

Review of Patent Infringement Litigation in the People's Republic of China

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As the Patent Law of the People's Republic of China (P.R.C.) enters its seventh year of existence since promulgation in 1985, the patent system in the P.R.C. is proving to be quite a success. Two contributing factors to its success are the increase in the number of patent applications and the commercialization of patented technology. According to statistics from the Patent Office, the number of patent applications has been increasing by an average of about 24% per year,¹ and in 1990, the production value of 3,518 patents in use added about RMB 6.27 billion *yuan* (U.S. \$1.17 billion).²

If, however, the Patent Law is not effectively and fairly enforced by courts, the whole patent system will be crippled. Hence, whether and how effectively Chinese courts enforce the Patent Law as well as handle patent infringement litigation have become issues of primary concern in both the P.R.C. and abroad. According to the Supreme Court's statistics, up to the end of 1990, courts had received 449 patent lawsuits, among which about 65 percent were patent infringement cases.

Year	Patent Lawsuits, 1985 - 1990	
	Cases received by courts	Cases decided by courts before end of 1990
1985	6	6
1986	10	7
1987	46	23
1988	79	54
1989	130	79
1990	178	136
Total	449	305

Indeed, the high percentage of patent infringement cases is a further indication that many patented technologies have been commercialized

1. Up to the end of September 1991, the Patent Office had received altogether 202,379 patent applications, of which 33,330 were filed by foreign applicants from 66 countries and regions. The United States, Japan and Germany were, in sequence, the top three foreign countries filing patent applications. Gao Lulin, *Zai Quanguo Zhuanli Gongzuo Huiyi shang de Baogao* [Report to the National Patent Work Conference], *ZHONGGUO ZHUANLI BAO* [CHINA PATENT NEWS], Oct. 23, 1991, at 1.

2. This is derived from a Patent Office survey which only covered 3,518 patents in use. Statistics on the production value of *all* patents in use are not available. It is, however, reported that about 30% of all patents granted have been put to use. In addition, about RMB 950 million *yuan* (US\$177 million) of taxes and profits were turned over in 1990. See *Patent Law Gives Talents Full Play*, *CHINA DAILY*, Nov. 27, 1991, at 4.

and that patentees have been using their patents as legal instruments to exercise the right to exclude competition in the marketplace.

As patent infringement lawsuits have increased greatly during the last three years, courts have made considerable efforts to adjudicate such cases promptly and fairly, and generally, to enforce the Patent Law within China's legal framework. This article will review the present status of patent infringement litigation in the P.R.C., explore some important issues arising from these actions as well as propose particular resolutions. Selected court decisions, and in some circumstances, administrative decisions, that cover areas of major interest or legal significance will also be discussed.³

I. INTRODUCTION

The Patent Law grants three categories of patents: for inventions, utility models and designs.⁴ Infringement is not specifically defined in the Patent Law, but Article 11 of the Patent Law provides:

After the grant of patent right for an invention or utility model, no unit or individual may, except as provided for in Article 14 of this Law,⁵ exploit the patent without the authorization of the patentee, that is, no unit or individual may manufacture, use or

3. Judicial decisions do not enjoy stare decisis status in the P.R.C. However, the Supreme People's Court in 1985 began to publish selected cases in ZHONGHUA RENMIN GONGHEGUO ZUIGAO RENMIN FAYUAN GONGBAO [GAZETTE OF THE SUPREME PEOPLE'S COURT OF THE PEOPLE'S REPUBLIC OF CHINA] [hereinafter SUPREME COURT GAZETTE]; this may indicate that judicial decisions may play a more important role than before in the courts' adjudication. See Liu Nanping, "Legal Precedents" with Chinese Characteristics: Published Cases in the Gazette of the Supreme People's Court, 5 J. CHINESE L. 107 (1991).

4. Zhonghua Renmin Gongheguo Zhuanli Fa [Patent Law of the People's Republic of China], (adopted Mar. 12, 1984, effective Apr. 1, 1985) [hereinafter the Patent Law], art. 2, reprinted in ZHONGHUA RENMIN GONGHEGUO FALU QUANSHU [COLLECTION OF THE LAWS OF THE PEOPLE'S REPUBLIC OF CHINA], at 1119 (1989) [hereinafter COLLECTION OF PRC LAWS]. For the definitions of "inventions," "utility models" and "designs," see Zhonghua Renmin Gongheguo Zhuanli Fa Shishi Xize [Implementing Regulations of the Patent Law of the People's Republic of China] (issued Jan. 19, 1985, effective Apr. 1, 1985) [hereinafter the Implementing Regulations of the Patent Law], art. 2 reprinted in COLLECTION OF PRC LAWS, *supra*, at 1129.

5. Article 14 of the Patent Law provides, in essence, that relevant government departments of the State Council have the power to permit designated units to exploit important patents held by units owned by the whole people in return for an exploitation fee; and that the State Council has the power to permit designated units to exploit patents held by Chinese individuals or collectively owned units that are of great significance to the interests of the state or the public in return for an exploitation fee. Article 14 only applies to patents held by Chinese units and Chinese individuals, and not foreign persons.

sell the patented product or use the patented process for production or business purposes.

After the grant of patent right for a design, no unit or individual may exploit the patent without the authorization of the patentee, that is, no unit or individual may manufacture or sell products incorporating the patented design for production or business purposes.⁶

Article 60 of the Patent Law provides: "If any acts arise from the exploitation of a patent without the authorization of the patentee, the patentee or interested parties may request the administrative authority for patent affairs to handle the matter or may directly file suit in a people's court." Accordingly, exploitation of a patent as described in Article 11 of the Patent Law constitutes an infringement of the patent.⁷

In determining the existence of patent infringement, the scope of patent protection for inventions or utility models is defined by the terms of patent claims; these claims may be interpreted by their specifications and by appended drawings.⁸ With regard to a design patent, the scope of patent protection is defined by the product incorporating the patented design as shown in drawings or photographs.⁹

Remedies for patent infringement include injunctions and damages,¹⁰ as well as elimination of the effects of the infringement,¹¹ a

6. Thus, while the importation of a patented product into China does not constitute a patent infringement under the Patent Law, using or selling the patented product after its importation is an infringing act. The exclusion of the right of importation from patent rights has drawn strong criticism, particularly from foreign patentees.

7. There are, however, five exceptions under Article 62 of the Patent Law, among which the most important is the exception concerning the right of prior use, *see infra* note 97.

8. Patent Law, *supra* note 4, art. 59. In addition, some commentators have suggested that any documents used in the course of examination proceedings in the Patent Office may be taken into consideration in the interpretation of patent claims and furthermore, that a patentee should be precluded, in an infringement action, from obtaining a construction of a claim so as to recapture subject matter surrendered during the course of proceedings in the Patent Office. *See* TAN ZHOUSHEN, *ZHUANLI FA JIAOCHENG* [PATENT LAW COURSE] 235 (1988); Tian Lipu, *Ruhe Panduan Zhuanli Qinquan* [How to Determine the Infringement of Patent Rights], 1987 GONGYE CHANQUAN [INDUSTRIAL PROPERTY], No. 1, at 36, 39; Yu Jianyang, *Zhuanli Susong zhong de Jige Shiji Wenti (II)* [Some Practical Issues in Patent Litigation (Part II)], 1990 GONGYE CHANQUAN, No. 13 (cumulative Vol. 2, Issue 13), at 29, 31.

9. Patent Law, *supra* note 4, art. 59.

10. Patent Law, *supra* note 4, art. 60; *see infra* notes 143-160 and accompanying text.

remedy which usually takes the form of the infringer being ordered by the court to make a public apology in the media to the patentee for infringing the patent. If the circumstances are serious, criminal prosecution may be instituted against the individual directly responsible for counterfeiting the patent of another person.¹²

The Supreme People's Court of the P.R.C., in a 1985 circular,¹³ granted the intermediate courts jurisdiction over patent disputes as the courts of first instance.¹⁴ According to that circular as well as a circular issued by the Court in 1987,¹⁵ there are altogether eight categories of civil patent litigation.

An intermediate court located in a provincial or autonomous regional capital, or in a municipality directly under the central government or one specially designated, has initial jurisdiction over the following patent disputes:¹⁶

(1) disputes over fees for exploiting an invention, utility model or

11. Zhonghua Renmin Gongheguo Minfa Tongze [General Principles of the Civil Law of the People's Republic of China] (adopted Apr. 12, 1986, effective Jan. 1, 1987) [hereinafter the General Principles of Civil Law], art. 118, reprinted in *COLLECTION OF PRC LAWS*, *supra* note 4, at 315, translated in *THE LAWS OF THE PEOPLE'S REPUBLIC OF CHINA* (1983 - 1986) 225 (1987).

12. Patent Law, *supra* note 4, art. 63. A criminal division of a local court in the place where the crime was committed has jurisdiction over the counterfeit of a patent. See Zhonghua Renmin Gongheguo Xingshi Susong Fa [Criminal Procedure Law of the People's Republic of China] (promulgated July 1, 1979), art. 19 reprinted in *COLLECTION OF PRC LAWS*, *supra* note 4, at 207, translated in *THE LAWS OF THE PEOPLE'S REPUBLIC OF CHINA* (1979 - 1982) 120 (1987) [hereinafter *PRC LAWS* 79-82].

13. Zuigao Renmin Fayuan Guanyu Kaizhan Zhuanli Shenpan Gongzuo de Guiding [Supreme People's Court Circular on the Trial and Adjudication of Patent Disputes] (issued on Feb. 16, 1985) [hereinafter the 1985 Supreme Court Circular] 1985 SUPREME COURT GAZETTE, No. 1, at 16.

14. The judiciary system in the P.R.C. consists of courts at four levels: the Supreme People's Court, the higher people's courts at the level of provinces, autonomous regions and municipalities directly under the central government, the intermediate people's courts, and the local people's courts. As to territorial jurisdiction in patent infringement litigation, see Zuigao Renmin Fayuan Guanyu Zhuanli Qinquan Jiufen Diyu Guanxia Wenti de Tongzhi [Circular of the Supreme People's Court on Territorial Jurisdiction in Patent Infringement Disputes] (issued June 29, 1987), reprinted in *COLLECTION OF PRC LAWS*, *supra* note 12, at 423.

15. Zuigao Renmin Fayuan Guanyu Shenli Zhuanli Shenqing Jiufen Anjian Ruogan Wenti de Tongzhi [Circular of the Supreme People's Court on Certain Matters Relating to Cases Involving Disputes over Application for a Patent] (issued Oct. 17, 1987), 1987 SUPREME COURT GAZETTE, No. 4, at 8.

16. The following 30 municipal intermediate people's courts are so located: Beijing, Shanghai, Tianjin, Shijiazhuang, Taiyuan, Shengyang, Changchun, Harbin, Jinan, Nanjing, Hefei, Hangzhou, Nanchang, Fuzhou, Zhengzhou, Wuhan, Changsha, Guangzhou, Xi'an, Lanzhou, Xining, Chengdu, Guiyang, Kunming, Hohhot, Nanning, Yinchuan, Urumqi, Lhasa, and Haikou.

So far, four municipal intermediate people's courts have been specially designated as having jurisdiction over patent disputes: Shenzhen, Dalian, Qingdao, and Chongqing.

design during the period after publication of the application and before the grant of the patent;

(2) disputes over patent infringement, including the counterfeiting of the patent of another person where the circumstances are not serious enough to constitute a criminal act;

(3) disputes over a contract concerning the assignment of a patent right or the right to apply for a patent; and

(4) disputes over the right to apply for a patent.

The Beijing Municipal Intermediate People's Court has, in addition to the above categories, initial and exclusive jurisdiction over the following disputes appealed from the Patent Office of the P.R.C.:¹⁷

(1) disputes over whether a patent for invention should be granted;

(2) disputes over a decision by the Patent Office declaring a patent valid or invalid;

(3) disputes over a compulsory license for exploitation; and

(4) disputes over the exploitation fee for a compulsory license.¹⁸

If dissatisfied with a decision by an intermediate court, a party to the litigation may appeal to a higher court. The higher court's decision is final,¹⁹ although review may be sought through a special trial supervision procedure.²⁰

A dual system was created by Article 60 of the Patent Law to handle patent infringement disputes: a patentee has a free choice either to request the administrative authority for patent affairs (hereinafter AAPA) to handle a patent infringement dispute or to file a patent

17. The Patent Office is responsible for reviewing patent applications and granting patent rights, deciding patent validity, granting compulsory licenses, and ruling on exploitation fees for the compulsory licenses when in dispute.

18. In December 1990, the Beijing Intermediate People's Court set up an Intellectual Property Tribunal under its Economic Division, which hears only patent and trademark cases. This is China's first exclusive tribunal for intellectual property cases. The tribunal is composed of 6 judges and 4 clerks. Three of the judges have law degrees while the other three have scientific backgrounds. At present, the tribunal does not adjudicate copyright cases, and the Civil Division of the court retains its jurisdiction over such disputes. See Chang Hong, *Court Hears Trademark, Patent Suits*, CHINA DAILY, Dec. 5, 1990, at 3.

19. Zhonghua Renmin Gongheguo Minshi Susong Fa [Civil Procedure Law of the People's Republic of China] (adopted and effective Apr. 9, 1991) art. 158 [hereinafter Civil Procedure Law], 1991 ZHONGHUA RENMIN GONGHEGUO GUOWUYUAN GONGBAO [GAZETTE OF THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA] 481 [hereinafter STATE COUNCIL GAZETTE], translated in CHINA L. & PRACTICE, Vol. 5, No. 5, June 17, 1991, at 15. The Civil Procedure Law replaced Zhonghua Renmin Gongheguo Minshi Susong Fa (Shixing) [Civil Procedure Law of the People's Republic of China for Trial Implementation] (adopted Mar. 8, 1982, effective Oct. 1, 1982) [hereinafter Civil Procedure Law for Trial Implementation] reprinted in COLLECTION OF PRC LAWS, *supra* note 4, at 389, translated in PRC LAWS 79-82, *supra* note 12, at 259. The translations in this article are the author's.

20. Civil Procedure Law, *supra* note 19, ch. 16.

infringement lawsuit directly in a court. The AAPA has the power to order a stop to the infringement and to require the infringer to compensate the patentee for his losses. Any party dissatisfied with the AAPA's order may institute legal proceedings in the intermediate court within three months of receiving the notification;²¹ otherwise the order will take legal effect.²² The legislative history of the Patent Law indicates that the primary purpose of establishing the AAPA was to provide an alternative method for resolving patent infringement disputes so as to reduce the number of cases brought before the court. In addition, the AAPA was expected to have the expertise to handle patent litigation as the staff responsible for patent infringement disputes are required to have technical backgrounds. Furthermore, resolving disputes by means other than litigation accords with Chinese tradition.²³

With its establishment at regional and government ministry levels,²⁴ the AAPA has been given dual functions: to act as an administrative court for adjudicating patent disputes and to act as a government institution for patent administration.²⁵ Through the end of July 1991, regional AAPAs had received 1,233 patent disputes, of which about 60 percent were patent infringement cases.²⁶

21. Patent Law, *supra* note 4, art. 60.

22. Zhuanli Guanli Jiguan Chuli Zhuanli Jiufen Banfa [Measures for Handling Patent Disputes by Administrative Authorities for Patent Affairs] (issued Dec. 4, 1989).

