Progressive IP Reform in the Middle Kingdom:
An Overview of the Past, Present, and Future
of Chinese Intellectual Property Law

JENNIFER WAI-SHING MAGUIRE*

Abstract

In the past several decades, China has established itself as a global leader in science and technology. However, the nation's patent system is one of the youngest in the world, having only just implemented a third amendment to its patent law in 2008. International trade concerns pressure continuous reform of Chinese patent law and call into question the need for a fourth amendment. This article will discuss the past, present, and future of Chinese patent law. Part I will examine China’s political and cultural history, which has long discouraged the idea of individual ownership. Part II will provide an overview of China's current intellectual property regime as well as a brief comparison of US and Chinese patent law after the America Invents Act. Part III will consider whether the Chinese government should implement a fourth amendment in order to ensure an effective Chinese patent regime.

Introduction

As one of the most rapidly developing countries in the past few decades, China has effectively burst onto the international intellectual property scene in recent years.1 The response to this burgeoning Asian power has been one of apprehension and unease, at

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* Jennifer Wai-Shing Maguire is a 2012 graduate of UC Davis School of Law, where she focused on intellectual property and patent law. She majored in Biology at Barnard College, Columbia University and worked in oncology and protein immunology at Columbia Medical School and several biotechnology companies. Jennifer will be entering the Navy JAG in the fall of 2012. She would like to thank Ryan Love, Jimmy Pak, and Professor Clay Tanaka for their invaluable advice on this article.

1. See Jeff Sommer, Looking Beyond Europe, N.Y. TIMES, Dec. 11, 2011, at BU6 (explaining that China is expected to surpass the United States as the World’s Largest Economy by the year 2027 because it enjoys “largely sound government debt and deficit positions, robust trading networks and huge numbers of people all moving steadily up the economic ladder”); Rachel T. Wu, Comment, Awaking the Sleeping Dragon: The Evolving Chinese Patent Law and its Implications for Pharmaceutical Patents, 34 FORDHAM INT’L LJ. 549, 549 (2011); China to Surpass the US Economy in 5 Years, RT (Apr. 26, 2011, 12:59 AM), http://rt.com/us/news/imf-china-surpass-usa-five-years/ (stating that “[t]he IMF has announced China will surpass the United States economically in real terms in 2016—a mere five years from” the article publication date).
least in the global intellectual property market.\textsuperscript{2} International trade concerns and China's own interest in developing a strong intellectual property market have pressured continuous reform of China's intellectual property laws in an attempt to meet the World Trade Organization's (WTO) strict requirements.\textsuperscript{3} But many nations argue that China's amendments fall short of WTO requirements and that China does not effectively enforce these new regulations.\textsuperscript{4} Various member nations of the WTO believe China's underdeveloped system of Intellectual Property Rights (IPR) unfairly infringes upon global market opportunities.\textsuperscript{5} In particular, the United States fears that IPR violations in China will undercut the profitability of American technology sales abroad.\textsuperscript{6}

As nations continue to identify market loss and tangible economic harm due to IPR infringement, global pressure on China to enforce its regulatory promises will only increase.\textsuperscript{7} The United States Trade Representative (USTR) has identified China as having one of the least developed and least effective IP regimes in the world.\textsuperscript{8} Piracy in China is estimated to have cost IP owners $2.4 billion worldwide in 2006.\textsuperscript{9} Furthermore, China's copyright infringement caused an estimated $1.5 billion global loss.\textsuperscript{10} China's patent docket is itself an example of the need for further IPR enforcement. Over four thousand patent infringement cases were filed in China in 2008.\textsuperscript{11} In fact, at the time, penalties for counterfeiting were so minimal they were viewed as business costs, creating only a neglig-

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4. See Wu, supra note 1, at 549-50; see also Donald P. Harris, \textit{The Honeymoon is Over: The U.S.-China WTO Intellectual Property Complaint}, 32 FORDHAM INT'L L.J. 96, 97 (2008) (describing that although China adopted strong substantive IP laws, China has failed to enforce these laws); Newberry, supra note 3, at 1425 (explaining that despite achieving staggering success in copyright reform, it still has a "long way to go" in enforcing those standards).

