licensed technology and/or patents, access to new technology ... and new opportunities that might include increased capacity, all signifying higher profits. These types of incentives ... show a commitment to a long-term relationship, something absolutely critical to a successful business relationship in China".

d. Clearly define employee confidentiality responsibilities through trade secret security clauses in labor contracts as well as employee security agreements and other legal documentation so as to prevent the occurrence of know-how violation by employees. Employee security agreements should be renewed along with new research content; in this way you can effectively prevent employees from abandoning their job and taking newly developed technology with them. Dynamic security agreements like this are helpful in proving the employee's piracy of specific know-how. As for security clauses in labor contracts, they should

① It is vital for foreign firms to understand that,in any case,their best option very well may be to pursue remediation through conciliation, arbitration, or other forms of ADR (Alternative Dispute Resolution). Not only is ADR more culturally acceptable and more likely to "save face" for all parties involved(an important skill in China); conciliation and arbitration are least susceptible to political or local pressures. Furthermore, "when a reputable company is the alleged infringer there is a better possibility of resolving such disputes in a forum outside of the administrative or court structure".



include the following statem ents: the employee will strictly follow the company's security policy, preventing any disclosure of trade secrets; the employee will never furnish company trade secrets to others $^{\scriptsize\textcircled{1}}$ in any way, shape, or form; and the employee will not use company trade secrets to perform any R & D or operational activities without the company's written consent $^{\tiny\fbox{12}}$

- e. Pay attention to physical security matters, moreover, employ someone specifically to be responsible for enforcing the company's trade secret security policy. The physical control of technological secrets—including the locking of spaces holding schematics, the locking of computers storing sensitive information with passwords, etc.—has a direct efficacy impact on the of the company's protection of know-how. As an important element of a company's legal management system, physical security measures should be manifest in each aspect of the system: throughout the overall security policy and within the responsibilities outlined in employee security agreements.
- f. A final practical consideration is seamless employee training. In order to prevent inadvertent trade secret disclosure, employees must understand the company security policy and their personal responsibilities within the policy framework through IP education^[5]. To some extent this training must begin before an employee signs onto the company roster, and continue throughout the duration of the employee's tenure, seamlessly. As technological advances bring upgrades to the management system, maintaining employee accountability to the system through education is vital to its continued effectiveness.

5 Conclusion

In China's hi-tech business world, IPR protection is an essential consideration. Those companies seeking to maximize the economic benefit reaped from their specialized know-how must take measured steps to implement a proactive protection system. If a trade secret violation occurs, Chinese and U.S. companies alike have few effective legal remedies available to protect their valuable know-how. Although applying for a patent may be appropriate at times, the wise Chinese company will incorporate patents as only a part of their overall know-how management system. That system must be controlled under one unified policy statement, supplemented with specialized nondisclosure agreements with all

outside parties, and strengthened from within by dynamic employee contracts, incentives, physical security measures, and vigilant employee training. Only by implementing such measures can technology companies in China hope to protect their know-how and keep their competitive edge.

The authors would like to thank Hans Zeller for his input and revisions.

References:

- HUO Ai-hua, TAO Yu-xia. Laws and regulations of China [M].
 3rd ed. Beijing; Law Press, 2004.
- [2] XU Wen-wu. The nature of criminal violation of trade secrets: an analysis [J]. Intellectual Property Right Law Research, 2006 (3):71-83.
- [3] GREENE N. Enforceability of the People's Republic of China's trade secret law:impact on technology transfer in the PRC and preparing for successful licensing[J]. IDEA:The Journal of Law and Technology, 2004 (44):437-467.
- [4] BEJESKY R. Investing in the dragon; managing the patent versus trade secret protection decision for the multinational corporation in China [J]. Tulsa Journal of Comparative & International Law, 2004(11):437-489.
- [5] GUO Qing-cun. Intellectual property right law [M]. Shanghai: Shanghai People's Press, 2002.
- [6] EFFRON R. Secrets and spies: extraterritorial application of the economic espionage act and the TRIPS agreement [J]. New York University Law Review, 2003 (78): 1475-1517.
- [7] 王力彬. 论专有技术的法律保护[J]. 广东经济管理学院学报, 2005(3):32-35.
 - WANG Li-bin. Study on legal protection of know-how [J]. Journal of the Institution of Guangdong Economic and Management, 2005 (3):32 35.
- [8] 莫昊思. 专有技术的法律保护与行政保护[J]. 行政与法,2005 (7):24-26.
 - MO Hao-si. Legal protection and administrative protection of know-how[J]. Administration and Law, 2005(7):24-26.
- [9] 华鹰. 论技术贸易中的专有技术保护策略[J]. 重庆工商大学学报:社会科学版,2005(1):87-92.

