

A Primer on Chinese Patent Law (1994)

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I. Introduction

China has an ancient tradition of creativity and inventiveness. The compass, printing, paper, silk, porcelain, cast iron, the magnet and gunpowder are all thought to be original Chinese discoveries and inventions.¹ The early Chinese also developed advanced mathematics, astronomy and medicine, and achieved unsurpassed refinement in art and culture.² However, for a variety of reasons, the Chinese were never strongly inclined either to provide legal protection for their inventions and discoveries, or to apply them toward industrial or military ends.³ These reasons included the existence of an agriculturally-based society where labor was abundant, geographical seclusion due to bordering high mountains and a vast ocean, and belief in a Confucian-based philosophy that emphasized personal moral development over personal economic gain.⁴

The cultural reluctance of the Chinese to apply science and technology to industrial and military ends eventually contributed⁵ to China suffering two epic national disasters in the nineteenth and twentieth centuries: Military defeat by the technologically superior British in the Opium War actions of 1841 and 1842,⁶ and widespread social and economic stagnation during a quarter century of communist rule by

¹ Needham, *Science and Civilization in China* 4 (1965); Durant, *The Story of Civilization, Our Oriental Heritage*, Pages 780, 781 (1935) [hereinafter "The Story of Civilization"].

² See *The Story of Civilization*, *supra* note 1, at 780, 781.

³ *Id.*

⁴ See Wang, *The Chinese Traditions Inimical to the Patent Law*, 14 N.W. J. INT. LAW & BUS. 15 (1993) [hereinafter "Chinese Traditions"]; Harrington, *Recent Amendments to China's Patent Law: The Emperor's New Clothes*, 17 BOS. COL. INT'L. & COMP. LAW REV. 337 (1994).

⁵ The absence of an effective intellectual property law system was not China's only structural problem. The lack of a free market system and China's highly rigid dynastic political tradition also contributed to an inability to compete militarily and economically with rapidly developing Western European nations that had already thrown off the yoke of feudalism. See *generally* Chinese Traditions, *supra* note 4.

⁶ Nineteenth century Western European technology produced steam driven gunboats capable of maneuvering effectively on swift, inland rivers. During the Opium Wars, the British ironclad *Nemesis* steamed up the Yangtze River and easily defeated the defending Chinese forces. See Kennedy, *The Rise and Fall of the Great Powers*, Page 159 (1987).

Mao Zedong.⁷ By the time Chairman Mao died in 1976, it was clear that China's approach to technology and intellectual property rights had been ineffective and had contributed to national economic failure.⁸

In 1978, the new Chinese leadership dramatically changed the policy goals of the Communist Party and re-opened China's door to foreign trade and technology.⁹ The primary reason for the policy change was a recognition by the Chinese that science and technology were the "premier productive forces" and were "critical to economic and social development."¹⁰ Specifically, the Chinese recognized the importance of intellectual property laws for encouraging invention, protecting investment, regulating public interest, disseminating and utilizing inventiveness, and for properly integrating into the established world intellectual property law system.¹¹

⁷ During the rule of Chairman Mao, hundreds of millions of Chinese suffered through "uncertainty, hardship, misery, and repeated visitations of famine." Johnson, *The People's Republic of China 1878-1990* pages 4, 5. (1990). A recent article that features excerpts from a soon to be released book on Mao Zedong written by his personal physician, Dr. Li Zhisui, states that "[Mao's] quixotic crusades may have killed more people than the mass exterminations of Hitler and Stalin combined." U.S. News and World Report, October 10, 1994 at 48.

⁸ It was the absence of intellectual property rights and the lack of industrial application of technology, and not the absence of a commitment to science and technology itself, that contributed to China's lack of economic growth. In the 1950's, China adopted a twelve year plan for science and technology to introduce and develop various high technology fields such as computers, semi-conductors, automation, radio electronics, and nuclear and jet propulsion. See Suttmeier, *China's High Technology: Programs, Problems, and Prospects*, China's Economic Dilemmas in the 1990s, page 549 (1993). However, a majority of the effort was directed away from industrial applications and applied toward military goals. *Id.* at 549, 550. It is estimated that in the 1970s, less than ten percent of the fruits of China's scientific and technical research was being put into industrial production. See Baark, *Fragmented Innovation: China's Science and Technology Policy Reforms in Retrospect*, China's Economic Dilemmas in the 1990s, page 533 (1993).

⁹ Government Policy based on class struggle and workers' rights was replaced by policy based on the "Four Modernizations" of industry, agriculture, science and technology, and national defense. See Wang, *Political and Cultural Perspectives of the PRC Patent Law: The Role of Article 14*, 6 WIS. INT'L L. J. 193, 202 (1988).

¹⁰ See Blue Book on Science and Technology No. 7, *China's Intellectual Property System*, page 4 (1992) [hereinafter "China's Intellectual Property System"].

¹¹ *Id.* at 2, 3.

In the past ten years, the Chinese government has enacted an impressive number of intellectual property laws covering trademarks,¹² patents,¹³ copyrights,¹⁴ computer software,¹⁵ unfair competition¹⁶ and technology contracts.¹⁷ Further, China has joined a number of international intellectual property treaties including the Paris Convention,¹⁸ the Madrid Agreement,¹⁹ the Universal Copyright Convention,²⁰ and the Berne Convention.²¹ China is currently a member of the World Intellectual Property Organization (WIPO) and is negotiating to re-accede to the General Agreement on Tariffs and Trade (GATT).²² In short, in the last decade, the Chinese government has made great strides toward

¹² Trademark Law of the People's Republic of China (Adopted and Promulgated by the 24th Session of the Standing Committee of the Fifth National People's Congress on August 23, 1982).

