

A Comparative Study of the Chinese Patent Law Practice

Part II: Patent Litigation and Case Studies

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PATENT LITIGATION

Over the past few decades, many high-profile patent infringement cases have been litigated in the U.S. courts. After years of judicial practice and academic research, the U.S. has developed a set of legal doctrines on almost any patent-related dispute. These doctrines, in the form of case law, have a significant impact upon other countries' patent litigation practice. For example, almost all the major judicial doctrines in the U.S. patent litigation practice have their respective counterparts in China's patent litigation practice, such as literal infringement, contributory infringement, the doctrine of equivalents and the prosecution estoppel.¹ Meanwhile, China has also adopted some of the doctrines to better serve the Chinese society. The first part of this section discusses the structure of Chinese judicial and administrative systems that handle patent litigation. The second part is an anatomy of an invention patent infringement case to illustrate China's patent litigation practice.

China's Dual-track Patent Litigation Structure

Compared with other types of civil lawsuits, patent-related disputes are usually more technical-oriented and very complex. It requires that the presiding judge(s) be not only experienced with the patent law, but also familiar with the technical subject matter covered by the patent at dispute. This technical requirement becomes more demanding when there are more patent litigations involving high-tech, such as micro-electronics, computer science and biotech, and the stakes at dispute are often in the magnitude of hundreds of millions of dollars.

In the U.S., the federal courts have exclusive subject matter jurisdiction over patent cases. A patentee may file a lawsuit at a federal district court against an alleged patent infringer. If either party does not agree with the district court's decision, he may appeal the decision to the Court of Appeals for the Federal Circuit (CAFC). The federal judges appointed to the Federal Circuit often have extensive technical and patent law training. Many of them are well-respected among patent law practitioners. Therefore, decisions rendered by the Federal Circuit in many instances are virtually final since the U.S. Supreme Court rarely grants certiorari to appeals of the Federal Circuit's decision on patent-related disputes.

The USPTO is an administrative agency under the Department of Commerce of the U.S. Federal Government. It is responsible for examining patent applications and granting patents to qualified applications. But the USPTO does not have a broad authority of adjudicating patent-related disputes. One exception is the Board of Patent Appeals and Interferences (BPAI), an internal panel under the USPTO. The BPAI is primarily responsible for hearing appeals from patent applicants against patent examiners' decisions in a variety of the USPTO proceedings including refusals to grant patents in ex parte patent examination or reexamination proceedings for determining the validity of an issued patent. Other than patent validity, the USPTO cannot adjudicate most of the patent-related disputes, e.g., a contractual dispute surrounding a patent licensing agreement or a proprietary dispute with respect to the ownership of a patent.

¹ Jiang, Zhipei, "Patent Litigation In China", available at <http://www.chinapatentlaw.com/english/forum/forum4.htm> (last visited November 20, 2004).

After twenty years of patent litigation practice, China has established its own legal infrastructure for adjudicating patent-related disputes and enforcing patent owners' legal rights. The two bodies of the infrastructure include the Intellectual Property (IP) tribunals at different levels of the People's Courts and the local branches of the State Intellectual Property Office (SIPO) across the country.²

The People's Courts of China has a four-tier system, that is, District People's Court, Intermediate People's Court, Higher People's Court and the Supreme People's Court. Due to the complexity of patent litigation and the unbalanced economic development between different regions, only a few Intermediate People's Courts located at provincial capitols or special economic zones like Shenzhen have established IP tribunals. A party dissatisfied with a decision issued by an Intermediate People's Court's IP tribunal may appeal to the IP tribunal at that province's Higher Court whose decision is usually final. In other words, the IP tribunal of the Supreme People's Court is not obligated to hear appeals from decisions rendered by a province's Higher People's Court.

The IP tribunal of the Supreme People's Court is primarily responsible for judicial interpretations of Chinese Patent Law and the Implementing Regulations of Chinese Patent Law, two most authoritative legal documents in Chinese patent law practice, as well as monitoring local IP tribunals' work. Sometimes, if a patent litigation involves a significant economic interest, the IP tribunal of a Higher People's Court will be the trial court and the IP tribunal of the Supreme People's Court will be the appellate court for this case. Meanwhile, if the IP tribunal of the Supreme People's Court identifies an erroneous decision by a local IP tribunal, it may review the case at its discretion and/or remand the case back to the local IP tribunal. In these two scenarios, the IP tribunal of the Supreme People's Court is similar to the U.S. Federal Circuit.

All patent-related lawsuits argued before different IP tribunals can be grouped into two categories: (1) patent civil lawsuits and (2) patent administrative lawsuits.³ Patent civil lawsuits typically involves two private parties, e.g., A suing B for infringing A's patent, while patent administrative lawsuits are between a private party and SIPO or one of its local branches, e.g., the private party objecting to the compulsory licensing decision issued against his patent by the SIPO.

Compared with the USPTO, the SIPO and its local branches enjoy a broader spectrum of power in patent-related disputes. Under Chinese Patent Law, the SIPO is the only agency which is authorized to examine patent applications and grant patents accordingly. In this respect, the SIPO is China's USPTO. But under Chinese Patent Law⁴ and Implementing Regulations of Chinese Patent Law⁵, the SIPO and its local branches can handle almost every type of patent-related disputes such as patent infringement, patent ownership, patent counterfeiting, or compulsory licensing, etc., none of which are within the authority of USPTO.

Granting an administrative agency like the SIPO quasi-judicial authorities is very common in China. A fundamental reason probably is that the China traditionally does not have the concept of "separation of power". A famous example is that Deng Xiaoping ridiculed that U.S. has three Presidents when he was interviewed by One of American journalists Mike Wallace in 1986.⁶ According to the Chinese tradition, there is only one government and the government is supposed

² It is estimated that, since the promulgation of Chinese Patent Law till 1999, the People's Courts have adjudicated more than 6000 patent-related disputes, and SIPO and its local branches have nearly 10000 disputes during the same period. Clearly, the administrative agencies have played an important role in China's patent protection.

³ Jiang, Zhipei, "A study on certain issues related to patent litigation", available at <http://www.chinaiprlaw.comfgtr/fgrt66.htm> (last visited November 20, 2004).

⁴ See Patent Law of the People's Republic of China, Article 57.

⁵ See Implementing Regulations of the Patent Law of the People's Republic of China, Articles 79-82.