23. See, Zhang Youyu, *Daibiao Renda Falu Weiyuanhui xiang Liu jie Quanguo Renda Changweihui Disici Huiyi Baogao Zhonghua Renmin Gongheguo Zhuanli Fa (Caoan) de Shencha Shenyi Jieguo* [Report on the Examination of the Draft Patent Law of the People's Republic of China to the Fourth Session of the Standing Committee of the Sixth National People's Congress], RENMIN RIBAO [PEOPLE'S DAILY], Mar. 15, 1984, at 23; Peng Guangya, *Zhuanli Guanli Jiguan de Falu Diwei* [Legal Status of the Patent Administration Authorities], 1990 ZHONGGUO ZHUANLI YU SHANGBIAO [CHINA PATENTS & TRADEMARKS QUARTERLY], No. 3, at 42.

24. The AAPAs have been set up at the following levels: provinces, autonomous regions, municipalities directly under the central government, open cities, special economic zones, and the relevant competent departments of the State Council, Implementing Regulations of the Patent Law, *supra* note 4, art. 76.

25. Guojia Jingwei, Laodong Renshi Bu, Guojia Kewei, Zhongguo Zhuanliju Guanyu Zai Quanguo Shezhi Zhuanli Gongzuo Jigou de Tongzhi [Circular on the Installation of Patent Organs Throughout the Nation by the State Economic Commission, the Ministry of Labor and Personnel, the State Science and Technology Commission and the China Patent Office] (issued in 1984).

26. Gao, *supra* note 1, at 2.

II. PROBLEMS REGARDING THE DUAL SYSTEM IN HANDLING PATENT INFRINGEMENT DISPUTES

However, there are particular problems where a patentee chooses to resort to the AAPA as the first step in resolving a patent infringement dispute.

First of all, a conflict of interests, arising from the AAPA's dual functions, may exist. Since the AAPA is involved in patent administration within its region or department, this would, in some cases, inevitably clash with its function as an administrative court. Moreover, as the AAPA is under the administration of the executive authority of the region or department, it is prone to local or departmental protectionism. Hence, the impartiality of the AAPA in handling patent infringement disputes is compromised due to its dual functions and its position in the administrative structure.

Second, the AAPA does not possess the necessary power to handle patent infringement cases. Most notably, the AAPA, unlike a court, is not empowered by law to investigate and collect evidence and furthermore, cannot issue preliminary injunctions. This has an adverse impact on the effectiveness of the AAPA in resolving patent infringement disputes.

Third, the AAPA may have difficulties in enforcing its orders. The Patent Law provides that if a party does not appeal an AAPA order to a court within the prescribed time and does not comply with the order, the AAPA may approach the court for compulsory enforcement of the order.²⁷ However, if the court approached by the AAPA concludes that the AAPA's order is in error, it will refuse to enforce the order unless the AAPA rectifies the alleged error. Therefore, where the AAPA insists that its order is correct despite the court's decision to the contrary, the order would remain unenforced.²⁸ There is no procedure governing the resolution of this disagreement. In practice, it is submitted to a higher court or the Supreme People's Court to decide, but again, there is no procedure provided with respect to this. This problem has caused two uncertainties: first, as to the legal status

27. Patent Law, *supra* note 4, art. 60.

28. In enforcing effective AAPA orders, the courts in practice have applied, *mutatis mutandis*, the relevant provision concerning the enforcement of effective arbitration awards under the *Zuigao Renmin Fayuan Guanyu Shenli Jingji Jiufen Anjian Juti Shiyong Minshi Susong Fa* (Shixing) de Ruogan Wenti de Jieda [Explanation of the Supreme People's Court on Matters Relating to Application of the Civil Procedure Law for Trial Implementation in the Hearing of Economic Dispute Cases] (issued July 21, 1987), reprinted in *COLLECTION OF PRC LAWS*, *supra* note 12, at 415.

of the AAPA's order, which has already taken "legal effect;" and second, as to how and through what procedure the higher courts would resolve the disagreement between the enforcing court and the AAPA.

Finally, with the promulgation of the Administrative Litigation Law,²⁹ there is concern as to which procedural law, the Civil Procedure Law³⁰ or the Administrative Litigation Law, should apply where the AAPA's order is appealed to a court. This, in turn, determines who would be the parties to the litigation on appeal. Before the Administrative Litigation Law came into force on October 1, 1990, the patentee and the alleged infringer were the parties to both the patent infringement action and the appellate action, the latter governed by the Civil Procedure Law for Trial Implementation.³¹ With the Administrative Litigation Law in force at present, Justice Fei Zongyi, a member of the Adjudication Committee of the Supreme People's Court of the P.R.C., has stated that an appeal should be handled through administrative litigation procedures since the AAPA's order is administrative in nature.³² Accordingly, the dissatisfied party would be the appellant and the AAPA, the respondent, in any appellate action. Then, if the party who prevailed at first instance seeks to join in the action as a third party under Article 27 of the Administrative Litigation Law, it would have to rely on the AAPA to defend it even where its own interests are at stake because the prevailing party's rights in an administrative litigation are limited.

The Administrative Litigation Law has already been applied in a recently reported case. In *Wu Weidong v. The 843 Factory*,³³ the plaintiff filed a complaint with the Patent Administration Bureau of Shaanxi Province³⁴ against the defendant for infringement of the plaintiff's design patent. After the Bureau issued its decision for the defendant, the plaintiff appealed to the Xi'an Municipal Intermediate People's Court of Shaanxi Province. In the action on appeal, *Wu*

29. Zhonghua Renmin Gongheguo Xingzheng Susong Fa [Administrative Litigation Law of the People's Republic of China] (adopted Apr. 4, 1989, effective Oct. 1, 1990) [hereinafter the Administrative Litigation Law] 1989 STATE COUNCIL GAZETTE 297, translated in CHINA L. & PRACTICE, Vol. 3, No. 5, June 5, 1989, at 37.

30. See *supra* note 19.

31. *Id.*

32. Fei Zongyi, *Woguo Gongye Chanquan Susong Qingkuang he Youdai Jiejue de Wenti* [The Current State of Industrial Property Litigation in China and Problems to be Solved], 1991 ZHISHI CHANQUAN [INTELLECTUAL PROPERTY], No. 1, at 23, 26.

33. See Bai Zhenjing, *Xian Shouqi Zhuanli Xingzheng Susongan Shimo* [First Patent Administrative Litigation Case in Xi'an], ZHONGGUO ZHUANLI BAO, Dec. 15, 1991, at 2.

34. The Patent Administration Bureaus of particular provinces or regions are the titles given to the AAPAs in those areas.

Weidong v. The Patent Administration Bureau of Shaanxi Province, the 843 Factory was joined as a third party. The Administrative Division of the Xi'an intermediate court tried the case in June 1991, applying the Administrative Litigation Law. Upon the court's discovery that the appellant had submitted false evidence to the respondent during the earlier administrative proceedings handled by the latter, the appellant withdrew its complaint and the case was dismissed.

A patent infringement dispute should be regarded as a civil action between the patentee and the alleged infringer with the AAPA acting as an administrative court, resolving the dispute between the parties, rather than as an executive institution responsible for the supervision of both parties. As such, there are no direct rights and obligations involved between the AAPA and the parties, and therefore the AAPA should not be a party to an appeal of the AAPA's order. Instead, the original parties should continue to litigate the appellate action and the Civil Procedure Law should be applied. The Supreme People's Court should make a judicial interpretation to this effect.³⁵

Recognizing the inherent deficiencies in the AAPA's handling of patent infringement disputes, proposals have been made to change the functions of the AAPA. Justice Fei Zongyi has proposed that in handling patent disputes, the AAPA should only conduct mediation between the two parties, and that legal proceedings should be instituted by the parties only if mediation fails.³⁶ Others from the AAPA have proposed that the AAPA act as an arbitrator and that the parties should have the alternatives of either bringing a lawsuit before a court or submitting the dispute to the AAPA for arbitration. The latter proposal is problematic in that a domestic arbitration award is still subject to judicial review under Article 117 of the Civil Procedure Law which requires that a court enforce the arbitral decision. If the court refuses to do so, the parties may have to file a lawsuit in a court or request rearbitration, either of which would prolong the resolution of the infringement dispute. Justice Fei's proposal to change the function of

35. The Supreme People's Court is empowered to make judicial interpretations as to the application of laws and decrees under *Zhonghua Renmin Gongheguo Renmin Fayuan Zuzhi Fa* [Organic Law of the People's Courts of the People's Republic of China] art. 33 (adopted July 1, 1979, amended Sept. 2, 1983), reprinted in *COLLECTION OF PRC LAWS*, *supra* note 4, at 47, and under *Quanguo Renmin Daibiao Dahui Changwu Weiyuanhui Guanyu Jiaqiang Falu Jieshe Gongzuo de Jueyi* [Resolution of the Standing Committee of the National People's Congress on Improving Interpretations of Laws] (adopted June 10, 1981), reprinted in *COLLECTION OF PRC LAWS*, *supra* note 4, at 86. Under *ZHONGHUA RENMIN GONGHEGUO XIANFA* [THE CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA] (promulgated Dec. 4, 1982), art. 67(4), the Standing Committee of the National People's Congress has the power to interpret laws.

36. Fei, *supra* note 32, at 26.

the AAPA is therefore to be recommended as it would not only rectify the deficiencies in the AAPA's handling of patent infringement disputes, but also simplify the entire remedial procedure.

If, however, the AAPA's dual functions are not to be changed in the foreseeable future or at all, the Patent Law should be amended to grant the AAPA the necessary powers for dealing with patent infringement cases, and the Patent Law should also be reconciled with the Civil Procedure Law with respect to the enforcement of an AAPA decision. In addition, there should be clarification by way of a Supreme Court interpretation, as to which litigation procedure should apply when an AAPA decision is appealed to a court. At present, as a practical matter, a patentee is advised to sue an alleged infringer directly in court, particularly if a transregional dispute is involved. As an initial step, a patentee should not resort to an AAPA unless the infringement dispute presents a clear-cut case and a preliminary injunction is not sought.

III. PATENT INFRINGEMENT

A. *Literal Infringement*

So far, many confirmed patent infringement cases concern literal infringement in which the infringing device or process is found to embody every element of a patent claim.

The first patent infringement case tried after the Patent Law came into force was *Shenyang No. 9 Shoe Factory v. Shenyang No. 1 Shoe Factory*,³⁷ decided by the Shenyang Municipal Intermediate People's Court of Liaoning Province in November 1987. The patent in question was a utility model for a chemical-fiber mesh shoe. After filing a patent application in November 1985, the plaintiff began closed-door production and sale within a month; the product was an immediate commercial success. In a tour organized by the Shenyang Municipal Leather and Shoe Company (hereinafter the Company), the superior administrative institution of both the plaintiff and the defendant, the defendant's engineers visited the plaintiff's production facilities in February 1986, ostensibly to inspect product quality, while in fact carefully observing the whole manufacturing process. Despite the plaintiff's warning that a patent application had been filed and that no

37. See Zhuanli Susong Anli Zhaideng [Report of Selected Patent Lawsuits], GONGYE CHANQUAN, Nov. 20, 1988, at 25, 26.

infringement would be tolerated, the defendant started manufacturing and selling the same product in March 1986 with the encouragement and support of the Company. At the end of July 1986, the plaintiff was granted a patent. After the plaintiff and the defendant failed to reach a license agreement, the plaintiff brought an action against the defendant for patent infringement in March 1987, requesting that the defendant stop its infringement and pay appropriate use fees and damages.³⁸ The court ordered the Company to join the action as a third party.³⁹ Arguing that the production and sale of the patented product were conducted under the instruction of the Company and without any intention of willful infringement, the defendant refused to pay compensation. In its defense, the Company contended that it had only made arrangements between the plaintiff and the defendant and was therefore not liable for infringement. The court held both the defendant and the Company liable for infringement of the plaintiff's patent under Articles 11 and 60 of the Patent Law⁴⁰ and Article 77 of the Implementing Regulations of the Patent Law.⁴¹ As all three parties had agreed to have the court conduct mediation, an agreement was reached among them and the court issued a mediation statement in December 1987.⁴² Given the status of the Company, the defendant

38. The statute of limitations for filing a patent infringement lawsuit is two years from the day on which the patentee became aware or should have become aware of the act of infringement. *See*, Patent Law, *supra* note 4, art. 61. When a patent is infringed, the patentee is entitled to obtain, in addition to damages, appropriate use fees for the exploitation of the invention during the period after the publication of the patent application and before the grant of the patent. *See*, Implementing Regulations of the Patent Law, *supra* note 4, art. 77 and Patent Law, *supra* note 4, art. 60; *see supra* note 7 and accompanying text. However, only after a patent is granted can the patentee file a request with an AIPA or bring a lawsuit to obtain the appropriate use fees. *See* Implementing Regulations of the Patent Law, *supra* note 4, art. 77.

39. *See* Civil Procedure Law for Trial Implementation, *supra* note 19, art. 48.

40. Patent Law, *see supra* note 4, arts. 11 and 60; *see supra* notes 6-7 and accompanying text.

41. Implementing Regulations of the Patent Law, *supra* note 4, art. 77.

42. Under article 85 of the Civil Procedure Law, *supra* note 19, courts are required to conduct mediation during the period before trial. Moreover, they may make a final effort to mediate after trial but before rendering a judgment. *Id.* art. 128. Mediation is conducted in accordance with two rules (art. 9): (1) the parties must voluntarily participate in the mediation and any agreement reached must be of their own free will (arts. 85 and 88); and (2) the content of the mediation agreement should not be in violation of laws (art. 88). Once a mediation agreement is reached, the court will issue a mediation statement setting forth the claims, facts and the result of the mediation (art. 89). After the statement is duly signed by the court and the parties, it has the same effect as that of a legally effective court judgment (art. 89).

volunteered to accept all economic liabilities,⁴³ the statement therefore stipulated that the defendant immediately cease its infringing acts, pay use fees and damages of RMB 18,000 yuan to the plaintiff, and bear the court costs.

In *He Peiping v. Research Institute for the Economic and Technological Development of Wu County*,⁴⁴ the court held that the defendant's improvement of the plaintiff's patented product did not give the defendant the right, without authorization by the plaintiff, to make and sell the improved product, which was determined to be covered by the plaintiff's patent.