¹³ Patent Law of the People's Republic of China (Adopted at the 4th Session of the Standing Committee of the Sixth National People's Congress on March 12, 1984 amended by the decision regarding the revision of the Patent Law of the People's Republic of China, Adopted at the 27th Session of the Standing Committee of the Seventh National People's Congress on September 4, 1992) [hereinafter "Chinese Patent Law"].

¹⁴ Copyright Law of the People's Republic of China (Adopted at the Fifteenth Session of the Standing Committee of the Seventh National People's Congress on September 7, 1990).

¹⁵ Regulations on Computer Software Protection (Promulgated by the State Council of the People's Republic of China on June 4, 1991); *See* China's Intellectual Property System, *supra* note 10, at 391.

¹⁶ Anti-Unfair Competition Law of the People's Republic of China (Effective December 1, 1993). This law was published in the People's Daily (Overseas Edition), September 7, 1993. For a discussion of the law with an unofficial English translation *see* Yu, An Anti-Unfair Competition Law Without a Core: An Introductory Comparison Between U.S. Antitrust Law and the New Law of the People's Republic of China, 4 IND. INT'L & COMP. L. REV. 315 (1994).

¹⁷ Law on Technology Contracts of the People's Republic of China (Adopted by the Twenty-First Session of the Standing Committee of the Sixth National People's Congress on June 23, 1987); *See* China's Intellectual Property System, *supra* note 10, at 403

¹⁸ International Convention for the Protection of Industrial Property, March 20, 1883, 828 U.N.T.S. 307 (revised July 14, 1967). China acceded to the Convention on March 19, 1985.

¹⁹ Madrid Agreement Concerning the International Registration of Marks, April 14, 1891, 828 U.N.T.S. 389 (revised October 4, 1989). China acceded to the Madrid Agreement on October 4, 1989.

²⁰ Universal Copyright Convention, Sept. 6, 1952, 216 U.N.T.S. (as revised July 24, 1971).

²¹ Berne Convention for the Protection of Literary and Artistic Works, signed at Berne, Switzerland, on September 8, 1886, 1971 COPYRIGHT 135.

²² China is currently engaged in negotiations with GATT member countries concerning necessary tariff harmonization and whether it will re-accede to GATT as a developed, developing or under-developed country. China has amended its Patent Law to be consistent with the GATT Trade Related Aspects of Intellectual Property ("GATT TRIPS"), although serious problems still exist with regard to China's enforcement standards.

rejoining the world's economic and technological communities, and to overcome China's historical reluctance to protect and apply technology to industrial and commercial ends. The passage of the Chinese Patent Law in 1984, and its recent amendments in 1992, are prime examples of the new Chinese attitude toward intellectual property law.

II. History of Chinese Patent Law

A. 1859-1978

The first proposal for a modern patent system for China was made in 1859 by Hong Rengan, a leader of the Taiping Heavenly Kingdom movement.²³ The proposal included an invention patent system with a ten year term and a petty patent system with a five year term. The Heavenly Kingdom movement failed in 1864, and the proposed law was never drafted or implemented.²⁴ In 1898, during the late Qing Dynasty, the first Chinese patent law was implemented.²⁵ This law, entitled "Regulations on Reward for the Promotion of Technology," was enacted by Emperor Guang Xui and lasted for less than two months.²⁶

In 1912, the government of the Republic of China enacted the Interim Regulations on Awards for Devices.²⁷ A total of 692 patents were granted under these Regulations.²⁸ In 1944, the Kuomintang Government in Chongqing, Sichuan Province, enacted the Patent Law of the Republic of China.²⁹ Only a limited number of patents were granted under this law.³⁰ In 1950, the government of the People's Republic of China enacted the Interim Regulations concerning Protection of Patents and Inventions.³¹ Under this law, applicants had to choose between an inventor's certificate, which entitled the holder to a reward, and a patent, which entitled the owner to certain exclusive rights.³² The patent

²³ See China's Intellectual Property System, *supra* note 10, at 13.

²⁴ See Zheng & Pendleton, Chinese Intellectual Property and Technology Transfer Law, Chapter III, Patents in China at 52 (1987). [hereinafter "Patents in China"].

²⁵ *Id.*

²⁶ *Id.*, See also China's Intellectual Property System, *supra* note 10, at 13.

²⁷ See Patents in China, *supra* note 23, at 52.

²⁸ *Id.*

²⁹ *Id.* The Kuomintang Government was comprised of the Chinese Nationalist Party. During World War II, the capital of China was moved to Chongqing.

³⁰ *Id.*

³¹ See China's Intellectual Property System, *supra* note 10, at 14.

³² *Id.*

term could range from three to fifteen years, and was determined by the Commission of Finance and Economics.³³ A total of four patents and six invention certificates were granted before the Interim Regulations were terminated in 1957.³⁴

In 1963, the government of the People's Republic of China passed the Regulations concerning Awards for Inventions.³⁵ These Regulations made all inventions property of the State and permitted free use of all inventions.³⁶ In 1978, the Regulations were amended to limit the invention reward to the actual inventor, although all enterprises were still free to use the inventions.³⁷ Eventually, the patent law came under severe criticism for not properly compensating ingenuity and for allowing the lazy to benefit equally from the efforts of the industrious.³⁸

B. 1978 to Present

In late 1978, two years following the death of Chairman Mao, the new Chinese leadership recognized that China's patent law was urgently in need of reform and undertook sweeping structural change of the entire Chinese patent law system.³⁹ The reforms were intended to bring Chinese law closer to international standards in order to attract foreign technology, and to promote domestic Chinese creativity.⁴⁰ The initial step was the pivotal decision to grant property right status to intellectual property within the socialist system and to allow individuals and entities to own such rights separate from the state.⁴¹ A drafting group was established in 1979 that studied the patent laws of thirty different

³³ See Patents in China, *supra* note 23, at 52.

³⁴ *Id.* at 52, 53.