5. See \textit{CHINA: INTELLECTUAL PROPERTY INFRINGEMENT, supra note} 2, at 27.

6. Id.

7. See Wu, supra note 1, at 549.


11. Van Voorhis & Yang, supra note 8, at 408.
ble deterrence. International patent holders face the additional risk of patent invalidation by petition of local Chinese pharmaceutical companies, as was the case with Pfizer’s Viagra patent. Thus, the ineffective enforcement of international IPRs in China has frustrated international litigants.

Despite these fears, China’s IP system is undeniably in its infancy and is therefore capable of developing an effective patent system in the near future. With the most recent third amendment to China’s patent law, the country has taken a substantial step toward meeting the WTO requirements and appeasing other developed nations. As a response to continued complaints of an ineffective intellectual property regime, China amended its patent law for a third time in 2008. With increased monetary damages for infringers and additional administrative and judicial tools to better enforce patents, the Third Amendment is predicted to address many international concerns regarding China’s IP system. Whether this latest modification will suffice has yet to be seen.

Part I of this article discusses China’s recent history and the political atmosphere leading up to the Third Amendment. Part II discusses the sufficiency of China’s Third Amendment. Finally, Part III discusses the future of intellectual property rights in China and the need for further reform.

I. Past: 2000 Years of Political and Cultural Adversity to Intellectual Property Rights

Historically, China was not particularly receptive to the idea that intellectual property was a form of individual property that should be legally protected. But the government recognized that an established intellectual property regime was necessary to legitimize itself as a global leader. As this article examines the commencement of a Chinese intellectual property system and its subsequent amendments, it is important to understand the complex history of politics and culture that laid the groundwork for these changes. The Confucian, Taoist, and Communist historical background of China created an environ-

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14. Harris, supra note 4, at 114-15 (stating that the United States filed a WTO complaint against China for IPR Infringement).
15. See Wu, supra note 1, at 551-52 (describing China’s Third Amendment and potential for strengthened IPRs).
16. Id.
20. Id. at 12
ment unfriendly to the development of intellectual property rights. Chinese political culture further frustrated the development of IPRs when Communism gained control of the country.21 In recent decades, China has made significant improvements to its IP system.22 However, the WTO and its member nations agree that the country still has a long way to go in enforcing its new IP laws.23

A. INTELLECTUAL PROPERTY RIGHTS VERSUS “THE WAY” OF TAOISM AND CONFUCIANISM

China’s under-developed IP regime is, in part, the result of a Confucian and Taoist emphasis on sharing property and discouragement of individualism (The Way).24 For two thousand years, China encouraged its citizens to share inventions, discoveries, and creative works.25 The sole reward for successful intellectual achievements was public recognition and endowments from the King or Emperor.26 As Alexander Chen stated, “[l]earning was not an individual pursuit, it was a community goal.”27 Taoism promoted harmony, balance, and social totality.28 Confucianism eschewed the idea of personal gain at the expense of others.29 Together, both Confucianism and Taoism embodied a way of life for most Chinese people.30

This way of life was reflected in almost every aspect of Chinese society. Traditionally, copying was a legitimate method of learning in China.31 Students of sculpture, painting, and calligraphy honored their master by copying his style and work closely.32 The more people who admired a master’s work, the more it was copied and spread, increasing the master’s success and popularity.33 The national acceptance of copying combined with a tradition of isolationism and distrust of outsiders34 further discouraged any development of internationally recognized IPRs.35

21. See Wu, supra note 1, at 553.
22. Id. at 554.
23. Id. at 549.
26. Id.
27. Id. at 8.
30. Id. at 10.
32. Chen, supra note 19, at 10.
33. Id.
34. Id. (explaining that a distrust of outsiders was largely due to the manipulation of the Chinese people in the Opium War in 1840).
35. See id.
Despite having a religious and cultural background that discouraged IPRs, China began to recognize such rights around the turn of the 20th century.\(^{36}\) In 1898, China implemented its first patent act, the Reward Regulations for Promoting Technology Development (Zhengxing Gongyi Geijiang Zhangcheng).\(^{37}\) In 1903, China signed its first bilateral patent treaty with the United States, constituting “the most important convention made by the United States with any oriental country.”\(^{38}\) The Treaty accomplished two major goals: (1) “the extension of the United States international copyright laws to China,” and (2) “the promise from China to establish a patent office in which the inventions of citizens of the United States may be protected.”\(^{39}\) In 1910, the Chinese emperor enacted the first written national statute on copyrights.\(^{40}\) In this manner, IPRs slowly gained momentum in China.