⁶ See Selected Articles by Deng Xiaoping, Vol. 3, available at <http://gd.cnread.net/cnread1/zzzp/d/dengxiaoping/3/057.htm> (last visited November 20, 2004).

to have one voice. Although different branches of the government may have different responsibilities, there should be no conflict between the administrative and the judicial branches of the government. Since SIPO is an administrative agency of the government and is authorized to administer patent-related business, it is very natural for a patent owner to seek assistance from the SIPO when he believes that his right has been violated.

Although vested with the authority to adjudicate patent disputes, the SIPO has taken an approach more akin to mediation than adjudication. This is another reason why so many Chinese administrative agencies (not just SIPO) are given quasi-judicial power that is usually accorded to the state or federal courts in the U.S. According to the Chinese tradition, filing or simply getting involved in a lawsuit is definitely not a virtue commendable by the public.⁷ The Chinese prefer to resolve disputes privately. A neutral and detached government agency like the SIPO can be invited to serve as a mediator to get opposing parties to make certain concessions so as to reach a compromise.⁸ Therefore, granting the SIPO and its local branches certain judicial authorities is a policy that is deeply rooted in the Chinese history.

Besides the traditional and philosophical reasons, there are two practical advantages of authorizing the SIPO to adjudicate patent-related disputes. First, the SIPO is a newly established agency and it has a large number of employees who are better trained on the subject of patent law than many judges. Second, the SIPO is an administrative agency and it does not have to abide by so many complicated legal procedures binding the People's Courts such as evidence discovery or cross-examination. In many cases, it has been proved that it is both efficient and economical to resolve a patent-related dispute before the SIPO rather than an IP tribunal.

The SIPO has not established an internal appealing procedure. All decisions made by the SIPO or any of its local branches are therefore subject to the judicial review of the People's Courts. An individual who is not satisfied with the SIPO's decision can challenge it by filing a lawsuit in an appropriate People's Court that has jurisdiction over the dispute. Technically, this lawsuit is still an administrative lawsuit because the individual does not litigate against a private opposing party, but against the SIPO or one of its local branches that issues the administrative decision he or she tries to overturn.

Among the many types of patent-related disputes that the SIPO and its local branches handle, there are two types deserving special attention. One is patent counterfeiting, or "passing off" a patent. In the U.S., it rarely occurs that a business markets a product which it falsely claims to have patent rights to the product. The most common patent-related dispute in the U.S. is that a patentee charges a business for infringing its patents. But in China, due to local protectionism, a business often expressly claims that its product is patent-protected and even prints a patent number on the product.⁹ Therefore, an important job of the SIPO, especially its local branches, is to crack down these patent counterfeiting activities and confiscate the business's illegal income. Because patent counterfeiting is always based on bad faith, it is at least as serious as the willful infringement under the U.S. patent law. Chinese Patent Law has prescribed a specific set of punishments (including treble damages and even criminal prosecution) against those

⁷ There is an ancient story in Chinese history that best illustrates people's attitude toward lawsuits. A relative of a prime minister was sued by his neighbor for adversely taking the neighbor's lot. He then wrote a letter to the prime minister seeking his help. The prime minister responded with a poem. The approximate meaning of the poem is that "I am saddened that you write a letter to me simply for a small dispute over the fence between you and your neighbor. Is it a big deal if you concede three yards to him?! Have you realized that the Great Wall still exists today after standing there for thousands of years and is there anyone interested in the whereabouts of its builder, the First Emperor?"

⁸ There is a Chinese saying that "It takes at least two hands to clap". In other words, both parties involved in a dispute should take some blame and therefore both parties need to make some concession to resolve the dispute.

⁹ It should be admitted that there are still a large number of people who have little knowledge about patent and they often draw an equal sign between a patent-protected product and a high-quality product. As a result, patent is often used as a marketing tool.

wrongdoers.¹⁰

The other one is compulsory licensing. Due to historical and philosophical reasons, the level of legal protection enjoyed by private properties in China is still not comparable to what happens in the U.S.¹¹ Compulsory licensing exemplifies this distinction in the patent law practice. Both Chinese Patent Law and the Implementing Regulations of Chinese Patent Law have devoted a whole chapter addressing the issues related to compulsory licensing.¹² Chinese Patent Law provides two scenarios under which a compulsory licensing may be granted. Under Article 49 of Chinese Patent Law, the SIPO is authorized to issue a compulsory license to an entity that plans to practice an invention patent or a utility model patent when the country is in the state of emergency or extremely difficult condition. A good example is the explosion of SARS in early 2003. Suppose that an inventor owns an invention patent directed to a medicine that can cure SARS and he is unwilling to license his patent to anyone for whatever reason, SIPO will be entitled to invoke this article to force the inventor to allow others to practice his invention for a reasonable compensation.

In contrast, it is a little more difficult to rationalize the other scenario addressed by Article 50 of Chinese Patent Law. In this case, the SIPO is authorized to issue a compulsory license to a patent owner whose patent has made a significant economic and technical progress over a prior art patent, but is dependent upon the prior art patent for its successful implementation. A literal reading of this article suggests that there is only economic interest involved in this type of compulsory licensing. In a free and transparent market economy, a government should keep its hands off a dispute that is primarily an economic issue. An excessive governmental interference like the compulsory licensing will send a negative signal to foreign enterprises since they are still highly suspicious of the commitment by a communist country to protect their IP rights. Pharmaceutical companies are especially sensitive to this kind of condemning measures. Since there is no case covering either type of compulsory licensing, it is still too early to predict how the SIPO and the People's Courts will interpret these articles.

In sum, China has implemented a unique dual-track infrastructure dealing with patent-related disputes for historical and philosophical reasons. The SIPO and its local branches, the administrative body, have been granted a significant amount of power in mediating and adjudicating patent disputes. The People's Courts are responsible for interpreting Chinese Patent Law, hearing disputes between two private parties and reviewing decisions rendered by the corresponding administrative agencies.

An Anatomy of an Invention Patent Infringement Case¹³

Over the years, China has studied and incorporated some of the U.S. patent jurisprudence into its own practice. However, most of the U.S. doctrines have not been codified into Chinese Patent Law, which illustrates that Chinese patent law legislative efforts are still falling behind its patent law practice. Since China is not a common law country, a judicial opinion issued by a People's Court rarely mentions other cases in supporting its decision. Nor can a precedent opinion serve as *stare decisis* for subsequent decisions. As more and more patent cases are filed and adjudicated, there have been a lot of discussions among Chinese legal professionals, including judges and patent attorneys, on how to develop a set of legal standards when hearing

¹⁰ See Patent Law of the People's Republic of China, Article 58.