³⁵ See China's Intellectual Property System, *supra* note 10, at 14.

³⁶ Article 23 of 1963 Regulations provided in relevant part that "All inventions are the property of the State; all enterprises (both State owned and collectives) are free to make use of them when they see fit".

³⁷ See Patents in China, *supra* note 26, at 53.

³⁸ *Id.*

³⁹ See China's Intellectual Property System, *supra* note 26, at 14 through 20.

⁴⁰ *Id.*

⁴¹ A fundamental conflict exists between traditional Marxist ideology (which requires that all factors of production be owned by the State for the public good) and the concept of privately held intellectual property rights. The Chinese have generally ignored this dilemma and have taken a pragmatic approach to revising their intellectual property law system. The debate concerning whether a Western-style property right system or a socialist reward system was the appropriate incentive method for intellectual property rights in China began in the 1950s. See Sidel, Copyright, Trademark and Patent Law in the People's Republic of China, 21 TEX. INT'L L. J. 259, 280-282 (1986).

countries, carried on extensive consultations with various entities, and ultimately prepared a new law.⁴² Five years later, on March 12, 1984, the new Chinese Patent Law was adopted at the Fourth Session of the Standing Committee of the Sixth National People's Congress.⁴³

III. Chinese Patent Law

A. Overview

The Patent law of China, in general, is similar to that of the United States and other Paris Convention members.⁴⁴ Protection is available for Inventions, Utility models and Designs. The term for an invention patent is twenty years from date of filing. Terms for utility models and designs are ten years from date of filing. Priority is based on "first to file," and patentability for inventions requires novelty, inventiveness and practical application. The patent application should include a request, a description, and claims. Applications are published eighteen months after date of filing. A right of priority is available for applicants who filed for a patent in a foreign country within twelve months before filing in China if an agreement, treaty or reciprocal rights exist between China and the foreign country.

China has a delayed examination system for inventions, and a registration system for utility models and designs. The invention examination system consists of a preliminary examination, publication of application, request for substantive examination, and substantive examination. Compulsory licenses can be granted in limited circumstances. The scope of patent protection is based on the claims, and the doctrines of equitable equivalents and prosecutorial estoppel are recognized. Upon the grant of a patent right, a patentee has, *inter alia*, the right to exclude others from making, using, or selling the patented product or process, without authorization, for production or business purposes.

B. Patent Ability

⁴² See China's Intellectual Property System, *supra* note 10, at 15; see also Sobel, Technology Transfer and Protection of Intellectual Property in China, 12 LOY. L.A. INT'L & COMP. L.J. 61, 63 (1989).

⁴³ See China's Intellectual Property System, *supra* note 10, at 15.

⁴⁴ See Oehler, Comment, Patent Law in the People's Republic of China: A Primer, 8 N.Y.L. SCH. J. INT'L & COMP. L. 451, 456 (1987).

A Chinese patent may be applied for by any "inventor or creator."⁴⁵ The phrase "inventor or creator" includes any "person who has made creative contributions to the substantive features of the invention creation."⁴⁶ Excluded from this definition are persons who only do organizational work, who only offer facilities, or who only perform auxiliary functions such as providing instruction or making "arousing" proposals.⁴⁷ An inventor or creator can be a Chinese citizen, Chinese organization, or a foreign citizen or foreign organization from a country that has entered into a treaty or agreement with China, or that has reciprocal rights with China.⁴⁸ To obtain a patent, a foreign citizen or organization must appoint a patent agent designated by the State Council of the Chinese government.⁴⁹

In the event a person makes an invention "in execution of the tasks of the entity to which he belongs" or "by using the material means of the entity," the right to apply for the patent belongs to the entity.⁵⁰ These two phrases are further defined in Rule 10. If the entity is owned by the state, then the patent may only be "held" by the entity and the ownership of the patent remains with the state.⁵¹ The ownership distinction becomes important with regard to compulsory licensing.⁵²

Article 10 provides that both the right to apply for a patent and the patent right itself may be assigned. Government approval is required for an assignment of a state owned patent or a Chinese patent to a foreigner. All assignments must be (1) in writing, (2) registered, and (3) announced by the Patent Office.⁵³ Rules regarding joint inventors are contained in Article 8.

⁴⁵ Art. 6, Chinese Patent Law.

⁴⁶ Rule 11, Implementing Regulations of the Patent Law of the People's Republic of China (Revision Approved by the State Council on December 12, 1992 and Promulgated by the Patent Office of the People's Republic of China on December 21, 1992) [hereinafter "Patent Implementing Regulations"].

⁴⁷ Rule 11, Patent Implementing Regulations; China's Intellectual Property System, *supra* note 10, at 24.

⁴⁸ See China's Intellectual Property System, *supra* note 10, at 24 through 27.

⁴⁹ Art. 19, Chinese Patent Law. Rule 14, Patent Implementing Regulations, provides that the patent agency "shall, on the authorization of the State Council, be designated by the Patent Office." There are currently six official patent agencies.

⁵⁰ Art. 6, Chinese Patent Law.

⁵¹ *Id.*

⁵² State owned enterprises and Chinese collectives and individuals are subject to the compulsory measures contained in Article 14 of the Chinese Patent Law.

⁵³ Art. 10, Chinese Patent Law.