He Peiping filed a utility model patent application for a monolithic small blue tile in July 1986. The application was published in November 1987 and the patent granted in February 1988. Meanwhile, the Research Institute for the Economic and Technological Development of Wu County (hereinafter the Institute) had independently invented a "new type multistage tile" in 1987 and had filed a patent application in October 1987 which was subsequently published in August 1988.⁴⁵ Upon discovering that the Institute was licensing its patent application for the new type multistage tile, He Peiping sued the Institute for patent infringement in the Nanjing Municipal Intermediate People's Court of Jiangsu Province.

The plaintiff's patent for the monolithic small blue tile had only one claim which contained three technical features whereas the sole claim of the defendant's patent application for its new type multistage tile comprised five technical features, among which three features were the same as those in the plaintiff's patent claim. The plaintiff submitted that the defendant's product fell within the scope of the plaintiff's patent claim and therefore constituted patent infringement. The

43. This was presumably because the Company was an administrative institution whose budget might not suffice to pay damages. This case therefore raises some interesting questions as to the liabilities of an administrative institution: Had the defendant not agreed to pay all the damages, would the court have held the Company liable? What would have been the Company's liabilities? And could the Company have located the resources for this purpose?

44. The case was briefly reported in Wen Yikui & Jiang Tianqiang, *Women Zenyang Shenli Zhuanli Jiufen Anjian* [How We Adjudicate Patent Disputes], FAZHI RIBAO [LEGAL SYSTEM DAILY], Dec. 31, 1989, at 3; and Yang Jinqi, *Gongmin de Zhuanliquan Shoudao Falu Baohu* [The Patent Rights of Citizens Are Protected by Law], 1990 ZHONGGUO ZHUANLI YU SHANGBIAO, No. 3, at 63.

45. Since the defendant filed after the plaintiff's application was filed but before it was published, the plaintiff's application constituted prior art vis-a-vis the defendant's application. In addition, since the defendant's product was developed subsequent to the filing date of the plaintiff's patent application, the defendant could not claim the right of prior use. At the time of the writing of this article, the defendant's patent application has not been granted and is still in the midst of opposition procedures.

defendant argued that the new type multistage tile differed from the monolithic small blue tile in design and technical conception and that the defendant had independently developed the new type multistage tile for which a patent application had been filed. It also argued that production of the new type multistage tile was supported by administrative authorities at higher levels and that the Science and Technology Commission of Jiangsu Province had issued an economic guiding plan for the production of the product. The defendant thus asserted that, as a result of these circumstances, it had not infringed the plaintiff's patent. The court rendered a judgment for the plaintiff under Articles 95 and 118 of the General Principles of the Civil Law⁴⁶ and Articles 11, 59 and 60 of the Patent Law,⁴⁷ and ordered the defendant to stop its infringement, holding that the defendant's new type multistage tile had infringed the plaintiff's patent for the monolithic small blue tile. The court reasoned that three of the five technical features of the defendant's product were the same as those contained in the plaintiff's patent claim and therefore these features infringed the plaintiff's patent. However, the remaining two features were an improvement of the patented product and, combined with the other three features, constituted a new invention which, therefore, did not infringe the plaintiff's patent. The court stated that although the defendant's product might be independently patentable, it did not give the defendant the right to make, use or sell the product without the plaintiff's authorization as it fell within the scope of protection of the plaintiff's patent. In addition, the court held that government departmental approval, in any event, did not exempt the defendant from liability for the infringement of another's patent.

In calculating damages, the court considered that since the defendant's product had improved upon the patented product, it was appropriate for the defendant to pay as damages a part of the profits derived from the infringing act. Hence, after assessing the defendant's net profits as RMB 55,000 *yuan*, the court ordered the defendant to pay damages of RMB 25,000 *yuan* to the plaintiff.⁴⁸

While the court's judgment of infringement was proper, its reasoning in arriving at that conclusion may be criticized. Since patent protection

46. *Supra* note 11, arts. 95 and 118; *see also supra* text accompanying note 11.

47. *Supra* note 4, art. 59; *see also supra* text accompanying note 8.

48. The court did not provide any reasoning as to how it arrived at the figure of RMB 25,000 *yuan*. After its judgment, both parties stated that they would not appeal and the defendant asked the plaintiff for an assignment of the patent. Upon the request of the parties, the court conducted mediation, as a result of which the plaintiff's patent was assigned to the defendant for RMB 10,000 *yuan*.

for a utility model is defined by the terms of a patent claim under Article 59 of the Patent Law, a court should, in determining patent infringement, compare the alleged infringing product or process with a patent claim to ascertain whether it possesses all the features contained in the claim or may otherwise be considered an equivalent under the doctrine of equivalents.⁴⁹ If the alleged infringing product does contain all the features of the claim or may be considered an equivalent, it falls within the scope of the earlier patent claim and therefore infringes the patent. Thus, in this case, the court should not have split the defendant's product into two parts: one with the three features that fell within the scope of the plaintiff's patent claim and was held to infringe the patent, and another with features not covered by the claim and thus was held not to infringe the patent. The issue presented was, simply, whether the defendant's product infringed the plaintiff's patent, and not which or how many features of the product infringed the patent. As soon as the court had determined that the defendant's product contained all three features of the plaintiff's patent claim, that should have concluded its analysis, and the additional two features of the defendant's product should not have warranted further consideration. In its assessment of damages, the court may have been influenced by its earlier reasoning with respect to the determination of infringement, since only about 45 percent of the defendant's net profits was ordered to be paid to the plaintiff as damages. The court's assessment appears to have been based on the premise that the defendant had obtained an improvement patent and that, as the holder of an improvement patent, it was merely required to pay royalties to the holder of the prior patent. This decision therefore suggests that if an infringer improves upon a product whose patent it infringes, it may be allowed to keep some of the profits derived from the infringement — in this case more than half of the profits — because of the improvement made. This is clearly not in conformity with Articles 11 and 60 of the Patent Law which grant a patentee exclusive rights to the patented product.

In *Tianjin General Electrical Machinery Plant v. Wuxi General Vane Plant and Daqing Fittings Company*,⁵⁰ the court held that there

49. For a discussion of the doctrine of equivalents, see *infra* text accompanying notes 77-86.

50. Nanjing Shi Zhongji Renmin Fayuan Jingjiting [Nanjing Municipal Intermediate People's Court Economic Division], *Yiqi Zhuanli Qinquan Jiufen Anjian de Chuli* [Handling of a Patent Infringement Dispute], 1990 GONGYE CHANQUAN, No. 4 (cumulative Vol. 2, Issue 14), at 26 (1990).

was patent infringement despite the slight difference in the parameters of the infringing product and the patented product, caused by copying the patented product during the process of manufacture. The plaintiff sued the Wuxi General Vane Plant (hereinafter the Vane Plant) for infringing its utility model patent on the A42 centrifugal impeller and guide shell of a submersible oil pump (hereinafter the A42 product) in the Nanjing Municipal Intermediate People's Court of Jiangsu Province, demanding that the defendant cease infringement and pay damages of RMB 300,000 *yuan*. As the Vane Plant was under a contract with the Daping Fittings Company (hereinafter the Company) to manufacture the A42 product in accordance with drawings and samples provided by the Company, the court ordered the latter to join the action as a codefendant.⁵¹ The Company argued that there was a difference in a key feature of the allegedly infringing product and the patented product, the parameters of the blade angles, and therefore there was no infringement.

While the court did find a slight difference between the respective products with respect to the parameters of their blade angles (minimum $\pm 0.05^\circ$, maximum $\pm 3.6^\circ$), it also found that the Vane Plant had manufactured the product based on samples identical to the patented product, which had been sent by the Company, and errors in measurement as well as in the process of manufacture had existed. Therefore, it held both defendants liable for infringement, stating that in spite of the slight difference, the infringing product was covered by the plaintiff's patent claim as it was merely a copy of the patented product. The court further held that the Company had willfully infringed the plaintiff's patent since it had known that the A42 product was patented and yet, had still contracted with the Vane Plant to manufacture the product and in addition, had provided the latter with samples and drawings.

The court ordered both defendants to immediately cease their infringement. As regards damages, it decided that the Vane Plant should pay RMB 65,000 *yuan*, the value of the net profits derived from its infringement. Since the Company's profits from its infringement were difficult to assess, the court decided that it should pay the plaintiff RMB 200,000 *yuan* to compensate for its economic losses; this represented 30 percent of the gross profits the plaintiff would have gained from the sale of its products had it not been for the Company's

51. See Civil Procedure Law for Trial Implementation, *supra* note 19, arts. 47 and 91. The corresponding provisions in the Civil Procedure Law, *supra* note 19, which was not yet in force at the time of the decision, are Articles 53 and 119.

infringement.⁵²

The court's reasoning in determining patent infringement in this case was as follows:

[T]he essence is to judge whether the [alleged infringing] technical solution is the same as that of the patent. Where one parameter of the [alleged infringing] technical solution deviates slightly from the scope of the patented protection, it is necessary to consider if the deviation is so great that it reflects a new technical conception and secures a new technical result, thereby constitutes a technical solution differing from that of the patent.⁵³

This interpretation of the scope of patent protection is clearly too broad. In order to avoid being held liable for infringing a patent, a product or process need not exhibit such variation from the patented product or process that it reflects a new technical conception and secures a new technical result. The test, instead, should be whether the product or process falls within the scope of the patent protection as defined by the terms of the patent claim. To determine whether any deviation from the terms of the claim is nevertheless covered by the scope of the patent protection, the doctrine of equivalents could well be applied.

The analysis of infringement with respect to a design patent differs from that of a patent for an invention or utility model since the scope of protection for a design patent is determined by the product incorporating the patented design as shown in drawings or photographs.⁵⁴ In an infringement case concerning a design patent, *Sandian Company, Ltd. v. Yixing Municipal Jiubin Special Lamp Factory*,⁵⁵ the court helpfully indicated the factors it may consider in ascertaining whether there is infringement of a design patent. The plaintiff, a Sino-foreign equity joint venture, had been granted a design patent for a

52. Before the court issued its judgment, the three parties reached an agreement that corresponded with the court's holding. After the defendants fulfilled their obligations under the agreement, the plaintiff filed a petition with the court to withdraw its complaint, which the court approved after reviewing the agreement.

53. Nanjing Zhongji Renmin Fayuan Jingjiting, *see supra* note 50, at 27. The court did not clarify what would constitute a "new technical solution," "new technical concept" and "new technical result," and there are no other cases on point. However, these concepts are commonly used in determining the patentability of an invention as distinct from prior art. It appears, therefore, that the court may have confused the test for patentability with the test for infringement.

54. Patent Law, *supra* note 4, art. 59.

55. Wen & Jiang, *supra* note 44.

transverse light socket. It filed an infringement suit in the Nanjing Municipal Intermediate People's Court of Jiangsu Province upon discovering that the defendant had copied and sold the patented product. As the shape, pattern, color, structure and material of the defendant's product were exactly the same as those of the patented product, the court held that the defendant infringed the plaintiff's design patent.⁵⁶ From this case, it appears that the elements alluded to by the court are therefore some of the relevant factors in determining whether a product incorporates a patented design and, as a result, constitutes infringement.

B. Counterfeiting

Generally, patent infringement is not a criminal offense under the Patent Law. However, in some cases involving the counterfeiting of another's patent, the person directly responsible could suffer criminal liability and be punished with a fine, detainment or imprisonment of up to three years.⁵⁷ Counterfeiting is not defined in the Patent Law and its Implementing Regulations, nor are the particular circumstances that may give rise to criminal liability. Although the Supreme Court has not addressed these issues yet, there are two lower court decisions that shed some light on the courts' approach.

In *Nanjing Moling Radio Factory and Zhang Shikui v. Jiangsu Science and Technology Journal*,⁵⁸ the court held that the defendant had counterfeited the plaintiff's utility model patent and referred the case to a public security bureau to further investigate for possible criminal liability. The patent in question related to an instrument for medical diagnosis. The plaintiffs jointly developed the instrument in August 1986, and a technical evaluation meeting on the instrument was organized in the same month by the Science and Technology Commission of Nanjing Municipality, in which the defendant obtained a set of technical documents concerning the instrument. The plaintiffs

56. A mediation agreement was reached in which the defendant agreed to: (1) immediately stop its infringement; (2) pay damages of RMB 13,000 yuan; (3) make a public apology in the Wuxi Daily and the Xinmin Evening News; and (4) bear the court costs.

57. Patent Law, *supra* note 4, art. 63; *see supra* note 12; Zhonghua Renmin Gongheguo Xing Fa [Criminal Law of the People's Republic of China] (promulgated July 1, 1979), art. 127 reprinted in COLLECTION OF PRC LAWS, *supra* note 4, at 97, translated in PRC LAWS 79-82, *supra* note 12, at 87.

58. The case was briefly reported in Wen Yikui, *Jiji Shenli Zhuanli, Jishu Hetong Jiufen Anjian, Jiaqiang Dui Zhishi Chanquan de Baohu* [Conscientiously Try Patent and Technology Contract Dispute Cases, Strengthen the Protection of Intellectual Property], 1991 ZHUSHI CHANQUAN, No. 4, at 25, 29-30.

filed an application for a utility model patent in September 1986, which was published in November 1987, and was granted a patent in March 1988.⁵⁹

In March 1987, the defendant sent letters all over the country soliciting potential licensees of the instrument without the knowledge and authorization of the plaintiffs. In September 1987, with the Mountain Development Journal acting as middleman, the defendant reached a licence agreement with the Dandong Rifei Medical Instrument (Group) Company (hereinafter the Rifei Company) ostensibly on behalf of the plaintiffs. Under this agreement, the technology concerning the instrument was licensed in return for a lump sum of RMB 80,000 *yuan*. The Rifei Company altogether paid over RMB 80,900 *yuan*, out of which the defendant obtained RMB 70,900 *yuan*, and the Mountain Development Journal RMB 10,000 *yuan* as commission fees. As the defendant could not provide the technical information necessary for manufacturing the instrument, the defendant asked a third person, Liu Qian, to provide such data, under the name of the plaintiffs, for the manufacture of a similar product in return for RMB 10,000 *yuan*. Eventually, the Rifei Company spent RMB 120,000 *yuan* manufacturing the instrument, but because the technical information it had received from the defendant was incomplete,⁶⁰ the instruments made were defective, and hence, unmarketable. Upon discovery of the licence agreement, the plaintiffs sued the defendant for patent infringement in the Nanjing Municipal Intermediate People's Court of Jiangsu Province, demanding an injunction and RMB 80,000 *yuan* for damages. Subsequently, the Rifei Company also brought an action against the defendant in the same court for breach of contract, and the court decided to adjudicate the two cases together,⁶¹ ordering the Rifei Company, the Mountain Development Journal and Liu Qian to join the infringement action as third parties, with the Rifei Company having an independent right to make claims.