¹¹ See page 5, last paragraph of this paper.

¹² See Patent Law of the People's Republic of China, Chapter 6, and Implementing Regulations of Patent Law of the People's Republic of China, Chapter 5, respectively.

¹³ See No. 1 civil judgement of 2001 which was issued by the IP tribunal of the Supreme People's Court of the People's Republic of China, available at <http://www.chinaiprlaw.com/wsjsx/wsjsx61.html> (last visited November 20, 2004).

the patent infringement cases.¹⁴

Compared with many other civil lawsuits, a patent dispute is usually more complex and more difficult to adjudicate primarily because it often involves some highly specialized technical topics. As a result, expert opinion solicited by the IP tribunal often plays a critical role in the tribunal's decision process. The case below best exemplifies this point.

This case involves an invention patent (Chinese Patent Number 92102458.4) that is directed to a mechanical apparatus used for manufacturing a musical resonating element widely used in different kinds of toys and an associated method of using the apparatus to make the element. The patent owner, Oriental Company at Ningbo, Zhejiang Province (hereinafter "Oriental"), brought a patent infringement lawsuit at Nanjing Intermediate People's Court against the alleged infringer, Golden Ring Company at Jiangyin, Jiangsu Province (hereinafter "Golden Ring"). Note that Nanjing is the capitol of Jiangsu Province and it is the only qualified trial court that has jurisdiction over the case.

After conducting pre-trial evidence exchange, discovery and cross-examination, Nanjing Intermediate People's Court, citing the all-limitation rule, decides that Golden Ring's alleged equipment does not infringe Oriental's patent for its lack of certain necessary technical features recited in the patent's claim. Following that, Oriental appeals to Jiangsu Higher People's Court and lost its appeal. Typically a decision by a provincial Higher People's Court is final because the Supreme People's Court rarely reviews and reverses decisions made by a provincial Higher People's Court. But the Supreme People's Court does have the discretion to review a case decided by a provincial Higher People's Court if it determines that the lower court has made a substantial mistake in the case. After receiving a renewed appeal filed by Oriental, the IP tribunal of the Supreme People's Court did grant a review of the case and in the end reversed the decisions made by the lower courts.

The mechanical apparatus, according to the claims in the issued patent, includes two elements, a tower-like cutter having multiple rotating razors for cutting a metal plate into a comb and a fastening device providing support for the metal plate which is fastened on its top when it is being cut by the cutter. The fastening device has a set of parallel built-in gaps, each gap hosting one rotating razor when the razor cuts through the metal plate. The specification of the patent also teaches that an advantage of the fastening device is that, since the metal plate is fixed onto the surface of the fastening device, not hanging in the air, it will not vibrate when it is in contact with the rotating razors, and as a result, the comb formed in the metal plate is very accurate and the musical sound generated by the comb-shaped metal plate is very clean.

There is little dispute over the feature of the tower-like cutter. Both parties agree that the alleged equipment includes a cutter that is equivalent or even identical to the cutter recited in the patent. However, the two sides disagree with respect to the fastening device recited in the patent.

The fact findings conducted by Nanjing Intermediate People's Court reveal that the alleged infringing equipment does not have a fastening device per se. However, the alleged infringing equipment does have a cutter-restraining device that has a set of parallel built-in gaps so that each rotating razor cannot move out of the space defined by its associated gap. But according to the alleged infringing device, the metal plate is not fastened to the surface of the cutter-restraining device. Instead, there is another supporting device that prevents the metal plate from vibrating when it is being cut through by the rotating razors.

As will be apparent below, the three opinions issued by three IP tribunals approximately represent the levels of patent law expertise that judges at different levels of the People's Courts

¹⁴ Liu, Jixiang, On the applicability of the Doctrine of Equivalents in patent infringement lawsuits, available at <http://www.chinaiplaw.com/fgrt/fgrt79.htm> (last visited November 20, 2004).

may have. The IP tribunal of Nanjing Intermediate People's Court rejected Oriental's infringing argument based on the doctrine of literal infringement. It reasoned that, since Golden Ring's equipment does not have a fastening device which is an inseparable technical feature recited in the patent's claim, it does not infringe upon Oriental's patent. The court did not address any other possible patent infringement theory at all, e.g., the doctrine of equivalents, which is obviously an appealable error.

The opinion provided by Jiangsu Higher People's Court is more thought-provoking. First, the Higher Court acknowledged that the cutter-restraining device of the alleged infringing equipment is structurally similar to the fastening device of the patent, since both have a set of parallel gaps for aligning the rotating razors. However, the Higher Court does not think the cutter-restraining device is equivalent to the fastening device because the cutter-restraining device does not have the function of supporting a metal plate as the fastening device does. The Higher Court determines that, under the tripartite test¹⁵, Golden Ring's equipment does not perform the same function in substantially the same way and achieve substantially the same result. Meanwhile, the Higher Court, based on the statement in the patent's specification that the metal plate does not vibrate when being cut since it is supported by the fastening device, argues that this statement shows that Oriental has forfeited its right to broaden the scope of its patent and is therefore estopped from arguing that the combination of Golden Ring's cutter-restraining device and the supporting device is equivalent to the fastening device in Oriental's patent.

I think that Jiangsu Higher People's Court's reading of the doctrine of prosecution history estoppel is consistent with the U.S. patent case law. In the U.S., the doctrine of prosecution history estoppel has seen a dramatic change during recent years, from the Supreme Court's presumption of estoppel¹⁶, to the Federal Circuit's complete bar rule¹⁷ and then to the Supreme Court's rebuttable presumptive bar rule¹⁸. An overall trend is that the U.S. courts intend to impose a strong version of the estoppel principle and make it more difficult for a patent owner to broaden its claim coverage under the doctrine of equivalents.

In this case, it is quite evident that Oriental regards the unique configuration of the fastening device and the metal plate as an important advantage of its invention over prior art. Therefore, Oriental should not be allowed to reap additional benefits from the doctrine of equivalents by subsequently broadening its claim coverage at the stage of patent litigation. The metal plate in Golden Ring's equipment is indeed held in the air by the supporting device and it is therefore more likely to vibrate when being cut by the rotating razors. Because of this difference, the product made by Golden Ring's equipment is inferior to the product manufactured in accordance with the patented technology. Unfortunately, for the reason discussed below, the IP tribunal of the Supreme People's Court was not convinced by the estoppel principle.