Under Article 9, the patent right is granted to the applicant who was the "first to file." In the event that two or more applicants file on the same day, Rule 12 provides that they shall "hold consultation among themselves" to decide who should be entitled to file the application.⁵⁴

C. Patent Eligibility

Article 2 defines "Inventions-Creations" as "Inventions, Utility models and Designs." Rule 2 further defines "Invention" as "any new technical solution relating to a product, a process or improvement thereof." A "Utility model" is defined as "any new technical solution relating to the shape, the structure, or their combination, of a product, which is fit for practical use."⁵⁵ The term "Design" means "any new design of the shape, pattern, color, or their combination, of a product, which creates an aesthetic feeling and is fit for industrial application."⁵⁶

Utility models are afforded protection under the Chinese patent law. This is a significant difference from United States patent law. The rationale for inclusion is a desire to stimulate and reward the inventiveness of the Chinese "masses," who will likely produce primarily "small inventions" (Utility models).⁵⁷

Article 25 excludes from patent eligibility (1) scientific discoveries, (2) rules and methods for mental activities⁵⁸, (3) methods for the diagnosis or for the treatment of diseases, (4) animal and plant varieties (products only), and (5) substances obtained by means of nuclear transformation. The patent eligibility exclusions on food, beverages and flavorings, pharmaceutical products, and substances obtained by means of a chemical process were removed in the 1992 amendments.

D. Patent Requirements

⁵⁴ Apparently no formal procedure exists to resolve the dispute if no agreement is reached between the parties.

⁵⁵ Rule 2, Patent Implementing Regulations.

⁵⁶ *Id.*

⁵⁷ See China's Intellectual Property Law System, *supra* note 10, at 18.

⁵⁸ The Chinese Patent Law does not expressly exclude computer software from receiving patent protection, and an issue currently exists as to whether such software should fall within the scope of the Patent Law. See Syz, Expanding the Patent Law of the People's Republic of China: A Proposal for Patent Protection of Computer Programs, 5 J. CHINESE L. 349 (1991). Protection for software is currently provided under the Regulations on Computer Software Protection, promulgated by the State Council on June 4, 1991.

1) Novelty

Chinese patent law follows a "mixed" novelty scheme similar to that of the United States. Under Article 22, novelty requires that "before the date of filing, no identical invention or utility model has been publicly disclosed in publications" in China or abroad or has been "publicly used or made known to the public by any other means" in China. Further, novelty will be defeated if "any other person filed previously with the Patent Office an application which described the identical invention or utility model and was published after the date of said filing."⁵⁹ However, novelty is not lost if within six months before the date of filing the invention-creation was (1) first exhibited at an international exhibition sponsored or recognized by the Chinese government, (2) first made public at a prescribed academic or technological meeting, or (3) disclosed without the applicant's consent.⁶⁰

2) Inventiveness

The term "Inventiveness" under Article 22 means that "as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress." The phrase "prominent substantive features" means that the technical characteristics of the invention are not simple small changes or amendments, but have "substantive differences which are beyond the thought of a person skilled in the art."⁶¹ The phrase "notable progress" means that the invention has "better technical results" than the prior art.⁶²

3) Practical Applicability

Under Article 22, "Practical Applicability" means that "the invention or utility model can be made or used and can produce effective results." The phrase "can be made or used" primarily means that the invention or utility model "can be made or used in industries" and can be "reproduced many

⁵⁹ Art. 22, Chinese Patent Law.

⁶⁰ Art. 24, Chinese Patent Law.

⁶¹ China's Intellectual Property System, *supra* note 10, at 33. The degree to which Chinese Law relies upon "secondary characteristics" to determine inventiveness is currently unknown.

⁶² *Id.*

times.⁶³ The phrase "can produce effective results" means that the invention or utility model can produce "good social, economic and technical results."⁶⁴

4) Contrary to Morality, Law, or Public Interest

Article 5 provides that "[n]o patent right shall be granted for any invention-creation that is contrary to the laws of the State or social morality or that is detrimental to public interest."⁶⁵

E. Application Process

The Chinese patent process begins with the filing of an application, which must include a request, a description and its abstract, and claims.⁶⁶ The date of receipt by the Patent Office is the date of filing.⁶⁷ The request must state the title of the invention, name of the inventor, name and address of the applicant, and other related matters.⁶⁸ The "other related matters" are listed in Rule 17, and include such items as the patent agency name, requested priority dates, and lists of documents constituting and appending the application.

The description serves the purpose of publicly disclosing the invention, and therefore must describe the invention "in a manner sufficiently clear and complete so as to enable a person skilled in the relevant field of technology to carry it out..."⁶⁹ Rule 18 prescribes the manner and order in which the description shall be presented, as follows:

- (1) state the title of the invention or utility model as appearing in the request;
- (2) specify the technical field to which the invention or utility model relates;
- (3) indicate the background art which, as far as known to the applicant, can be regarded as useful for the understanding, searching and examination of the invention or utility model, and cite the documents reflecting such art;
- (4) specify the purpose which the invention or utility model is designed to fulfill;

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Id.

⁶⁴

Id.

⁶⁵

This standard is vague and in need of further clarification by the Chinese legal authorities.

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Art. 26, Chinese Patent Law.

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Art. 28, Chinese Patent Law.

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Art. 26, Chinese Patent Law.

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Id.

- (5) disclose the technical solution of the invention or utility model, as claimed, in such terms that a person having ordinary skill in the art can understand it and fulfill the purpose of the invention or utility model;
- (6) state the advantageous effects of the invention or utility model, with reference to the background art;
- (7) briefly describe the figures in the drawings, if any;
- (8) describe in detail the best mode contemplated by the applicant for carrying out the invention or utility model; this shall be done in terms of examples, where appropriate, and with reference to the drawings, if any. The preceding form must be followed, unless a different form would "afford a better understanding and a more economical presentation."⁷⁰ Finally, the description must not refer to the claims for the purpose of describing matters contained in the description.⁷¹

The claims state the extent of the patent protection requested. Rule 20 requires that the claims "define clearly and concisely the matter for which protection is sought in terms of the technical features of the invention or utility model."⁷² Rules 20 - 23 describe the specific form the claims must take. In general, the claims must have an independent claim and may also have dependent claims. The independent claim should contain a (1) preamble portion indicating the technical features "necessary for the definition of the claimed subject matter but which, in combination, are part of the prior art," and (2) a characterizing portion that states the "technical features of the invention or utility model, which distinguish it from the prior art."⁷³ The dependent claim should contain a reference portion and a characterizing portion that states the "additional technical features of the invention or utility model."⁷⁴

Article 31 provides that an application shall be limited to one invention or utility model, although a single application may be used for two or more inventions or utility models belonging to a "single

⁷⁰ Rule 18, Patent Implementing Regulations.