The court held that the defendant's licensing of the patent without the patentees' knowledge and authorization constituted counterfeiting

59. Under Article 24 of the Patent Law, *supra* note 4, the disclosure of the instrument at the evaluation meeting did not destroy the novelty of the utility model as the patent application was filed within six months of the date of the disclosure.

60. As the patent application for the instrument had not yet been published by the Patent Office at the time the license agreement was concluded, the defendant could not have obtained information from the disclosure.

61. See Civil Procedure Law for Trial Implementation, *supra* note 19, arts. 48 and 109. The corresponding provisions in the Civil Procedure Law, *supra* note 19, are Articles 56 and 126.

of the patent as well as an infringement of the plaintiffs' patent under Article 60 of the Patent Law. It ordered the defendant to make a public apology to the patentees and pay damages of RMB 1,800 *yuan*. In addition, the court found that the defendant had not only fraudulently induced the Rifei Company to sign a licence agreement with the knowledge that it did not own the technology being licensed, but had also conspired with Liu Qian to act on behalf of the plaintiffs to fulfil its contractual responsibilities. Noting, for instance, that the Rifei Company had spent RMB 120,000 *yuan* to manufacture the instrument but failed to reap the rewards of its investment, the court found that the defendant's activities had severe consequences and therefore held that its counterfeiting was of a serious nature. The court also held Liu Qian directly responsible for the counterfeiting and referred the case to a public security bureau for further investigation as to his possible criminal liability under Article 63 of the Patent Law.⁶²

With regard to the licensing agreement between the defendant and the Rifei Company, the court held that it was invalid under Article 7 of the Economic Contract Law.⁶³ In addition, based on Article 16 of the Economic Contract Law,⁶⁴ the court ordered the defendant to return RMB 60,900 *yuan* to the Rifei Company and compensate the latter for its economic loss by paying RMB 30,000 *yuan*. It also ordered Liu Qian to return RMB 10,000 *yuan*, and the Mountain Development Journal to return its commission fee of RMB 10,000 *yuan* to the Rifei Company.

Another counterfeiting case arose out of a patent licensing dispute in *Jiang Changjiang v. Qingdao Electric Instrument Factory*,⁶⁵ in which the Qingdao Municipal Intermediate People's Court of Shandong Province held that a licensee's manufacture and sale of a nonpatented product, marked with the number of the patent being licensed, constituted the counterfeiting of the licensor's patent. The plaintiff had granted the defendant an exclusive license to exploit his patent for

62. Song Hengyin, a staff member of the defendant, was also held liable for counterfeiting and similarly suffers possible criminal liability.

63. See *Zhonghua Renmin Gongheguo Jingji Hetong Fa* [Economic Contract Law of the People's Republic of China] (adopted Dec. 13, 1981, effective July 1, 1982) [hereinafter *Economic Contract Law*], art. 7, reprinted in *COLLECTION OF PRC LAWS*, *supra* note 4, at 931, translated in *PRC LAWS 79-82*, *supra* note 12, at 219, which provides, *inter alia*, that any economic contract which violates the law or involves fraud is invalid.

64. *Id.*, art. 16.

65. *Qingdao Shi Zhongji Renmin Fayuan Jingjiting* [Qingdao Municipal Intermediate People's Court Economic Division], *Dui Yiqi Zhuanli Shishi Xuke Hetong Jiufen Yinqi de Liangge Wenti de Kanfa* [Views on Two Issues Arising From a Patent License Agreement Dispute] (1989) (unpublished opinion, on file with the author).

circular blade plate shears. A dispute arose over the accounting and payment of royalties, resulting in the plaintiff suing the defendant for breach of contract in failing to pay royalties. It was then found that only two machines out of 604 the defendant had manufactured and sold complied with the drawings provided by the patentee, the remaining machines being structurally different from the patented machine which was the subject of the licensing agreement. However, all of the machines bore the same patent mark and number.

The court found that 602 of the machines manufactured by the defendant lacked both the driving and direction-changing devices necessary for distinguishing the patented machine from prior art. Therefore, the machines represented prior art and were not patented. The defendant admitted to having purposely manufactured the machines without the two devices in order to reduce the production costs, but having marked them as patented products to promote sales. The court held that the defendant had not only broken the terms of the patent licensing agreement, but also counterfeited the plaintiff's patent. No criminal charges were reported to have been filed in this case.

In view of the above two cases, it appears that to date, courts have defined two forms of patent counterfeiting: (1) exploiting a patent, without the knowledge and authorization of the patentee, as one's own, which also constitutes an infringement of the patent; and (2) manufacturing and selling a product that is marked with a patent number without the knowledge and authorization of the patentee; this constitutes a patent infringement depending on whether or not the product falls within the scope of patent protection. Furthermore, a court may decide that criminal prosecution is necessary where the counterfeiting is of a serious nature, for example, where it resulted in severe economic consequences.

C. Infringement by Licensee

There are significant cases in which licensees were held liable for patent infringement. Two issues are often present in patent infringement actions involving patent licensing: (1) whether a license agreement on a patent has expired or has been legally terminated, and therefore the licensee's continued use of the patented invention is an infringement of the licensor's patent; and (2) whether a licensee's activities in connection with a third party amount to a sublicense that is prohibited under the license agreement and therefore, an infringement of the licensor's patent.

For example, in *Lu Zhijie and Wang Fuxian v. Shenyang Guanhua*

*Electromechanical Plant*⁶⁶ the appellate court held that the licensee's continued use of patented technology after termination of the patent license constituted infringement. The patent in question was granted for both a grinding coolant and the process for producing this coolant. The patent application was filed by the Research Institute of Material Technology Application of Liaoning Province in July 1985. Two agreements were reached in April 1986, in which the rights to the product in the patent application were eventually assigned to the plaintiffs in return for RMB 35,000 *yuan* paid by the defendant. Shortly thereafter, the plaintiffs entered into an exclusive licensing agreement with the defendants with respect to the product in the pending application, the patent for which was granted in September 1987. The licensing agreement stipulated a term of two years within which the licensee was guaranteed returns of RMB 35,000 *yuan* in addition to profits of RMB 60,000 *yuan*. Clause 6 of the agreement provided that, if upon expiration of the agreement, the licensee wished to continue making the patented product the licensors would respect the licensee's request and the provisions of the agreement would continue to stand, with the exception of the provisions concerning technical assistance from one of the licensors, which would be subject to renegotiation.

When the licensing agreement expired, the plaintiffs requested that the defendant stop production under Clause 3 of the agreement which provided that the licensor had the right to terminate the agreement if the defendant failed to pay the agreed-upon royalties. However, the defendant argued that Clause 6 directed the licensor to respect the licensee's request for continuous production, and therefore continued to make the patented product without paying any fees to the plaintiffs. The plaintiffs sued the defendant for patent infringement in the Changchun Municipal Intermediate People's Court of Jilin Province in January 1990, demanding that the defendant stop infringement, pay any royalties due, and compensate for losses up to the amount of RMB 20,000 *yuan*.

The Intermediate Court held that all the clauses in the licensing agreement continued to be valid except for Clause 6 which contradicted the terms of the agreement, and that the plaintiffs were entitled to

66. See Gaoliao, *Shourangfang Weiyue Zhuanrangfang Youquan Jiechu Hetong, Shourangfang Jixu Shengchan Ying Chengdan Qinquan Zeren* [The Licensor Has the Right to Terminate the License Agreement Where the Licensee Violated the Agreement; Licensee's Continuous Production Constitutes Patent Infringement], *ZHONGGUO ZHUANLI BAO*, July 17, 1991, at 2.

royalties. Since the defendant had paid RMB 35,000 *yuan* to the plaintiffs to obtain the rights in the patent application, the court held that it was appropriate to allow the defendant continued access to the patented technology for an additional two years.⁶⁷ The court ordered the defendant to pay the plaintiffs RMB 1,599.30 *yuan*, covering royalties and a penalty for overdue payment in accordance with Articles 37 and 41 of the Technology Contract Law,⁶⁸ and stated that the defendant had the right to continue using the patented technology, with payment of royalties, for two years effective from the judgment date.

On appeal by the plaintiffs, the Higher People's Court of Jilin Province overruled the Intermediate Court's judgment and held that the plaintiff's termination of the licensing agreement was in conformity with Clause 3 of the agreement because the defendant had failed to pay royalties, and therefore, the agreement was legally terminated when it expired. The Higher Court further held, under Article 60 of the Patent Law and Article 41(1) of the Technology Contract Law,⁶⁹ that the defendant had infringed the plaintiffs' patent by exploiting the patent after the expiration of the licensing agreement. Through mediation conducted by the Higher Court,⁷⁰ the parties reached an agreement. The Higher Court issued a mediation statement in October 1990, stipulating that: (1) the defendant should immediately stop infringing the patent; (2) the defendant should pay the plaintiffs outstanding royalties due for the term of the licensing contract; (3) the plaintiffs would drop the request for a penalty on the overdue royalties; (4) the defendant should pay damages of RMB 4,000 *yuan* to the plaintiffs for patent infringement; (5) the defendant's remaining supply of materials used for making the patented product should be bought by the plaintiffs; and (6) the defendant should bear court costs for both the Intermediate and Higher Court proceedings.

The same question was presented in *Sun Zhongxin v. Machinery Plant of Dongming County*.⁷¹ The plaintiff and defendant had a

67. It appears that the intermediate court's decision was not based on laws or the terms of the agreement, but based on what the court considered would be fair to the defendant to get a fair return on the defendant's payment of RMB 35,000 *yuan*.

68. Zhonghua Renmin Gongheguo Jishu Hetong Fa [Technology Contract Law of the People's Republic of China] (adopted June 23, 1987, effective Nov. 1, 1987) [hereinafter the Technology Contract Law], reprinted in COLLECTION OF PRC LAWS, *supra* note 4, at 887, translated in CHINA L. & PRACTICE, Vol. 1, No. 7, Aug. 24, 1987, at 32.

69. *See id.*

70. *See supra* note 42.

71. *Supra* note 37, at 26.

licensing agreement with respect to the plaintiff's patent which stipulated a term of eight years and that if the licensee continued to make the patented product after the expiration of the agreement, a user fee of double the royalties prescribed in the agreement would be paid. About a year later, the defendant informed the plaintiff that it was terminating the licensing agreement on the grounds that the product was of poor quality and had caused the licensee to suffer losses. The defendant then made some improvements to the patented product and resumed production, refusing to pay the user fee. The plaintiff sued the defendant for patent infringement in the Harbin Municipal Intermediate People's Court of Heilongjiang Province, demanding that the defendant stop infringement and pay damages. The defendant argued that the product it made was an improvement over the patented product and therefore, its actions did not constitute infringement. The court held that the defendant had infringed the plaintiff's patent since the improved product fell within the scope of protection of the plaintiff's patent. A mediation agreement was reached in which the defendant promised to stop its infringement and pay the plaintiff damages of RMB 7,600 *yuan*, calculated by doubling the royalties for the products already sold and adding five percent of the sales price of the remaining products.

It is clear from the above cases that the courts examined the terms of the licensing agreements to determine if they had expired or had been legally terminated. The licensee's continued use of the patent after the agreement's expiry may constitute an infringement of the patent notwithstanding its contribution in facilitating the licensor's acquisition of the patent or its improvements to the patent.

Under the Technology Contract Law, a licensee is prohibited from granting a sublicense unless it has the licensor's direct consent or is explicitly authorized under the licensing agreement.⁷² A question frequently raised in this context is whether an arrangement or a contract between a licensee and a third party in connection with the exploitation of the patented technology is, in fact, a sublicense prohibited under the licensing agreement between the patentee and the licensee, and thus constitutes patent infringement. There are two cases on point.

72. Technology Contract Law, *supra* note 68, arts. 37 and 41(2); *see also* Zhonghua Renmin Gongheguo Jishu Hetong Fa Shishi Tiaoli [Implementing Regulations of the Technology Contract Law of the People's Republic of China] (approved Feb. 15, 1989, issued Mar. 15, 1989) [hereinafter the Implementing Regulations of the Technology Contract Law], art. 69 *reprinted in* COLLECTION OF PRC LAWS, *supra* note 4, at 892.

In *Nanning Xingxing Experimental Factory v. Zhou Chongjie and Ye Yisheng*,⁷³ the court held that the "production and sale" contracts between the licensee and third parties were really sublicenses, and all the parties to such contracts had therefore jointly infringed the patent in question. Zhou Chongjie and Ye Yisheng (hereinafter the licensors) were joint owners of a utility model patent on a multifunction high-efficiency coal-saving stove. The licensors had signed a licensing agreement with the Nanning Xingxing Experimental Factory (hereinafter the licensee) which provided that the licensee was prohibited from entering into any sublicense agreements. A year later, the licensee and its administrative supervisor, the Fuel Company of the Guangxi Zhuang Autonomous Region (hereinafter the Company), signed "production and sale" contracts with three factories which provided that the licensee and the Fuel Company would commission the factories to make and sell the patented stove in return for a profit calculated at RMB 14 yuan for each stove the three factories sold.

A dispute arose concerning the licensee's other activities and the licensors requested that the Patent Administration Bureau of Guangxi Zhuang Autonomous Region handle it. The Bureau made a decision in January 1989 in favor of the licensors. On appeal to the Nanning Municipal Intermediate People's Court of the Guangxi Zhuang Autonomous Region, the issue of the "production and sale" contracts was raised. The court held that the "production and sale" contracts were in fact sublicenses and the "profits" the licensee obtained from the three factories were disguised royalties for the sublicenses. Accordingly, the court ordered the Company and the three factories to join the lawsuit as third parties and held that all parties to the "production and sale" contracts were infringing the patent.⁷⁴

In another case,⁷⁵ a patentee licensed his patent to a company in February 1988, but the company did not manufacture and sell the patented product itself. Instead, the company requested a subordinate factory to manufacture and sell the patented product under the company's name, a venture in which the factory suffered losses. The

73. Nanning Shi Zhongji Renmin Fayuan [Nanning Municipal Intermediate People's Court], "Duogongneng Gaoxiao Jimeilu" Shiyong Xinxing Zhuanli Qinquan Jiufen Anli ["Multifunction High-Efficiency Coal-Saving Stove" Utility Model Patent Infringement Case] (Nov. 25, 1990) (unpublished opinion, on file with the author).