In its appellate brief submitted to the Supreme People's Court, Oriental rebutted Jiangsu Higher People's Court's decision. Oriental argues that Golden Ring has split the function of the fastening device into two pieces that are assigned to two elements in the alleged infringing device, the cutter-restraining device responsible for controlling the rotating orientation of the multiple razors constituting the tower-like cutter and the supporting device responsible for holding the metal plate being cut tightly to prevent it from vibrating. However, it is difficult for this argument to pass the muster of the tripartite test. Even if the two approaches generate similar results, the way that the metal plate is being held in Golden Ring's equipment is dramatically

¹⁵ The tripartite test refers to U.S. Supreme Court decision in *Sanitary Refrigerator Co. v. Winters* that an accused device infringes under the doctrine of equivalents "if it performs substantially the same **function** in substantially the same **way** to obtain the same **result**".

¹⁶ See *Warner-Jenkinson Co. v. Hilton Davis Chem., Co.*, 520 U.S. 17 (1997).

¹⁷ See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. (Festo I)*, 234 F.3d 558 (Fed. Cir. 2000) (*en banc*).

¹⁸ See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. (Festo II)*, 522 U.S. 735.

different. It has no contact with the cutter-restraining device and it does not move with the cutter-restraining device either.

As for Jiangsu Higher People's Court's estoppel argument, Oriental threw in a best-mode argument, claiming that the limiting statement in the patent's specification provides a comparison between different implementing modes and should not be read as ruling out other possible solutions. This argument has no merit because Chinese Patent Law does not have a best-mode requirement. Therefore, any right-forfeiting statements in the specification should be enforced against the patentee according to Chinese Patent Law.

In its responding brief, Golden Ring, besides emphasizing the technical differences between its equipment and Oriental Patent, presented two old Japanese prior art patents, arguing that what it was practicing has long been in the public domain and therefore there is no infringing activity from Golden Ring.

The decision by the IP tribunal of the Supreme People's Court hinges on two important factors. First, the IP tribunal assembled an expert committee that comprises both mechanical experts and patent law experts to compare Oriental's patent and Golden Ring's product. Neither Nanjing Intermediate People's Court nor Jiangsu Higher People's Court have solicited any expert opinion on the issue of equivalence between Golden Ring's equipment and Oriental's patent, although Oriental has requested the Higher Court to consult mechanical experts on the technical aspect of the patent dispute.

When handling a highly technical-based dispute, a judge's common sense and his legal expertise may not be sufficient and he should listen to opinions from experts in a particular field when resolving certain technical issues. Even if the judge happens to possess certain technical background related to the dispute, it may still be deemed necessary to listen to a neutral and better qualified expert's opinion. This is particularly important when local protectionism is still prevalent in China. Oriental, as a plaintiff from a different province, is almost entitled to question the fairness of the Intermediate Court and the Higher Court which are in the same province as the defendant, Golden Ring. This doubt finds further support when its reasonable request of soliciting expert opinions was turned down. In my opinion, this is a major reason why the Supreme People's Court grants a review over the case. In other words, it sends a strong signal to local courts that if the lack of neutrality can be shown procedurally, the credibility of their decisions will be in serious trouble.

The opinion issued by the expert committee listed all the major similarities and dissimilarities between Golden Ring's equipment and Oriental's patent. In particular, the pieces of evidence that Oriental contends support its argument of equivalents have almost all been classified as dissimilarities. Surprisingly, the expert committee then reached a conclusion that the two mechanical designs are equivalent. In my opinion, the expert committee has given too much weight to the underlying operating principle and theory rather than the technical implementations. There is little doubt that the two designs are equivalent on basic physical principle level. Both designs require that a metal plate be fixed and then be cut by a rotating cutter to produce a comb-like device. However, the two designs are quite different with respect to how the metal plate is being fixed. Golden Ring's design may not be more advanced than Oriental's. But it is definitely different. This should be the principle in any patent infringement cases.

It is worth mentioning that the two parties are not allowed to present their own expert opinions and the committee appointed by the court therefore has been deferred to a great deal of authority. In contrast, both sides in the U.S. court can present their own expert opinions. This is probably an important difference between America's accusatorial system and China's inquisitorial system.

The second factor that plays an important role in the Supreme People's Court's decision making was only mentioned briefly. It turned out that Golden Ring initially approached Oriental for the purpose of establishing a joint venture (including a Taiwanese third party) to manufacture the musical component using Oriental's patented technology. Unfortunately, the idea of having joint venture did not fly after a few months' efforts. During this period, a representative from Golden Ring had frequently visited Oriental's manufacturing site. Right after the demise of the joint venture, Golden Ring started its own business of manufacturing the musical component using the equipment at dispute. This act by Golden Ring is clearly a type of inequitable conduct. In the U.S., the doctrine of inequitable conduct is often used by the alleged infringer to defend itself against the patent owner. I am not aware of any cases that allow the patent owner to go after the infringer under the doctrine of inequitable conduct. Chinese Patent Law does not have any article remotely related to this topic either. Therefore, the Supreme People's Court, in its opinion, only mentioned the aforementioned facts briefly, indicating that Golden Ring has abused Oriental's good will and used the joint venture as an opportunity to "steal" Oriental's technology. I personally think Golden Ring's alleged inequitable conduct has significantly tarnished its credibility before the judges at the Supreme People's Court. Therefore, although I may disagree with the court's interpretation of some patent infringement principles, e.g., the doctrine of equivalents and the doctrine of estoppel, the final judicial verdict seem to be correct and fair.

The opinion issued by the IP tribunal of the Supreme People's Court in this case is helpful in clarifying the stand of Chinese Patent Law authorities on the doctrine of equivalents and the doctrine of estoppel. First, China has adopted a liberal reading of the tripartite test of the doctrine of equivalents. As long as one of ordinary skill in the art who has read the patent can easily infer that the replacement implemented by the alleged infringing party can produce substantially the same technical effect as the patent, the replacement will be deemed equivalent. There are two arguments supporting this liberal interpretation: (1) the technical effect is a factual issue, not a legal issue, and the existence of the equivalent technical effect can be easily determined by soliciting expert opinions, and as a result, the bias towards either party can be avoided; (2) what a patent infringer is most interested in when choosing a replacement approach is whether the replacement approach can reach the same technical effect, which can be effectively deterred by this liberal standard.