⁷¹ *Id.*

⁷² The Chinese requirement is similar to the "peripheral claiming" or "fencepost claiming" system of the United States, which requires the patentee to clearly define the outer limits, or "metes and bounds", of the invention. The Western European system is different in that it follows the practice of "inventive concept claiming" or "signpost claiming", which allows for a broader interpretation of the patent. *See Patents in China, supra* note 23, at 58, note 18.

⁷³ Rule 22, Patent Implementing Regulations.

⁷⁴ Rule 23, Patent Implementing Regulations.

general inventive concept." Rule 35 describes the types of multiple independent claims which may be filed in one application. A divisional application may be filed to separate the claims.⁷⁵

China recognizes a right of priority for applicants who applied for a patent in a foreign country within twelve months before filing in China if an agreement, treaty or reciprocal rights exist between China and the foreign country.⁷⁶ China also recognizes a domestic right of priority, subject to the limitations in Rule 33, for applicants who first filed an application in China for an invention or utility model within twelve months of the later filing over the same subject matter.⁷⁷ The domestic right of priority allows an applicant who is seeking to upgrade a utility model application to an invention application to retain the original utility model filing date for priority purposes.

Article 33 allows an applicant to amend an application providing the amendment does not "go beyond the scope of the disclosure contained in the initial description and claims." An application may be withdrawn at any time before the patent is granted.⁷⁸

F. Examination and Approval

The Chinese patent system has a delayed examination system for inventions and a registration system for utility models and designs. The invention examination system consists of the following four steps: (1) Preliminary examination; (2) publication of application; (3) request for substantive examination; and (4) substantive examination.

The purpose of the preliminary examination is to ensure that the application conforms to all formal legal requirements and does not contain any obvious defects of substance. Items examined are listed in Rules 40, 41, 42 and 44. Questions of novelty, inventiveness and practical applicability are not addressed in the preliminary examination. Applications approved by the Patent Office are published eighteen months after date of filing, or sooner if requested by the applicant.⁷⁹ After the patent application is published, a patent applicant has the right to require anyone exploiting the invention to pay

⁷⁵ Rule 42, Patent Implementing Regulations.

⁷⁶ Art. 29, Chinese Patent Law.

⁷⁷ *Id.* The domestic right of priority was added in the 1992 amendments.

⁷⁸ Art. 32, Chinese Patent Law.

⁷⁹ Art. 34, Chinese Patent Law.

an appropriate fee.⁸⁰ From the time of publication until the grant of a patent right, any person may submit "observations" concerning defects in the patent application.⁸¹ It should be noted that Rule 40(2) requires the patent application to be written in Chinese. An applicant may amend or correct a defective application within a specified time limit.⁸²

Article 35 provides that the Patent Office will examine the application as to substance upon request of the applicant made at any time within three years of filing. If a request is not made within the three year time limit without justified reason, the application is deemed to have been withdrawn.⁸³ The Patent Office may, *sua sponte*, examine any invention application for substance when deemed necessary.⁸⁴ An applicant must furnish with his application pre-filing date reference materials and foreign search and examination documents, or furnish a statement explaining why the documents were not provided.⁸⁵

The purpose of the substantive examination is to determine whether the invention possesses novelty, inventiveness and practical applicability, and to determine the appropriate scope of protection.⁸⁶ A list of reasons for rejection are set forth in Rule 53. When an applicant's invention application is initially rejected, the applicant may submit observations or amendments.⁸⁷ In the event no observations or amendments are submitted, the application is deemed to be withdrawn.⁸⁸ If the observations or amendments do not cure the alleged defects, the application will be rejected by the Patent Office.⁸⁹

In the event the Patent Office examines the invention application for substance and finds no reason for rejection, a notification to grant the patent right is issued.⁹⁰ The applicant then has two

⁸⁰ Art. 13, Chinese Patent Law.

⁸¹ Rule 48, Patent Implementing Regulations.

⁸² Rule 44, Patent Implementing Regulations.

⁸³ Art. 35, Chinese Patent Law.

⁸⁴ *Id.*

⁸⁵ Art. 36, Chinese Patent Law; Rule 49, Patent Implementing Regulations.

⁸⁶ China's Intellectual Property System, *supra* note 10, at 38.

⁸⁷ Art. 37, Chinese Patent Law.

⁸⁸ *Id.*

⁸⁹ Art. 38, Chinese Patent Law.

⁹⁰ Art. 39, Chinese Patent Law; Rule 54, Patent Implementing Regulations.

months from receipt of notification to go through the formalities of registration.⁹¹ If the formalities are accomplished timely, the Patent Office grants the patent right, issues the patent certificate, and announces the patent grant.⁹² If the formalities are not accomplished timely, the applicant is deemed to have abandoned the patent right.⁹³

Within six months after the announcement is made, any person may request that the patent be revoked.⁹⁴ The request must conform to the requirements of Rules 56 and 57, and be based on grounds set forth in Rule 55.⁹⁵ If a request is made, the Patent Office examines the application for revocation.⁹⁶ The decision by the Patent Office concerning revocation can be reexamined by the Patent Reexamination Board if a request is made within three months of the Patent Office decision.⁹⁷ The reexamination is governed by Rules 58 through 63. Anyone dissatisfied with the decision of the Patent Reexamination Board with regard to an invention application may, within three months of the decision, appeal to the People's Court.⁹⁸ All decisions of the Patent Reexamination Board concerning utility models and designs are final.⁹⁹ If a patent right is revoked, it is deemed "non-existent" from the beginning.¹⁰⁰

G. Duration, Cessation, and Invalidation

The term for an invention patent is twenty years from date of filing.¹⁰¹ The terms for utility models and designs are ten years from date of filing.¹⁰² A patent right will cease before expiration if (1) the annual fee is not paid, or (2) if the patentee abandons the patent right by a written declaration.¹⁰³

⁹¹ Rule 54, Patent Implementing Regulations.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ Art. 41, Chinese Patent Law.