74. The lawsuit was eventually settled by mediation.

75. For a discussion of this case, see Xi'an Shi Zhongji Renmin Fayuan Jingjiting [Xi'an Municipal Intermediate People's Court Economic Division], Zhuanli Shenpan zhong Ruogan Wenti Chuping [Preliminary Analysis of a Few Questions in Patent Adjudication] (Oct. 10, 1989) (unpublished opinion, on file with the author).

patentee sued the factory for patent infringement in Xi'an Municipal Intermediate People's Court of Shaanxi Province, requesting that the factory stop infringement and pay damages. The court found that the company and the factory were two independent legal entities despite having a superior-subordinate relationship and were being managed by the same personnel. It also found that at the time the license agreement was reached, the company had already decided to have the factory manufacture and sell the patented product and had not licensed anyone else since then. It then found that by having the factory manufacture and sell the patented product, the company did not expect to gain any profit, the patentee's market was not affected, nor were any economic losses imposed. Despite these extenuating factors, the court held that the company and the factory had nevertheless violated the Patent Law, and the factory was not entitled to exploit the patent. However, the court also held that the case was distinguishable from cases of willful infringement involving sublicensing of patents without the authorization of the patentee. The court therefore ordered that no damages should be paid to the patentee.

The above two cases demonstrate that any contract or arrangement between a licensee and a third party for exploitation of a licensed patent without the authorization of the patentee constitutes patent infringement.⁷⁶ A court may, however, take into consideration the specific circumstances of the case in determining what liabilities the parties should bear, distinguishing willful infringement for pure profit from arrangements made as a result of the licensee's inherent internal structure.

IV. APPLICATION OF THE DOCTRINE OF EQUIVALENTS

When a patent is not literally infringed, the application of the doctrine of equivalents may nevertheless result in a successful claim of infringement where a competing product or process is found to perform substantially the same function in substantially the same way to obtain substantially the same result. Although the doctrine of equivalents is not prescribed in the Patent Law, the application of the doctrine of equivalents in determining patent infringement can be inferred from the court's decision in *Shen Cunzheng v. Dangkou*

76. See Patent Law, *supra* note 4, art. 11.

*Linguang Medical Electrical Apparatus Plant of Wuxi County.*⁷⁷

In this case, the plaintiff filed a patent application in July 1985 for a field effect therapeutic apparatus that, when electrified, creates a low-frequency alternating magnetic field and produces far infrared radiation to treat human diseases. The patent application was published for public inspection on February 10, 1986 and the patent was granted in December 1987. At about the same time, the plaintiff found that a similar field effect therapeutic apparatus had been sold by the defendant with the accompanying product specifications stating that "the product was patented on February 10, 1986." The plaintiff sued the defendant for patent infringement in the Nanjing Municipal Intermediate People's Court of Jiangsu Province in June 1988. The defendant argued that the plaintiff's patented invention made use of a coil of magnetic material creating, when electrified, an alternating magnetic field to produce therapeutic effects, whereas the defendant's product made use of an ordinary coil generating, when electrified, heat energy for physical therapy. The defendant alleged that the two products were therefore different in principle, function and selection of materials, and that it had not infringed the plaintiff's patent.

The court rendered its judgment for the plaintiff, finding that although the coils used in the two products were of different materials, the function and purpose of the two products were identical because both were able, when electrified, to create a low-frequency alternating magnetic field and generate far infrared radiation. Thus, the ordinary coil used in the defendant's product could be regarded as an equivalent to the magnetic material coil used in the patented invention, the former being merely a simple substitute for the latter. In addition, the court found that the shape, construction, use and function of the defendant's product were identical to those of the patented invention. Accordingly, the court held that the defendant's product fell within the scope of the plaintiff's patent claim and that the defendant was liable for willful infringement because it had not only infringed the plaintiff's patent under Articles 95 and 118 of the General Principles of the Civil Law⁷⁸ and Articles 11 and 60 of the Patent Law,⁷⁹ but also counterfeited the plaintiff's patent under Article 63 of the Patent Law.⁸⁰

77. The case was briefly reported in Yang Jinqi, *Woguo Zhuanli Qinquan Susong Zongsu* [A Summary of Patent Infringement Litigation in China], 21 ZHONGGUO ZHUANLI YU SHANGBIAO 64, 65 (1990).

78. *Supra* note 19, arts. 95 and 118.

79. Patent Law, *supra* note 4, arts. 11 and 60; see *supra* notes 6-7 and accompanying text.

80. Patent Law, *supra* note 4, art. 63; see *supra* note 12.

This case makes it clear that the court applied a quasi-doctrine of equivalents. Without giving any reasoning, the court appeared to have taken it for granted that such a doctrine could be applied in the determination of patent infringement. This doctrine is also supported by other segments of the patent law community who have advocated its application: academics, patent attorneys⁸¹ and the AAPAs. One AAPA has taken the matter one step further by expressly applying the doctrine of equivalents in determining patent infringement. Two relevant cases have been decided by the Patent Administration Bureau of Shandong Province.

In *Weihai General Machinery Plant v. Weihai Carpentry Machinery Plant*,⁸² the plaintiff filed a complaint against the defendant for patent infringement in August 1988 with the Patent Administration Bureau of Shandong Province. The patent in question was issued for a drilling apparatus used in a carpentry device. The only difference between the alleged infringing product and the patented product was that the former used a gear plate and a gear base to form a pressure bar pedestal, whereas the patented product had an integrated pressure bar pedestal. Reasoning that the two products performed substantially the same function in the same way to obtain the same result, the Bureau stated that the two pressure bar pedestals were equivalent and held that the accused product fell within the scope of the patent claim under Article 59 of the Patent Law⁸³ and Article 21 of the Implementing Regulations of the Patent Law,⁸⁴ and consequently, infringed the patent. This case therefore contains a clear application of the doctrine of equivalents.

The second case is *Juancheng Shipyard v. Xiaoqinhe Shipping Bureau of Jinan Municipality*.⁸⁵ The patent claim in question comprised five elements. In comparison, the alleged infringing product also had five elements, two of which were similar and three different. The

81. See, e.g., TAN, *supra* note 8, at 236 (1988); Yu Jianyang, *supra* note 8; Feng Zhongliang, *Quanli Yaoqiu de Jieshi ji "Dengtong Yuanze" de Yunyong [Interpretations of Claims and Application of the "Doctrine of Equivalents"]*, ZHONGGUO ZHUANLI BAO, July 10, 1991, at 2.

82. Zhang Yuejin, Cong Jige Anjian Kan Zhuanli Qinquan de Rendeng [Determination of Patent Infringement in the Light of a Few Cases] (Oct. 1989) (unpublished manuscript, available with the author).

83. Patent Law, *supra* note 4, art. 59; see *supra* note 8.

84. Article 21 of the Implementing Regulations of the Patent Law, *supra* note 4, provides that "... An independent claim shall outline the essential technical contents of an invention or utility model and describe the indispensable technical features constituting the invention or utility model"

85. *Supra* note 82.

patentee argued that the three different elements were equivalents of the corresponding three elements expressed in its claim, thus the two products were substantially the same and infringement had been committed. The Bureau found that two of the three different elements were equivalent to two elements in the patent claim, however the third different element was not an equivalent. The Bureau reasoned that the corresponding third element in the patent claim was crucial to the patentability of the plaintiff's invention since it was the only element in the patent claim that distinguished the invention from prior art; whereas the alleged infringing product, with the third different element, belonged to prior art. The Bureau therefore held that the latter was not an infringement as it did not fall within the scope of the patent claim.⁸⁶ In this case a limitation was imposed on the application of the doctrine of equivalents. The implication appears to be that a patent claim will not be construed so broadly under the doctrine of equivalents that it would be found invalid in view of prior art.

In summary, there is strong support for applying the doctrine of equivalents in the determination of patent infringement. However, there are still questions to be clarified: for instance, what is the range of equivalence to be afforded to a patent? Must an equivalent have been in existence and known in the relevant field of technology as such? What are the limits of the doctrine and what should be the approach to its application? All these issues await either an express definition by the Supreme Court or decisions by the courts.

V. CONTRIBUTORY INFRINGEMENT

A. *Active Inducement to Infringe*

Although there is no specific provision under the Patent Law holding that there is patent infringement in actively and knowingly inducing or aiding another person's direct infringement of the patent, courts have imposed liability for assisting or inducing patent infringement under general provisions in the Patent Law concerning the patentee's exclusive rights and infringement.

In *Shenyang No. 9 Shoe Factory v. Shenyang No.1 Shoe Factory*,⁸⁷ the Shenyang Municipal Leather and Shoe Company, the superior administrative institution of both the plaintiff and defendant, was held

86. Patent Law, *supra* note 4, art. 59; Implementing Regulations of the Patent Law, *supra* note 4, art. 21; see *supra* note 84.

87. See *supra* note 37.

liable for patent infringement in that it had committed what were essentially acts of assistance: knowing that the plaintiff had a pending patent, the Company first made arrangements for the defendant to gain access to the plaintiff's technology and then actively promoted the sale of the defendant's product.

Similarly, in *Tianjin General Electrical Machinery Plant v. Wuxi General Vane Plant and Daqing Fittings Company*,⁸⁸ the Company was held liable for infringement where it had known that the plaintiff had a patent for the product in question, but had still contracted with the Vane Plant to manufacture the product and had moreover provided it with drawings and samples identical to the plaintiff's product.

In contrast, instructing others to manufacture and sell a patented product without knowledge that the product is patented does not render one liable for patent infringement. In *Fuzhou No. 3 Electric Appliance Factory v. Fuzhou Municipal Electric Appliance Factory*,⁸⁹ the plaintiff and another factory (not a party to the subsequent lawsuit) produced a model of an indoor instrument for displaying high voltage, based on a request by the Ministry of Machinery and the Ministry of Water Conservation and Power. After the instrument was approved by the two ministries in 1984, the plaintiff filed a utility model patent application for the instrument in October 1988, and a patent was granted in December 1989. Meanwhile, Zhou Zhonguan, deputy director of the plaintiff and the person in charge of researching and developing the instrument, had left the factory in May 1987 to found the Fuzhou Municipal Electric Appliance Factory, the defendant, which manufactured instruments for displaying high voltage. The defendant made some improvements to the instrument developed by the plaintiff and sold it in March 1988.⁹⁰ In November 1988, the defendant's improved instrument was approved by the above-mentioned two ministries which proceeded to issue a notice recommending that the defendant's product be used nationwide.

In October 1988, the plaintiff sued the defendant for patent infringement in the Fuzhou Municipal Intermediate People's Court of Fujian Province, demanding that the defendant stop manufacturing the product, return the technical materials illegally possessed by Zhou

88. See *supra* note 50.

89. Bao Zhirong, Wang Wenli & Xu Xiancong, *Dui Yiqi Keji Chengguoquan Qinquan Jiufenan de Falu Fenxi* [Legal Analysis of a Case Concerning an Infringement Dispute over a Science and Technology Achievement Right] (unpublished manuscript, on file with the author).

90. Since the defendant sold an improved model of the plaintiff's instrument before the plaintiff filed its patent application, it would appear that the patent would thereby be rendered invalid. However, the issue of the validity of the plaintiff's patent was not raised in the action.

Zhouguan, eliminate the effect of the infringement and pay damages. The defendant argued that its actions did not constitute infringement and counterclaimed for the economic losses suffered as a result of the lawsuit.

The Intermediate Court rendered its judgment in January 1990, rejecting both parties' claims. It held that since the two ministries had approved the manufacture and sale of the defendant's product, the plaintiff's demand should be rejected. The plaintiff appealed to the Higher People's Court of Fujian Province. The Higher Court held that the defendant's improved product fell within the scope of the plaintiff's patent protection and the defendant had thus infringed the patent; furthermore, that the ministries' approval and recommendation of the instrument was not a defense in patent infringement litigation under Article 118 of the General Principles of the Civil Law.⁹¹ The Higher Court approved the plaintiff's claims, stating that the Intermediate Court had applied the law erroneously.⁹² It, however, did not hold the administrative institutions liable for patent infringement, presumably because they had not known that the improved product was covered by a patent.

In *He Peiping v. Research Institute of Economic and Technology Development of Wu County*,⁹³ although the court held that the defendant had infringed the plaintiff's patent, it did not hold the Science and Technology Commission of Jiangsu Province similarly liable since the Commission had not known that the defendant's product would infringe the plaintiff's patent, and had issued an economic guiding plan to the defendant for the production of the infringing product based solely on a request submitted and information provided by the defendant.

As these two cases demonstrate, when granting approval to or recommendation of a technology, or considering the inclusion of a technology in a government economic plan, administrative institutions sometimes fail to inquire as to whether the technology would infringe existing patents — a result caused probably by a lack of knowledge about the Patent Law among administrative staff. To minimize the risk of unintentionally assisting the infringement of a patent, an administrative institution should require all persons requesting approval of or

91. *Supra* note 11, art. 118.

92. It overruled the Intermediate Court's judgment under Article 151(2) of the Civil Procedure Law for Trial Implementation, *supra* note 19. The corresponding provision in the Civil Procedure Law is Article 153(2).

93. *See supra* note 44.

recommendation for a technology, or the inclusion of a technology in government economic plans, to conduct a search and submit a "best effort" statement that the technology does not infringe any patents.

In conclusion, courts have made it clear that a party shall be held liable for infringement jointly with the direct infringer, if it knowingly and actively instructs or assists others in infringing a patent. Furthermore, government approval or recommendation, or compliance with government economic plans, are not valid defenses in these actions.

B. Contributory Infringement by a Component Seller

Judicial decisions concerning contributory infringement have not been reported. However, in one infringement case, *Emei Slide Water-Gate Valve Factory v. Zibo Boshan Refractory Factory*,⁹⁴ the Patent Administration Bureau of Shandong Province held a defendant liable for patent infringement for acts amounting to contributory infringement.

The patent was for a valve and its claim comprised nine components. Six of the nine components were made of cast iron and three of refractory. The defendant manufactured and sold the three refractory components to a steel plant, where the three components were combined with the six cast iron components manufactured by the steel plant itself to form the patented product, which was used in the steel plant's production process. The Bureau found that the three refractory components could be used only in the product specified in the patent claim and that the defendant had sold the three components especially for a use that constituted an infringement of the patent. The Bureau thus held that the defendant had infringed the plaintiff's patent.⁹⁵ It was unclear from the case whether the defendant had known that the components were to be used in infringement of the patent, or whether the Bureau considered the defendant's knowledge or lack thereof to be irrelevant to its decision. It was also unclear why the Bureau did not order the steel plant, the direct infringer, to be a party to the infringement action. Nevertheless, the Bureau's holding shows, at the very least, that if a person sells components to be specifically used by another in infringement of a patent, the person also runs the risk of being held liable for infringement. As further development in this area is required to give the public proper guidance, an elaboration by the courts on the standards and tests to be applied in determining

94. *Supra* note 82.

95. Before the bureau rendered its decision, the case was settled between the parties and the plaintiff withdrew its request.

contributory infringement would be welcome.