There are both pros and cons associated with this liberal standard. A broader interpretation of a patent claim may motivate more inventors to pursue patent protection since they can potentially go after a wider range of infringing activities. This consequence is desirable for a country like China where there are still many people having doubt about the importance and power of legal protection for their creative work. From a pragmatic perspective, promising and enforcing a broader protection seems to be at least as desirable as securing a fair and balanced verdict, if not more. On the other hand, an over-reaching interpretation of a patent claim, in the long run, may discourage people from making improvements over prior art because of the concern that the improvement (if not so dramatic) may be encroached by the doctrine of equivalents. Therefore, there is a strong public policy support for a review of the interpretation of the doctrine of equivalents.

Second, the Supreme People's Court's interpretation of the doctrine of estoppel is quite different from what is prevalent in the U.S. In China, a patent's specification and drawings can be used for determining the scope of the patent's claim only if the claim itself is not clear. Nor do the embodiments listed in the specification restrict the coverage of the patent. In the U.S., a patent's specification and drawings play a key role in the Markman hearing, a process for defining the coverage of the patent. The outcome of the Markman hearing, to a great extent, determines what will be key issues in the lawsuit and even which side has a better chance of winning the lawsuit. In contrast, Chinese patent litigation does not have a process similar to

Markman hearing or the like. As a result, it is very difficult for an estoppel-based argument to prevail in Chinese court.

The “Redundant Elements” Principle and Its Future

As mentioned above, China has adopted most U.S. patent litigation doctrines. Meanwhile, it also establishes some Chinese-style principles after taking into account the reality of Chinese Patent Law practice. One of the most famous and also most disputable Chinese-style principles is the so-called “redundant element” principle. According to this principle, it is possible that a patent claim may include certain redundant elements that can be (and should be) ignored during claim construction. This doctrine is directly contradictory to the “all-elements” rule prevalent in the U.S.

In *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*¹⁹, the U.S. Supreme Court stated:

“Each element contained in a patent claim is deemed material to defining the scope of the patent invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.”

An underlying assumption of the all-elements rule is that the patentee or more specifically the patent drafter is a well-trained professional and any limitation recited in a patent claim is deemed essential to the invention. This assumption may be true in the U.S. since the patent law practice has a two hundred plus years history and there is a sizable number of case law on this issue and a large number of well-trained patent attorneys and agents.

In contrast, patent is still a relatively new concept among the public in China and there are not so many qualified legal professionals. As a matter of fact, a large number of the Chinese patent applications are drafted by the inventor himself. The probability of seeing a poorly drafted patent claim is higher than the U.S. and Europe. A legitimate concern is that, without providing a leeway like the “redundant-element” principle, some unexpected and harsh verdict may become inevitable. But from a foreigner’s perspective, the redundant-element principle seems to be a nickname for local protectionism. It does not offer equal protections to domestic and foreign inventors and hurts China’s reputation of committing itself to IP protection. Moreover, the redundant-element principle makes a Chinese patent agent less motivated to improve his drafting skill and it also makes the coverage of a patent claim more unpredictable, e.g., how to determine which element is essential and which one is redundant.

Practicing a standard that is unacceptable to the international community discourages foreign companies from introducing their new technologies into Chinese market. Chinese courts and patent administrative agencies should realize its long-term negative impact and take some steps to abandon the “redundant-element” principle. As an initial step, it may raise the evidentiary standard for a patent owner to invoke this principle in a patent-related litigation.

TWO CASE STUDIES OF FOREIGN-RELATED PATENT ENFORCEMENT

In the last four years, outsourcing, an economic phenomenon tied with globalization, has been seriously criticized in the U.S. after the burst of the Internet bubble. On the face, developing countries like China and India seem to have won a windfall from globalization. A large number of well-trained and hard-working workers in these countries have taken away not only blue-collar but even white-collar jobs from the U.S. However, the truth of the matter is that globalization is

¹⁹ *Id.* at 1837.

not an altruistic act initiated by the developed countries to help the developing countries. It is probably the only way for developed countries to maximize their economic return at a reasonable level of risk.

On the other hand, in order to become a legitimate member of the global economy, a developing country has to overhaul its own legal system (if it does have a legal system) to meet various international treaties promulgated by the World Trade Organization (WTO). The international treaties in the field of intellectual property include the Berne Convention that covers primarily copyright protection, Paris Convention that deals with patent, trademark and industrial design and the Trade-Related Aspects of Intellectual Property Rights (TRIPS). What is common among these treaties is that the driving force behind all of them is predominantly from the developed countries. Many developing countries have little voice and bargaining power in the drafting of these agreements. As a result, a developing country that plans to join the global economy often finds itself in an awkward position. First, it needs to sign on many international treaties to be a qualified member of the global economy. However, signing on these treaties puts itself at a seriously disadvantaged position when competing with those developed countries.

In this regard, Chinese enterprises have a very bitter taste during the past few years. The following are two case studies that involve patent-related disputes between Chinese and foreign enterprises, one related to DVD manufacturing and the other concerning Pfizer's blockbuster medicine Viagra. These two case studies illustrate some critical lessons that China has learned or should have learned in order to become a truly international economic powerhouse: (1) intellectual property especially patent is the real (even though intangible) asset of a successful company (especially in the high-tech field); (2) Chinese enterprises need to honor other companies' IP right if they want to acquire and then increase their market share in the high-end intellectual-based global market, even if it means that they have to forfeit a significant amount of short-term economic interest; and (3) Chinese enterprises can and must learn how to use IP as an important legal weapon in their efforts to compete with foreign companies, domestically and internationally.