⁹⁵ A patent may be revoked if it lacks novelty, inventiveness, or practical applicability. Rule 55, Patent Implementing Regulations, Arts. 22, 23 Chinese Patent Law.

⁹⁶ Art. 42, Chinese Patent Law.

⁹⁷ Art. 43, Chinese Patent Law.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ Art. 44, Chinese Patent Law.

¹⁰¹ Art. 45, Chinese Patent Law. The term was extended from fifteen to twenty years in the 1992 amendments.

¹⁰² *Id.*

¹⁰³ Art. 47, Chinese Patent Law.

After the expiration of six months from the patent grant announcement, anyone may request the Patent Reexamination Board to declare the patent invalid based on reasons listed in Rule 66.¹⁰⁴ The Board shall thereafter examine the request and make an invalidation decision.¹⁰⁵ Anyone dissatisfied with a decision regarding an invention may, within three months, appeal to the People's Court.¹⁰⁶ All decisions of the Board concerning the validity of utility models and designs are final.¹⁰⁷ A patent declared invalid is deemed "non-existent" from the beginning.¹⁰⁸

Invalidation and revocation decisions have no retroactive effect on (1) a judgment or order concerning patent infringement pronounced and enforced by the People's Court, (2) an administrative patent infringement decision, or (3) any license contract or assignment performed prior to the date of the patent invalidation decision, unless (a) damages were caused to other persons in bad faith by the patentee (in which case they shall be compensated) or (b) a failure to reimburse fees and assignment prices obviously would be contrary to principles of equity (in which case the fees and assignment prices should be repaid in whole or in part).¹⁰⁹

H. Rights and Limitations

Upon the grant of a patent right, a patentee has the right (1) to exclude others from making, using or selling the patented product or process, without authorization, for production or business purposes, (2) to prevent others from importing the patented product or goods obtained by the patented process for production or business purposes, (3) to enter into written licensing agreements allowing

¹⁰⁴ Art. 48, Chinese Patent Law; Rule 66, Patent Implementing Regulations. The reasons set forth in Rule 66 for invalidating a patent are broader than the reasons set forth in Rule 55 for revoking a patent. This is a departure from the usual approach taken by United States law, which generally narrows the grounds for complaint as time passes.

¹⁰⁵ Art. 49, Chinese Patent Law.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ Art. 50, Chinese Patent Law.

¹⁰⁹ *Id.* The principal reason for limited retroactivity is to preserve the integrity of the patent system. The second exception involving cases that would "obviously be contrary to principles of equity" is vague and in need of clarification.

others to exploit the patent for a fee, (4) to affix a patent marking on the product, and (5) to assign the patent right.¹¹⁰

The inventor or creator of a service invention has the right (1) to receive a lump sum reward, (2) to receive a reward based upon the economic benefits generated by the patent and (3) the right to be named as inventor in the patent document.¹¹¹

With regard to limitations on the patent right, Article 62 provides that the following acts are not considered to be infringing:

- (1) Where, after the sale of a patented product that was made by the patentee or with the authorization of the patentee, any other person uses or sells that product;
- (2) Where any person uses or sells a patented product not knowing that it was made and sold without the authorization of the patentee;¹¹²
- (3) Where, before the date of filing of the application for patent, any person who has already made the identical product, used the identical process, or made necessary preparations for its making or using, continues to make or use it within the original scope only;
- (4) Where any foreign means of transport which temporarily passes through the territory, territorial waters or territorial airspace of China uses the patent concerned, in accordance with any agreement concluded between the country to which the foreign means of transport belongs and China, or in accordance with any international treaty to which both countries are party, or on the basis of the principle of reciprocity, for its own needs, in its devices and installations;
- (5) Where any person uses the patent concerned solely for the purposes of scientific research and experimentation.

I. Compulsory Measures

Two types of compulsory measures exist under Chinese patent law: Compulsory licenses and compulsory measures concerning state-owned enterprises. Compulsory licenses may be granted by the Patent Office (1) after three years from patent grant if a qualified entity makes a reasonable request for

¹¹⁰ Arts. 11, 12, 14, and 15, Chinese Patent Law. The right to exclude patented imported products was added in the 1992 amendments.

¹¹¹ Arts. 16 and 17, Chinese Patent Law; Rules 70 through 75, Patent Implementing Regulations.

¹¹² This subsection requires actual knowledge on the part of the alleged infringer. This is a departure from U.S. law, which only requires constructive knowledge.

authorization from the patentee and is not successful within a reasonable period of time,¹¹³ (2) when a "national emergency or any extraordinary state of affairs occurs, or in cases of public non-commercial use",¹¹⁴ or (3) when the exploitation of a later granted "technically more advanced" patent on an invention or utility model is dependent upon the exploitation of an earlier granted patent.¹¹⁵

Anyone requesting a compulsory license must furnish proof that attempts to license the patent from the patentee on reasonable terms have failed.¹¹⁶ The request must state the reasons for the compulsory license, and must be accompanied by any supporting documentation.¹¹⁷ The patentee may respond to the request with observations within a specified time limit.¹¹⁸ If a compulsory license is granted, the Patent Office must limit the scope and duration of the patent exploitation "on the basis of the reasons justifying the grant, and provide that the exploitation shall be predominately for the supply of the domestic market."¹¹⁹ The Patent Office may terminate the license if the circumstances which led to the grant of the compulsory license "cease to exist and are unlikely to recur".¹²⁰

A compulsory license does not grant the licensee exclusive rights or the right to authorize others to exploit the patent,¹²¹ and a reasonable fee must be paid in an amount agreed upon by the parties. If the parties fail to agree, the amount is set by the Patent Office within three months.¹²² In the event a patentee disagrees with the decision of the Patent Office to grant a compulsory license or with the amount of the fee, an appeal may be taken to the people's court within three months of the receipt of notification.¹²³

¹¹³ Art. 51, Chinese Patent Law; Rule 68, Patent Implementing Regulations. The requirement that the patentee "use" the patent within a specified period of time has been dropped. No compulsory licenses have been granted against foreigners to date.