VI. DEFENSES AND COUNTERCLAIMS

A. *Prior Use Defense*

The Patent Law of the P.R.C. adopted the "first-to-file" principle under which the rights to a patent are determined by the priority in filing the patent application.⁹⁶ A corrective measure, the right of prior use, is provided in Article 62 of the Patent Law to ensure that a patent is not effective against a person who, prior to the date of filing, had already manufactured a similar product, used the same process or made the necessary preparations for such manufacture or use.⁹⁷ Actual prior use can easily be determined and therefore has not been a problem in patent infringement litigation. However, since defendants claiming the prior use right often refer to the "necessary preparations" antecedent to actual use, the central question concerns the preparations necessary for establishing the prior use right.

In *Hunan Changsha Electrical Switch Plant v. Zhejiang Xiangshan High-Pressure Electrical Appliance Plant*,⁹⁸ the plaintiff and Xi'an Research Institute for High-Pressure Electrical Appliances jointly filed a patent application in July 1986, and a patent was granted in August 1987. Two months before the plaintiff's application was filed, the defendant began preparations for the independent manufacture of the same product on a trial basis. By May 1987, the defendant had made a product that was identical to the plaintiff's in structure, function and purpose. The plaintiff therefore sued the defendant for patent infringement in the Hangzhou Municipal Intermediate People's Court of Zhejiang Province.⁹⁹ The defendant claimed that it had made the

96. Patent Law, art. 9.

97. Article 62 of the Patent Law provides:

None of the following shall be deemed an infringement of a patent right:

....

(3) Where, before the date of filing of the application for patent, any person who has already made the same product, used the same process, or made necessary preparations for its making or using, continues to make or use it within the original scope only[.]

98. ZHONGGUO ZHUANLIJU ZHUANLI GUANLIBU HE ZUIGAO RENMIN FAYUAN JINGJITING [CHINA PATENT OFFICE PATENT ADMINISTRATION DEPARTMENT & SUPREME PEOPLE'S COURT ECONOMIC DIVISION], ZHONGGUO ZHUANLI JUFEN ANLI XUANBIAN [SELECTED CASES CONCERNING PATENT DISPUTES IN CHINA] 99-102 (1991).

99. The research institute, the co-owner of the patent in suit, abandoned its claim in this litigation and was not a party to the lawsuit.

necessary preparations for manufacturing the patented product before the filing date of the plaintiff's patent application and thus was entitled to the prior use right.

After deciding that the product that the defendant had manufactured fell within the scope of the plaintiff's patent protection, the court then turned to examine whether the defendant had established a prior use right. In determining what constitutes "necessary preparations," the court laid down three tests:

(1) whether the defendant had made technological preparations, including technical directions as to the task, design and instruction documents for the product, or workshop drawings;

(2) whether the defendant had made preparations with respect to production facilities, including special machines, instruments, molds and fixtures; and

(3) whether the defendant had finished the manufacture, on a trial-basis, of the product models.

Applying the first test, the court found that the defendant finished the workshop drawings in March 1988. As regards the second test, the defendant had made only four special instruments, molds and fixtures by August 1988 although thirty-nine were needed to actually manufacture the product. And as for the final test, the defendant had finished the trial-manufacture of its product only in May 1987.¹⁰⁰ The court stated that, accordingly, the defendant had not made the necessary preparations for production by July 3, 1986, the filing date of the plaintiff's patent application, and was therefore not entitled to the prior use right. Holding that the defendant's making and selling of the product had infringed the plaintiff's patent under Articles 8, 12 and 60 of the Patent Law,¹⁰¹ the court ordered the defendant to cease production and pay the plaintiff damages of RMB 4,000 *yuan*.

The three tests are helpful indications as to how a court may determine whether the necessary preparations have been established so as to trigger the prior use right. However, these three tests should not be regarded as laying down the only relevant factors, nor should it be necessary that all three tests be satisfied to find necessary preparations. This would unfairly narrow the scope of what constitutes necessary

100. The court did not make it clear whether all three tests must be satisfied to establish "necessary preparations." However, when applying the third test concerning the completion of a product model, the court stated that "the date a product model is made should be considered the date on which the necessary preparations are completed." In so deciding, the court, in effect, rendered the other two tests unnecessary.

101. Patent Law, *supra* note 4, art. 60; *see supra* note 7 and accompanying text; Patent Law, arts. 8 and 12.

preparations. In any event, a court should consider all kinds of activities that are undertaken for the purpose of manufacturing a product or using a process, taking into consideration the nature of the product or process, to determine if such activities are sufficient to constitute necessary preparations. Depending on the facts presented, one factor, or a series of factors in combination, may be equally determinative.

B. Patent Validity

Under the Patent Law, any person may request that the Patent Reexamination Board of the Patent Office declare a patent invalid.¹⁰² Any party dissatisfied with the board's decision on the validity of a patent for invention may institute legal proceedings in a court, but its decision on the validity of a patent for a utility model or design is final.¹⁰³ The Beijing Municipal Intermediate People's Court is designated by the Supreme Court to have exclusive jurisdiction over appeals from the Board's decision on the validity of a patent for invention. The court's decision can be further appealed to the Higher People's Court of Beijing Municipality, whose decision is final.¹⁰⁴ In patent infringement litigation, the issue of patent validity has caused great concern for two reasons: (1) The way in which courts have handled patent invalidity counterclaims has delayed adjudication of infringement lawsuits; and (2) the status of judicial decisions confirming patent infringement is rendered uncertain by the possible retroactive effect of subsequent patent invalidity decisions.

1. Stay of Infringement Proceedings

In the 1985 Supreme Court circular,¹⁰⁵ it is provided that if a defendant in a patent infringement lawsuit counterclaims that the patent in suit is invalid,¹⁰⁶ the court should request the defendant to file the

102. Patent Law, *supra* note 4, art. 48.

103. Patent Law, *id.*, art. 49.

104. See *supra* note 19 and accompanying text.

105. See *supra* note 13.

106. In fact, patent invalidity is generally not a valid counterclaim since the courts do not have initial jurisdiction over patent invalidity claims and only the Beijing Intermediate People's Court has appellate jurisdiction over such claims. Hence patent invalidity is only a defense and this defense can only stand when the defendant has filed a patent invalidation request with the Patent Reexamination Board and the court rules to stay the court proceedings because of the invalidation request. The necessity of such a filing to sustain an invalid patent defense is

claim for invalidation with the Patent Office, and the court may stay the infringement proceedings in accordance with Article 118(4) of the Civil Procedure Law for Trial Implementation.¹⁰⁷ However, courts in practice have interpreted the circular as making such stays mandatory and not discretionary and rendered rulings accordingly. For example, of the 18 patent infringement lawsuits filed in the Nanjing Municipal Intermediate People's Court of Jiangsu Province through 1989, all 11 suits in which invalidation counterclaims were filed were stayed. The automatic granting of stays upon the filing of an invalidation claim has encouraged defendants who sense imminent defeat to file frivolous requests for patent invalidation. This has sparked an outcry from many patentees involved in patent infringement actions, because they believe the defendants may use the resultant delay for the purpose of continuing the infringement or to transfer property or funds to reduce the amount of damages they may eventually have to pay. Since a great deal of time generally elapses before a decision is reached in an invalidation action, particularly if it relates to a patent for invention, it is clear that a stay of infringement proceedings can have far-reaching consequences for the patentees.

The potential for misuse of invalidation proceedings has drawn much discussion.¹⁰⁸ A proposed two-stage resolution of the problem

illustrated by *Service Center for Energy-Saving Technology of Jiangsu Province v. No. 5 Nanjing Glass Fiber Factory*. The defendant conceded that it had infringed the plaintiff's patent but contended that the patent was invalid and stated its intent to file a patent invalidation request with the Patent Reexamination Board. After a considerable period of time had elapsed without such a filing, the bureau gave the defendant one month in which to do so. Because the defendant failed to file the request within that period, the Patent Administration Bureau of Jiangsu Province rendered a decision against the defendant. The defendant did not appeal the decision, but continued to infringe the plaintiff's patent. Acting upon the request of the Bureau, the Nanjing Municipal Intermediate People's Court ordered compulsory enforcement of the bureau's decision.

107. *Supra* note 19. This Article corresponds to Article 136(5) of the Civil Procedure Law, *supra* note 19.

108. See Lin Dewei and Ou Zongbiao, *Zhuanli Wuxiao Qingqiu zhong de Ruogan Wenti* [Some Problems Concerning Patent Invalidation Requests], *ZHONGGUO ZHUANLI BAO*, Jan. 16, 1991, at 2; Shen Lang, *Fansu Zhuanli Wuxiao Xuangao Qingqiu An Ying Shouqu Gaoe Shenliffei de Jianyi* [A Proposal for Paying High Fees for Bringing Counterclaims of Patent Invalidation], *ZHONGGUO ZHUANLI BAO*, Mar. 13, 1991, at 2; Yang Jinqi, *Woguo Zhuanli Qinquan Susong Zongsu* [A Summary of Patent Infringement Litigation in China], 21 *ZHONGGUO ZHUANLI YU SHANGBIAO* 64, 66 (1990); Zhao Yuanguo, *Fansu Zhuanli Wuxiao Dui Qinquan Shenli Chengxu de Kunrao Jiqi Duice* [Counterclaims of Patent Invalidity Complicating Patent Infringement Proceedings and Proposed Resolutions], *ZHONGGUO ZHUANLI BAO*, June 13, 1990, at 2; Yu Muxiang, *Zhuanli Qinquan Susong zhong de Zhuanli Wuxiao Wenti zhi Wojian* [My Views on the Question of Patent Validity in Patent Infringement Lawsuits], *ZHONGGUO ZHUANLI BAO*, May 29, 1991, at 2; Yan Shiqiang, *Qinquo Xuangao Zhuanli Wuxiao yu Zhuanli Qinquan Jiufen de Chuli* [Patent Invalidation Requests and the Handling of Patent Infringement

designed to protect a patentee's rights and limit further damages caused by infringement is currently under consideration by the Supreme Court. The Proposal provides that:

(1) Where a defendant files a patent invalidation counterclaim within the period for filing an answer prescribed in the Civil Procedure Law (15 days after receipt of the complaint for a domestic defendant; and 30 days for a foreign defendant, unless the court grants an extension), if the patent in suit is a patent for invention, the court generally should not rule to stay court proceedings because a patent for invention has been subject to substantive examination and the probability of its being invalid is relatively small, but if the patent in suit is a patent for utility model or design, the court should generally rule to stay court proceedings;

(2) Where a defendant files a patent invalidation counterclaim after the period for filing an answer has expired, the court should not rule to stay court proceedings, and after the court judgment becomes legally effective, it should not be affected by a later decision invalidating the patent.¹⁰⁹

The proposal is inadequate in a number of respects. First, it is difficult, if not impossible, for a defendant to conduct a patent validity search, analyze the results of that search, and prepare and file an invalidation counterclaim within the prescribed time period. Second, courts should rule on whether to stay patent infringement proceedings based on the merits of the invalidation counterclaim, rather than on the timing of that claim. The proposal implicitly assumes a link between prompt filing and merit that has no basis in fact. If a defendant company seeks to prolong court proceedings in order to continue infringing a design or utility model patent in suit or to transfer property or funds, it need only file an invalidation counterclaim within the prescribed time limit regardless of the merits of the counterclaim, because the court would then "generally" rule to stay the court proceedings. If, on the other hand, a defendant does have sufficient evidence but files the invalidation counterclaim after the prescribed time period has passed, the court would nevertheless proceed with the infringement proceedings. If the court then rendered a decision confirming infringement of a patent whose validity has been challenged, the defendant would have to comply with the decision at least

Disputes], ZHONGGUO ZHUANLI BAO, Sept. 11, 1991, at 2.

109. Fei, *supra* note 32, at 24.

until the patent is found invalid.¹¹⁰ It is clear that the proposal would potentially work substantial unfairness for both plaintiffs and defendants.

If the courts ruled on whether to stay infringement proceedings based on the merits of the invalidation counterclaim, the likelihood of unfair results possible under the proposal outlined above would be greatly reduced. Adoption of the proposal would encourage—indeed, it would virtually compel—defendants to file patent invalidation counterclaims before the prescribed time period has expired in order to gain extra time, regardless of whether a thorough invalidity analysis had been concluded.

In sum, the proposal, if given legal effect, would result in the filing of more premature invalidation counterclaims in the initial stages of infringement actions and many court proceedings would be stayed, exacerbating the delays the proposal was intended to reduce. The better course is to abide by the 1985 Supreme Court circular and, at the same time, request courts to determine, after a request for stay of court proceedings has been submitted, whether a stay is warranted based on the merits of the invalidation counterclaim. The ultimate solution may be to let courts have direct jurisdiction over patent invalidation counterclaims when they have acquired sufficient experience in trying patent lawsuits.

2. Retroactive Effect of an Invalidity Decision

It is not entirely clear under Chinese law whether a later patent invalidity decision has any retroactive effect on an earlier patent infringement decision. In *Shenyang No. 9 Shoe Factory v. Shenyang No. 1 Shoe Factory*,¹¹¹ the Shenyang Municipal Intermediate People's Court held the defendant liable for infringing the plaintiff's patent and a mediation agreement¹¹² was then reached providing that the defendant would cease infringing the patent and pay damages. After the mediation agreement took effect, the defendant filed a request for patent invalidation with the Patent Reexamination Board of the Patent Office. Although the defendant later withdrew the request, the case

110. For a discussion on the effect a later decision of patent invalidity may have on an earlier decision of patent infringement, see discussion *infra* in text accompanying notes 111-25.

111. See *supra* note 37.

112. A mediation agreement issued by a court and signed by the parties has the same legal effect as a court judgment. Civil Procedure Law, *supra* note 19, art. 89; see also *supra* note 42.

illustrates the troubling potential for vexatious suits brought by unrepentant infringers.

Article 50 of the Patent Law provides that "any patent right that has been declared invalid shall be deemed to have been nonexistent from the outset."¹¹³ A literal reading of this article would suggest that a decision on patent invalidity would have retroactive effect on an earlier decision finding patent infringement.¹¹⁴ However, such a reading would cause problems both in practice and law.

First, endowing an invalidity decision with retroactive effect on an earlier infringement decision would create huge uncertainties. A patentee supposedly vindicated in a successful infringement action would run the risk that its patent might be subsequently invalidated and that, as a consequence, it would have to return all the damages the "infringer" had paid and perhaps even have to compensate the "infringer" for economic losses caused by the injunction. Thus, a "victorious" patentee might conceivably be worse off than it would have been had it lost the infringement lawsuit. Implementing Article 50 of the Patent Law in this fashion would have a chilling impact on patentees' willingness to institute infringement proceedings to protect their patent rights.