DVD Patent Royalty Claims Against Chinese Manufacturers

In June, 1999, six multinational companies including Hitachi, Panasonic, Mitsubishi, Time-Warner, Toshiba and JVC (herein after "6C") issued a joint statement. The joint statement claims that 6C owns about two thousand patents in the world covering almost every aspect of DVD's core technology and any DVD manufacturer needs to acquire a license from 6C before making and selling DVD players. One of 6C's primary targets is China which has over two hundred DVD manufacturers with a manufacturing capacity of more than sixty million DVDs. After intensive negotiation between 6C and Chinese DVD manufacturers, Chinese DVD manufacturers agree to pay to 6C about \$4 patent royalty fee per DVD player. Subsequently, three other companies including Sony, Pioneer and Philips (hereinafter "3C") went after the Chinese DVD manufacturers and forced them to pay to 3C another \$5 patent royalty fee for each DVD player. Right now, Chinese DVD manufacturers have agreed to pay about \$20 patent royalty fee for each DVD player to about 12 foreign companies. It is estimated that this royalty payment deprives the Chinese DVD manufacturers of approximately \$12.5 billion profit in the next five years.²⁰

A revisit of Chinese DVD manufacturers' response to patent royalty requests from 6C or 3C shows the Chinese DVD manufacturers have made a series of mistakes partly because they are

²⁰ See PeopleNet, "Chinese DVD manufacturers withdrew from overseas market due to high patent royalty fee", available at <http://info.news.hc360.com/html/001/002/003/013/55606.htm> (last visited November 20, 2004).

short of legal expertise on patent law and patent strategy.²¹

First, many Chinese DVD manufacturers are still unaware of the importance of patent to a high-tech company. In the U.S., especially in the Silicon Valley, one of the first few expenses a startup company has to write off is to file several high-quality patent applications covering the core of the its technology and product. These patent applications are an important legal weapon defending the company if it is ever sued for infringing other companies' patents. More than that, these patent applications are important marketing tools for the company to seek funding from venture capitalists. Without necessary patent protection, no venture capitalist is willing to take the risk of seeing the business it funded being sued one day by a competitor who already has patents covering the company's product.

In contrast, most of the Chinese DVD manufacturers purchased their product lines from developed countries like the U.S. or Japan. None of them have a significant investment in the development of DVD technology and therefore own few patents on the technology themselves. Most of the Chinese DVD manufacturers have shown little, if any, concern over infringing other companies' patents. They take it for granted that they can freely implement many features in their DVD players without ever bothering to learn whether these features have been patented and whether they should purchase a license from the corresponding patents' owners prior to using them.

The Chinese DVD manufacturers' behavior is an accurate reflection of the traditional Chinese society's attitude towards IP right. In other words, copying is an honor and an acknowledgement, not an offense, to the creator of an intellectual product, be it a new tool, a cooking recipe or a novel.²² A more practical reason is that these manufacturers may think that each of them is just a small fish from the perspective of those multi-national enterprises. They think they can enjoy a free ride as much as they want. This assumption may be true for each individual manufacturer, but not for the whole industry of DVD manufacturing. What is more critical is that the environment behind the successful stories related to those household products is different. At that time, almost all of the products made by the Chinese manufacturers, e.g., color TV, are consumed by the Chinese domestic market. Many product lines they have imported were actually deemed as old-generation technique that had or would have retired in the developed countries. Therefore, the Chinese TV manufacturers have not been mature enough, both technically and economically, to compete with those international giants like Sony or Panasonic in the global market.²³

The environment faced by Chinese DVD manufacturers is dramatically different. First, there is no significant technical lapse between the Chinese and foreign manufacturers. To a certain degree, Chinese manufacturers are even ahead of their foreign competitors. For example, because of strict copyright protection, many foreign DVD manufacturers are forbidden from manufacturing DVD players that can be used globally, i.e., DVD players that can decipher all DVD formats in the world. This is not a serious issue in China for lack of strong protection of copyright. As a result, many DVD manufacturers are able to make this kind of DVD player and

²¹ Fu, Gang, "Legal afterthought over the DVD patent dispute", available at http://www.cnipr.com/zsyd/xslw/t200030526_14003.htm (last visited November 20, 2004).

²² For example, "The Dream of Red Mansion", the most famous classic novel in China, became popular thanks to many people who made pirate copies of their own. The author, Cao Xue-Qin, may have never thought that he could become rich by collecting copyright fee from these pirates. As a matter of fact, he may have been very thankful to those pirates for spreading his work.

²³ Today, Chinese TV manufacturers are facing more and more challenges to enter the market of developed countries. First, many of them have been sued and incurred high penalty for allegedly dumping their low-end products into European and U.S. markets. Second, since they don't own the core technology of the high-end products like LCD TV or plasma TV, they find it extremely difficult to bring their products into these markets even though their products' quality is about the same as Sony or Samsung's products and they have a significant edge in terms of price.

sell them through the Internet or their outlets all over the world. Second, Chinese DVD player market was quickly saturated. As a result, there is a significant surplus of DVD manufacturing capacity in China. The only way to utilize this additional capacity efficiently is to sell Chinese DVD players overseas, which results a face-to-face competition with the foreign DVD player makers. Without any technical advantage, the foreign companies find their DVD players that often charge more than \$100 much less attractive than a technically-equivalent Chinese DVD player which charges less than half of that price. Last, but not the least, the rapid development of the Chinese economy in the past two decades has made it economically possible for those foreign enterprises to “ambush” the Chinese DVD manufacturers using their patent stick.

When faced with the patent royalty claim from foreign enterprises like 6C and 3C, most of the Chinese DVD manufacturers do not know how to respond. Initially, they adopted the “ostrich policy” by simply ignoring their existence. They may have thought that it is just “crying wolf” and will never pose a real threat to their business. After realizing that those foreign companies are serious this time, they quickly lost their stand without carefully examining the legitimacy of the claim. For example, although 6C claimed that they have owned more than two thousand patents to DVD technology, not every one of them is valid. As a matter of fact, a significant percentage of the patents may be invalid or unenforceable if they were ever litigated. Even among those valid and enforceable patents, many of them are just marginal improvements and therefore have little economic value. Without carefully examining the foreign companies’ patent portfolio, the Chinese DVD manufacturers have little to do but acknowledging their legitimacy. After resolving the claim’s legitimacy, the only issue left between the two sides is the price, i.e., how much the Chinese DVD manufacturers have to pay to satisfy the foreign enterprises’ requirement.

Many Chinese DVD manufacturers have invested so little on the research and development of the DVD technology and they do not have a strategy on how to use patent to defend them and even fight back. They seized the opportunity of reaping short-term profit by taking advantage of the lost cost of the Chinese labor market. When this advantage is drained out by the patent royalty charge, they have no alternative but to shut down their plants and dispatch all the workers home.

Not every invention requires a large research and development budget. Many Chinese DVD manufacturers indeed have made many small, but useful improvements on their DVD players, especially in the look and feel of the DVD players. Many of these improvements are qualified at least for design patents or utility model patent or even invention patent. If the Chinese DVD manufacturers have ever sought patent protection for these improvements, they will have at least certain bargaining power, e.g., seeking a cross-licensing agreement or reducing the patent royalty, when negotiating with 6C or 3C.