¹¹⁴ Art. 52, Chinese Patent Law, as modified by Rule 68, Patent Implementing Regulations. The three year waiting period does not apply to this subsection.

¹¹⁵ Art. 53, Chinese Patent Law. The three year waiting period does not apply to this subsection.

¹¹⁶ Art. 54, Chinese Patent Law.

¹¹⁷ Rule 68, Patent Implementing Regulations.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Art. 56, Chinese Patent Law.

¹²² Art. 57, Chinese Patent Law; Rule 69, Patent Implementing Regulations.

¹²³ Art. 58, Chinese Patent Law.

The second type of compulsory measure is limited to state owned entities and Chinese persons and entities under collective ownership. Article 14 provides that in accordance with the State plan (1) entities owned and controlled by the state that hold a patent to an "important invention-creation", and (2) Chinese individuals or entities under collective ownership that own a patent "of great significance to the interests of the State or to the public interest and [that] is in need of spreading and application", may be required to allow other designated entities to exploit the patent. The exploiting entity must pay a fee according to "prescriptions of the State".¹²⁴ The exploitation of a patent owned by a Chinese individual or collective entity must be approved by the State Council.¹²⁵

J. Legal Protection

The extent of patent protection for inventions and utility models is determined by the terms of the claims.¹²⁶ The patent description and appended drawings may be used to interpret the claims.¹²⁷ The extent of patent protection for designs is determined by the "product incorporating the patented design as shown in the drawings or photographs."¹²⁸

With regard to procedure, a patentee or any interested party alleging infringement has the option of either (1) complaining to the administrative authority for patent affairs, or (2) directly instituting legal proceedings in the people's court.¹²⁹ The administrative authority has the power to issue injunctive relief and to compensate for damages.¹³⁰ The decision of the administrative authority may be appealed to the people's court.¹³¹ Although the burden of proof is generally on the party alleging infringement, in

¹²⁴ Art. 14, Chinese Patent Law.

¹²⁵ *Id.*

¹²⁶ Art. 59, Chinese Patent Law.

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ Art. 60, Chinese Patent Law.

¹³⁰ *Id.* The power of the administrative authority is limited in that it lacks subpoena power and does not have the ability to issue preliminary injunctive relief. *See* Yu, Review of Patent Infringement Litigation in the People's Republic of China, 5 J. CHINESE L. 297 (1991) [hereinafter "Patent Infringement Litigation"].

¹³¹ Art. 60, Chinese Patent Law. An issue exists as to whether the Civil Procedure Law or the Administrative Litigation Law will apply to an administrative appeal. *See* Patent Infringement Litigation, *supra* note 130.

disputes involving processes for the manufacture of a new product, the accused manufacturer of the new product must furnish proof of the process used.¹³²

In the event a defendant makes a counterclaim based on the invalidity of an invention patent, the court has the option of suspending the proceedings while the invalidity claim is heard initially by the Patent Reexamination Board.¹³³ In the case of a counterclaim based on the invalidity of a utility model or design patent, the court should stay the proceedings since these type patents have not yet been examined.¹³⁴

The four elements of proof for infringement are: (1) An illegal act infringing a valid patent right; (2) damages to the patentee; (3) causation between the illegal act and damages; and (4) fault by the accused infringer.¹³⁵ Liability can result from both direct and indirect acts of infringement.¹³⁶

The remedies available for patent infringement are: (1) injunctive relief; (2) money compensation; and (3) rehabilitation of the patentee's reputation.¹³⁷ The amount of money compensation is dependent on the facts of each case and may be based on (1) lost profits of the patentee, (2) unlawful profits of the infringer, or (3) no less than a reasonable patent license fee.¹³⁸ Certain serious acts of passing off the patent of another person may result in criminal liability.¹³⁹

Claim interpretation in patent infringement cases is complex. As previously stated, the scope of protection is determined by the claims, as interpreted in light of the description and appended drawings.¹⁴⁰ Chinese law follows the "compromise explanation" approach to claim interpretation.¹⁴¹ Under this approach, claim interpretation is based on the "substantive content" of the claims, rather than on the literal description or expression in the claims.¹⁴² "Substantive content" is determined "by taking

¹³² Art. 60, Chinese Patent Law.

¹³³ See Notice on Several Issues Concerning Patent Judgement Works.

¹³⁴ See China's Intellectual Property Law System, *supra* note 10, at 266.

¹³⁵ China's Intellectual Property System, *supra* note 10, at 47.

¹³⁶ Art. 148, Views of the Supreme Court Regarding the Implementation of the General Rules of the Civil Procedures Law of the People's Republic of China.

¹³⁷ China's Intellectual Property System, *supra* note 10, at 47, 256.

¹³⁸ China's Intellectual Property System, *supra* note 10, at 267, 268.

¹³⁹ Art. 63, Chinese Patent Law.

¹⁴⁰ Art. 59, Chinese Patent Law.

¹⁴¹ China's Intellectual Property System, *supra* note 10, at 260.