Second, it would be difficult to calculate the economic losses caused by injunctions because of their inherently speculative nature. Finally, interpreting Article 50 of the Patent Law to allow retroactive application of invalidity decisions to prior infringement judgments may be inconsistent with the Civil Procedure Law. Under the Civil Procedure Law, the only way to revoke a court decision that has already taken

113. See *supra* note 4.

114. A related issue is what effect a patent invalidity decision would have on a patent assignment or license agreement. Article 38 of the Technology Contract Law, *supra* note 68, provides that a patent licensing agreement is valid only during the period when the patent concerned is valid. Article 65 of the Implementing Regulations for the Technology Contract Law, *supra* note 72, stipulates that where a patent assignment contract has become effective, if the patent is invalidated, the assignor should return the assigning fees to the assignee. Article 68 of the Regulations provides that a licensing agreement should be terminated on the date the patent is declared invalid and that the licensor should pay the liquidated damages stipulated in the agreement or, if no such provision exists, compensate the licensee for the damages it suffered. However, Article 68 further provides that royalties that the licensee has paid shall not be returned. It has been asserted that Articles 65 and 68 are unfair to the patent assignor/licensor and are detrimental to the development of technology transfer and licensing trade in the P.R.C. See Fei, *supra* note 32, at 24-25. In addition, it is unclear under Article 68 what damages suffered by the licensee the licensor must compensate for. Since the Regulations were issued by administrative authorities, Articles 65 and 68 could be challenged in courts, but no court decisions concerning the above issues have yet been reported.

legal effect is through "trial supervision procedures."¹¹⁵ According to these procedures, there are four avenues by which a decision may be revoked. First, a party may petition the court which originally heard the case or a higher level court to retry the case.¹¹⁶ Second, the court may decide, on its own initiative, to retry the case if it finds that the decision it rendered was "actually erroneous" (*que you cuowu*).¹¹⁷ Third, the higher level court or the Supreme Court may, on its own initiative, review the case or order the court issuing the decision to retry the case if it finds that the decision the lower court rendered was actually erroneous.¹¹⁸ Finally, the higher-level procuratorate or the Supreme People's Procuratorate may, on its own initiative, require the court issuing the decision to retry the case.¹¹⁹

Where the losing party in an earlier lawsuit files an appeal introducing new evidence sufficient to reverse an earlier court decision, the court must retry the case.¹²⁰ However, it is also provided that any appeal by a party for retrial must be filed within two years after the court decision takes legal effect.¹²¹ Suppose new evidence, such as prior art documents that would destroy the novelty of the patented subject matter or render the patented subject matter obvious, is discovered following a court decision confirming patent infringement, and based on the new evidence the patent in issue is later declared invalid. Under the Civil Procedure Law, the defendant in the earlier patent infringement lawsuit can only file a petition for and obtain a retrial of the case within two years after the earlier court decision took effect. But after the two year period has elapsed, the defendant may not petition for a retrial even if the patent is invalidated. Thus, Article 50 of the Patent Law cannot confer upon patent invalidity decisions the unlimited retroactivity that a literal reading of the provision might suggest.

While Article 182 of the Civil Procedure Law imposes temporal constraints on the right of a party to petition for retrial, there is no such limitations period within which courts must decide to retry or review a case. However, a court is unlikely to find that an earlier decision confirming patent infringement was actually erroneous in light of a later patent invalidation decision and hence decide, on its own

115. Civil Procedure Law, *supra* note 19, ch. 16, arts. 177-88.

116. *Id.* art. 178.

117. *Id.* art. 177.

118. *Id.*

119. *Id.* arts. 185, 186.

120. *Id.* art. 179(1).

121. *Id.* art. 182.

initiative, to retry or review the case. The courts would be reluctant to do so because the earlier court decision confirming patent infringement could not have been actually erroneous *per se*. Although the Civil Procedure Law does not specify the grounds for which a court may find a decision actually erroneous, in practice, courts examine the record and find decisions actually erroneous where the facts were established by insufficient evidence or the law was applied incorrectly. Thus, courts would not consider new evidence of a later patent invalidity decision grounds for finding an earlier court decision confirming patent infringement actually erroneous, because the invalidity decision was not evidence before the court when it decided the case.

If a patent invalidity counterclaim was not filed during infringement proceedings, the court is bound by the patent granted and its decision will not address the patent validity issue, since that issue is not properly before the court. Furthermore, the court lacks the authority to judge the validity of the patent. Therefore, the court's finding of infringement could not be found actually erroneous.

If patent validity was indeed challenged in a counterclaim, the validity issue would be decided by the Patent Reexamination Board of the Patent Office or possibly the Beijing municipal intermediate or higher courts. Since no other courts or administrative bodies have jurisdiction over patent validity disputes, the court hearing the infringement case would be bound by the patent granted if it ruled to proceed with the court proceedings or by the decision of the board or the Beijing courts on patent validity if it ruled to stay court proceedings. Therefore, even where a patent invalidity counterclaim has been filed, the infringement decision will not address patent validity and hence the decision can not be found actually erroneous.

A similar result prevails if the infringement and invalidation suits are handled by the same Beijing court. If the defendant fails to prove that the patent was invalid and the court finds in favor of the patentee, the decision cannot be found actually erroneous because of later evidence that leads to a subsequent patent invalidation.

Finally, the higher-level procuratorate and the Supreme Procuratorate may not invoke the trial supervision procedures to revoke an earlier decision finding patent infringement because of a later determination that the patent was invalid, as the invalidation decision is new evidence that is not a ground under Article 185 of the Civil Procedure Law for which a procuratorate may order a retrial.

Reconciling Article 50 of the Patent Law and the stipulations regarding the right to a new trial in the Civil Procedure Law is a very

difficult task. Under the latter law, an individual or entity found guilty of infringing a patent can invoke trial supervision procedures and seek a retrial if the patent in question is found invalid within two years of the date the infringement decision took effect. However, as noted above, courts will not rely on trial supervision procedures to allow relitigation of an infringement decision because of a subsequent invalidation of the underlying patent, unless the earlier decision was found to be actually erroneous.¹²² Justice Fei Zongyi of the Supreme People's Court has proposed that China follow the practice of the European Community Patent Treaty¹²³ and resolve this dilemma by amending the Patent Law to provide that a later final decision by the Patent Reexamination Board declaring a utility model patent or design invalid or a later final decision by a court judgment declaring an invention patent invalid should not have retroactive effect on an earlier, legally effective court decision finding infringement of that patent.¹²⁴ It should be noted, however, that implementing Justice Fei's proposal would require amendments to other laws and regulations to ensure consistency.¹²⁵ Until Article 50 of the Patent Law is amended, this will remain an area of considerable confusion.

122. See Yang Jinqi, *Qianxi Zhuanliquan Wuxiao de Zhuishu Xiaoli* [Preliminary Analysis on the Retroactive Effect of the Invalidity of a Patent Right], 1989 GONGYE CHANQUAN, No. 2 (cumulative Vol. 1, Issue 8) 19, 19.

123. Article 35 of the Convention for the European Patent for the Common Market (entered Dec. 15, 1975) reads as follows:

Article 35 Effect of revocation of the Community patent

1. A European patent application in which the Contracting States are designated and the resulting Community patent shall be deemed not to have had, as from the outset, the effect specified in this chapter, to the extent that the patent has been revoked.

2. Subject to the national provisions relating either to claims for compensation for damages caused by negligence or lack of good faith on the part of the proprietor of the patent, or to unjust enrichment, the retroactive effect of the revocation of the patent as a result of opposition or revocation proceedings shall not affect:

(a) any decision on infringement which has acquired the authority of a final decision and been enforced prior to the revocation decision;

(b) any contract concluded prior to the revocation decision, in so far as it has been performed before that decision; however, repayment, to an extent justified by the circumstances, of sums paid under the relevant contract, may be claimed on grounds of equity.

2M JOHN P. SINNOTT, *WORLD PATENT LAW AND PRACTICE*, at Common Market 28 (1991).

124. Fei, *supra* note 32, at 25.

125. For example, the Technology Contract Law, *supra* note 68, and the Implementing Regulations for the Technology Contract Law, *supra* note 72, would have to be so amended. See *supra* note 114.

3. Problems Concerning Utility Model Patents

Under the Patent Law an application for a patent for a utility model will be granted by the Patent Office without substantive examination if no opposition is filed within three months after the application is published.¹²⁶ More than six years of practice since the Patent Law was promulgated have revealed many troubling deficiencies in the utility model patent system.

First, since utility model patents are usually not examined as to substance, their ability to withstand an invalidation challenge is suspect.¹²⁷ For example, of the 26 cases involving such a challenge decided by the Patent Reexamination Board of the Patent Office in 1987 and 1988, the board held 18 patents invalid, three partially invalid, and only five valid.¹²⁸ Courts that construe Article 50 of the Patent Law as allowing the retroactive application of subsequent patent invalidation to an earlier finding of infringement are understandably reluctant to expend scarce judicial resources to evaluate an infringement claim when the underlying patent is of such dubious validity.

Second, because it is the practice of the Patent Reexamination Board of the Patent Office to allow patentees to amend the claims of a utility model patent during invalidation proceedings¹²⁹ such patents fail to reasonably inform the public of the scope and reach of the exclusive rights asserted under the patent. Under the Patent Law, after a utility patent is granted, anyone may request the Patent Reexamination Board to declare the patent invalid or partially invalid.¹³⁰ The board's decision on the validity of a utility model patent is final, therefore legal proceedings may not be instituted in a court if a party is dissatisfied.¹³¹

126. Patent Law, *supra* note 4, arts. 40, 41 and 42.

127. Utility model patents are regarded as "petty patents" as, compared to patents for inventions, they lack technological and economic significance. The utility model patent system is designed to encourage small inventions that do not meet the standard of patentability for inventions. The non-substantive examination procedure results in prompt protection of technology by speeding up the grant of patents; this is important in view of the shorter commercial lifespan of such technology. Furthermore, it reduces the cost to applicants and relieves the workload of the Patent Office.

128. Fei, *supra* note 32, at 25.

129. The Patent Reexamination Board requires that the scope of the amended claims be narrower than that of the original claims and that the revised claims not change the subject of the patent.

130. Patent Law, art. 48; Implementing Regulations of the Patent Law, *supra* note 4, art. 65.

131. Patent Law, *supra* note 4, art. 49.

A recently decided invalidation case involving a utility model patent for a writing and drafting instrument demonstrates the potential for confusion inherent in the approach currently employed.¹³² The patent at issue consisted of one independent claim and five dependent claims. After holding all six claims invalid over prior art for lacking inventiveness, the board concluded that while the individual claims of the patent did not possess legally sufficient inventiveness, the content of the claims taken as a whole did attain the requisite level of inventiveness and that the patent could withstand challenge if the claims were amended properly. The Board then redrafted the six claims as three new claims and held the patent valid on the basis of the revised claims. The Board did not address the question of the retroactive application of the amended claims.

It is not clear that this decision comports with the Patent Law or that it is a wise policy choice. The Patent Law does not authorize amendments to claims during patent invalidation proceedings. The Board counters that nothing in the Patent Law expressly prohibits such amendments. However, even if modifying the claims of a utility model patent during invalidation proceedings is within the discretion of the Board, a strong argument can be made that such modification does more harm than good. Redrafting the claims of an existing patent could conceivably affect the rights of a third party which has relied on the patent as published. Third parties would thus have to run the risk of being held liable for patent infringement under the amended claims, even if the original claims were analyzed and determined to be invalid.

Third, the utility model system has made it possible for some applicants to file unsubstantiated patent applications in an attempt to deprive the public of the right to freely use public domain technology. The current system is so easily manipulated that some companies have even filed fraudulent patent applications to shield flagrant patent infringement. One such case involved a utility model patent granted in 1986 for a plastic clip for steel-frame windowpanes. The patented product was an immediate commercial success. Two years later the Patent Office announced a utility model patent application filed by a plastics factory for the same product, albeit with slight changes in shape and measurements.¹³³ The infringing factory reaped more than

132. Patent Re-examination Board Decision No. 63 was generally reported in Tian Lipu, *Zhuanliquan Bufen Wuxiao Chutan* [Preliminary Analysis of Partial Patent Invalidation], 1990 ZHONGGUO ZHUANLI DAILI [CHINA PATENT AGENT], No. 3, at 5, 5.

133. The patent application would have been rejected by the Patent Office in view of the earlier patent if it had been examined.

RMB 300,000 *yuan* in after-tax profits each year from the copied product.¹³⁴

Finally, patentees often have difficulty enforcing utility model patents in infringement actions because of the nonexamination of the patents. A case in point is *Beijing Research Institute for Textile Science and Chumen Environmental Protection Equipment Plant of Yuhuan County v. Gaoteng Purification Plant for Environmental Protection et al.*¹³⁵ The patentee and its exclusive licensee sued five defendants for infringing a utility model patent for a new filter for a biological filter pool in the Nanjing Intermediate People's Court of Jiangsu Province. The court determined that the defendants had infringed the patent, but shortly before judgment was to be entered, two of the defendants filed patent invalidation requests with the Patent Reexamination Board of the Patent Office and the court stayed the infringement proceedings.¹³⁶ The validity of the patent turned on alleged defects in the form of the patent claims. Two elements were described in generic terms in the patent specification, while species terms were used for the two elements in the patent claims. The defendants in the infringement action requested that the patent be invalidated on the ground that the claims were not supported by the specification.¹³⁷ While such a discrepancy between the claims and the specification may in some cases warrant invalidation of the patent, in others it merely represents an oversight on the part of the applicant. In this case, the problem could easily have been rectified if the patent application had been examined. The patentee actually narrowed the scope of patent protection unnecessarily by using species terms in the claims.¹³⁸ In this instance, the Board allowed substance to triumph over form and held the patent valid. Having been deprived of an

134. See Lu Hanzhang, *Jingli Yizhong Bianxiang Qinquan Xingshi* [Warning! A Disguised Form of Patent Infringement], *ZHONGGUO ZHUANLI BAO*, Mar. 6, 1991, at 2. The article reported that the patentee filed an opposition request with regard to the later application. The author lamented the fact that the patentee had to go through the time-consuming opposition process and then institute infringement proceedings to stop the infringer. The author's concern is understandable but unwarranted. Because China has adopted a "first-to-file" patent system, the patentee did not have to go through the opposition procedure and should have directly sued the infringer for patent infringement in a court or requested AAPA to handle the matter.

135. For a discussion of this case, see Wen & Jiang, *supra* note 44.

136. *Id.* at 3.