The Chinese DVD manufacturers’ quick surrender to the patent royalty requests by the foreign companies also demonstrates that China lacks high-quality legal professionals in the area of patent law practice. Although Chinese Patent Law is close to the international standards after the two amendments, there is still a significant gap to fill in terms of the quality of Chinese patent law practitioners.²⁴ Chinese domestic patent law practice has focused on areas that have little high-tech ingredients such as Chinese medicine, soft drink and food. Most of the high-tech related topics, e.g., wireless communication, computer software and genetic engineering, are

²⁴ Actually, this is by no means unique to legal professionals in the area of patent law practice. It is true in almost every aspect of Chinese legal practice. Even though Chinese people like to poke fun about the role and number of lawyers in the U.S. society, they have come to realize that a large number of well-trained legal professionals, just like a large number of technical professionals, are essential to the long-term development of Chinese society.

covered by foreign patents.²⁵ Many Chinese patent prosecutors have little training on high-tech subjects.²⁶ Lack of high-quality Chinese patent law practitioners in the DVD technology is probably another reason that Chinese DVD manufacturers would settle the royalty claim instead of confronting the foreign companies through litigation.

The DVD-related patent dispute in the last few years gave birth to a few new terms such as “patent barrier” or “intellectual property barrier” that have received a broad attention by China’s media. What these terms refer to is that many foreign companies, especially those multi-national companies, have established a systematic strategy of preventing Chinese companies from entering those key high-tech areas.²⁷ Since the enactment of Chinese Patent Law in 1985, these foreign companies have filed nearly 200,000 patent applications in the Chinese Patent Office covering major areas like telecommunication, computer software, biotechnology, and semiconductor, etc.²⁸

What triggers the Chinese media to call it a “patent barrier” is partly due to the existence of consortiums like 6C and 3C, which gives the Chinese companies a strong impression that the foreign companies have worked in concert to restrict the growth of the Chinese companies and even annihilate them. This impression is rationalized by the fact that most of the Chinese DVD manufacturers actually imported their DVD player manufacturing lines from members of 6C or 3C. In other words, these foreign companies first “feed” Chinese companies with their own technology free of patent royalty charge. Once the Chinese manufacturers “grow up” and begin to threaten these foreign companies’ market share, they will wave their patent stick and demand a huge amount of patent royalty fee from the Chinese companies.

It is true that those major multi-national companies have built up comprehensive patent portfolios to attack their competitors as well as protecting itself from attacks. These competitors routinely cross-license each other’s patents to reduce the patent litigation expense and sometimes establish various forms of alliance program to monopolize the market among themselves. As a potentially huge market, these foreign companies have spent year establishing their own patent portfolios in China. This so-called “patent barrier” will exist whether China sets up its own high-tech industry or not, because they first need to protect themselves from patent attacks.

Patent Validity Dispute Surrounding Viagra

If the DVD-related patent dispute has boosted foreign enterprises’ confidence in enforcing their patent right in China, the Viagra-related patent dispute is clearly a Waterloo not just for Pfizer itself. The impact of this dispute can be gauged from the wide publicity it has received in the U.S.^{29 30 31}

²⁵ Wu, Boming, “The improvement of Chinese patent system providing effective protection for the technical creativity in the 21st Century”, available at http://www.gzipo.gov.cn/article/Article_Print.asp?ArticleID=85 (last visited November 20, 2004).

²⁶ Even though a foreign patent application needs to be filed through a Chinese patent agent, his job is different from prosecuting the original patent application in its native language, because the Chinese agent is only responsible for translating the application from its native language, e.g., English, to Chinese.

²⁷ Some news reports even give the strategy a more negative flavor by calling it a “conspiracy” by foreign companies. However, for the reasons discussed below, the author of this paper does not believe there is a so-called conspiracy. It is just a savvy business developing plan that has been practiced for many years in the developed countries, especially in the U.S.

²⁸ Fu, Gang, “Legal afterthought over the DVD patent dispute”, available at http://www.cnipr.com/zsyd/xslw/t200030526_14003.htm (last visited November 20, 2004).

²⁹ See Red Herring, “Pfizer v. China”, available at <http://www.redherring.com/PrintArticle.aspx?a=10812§or=Industries> (last visited November 20, 2004).

³⁰ See Forbes, “Pfizer: China Overturns Viagra Patent”, available at <http://www.forbes.com/feeds/ap/2004/07/07/ap1446413.html> (last visited November 20, 2004).

The DVD-related patent dispute was resolved between two private parties and there is no involvement of the Chinese government. In contrast, Viagra's patent validity dispute involved the Chinese Patent Office from the very beginning. Here is a brief overview of the dispute.

In 1994, Pfizer filed a patent application to the Chinese Patent Office and the application is directed to the chemical composition of sildenafil citrate, the key ingredient of Viagra, as well as its function of curing or preventing the erectile dysfunction (ED) of male animals including human being. It should be noted that Pfizer's original application included a claim directed to a method of using sildenafil citrate for treating human being's erectile dysfunction. Since Chinese Patent Law does not grant patent protection to method claims for medical treatments, Pfizer had to withdraw its method claim.³²

On September 19, 2001, China Patent Office granted Pfizer's patent and the patent's validity was immediately challenged on multiple aspects.³³ First, the patent was challenged for lack of novelty, creativeness and usefulness under Chinese Patent Law, Article 22. It was claimed that what the patent claims was all known art to one in the relevant field and therefore unpatentable. Second, it was argued that the patent was invalid for insufficient disclosure under Chinese Patent Law, Article 26, Section 3. In other words, Pfizer has not fully disclosed the invention so that one skilled in the art can practice the teachings of the invention without undue experimentation.

On September 3, 2003, the Chinese Patent Reexamination Board, a subsidiary of the Chinese Patent Office, heard the oral arguments from the two sides.³⁴ After nearly one year of investigation and reviewing evidence provided by the two parties, the Chinese Patent Reexamination Board, on July 7, 2004, revoked the 2001 patent to Pfizer for insufficient disclosure under Chinese Patent Law, Article 26, Section 3. In response, Pfizer has appealed the Board's decision to Beijing's Intermediate People's Court with the hope to reverse the Board's decision. The appeal is currently pending.