¹⁴² *Id.* at 261.

account of the description and appended drawings and comprehensively considering the purpose, function, and effect of the invention or utility model."¹⁴³

The description and appended drawings must not be used, other than for interpretive purposes, to determine the scope of the patent.¹⁴⁴ For example, technical concepts described in the description and drawings, but not in the claims, are outside the scope of the patent. Further, conflicts between the technical content in the claims and the technical content in the description and drawings should be resolved in favor of the technical content in the claims. Finally, if the technical content of the description and drawings is broad, and the technical content of the claims is narrow, the scope of the claims should be interpreted narrowly.¹⁴⁵

A judicial officer determines whether infringement exists by comparing the technical features of the alleged infringing product or process with the plaintiff's independent claims.¹⁴⁶ Infringement will exist if the alleged infringing product or process includes "every necessary technical feature of the independent claim".¹⁴⁷ Infringement will not exist if the alleged infringing product or process "lacks one or several necessary technical features of the independent claim."¹⁴⁸ Former contents of the independent claim abandoned by the patentee in the application process should be excluded from the protective scope of the claim.¹⁴⁹

When interpreting the scope of patent protection, Chinese law follows the doctrine of equitable equivalents. This doctrine expands the scope of patent protection to exclude any technical means that are "identical in nature" and which achieve a "substantially identical effect" to the subject patent.¹⁵⁰ For example, Chinese law uses the equity principle to determine infringement in cases that involve (1) rearranging parts of a product or steps in a process without causing a substantial difference in function or effect; (2) replacing a component with a technically equivalent component commonly known to

¹⁴³ *Id.*
¹⁴⁴ *Id.*
¹⁴⁵ *Id.*
¹⁴⁶ *Id.* at 262, 263.
¹⁴⁷ *Id.* at 263.
¹⁴⁸ *Id.*
¹⁴⁹ *Id.* at 263.
¹⁵⁰ *Id.* at 261.

ordinary technical personnel in the field (e.g., replacing a screw with a bolt); (3) omitting unnecessary technical features while still achieving the desired result; and (4) substituting multiple technical components for one technical component, or substituting one technical component for several technical components, without substantially changing the function or effect.¹⁵¹

Under Chinese law, the equity principle is applied on a case by case basis.¹⁵² In the case of an important pioneering invention, the equity principle should be used to expand the scope of protection.¹⁵³ In the case of a small innovation in an established field of technology, the equity principle should not be used to alter the narrow scope of protection.¹⁵⁴

The statute of limitations on an infringement case is two years from the date the patentee or any interested party "obtains or should have obtained knowledge of the infringing act."¹⁵⁵ Finally, Article 85 of the Chinese Civil Procedure Law stresses the importance of mediation in the legal process, and encourages the settlement of patent infringement suits through the use of cooperative licensing agreements.

K. 1992 Amendments

In 1992, primarily in response to an agreement between China and the United States¹⁵⁶, the Chinese Patent Law was amended in the following areas:

(1) Patent eligibility was expanded to include food, beverages and flavorings, pharmaceutical products, and substances obtained by means of a chemical process;

(2) The patent term for inventions was expanded from fifteen years to twenty years from date of filing, and the patent terms for utility models and designs were both expanded to ten years, with no right of renewal;

¹⁵¹ *Id.* at 264.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ Art. 61, Chinese Patent Law.

¹⁵⁶ In December, 1991, the United States Trade Representative (USTR) threatened trade sanctions against China pursuant to Section 301 of the Omnibus Trade and Competitiveness Act of 1988 for, *inter alia*, lax enforcement of its intellectual property laws. China agreed to strengthen its IP protection and entered into a Memorandum of Understanding (MOU) with the USTR in January of 1992. (The text of the MOU is appended to this paper)

(3) The patentee was granted a right to prevent others from importing the patented product, or products directly produced from the patented process, for use or sale for production or business purposes;

(4) The protection of patented processes was extended to cover the products produced directly by the process for business or production purposes;

(5) The conditions for granting compulsory licenses were changed to be more consistent with the requirements of the memorandum of understanding;

(6) A domestic right of priority was added to allow applicants who first filed an application in China for an invention or utility model to enjoy a right of priority on later filed applications covering the same subject matter. The later filed applications must be filed within twelve months of the original filing. The domestic right of priority allows an applicant who is seeking to upgrade a utility model application to an invention application to retain the original utility model filing date for priority purposes;

(7) The Chinese pre-grant opposition system was replaced by a post-grant administrative revocation procedure;

(8) The retroactive effect of decisions invalidating patents was limited except in cases involving bad faith by the patentee and cases that are "obviously contrary" to principles of equity;

(9) New remedies were added for persons who pass off unpatented products or processes as patented products or processes.

L. Conclusion

China's recent conversion to Western-style intellectual property laws has been remarkably swift and dramatically successful. The Chinese Patent Law in particular has allowed China to finally begin to harness and promote its enormous creative potential. The recent amendments bring Chinese Patent Law even closer to international standards and reflect a healthy willingness on the part of the Chinese to be flexible and progressive. Despite China's rapid progress, differences and problems still remain in the areas of compulsory measures, administrative review and patent enforcement. These matters will likely be further addressed by the Chinese as international patent harmonization continues and as China

continues to convert from a socialist planned economy to free market capitalism. One particular issue that should prove interesting to follow is China's ability to effectively convince its enormous rural population that an intangible idea is entitled to strict legal protection. Regardless of the problems remaining or the challenges ahead, China appears to have made fundamentally wise moves in the original enactment and recent amendment of its Patent Law. Unfortunately, the Chinese had to learn the hard way that inventiveness must be protected and applied, through law, to maintain a competitive economy and strong defense. Now that ancient traditions of creativity and inventiveness are being reawakened and reinforced with healthy doses of Western-style intellectual property law, both China and the world should benefit.