 HUA Ying. Study on the strategy of know-how protection in
 - technology trade [J]. Journal of Chongqing Industry and Commerce University: Social Science Edition, 2005(1):87-92.
- [10] 岳雷驰. 试析专有技术法律保护的界线[J]. 法学,1990(4): 45-48.
 - YUE Lei-chi. Borderline of legal protect of know-how [J]. Legal Science, 1990(4):45-48.
- [11] 段晓梅,吴亚娥. 浅析专有技术及其法律保护[J]. 渭南师范 学院学报,2003(3):65-70.
 - DUAN Xiao-mei, WU Ya-e. Study on know-how and legal protection [J]. Journal of Weinan Normal College, 2003(3):65-70.
- [12] 何燕华. 论专有技术的国际保护 [J]. 重庆教育学院学报,2004 (5):64-69.
 - HE Yan-hua, Study on international protection of know-how
- ① Considering Chinese culture, it is vitally important to clarify who constitutes "others". Many companies operating in China have regretted using the term "third parties" in their labor contracts because the idea of a third party in traditional Chinese culture does not include close relationships like family members or close friends. So to avoid catastrophe, companies doing business in China should be as clear as possible by defining "others" in terms of family members, close friends, or anyone other than the employer.



[J]. Journal of Chongqing Education College, 2004(5):64-69.

[13] 周妮娜. 企业技术秘密自我保护研究[J]. 经济体制改革, 2005 (3):93-99.

ZHOU Ni-na. Enterprises self-protection on know-how [J]. Economic System Reform, 2005(3):93-99.

[14] 周南,穆效荣,技术开发合同中技术秘密成果的归属与分享[J]. 技术与创新管理,2006(1):75-81.

ZHOU Nan, MU Xiao-rong. Vest or share of know-how in technology exploiture contracts [J]. Management of Technology and Innovation, 2006(1):75-81.

[15] 王千华. 关于技术秘密立法若干问题的思考[J]. 河北法学,2001(3):54-63.

WANG Qian-hua. Thinking of legislation for know-how [J].

Hebei Law Review, 2001(3):54-63.

(责任编辑:李育燕)

Biographies:

LI Shi-jian(1967-), male, born in Rugao, China. LL. M., Ph.D candidate. He mainly focuses his research on corporate governance and legal management system (E-mail: lisj@lawyersonline.com.cn).

James Fowler(1980-), male, born in New York, USA. BA. He is currently working as an International Trade Specialist in the Office of the Chinese Economic Area in the U.S. Department of Commerce.

中国高新技术企业的专有技术保护与法律管理

李世建1,冯雅各2

(1.东南大学 经济管理学院,江苏 南京 210096; 2.美国商务部中国经济区办公室)

摘要:专有技术的保护基于专有技术拥有人自身所采取的保护措施,没有保护措施,则没有法律上的权利。从研究有关专有技术保护的理论与规则入手,采用对比方法,以专利法律保护为参照系统分析了专有技术保护的特点;同时,分析了企业在中国经营中保护专有技术的理论与规则。创新之处在于提出了高新技术企业应当建立以保护专有技术为目标的法律管理体系的观点,并提出该法律管理体系应当包括:建立并执行企业专有技术保护战略、签署各种技术保密合同、制定激励机制、劳动合同中包含保守商业秘密的义务、物理形态的保护措施以及员工培训等。

关键词:专有技术保护;高新技术企业;法律管理系统

中图分类号: DF 523

文献标识码: A

文章编号:1006-6047(2006)12-0096-06