137. Implementing Regulations of the Patent Law, *supra* note 4, art. 66.

138. The board upheld the patent (Patent Reexamination Board Decision No. 189, issued Nov. 30, 1991) on the ground that the two elements could be understood by a person skilled in the art from the description in the specification and therefore the claims were supported by the specification. However, two and half years had passed since the court stayed the infringement proceedings.

opportunity to amend their patent applications, less fortunate patentees in such situations may have to bear harsh consequences that could easily have been avoided had the application been examined before a patent was granted.¹³⁹

The utility model patent system has not only created uncertainty for the patentees and the public in general as to both the validity and the scope of protection of utility model patents, but also caused patentees to suffer economic hardship and facilitated fraud and abuse. In addition, the system constitutes a drain on precious judicial and administrative resources.¹⁴⁰ The utility model patent system would function considerably more efficiently if an examination of some kind were conducted before or after¹⁴¹ patents were granted.¹⁴² Such systemic reform would probably require amendments to the Patent Law.

VII. REMEDIES

A. *Preliminary and Permanent Injunctions*

In many countries, plaintiffs in patent infringement suits may seek two forms of injunctive relief: preliminary and permanent injunctions.¹⁴³ Under Chinese law, courts may grant permanent injunctions after a judgment of infringement has been entered.¹⁴⁴ Neither the Patent Law nor the Civil Procedure Law expressly authorize prelimi-

139. The likelihood that an otherwise legitimate patent will be invalidated because of a minor error in form is reduced somewhat by the possibility that the Patent Reexamination Board may allow the patentee to amend the patent's claims during invalidation proceedings. See discussion accompanying *supra* note 129.

140. Of the 312 patent invalidation requests received by the Patent Reexamination Board of the Patent Office through 1990, 85 percent related to utility model patents and many of them were filed in connection with patent infringement actions.

141. For instance, after the grant of a utility model patent, examination of the patent could be conducted upon request and amendments to the specifications, drawings or claims could be allowed with the stipulation that the amended claims not apply retroactively.

142. Jiang Zhenhua, *Guanyu Wanshan Woguo Shiyong Xingxing Zhuanli Zhidu de Tantai* [Views on Improvement of China's Utility Model Patent System], ZHONGGUO ZHUANLI BAO, Aug. 15, 1990, at 2; Yang, *supra* note 108, at 65-66. To improve administrative efficiency, Fei Zongyi suggests that a utility model patentee should seek substantive review by the Patent Office prior to his institution of a suit in court. Fei, *supra* note 32, at 25.

143. Among the countries which provide for both preliminary and permanent injunctive relief are Austria, Australia, Canada, Finland, France, Germany, Japan, the Netherlands, New Zealand, Switzerland, the United Kingdom and the United States. See INTERNATIONAL PATENT LITIGATION — A COUNTRY BY COUNTRY ANALYSIS (MICHAEL N. MELLER ED., 1988 SUPPLEMENT), tables 2-5.

144. Patent Law, *supra* note 4, art. 60.

nary injunctions. However, courts hearing infringement cases have issued preliminary injunctions under the authority of Articles 92 and 94 of the Civil Procedure Law, which provide that courts may grant "provisional property remedies" using "other forms permitted by law" for reasons "other than" ensuring the execution of a court judgment.¹⁴⁵ The generally accepted view among Chinese judges is that preliminary injunctions may be necessary to effectively protect patentees' rights, but should be granted cautiously because of their severity.

Under the Civil Procedure Law, a court may grant a provisional property remedy upon the application of a party to the lawsuit,¹⁴⁶ or upon the application of an interested party before the party files a lawsuit where the situation is urgent and the party's legal rights and interests will be irreparably harmed in the absence of the protection of a provisional property remedy.¹⁴⁷ The court may order the applicant to provide security for the grant of a provisional property remedy and the applicant's refusal to do so will result in the denial of the application.¹⁴⁸ Provisional property remedies include sequestration, attachment, freezing, an order to post security, or other forms permitted by law.¹⁴⁹ But if the party against whom the provisional property remedy was granted provides security, the court should relinquish custody of the property.¹⁵⁰ If the applicant is at fault, the applicant must compensate the opposing party for any loss sustained.¹⁵¹

In practice, many of the provisional property remedies granted by courts in patent infringement litigation essentially amount to preliminary injunctions. In *Tian Guohua and Wei Saiying v. Zhengzhou*

145. *Supra* note 19. In this regard, Articles 92 and 94 of the Civil Procedure Law correspond to Articles 92 and 93 of the Civil Procedure Law for Trial Implementation respectively. *Supra* note 19. The term "provisional security remedies" under the Civil Procedure Law for Trial Implementation has been changed to "provisional property remedies" to accommodate the pre-litigation security remedies now available under Article 93 of the Civil Procedure Law. *See supra* note 19.

146. Civil Procedure Law, art. 92.

147. *Id.* art. 93. In that case, the party must file the lawsuit within 15 days after the court ruled in its favor, or the court will revoke the ruling.

148. *Id.* arts. 92 and 93.

149. *Id.* art. 94.

150. *Id.* art. 95. In this respect, provisional property remedies differ from preliminary injunctions.

151. *Id.* art. 96.

Guancheng Hydraulic Control Equipment Factory,¹⁵² the defendant's product was exactly the same as the plaintiff's patented product and was also marked with the same patent number. After the plaintiff brought the infringement suit, the defendant continued making the product in question—its only product—and signed several sales contracts. The plaintiff filed an application for provisional security remedies¹⁵³ on April 20, 1989, and the Zhengzhou Municipal Intermediate People's Court of Henan Province granted the request on May 4, 1989, ordering, *inter alia*, that the defendant's factory be shut down. This ruling was, in essence, a preliminary injunction.

Another recent case in which relief approximating a preliminary injunction was ordered is *Song Guoliang v. Fanjiatun Clothing Factory*.¹⁵⁴ Three months after signing an agreement to jointly exploit a design patent with the defendant in June 1987, the patentee assigned his patent right to the plaintiff. Upon discovering that the defendant was making and selling products incorporating the patented design, the plaintiff sued the defendant for patent infringement in the Changchun Municipal Intermediate People's Court of Jilin Province in March 1988. After the plaintiff applied for provisional security remedies the Intermediate Court issued a ruling ordering the defendant to stop selling the product incorporating the patented design. The court subsequently rendered judgment for the plaintiff and the defendant appealed to the Higher People's Court of Jilin Province. The Higher Court overruled the lower court judgment in July 1990 and ordered the plaintiff to pay the defendant RMB 5,000 *yuan* in compensation for losses caused by provisional security remedies granted by the lower court.

Preliminary injunctions should be made available to patentees and could be granted as one form of provisional property remedy, but further development is required. Because the preliminary injunction is an extraordinary measure, it is imperative that its scope and function, as well as the criteria for its issuance, be clearly defined. A Supreme Court directive would be the most efficient means to effect such a

152. For a discussion of this case, see Song Ke, Zhengzhou Shi Zhongji Renmin Fayuan Jingjiting [Zhengzhou Municipal Intermediate People's Court Economic Division], Guanyu Zhuanli Qinquan Jiufen Zhong de Susong Baoquan Wenti [Issues in Patent Infringement Litigation Concerning Provisional Security Measures] (Oct. 9, 1989) (unpublished opinion, on file with the author).

153. See *supra* note 145.

154. The facts of the case were briefly reported in Huo Shizhong, *Nage Hetong Youxiao?* [Which Contract is Valid?], 1989 GONGYE CHANQUAN, No.2 (cumulative Vol. 1, Issue 8) 42, 42.

clarification.¹⁵⁵ As long as the boundaries of preliminary injunctive relief remain unclear, there will be the potential for considerable harm to innocent parties.

B. Damages

Where infringement of a patent has been established, the patentee is entitled to be compensated for the damages resulting from the infringement under the Patent Law.¹⁵⁶ Although the law does not specify how damages should be calculated, in practice damages are calculated on any of the following bases:

- (1) the patentee's actual economic loss caused by the infringement;
- (2) the infringer's total profits derived from the infringement;
- (3) an amount no less than a reasonable royalty.¹⁵⁷

The actual economic loss method is used to calculate damages where the patented product or product manufactured by the patented process has been put on the market by the patentee or its licensee on a large scale and its market position has been adversely affected by the infringing product or product manufactured by the plaintiff's patented process.¹⁵⁸ Damages are generally assessed with reference to the infringer's total profits where the patented product or the product manufactured by the patented process has not been put on the market or has been put on the market only on a small scale and as a consequence, the product has not achieved a significant market share

155. See Yu Jianyang, *Luelun Chushi Jinling Zai Zhuanli Qingquan Susong zhong de Yingyong* [Proposals for the Use of Preliminary Injunctions in Patent Infringement Litigation], ZHONGGUO ZHUANLI BAO, Apr. 18, 1990, at 2.

156. Patent Law, *supra* note 4, art. 60.

157. See Wen & Yang, *supra* note 44, at 28; Zhang Huizhen, *Tan Qinfan Zhuanliquan de Peishang* [On Patent Infringement Damages], ZHONGGUO ZHUANLI BAO, Nov. 27, 1991, at 2. Article 23 of the Implementing Regulations of the Technology Contract Law, *supra* note 72, provides that where a party to a technology contract infringes the other party's patent or patent application, the breaching party should be liable for the breach of contract, stop the infringing act, take remedial measures, and pay damages. Article 23 also stipulates that the amount of damages should be the equivalent to either the illegal profits that the infringer obtained or the injured party's actual losses occurring during the period of the infringement. Although the Technology Contract Law, *supra* note 68, and its Implementing Regulations, *supra* note 72, only apply to domestic technology contracts, Article 23 provides a method for calculating damages in connection with patent infringement.

158. See *Shenyang No. 9 Shoe Factory v. Shenyang No. 1 Shoe Factory*, *supra* note 37 (where the plaintiff had sold the patented product on the market and it was a commercial success, the Shenyang Municipal Intermediate People's Court of Liaoning Province held that the defendant should pay the patentee as damages the plaintiff's actual economic loss).

or its market share has not been reduced by the acts of infringement.¹⁵⁹ The reasonable royalty method is used where there is insufficient evidence to calculate damages in accordance with the above two methods.¹⁶⁰

VIII. CONCLUSION

The steady increase in recent years in the volume of patent infringement litigation has focused considerable attention on the efforts of the Chinese legal system to interpret and enforce the Patent Law. It is clear that the timely, effective and consistent enforcement of that law is vital to the success of the Chinese patent system. Although considerable progress has been made, China is still at the primary stage of development in the enforcement of patent rights and patent infringement litigation has brought to light many areas of ambiguity and uncertainty. In order to eliminate these areas of confusion and instill greater confidence in the system, laws and regulations should be amended to harmonize with each other and to reflect the changing needs of the patent system. In addition, courts should establish and publicize standards concerning patent infringement and patent validity issues. Although numerous problems exist, the speed with which Chinese courts and patent officials have identified them and sought to devise solutions suggests that the future of the Patent Law remains bright.

Amendments to the Patent Law are under consideration in order to bring it up to date in resolving new issues¹⁶¹ and the Chinese

159. See *Tianjin General Electrical Machinery Plant v. Wuxi General Vane Plant and Daqing Fittings Company*, *supra* note 50 (where the Daqing Fittings Company had contracted with the Wuxi General Vane Plant to manufacture the plaintiff's patented product for the Company's use, the Nanjing Municipal Intermediate People's Court of Jiangsu Province stated that the Plant should pay damages based on the net profits it derived from the infringing act and that the Company should, because of the difficulty of assessing the profits it derived from its use of the patented product, pay damages based on the patentee's economic losses, calculated as 30 percent of the gross profits the patentee would have gained from the sale of its patented product).

160. See *Nanning Xingxing Experimental Factory v. Zhou Chongjie and Ye Yisheng*, *supra* note 73 (where the defendant and three third parties had infringed the plaintiffs' patent by reaching de facto sublicenses that were prohibited under the license agreement between the plaintiffs and the defendant, the Nanning Municipal Intermediate People's Court of Guangxi Zhuang Autonomous Region stated that the infringers should pay damages to the patentees equivalent to reasonable royalties).

161. See Gao Lulin, *Zai Zhongguo Zhishi Chanquan Yanjiuhui Shoujie Huiyuan Daibiao Dahui ji 1990 Niandu Xueshu Nianhui Shang de Jianghua*, [Speech on the First Representative Conference of Members of the China Association for Intellectual Property Research and 1990

government has been participating in the World Intellectual Property Organization (WIPO) negotiations on the Patent Law Treaty¹⁶² and the General Agreement on Tariffs and Trade (GATT) Uruguay Round negotiations on trade-related aspects of intellectual property rights.¹⁶³ If China ratifies the Patent Law Treaty or restores its membership in GATT and signs the final agreements of the Uruguay Round, there will be a significant impact on the development of the Chinese patent system in general and on patent infringement litigation in particular.¹⁶⁴ These recent developments demonstrate that China is updating its Patent Law and has joined in the international effort to standardize the intellectual property laws.

Annual Academic Meeting], 1 ZHISHI CHANQUAN 17, 19-20 (1991); *New Move on Patent Law*, CHINA DAILY BUSINESS WEEKLY, Mar. 31, 1991, at 1. The proposed amendments to the Patent Law include: (1) the term of a patent for invention would be extended to 20 years from the present 15 years; (2) the protection of a process patent would extend to the product directly resulting from the use of the process; (3) the patentee would be granted the right to exclude others from importation of the patented product or a product directly resulting from the use of the patented process; and (4) all decisions of the Patent Reexamination Board of the Patent Office would be appealable to a court.

162. Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as far as Patents Are Concerned, organized by WIPO, 30 INDUSTRIAL PROPERTY-WIPO, No. 2, at 118 (Feb. 1991). The PRC is a member country of the Paris Convention for the Protection of Industrial Property and a member of WIPO.

163. The P.R.C. is currently negotiating to restore China's membership in GATT and has participated in the GATT Uruguay Round as an observer.

164. For example, the Draft Patent Law Treaty includes provisions on patentable subject matter, rights conferred by the patent, the doctrine of equivalents, and the doctrine of file wrapper estoppel. See, *Draft Treaty Supplementing the Paris Convention for the Protection of Industrial Property as Far as Patents are Concerned*, U.N. WIPO, U.N. Doc. PLT/DC/3 (Dec. 21, 1990), reprinted in 30 INDUSTRIAL PROPERTY-WIPO, No. 2, at 118 (Jan. 1991). The draft agreement prepared by the chairman of the intellectual property group includes provisions on patentable subject matter, rights conferred by the patent, enforcement guidelines and remedies which set out fair and equitable procedures, evidentiary rules, injunctions and damages, and provisional measures; *Status of Work in the Negotiating Group Prepared by the Chairman, Negotiating Group on Trade-Related Aspect of Intellectual Property Rights, Including Trade in Counterfeit Goods*, Quarterly Report IV/1990, Schedule 11, GATT Doc., (Nov. 13, 1990).