The revocation of the Viagra patent immediately aroused polarized responses from the Chinese side and the foreign side. Because of the global popularity of Viagra and Pfizer's lobbying of the U.S. government, the dispute surrounding the Viagra patent's validity has been highly politicized. Since the beginning of the dispute in 2001, almost every high-ranking US official visiting China has brought up this issue when they met their Chinese counterpart. Right after the announcement of the revocation decision, the U.S. Embassy at Beijing has issued a statement criticizing the decision by the Board and warning that this decision may deter foreign enterprises from entering Chinese market for the concern of lack of IP protection. This paper will focus on the legal ramification of the dispute, in particular, what kind of impact it has upon China's patent law practice.

On the one hand, the decision by the Board sends a positive message that Chinese enterprises have started to learn how to use legal weapons to protect their interests, instead of

³¹ See Nature, "Patent fights rumble in China", available at http://www.nature.com/news/2004/041129/pf/nrd1595_pf.html (last visited December 05, 2004).

³² The original version of Chinese Patent Law did not even grant patent protection to chemical composition. In order to join the WTO, China amended its patent law in 1993 to include patent protection to chemical composition. However, even after the most recent 2003 amendment, Chinese Patent Law still does not protect medical diagnosis and treatment methods. See Patent Law of the People's Republic of China, Article 25, Section 3.

³³ See Huang, Yu, "Viagra and Avandia: Chinese Patent Dispute Having an Implication on the Market", available at <http://it.sohu.com/20040806/n221386924.shtml> (last visited November 20, 2004). However, since the author of this paper is unable to acquire a copy of Pfizer's Chinese Patent, there is no discussion about the legal merit of the two opposing parties' argument.

³⁴ See Guo, Xiaojing, "Viagra Patent Under Reexamination", available at <http://business.sohu.com/17/66/article202986617.shtml> (last visited November 20, 2004). In order to support its argument, Pfizer even invited UCLA Professor Louis J. Ignarro, the 1998 Nobel Prize winner in Physiology or Medicine. Professor Ignarro is also known as the father of Viagra because his Nobel discovery directly results in the birth of Viagra.

simply relying upon Chinese government's interference. From a broader perspective, this can even be read as a sign that China's market economy is becoming more mature because both parties are following a set of relatively transparent rules to resolve their disputes. Chinese domestic pharmaceutical companies as well as ordinary people are direct beneficiaries of the ruling. Four domestic companies have already received licenses to manufacture their generic versions of Viagra and their price is much lower than Pfizer's Viagra.³⁵

As a matter of fact, China is not the only country and not even the first country where Pfizer's Viagra patent's validity is challenged. Eli Lilly has already successfully invalidated another Pfizer's patent related to Viagra at Britain.³⁶ This case is frequently cited by the supporters of the ruling to refute as "cheap shot" the argument that the Chinese Patent Office has not been playing neutral in this dispute.

Putting aside the neutrality of the Chinese Patent Office, there is a fundamental difference between this case and the British case in terms of the motivation for invalidating Pfizer's patent. In the British case, what was invalidated is a method claim directed to any approach of using a broad type of chemical composition called "PDE-5" including Viagra's sildenafil citrate to treat ED. Eli Lilly's motivation for invalidating this claim is to clear any legal hurdle for introducing its own ED treatment medicine, Cialis. Therefore, Eli Lilly's motivation is not to sell a generic version of Viagra, but to protect its own innovation from inappropriately claimed by Pfizer.

Even if there is sufficient evidence supporting the Board's decision that Pfizer's Chinese patent is invalid for insufficient disclosure, the victory that the Chinese challengers are enjoying today is at most a "technical knockdown". Their intention is not to put forward their own innovations as Eli Lilly does in Britain. Their sole intention is to sell a cheaper version of Viagra using the discovery made by Pfizer. The meaning of the victory is more in doubt when we realize that 99% of western medicines sold in China are based on imitation of technologies developed by foreign pharmaceutical companies. It may be the case that Pfizer has made a fatal mistake in their prosecution of this patent, but there is no reason to believe that this will occur again and again. Attacking the validity of a foreign competitor's patent does not hide the fact that Chinese pharmaceutical companies are far behind their international counterparts in terms of research and development.

Many Chinese observers have brushed aside the argument that the ultimate result of this case tests Chinese government's commitment to IP protection. They argue that given the size of the Chinese population and its growing economy, nobody is going to skip the lucrative Chinese market. It is true that comments made by Pfizer or the U.S. Embassy may be intended to influence the Chinese Patent Office's decision. Unlike other high-tech areas such as semiconductor or computer software, most international pharmaceutical companies live on their patent portfolios.³⁷ Without necessary patent protection, no pharmaceutical company will find it financially viable to invest in the Chinese market. The opposite may be true that the larger the market, the bigger the financial loss.

After the initial David-defeating-Goliath type of excitement, a consensus has been gradually reached among Chinese legal observers that the core issue is no longer the validity of Pfizer patent per se. The core issue is actually the motivation for the Chinese local companies to challenge Pfizer patent's validity. A business plan that relies upon knocking down a competitor's

³⁵ Currently, the retail price of a 50-milligram Viagra tablet is about \$12. It is estimated that a Chinese generic version of the similar doze will be less \$4. Therefore, Chinese customers may have a significant benefit from the drop of price.

³⁶ See Lou, Dan, "The behind scene of Viagra-related patent dispute", available at <http://finance.sina.com.cn/jygl/20040829/1747983598.shtml> (last visited November 20, 2004).

³⁷ As an analogy, Intel's stock price may drop 20% if its key patents are invalidated while Pfizer's stock price may drop 90% if it lost patent protection.

patent, not on developing its own “first product”, is not a time-honored long-term strategy. In order to become a global power in the area of pharmaceutical and biotech, the Chinese government needs to make substantial effort to protect the intellectual property of any entity, domestic or foreign, especially in preventing underground drug counterfeiting business.³⁸

CONCLUSION

After twenty years of patent law practice, China has successfully established a modern patent system from virtually the ground zero. This patent system has been amended repeatedly to be consistent with major international protocols. China’s patent prosecution system is more close to the European patent prosecution system. But China’s patent litigation practice has significantly affected by the U.S. patent case law. What is lacking or lagging in China is a credible patent enforcement system. The recent developments on patent disputes related to DVD and Viagra have shown that the Chinese companies have recognized that IP as an important type of asset a company cannot do without in order to compete in the global economy.

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³⁸ Fred Greguras, “Will China Become a Global Power in Biotech”, at: http://www.fenwick.com/docstore/Publications/Corporate/China_Global_Power.pdf (last visited November 20, 2004).