B. THE CULTURAL REVOLUTION AND THE COMMUNIST REGIME

Despite a trend of strengthening IPRs and international IP treaties in China, progress in China’s intellectual property regime came to a halt with the onset of communism.\(^{41}\) Between 1945 and 1949, the Communist Party combated the Nationalist Party for control of the political system.\(^{42}\) Even decades before 1949, communists controlled areas around the country, influencing politics and culture to create “Soviet-like” microcosms.\(^{43}\) Therefore, when the Communist Party gained control in 1949, a strong sense of the communist ideology had already spread throughout the nation.\(^{44}\) Communist policies promoted sharing property and discouraged individual ownership.\(^{45}\) Commentators have noted that the communist principles of shared property flowed seamlessly from China’s Confucian and Taoist background, providing an easy transition.\(^{46}\)

China adopted a two-track approach toward patents, imitating the approach taken by the Soviet Union.\(^{47}\) The “first track” discouraged individual property ownership in an invention by awarding only a “certificate of invention.”\(^{48}\) The certificate was essentially meaningless to the holder because it attributed ownership and rights to the government,


\(^{37}\) Id. at 19.


\(^{39}\) Id. at 13 (quoting *Treaty with China Ratified*, N.Y. TIMES, Dec. 19, 1903, at 1) (noting that although the Treaty of 1903 signified China’s recognition of IPRs, the treaty was patently unfair as it provided protection only to American citizens).


\(^{41}\) Chen, *supra* note 19, at 11.

\(^{42}\) McCabe, *supra* note 38, at 15.

\(^{43}\) Id. (quoting John R. Allison & Lianlian Lin, *The Evolution of Chinese Attitudes Toward Property Rights in Invention and Discovery*, 20 U. PA. J. INT’L ECON. L. 735, 749 (1999)).

\(^{44}\) See McCabe, *supra* note 38, at 15.

\(^{45}\) See generally Allison & Lin, *supra* note 43, at 736, 743-44.


\(^{48}\) Id. at 749-50; see McCabe, *supra* note 38, at 15-16.
including the right to disseminate and collect royalties from the invention. The "second track" of Chinese patent law at this time issued a true patent to the inventor, including the right to receive royalties. Qualifying for this type of patent was not only difficult, but the government had the right to confiscate the invention at any time if the product concerned "national security," or "affected the welfare of the great majority of people." As a result, by 1963 property rights in patents were essentially abolished.

In the decades following the establishment of a communist regime in China, further cultural movements halted the IP system almost entirely. During the period from 1966-1976, Chairman Mao instigated the Cultural Revolution to prevent the formation of the bureaucratic communism that had developed in the Soviet Union. The movement led to the imprisonment of writers, scientists, doctors, and many other intellectuals in an attempt to eradicate individualism. For the next decade, China lacked an IP system entirely due to the renunciation of all previously established patent laws. In 1969, Chairman Mao declared an official end to the Cultural Revolution, but the movement continued to be active until the death of military leader Lin Biao in 1971.

C. Deng Xiaoping and the Rebirth of China’s IP System

A period of aggressive cultural and political reform began when Deng Xiaoping came into power. He recognized that foreign investment was essential to China’s future and that the implementation of an IP regime was necessary to attract international business. Consequently, in 1979, China began drafting patent laws to improve IPRs, and in 1980, China joined the World Intellectual Property Organization (WIPO). In 1984, China enacted its first patent law in decades, listing the methods for patent application, the patent examination process, and the protection strength of effective patents. But the 1984 patent law lacked essential features. For example, the law excluded patents for inventions

50. Id.
51. Id.
52. Peter Ganea & Thomas Pattloch, Intellectual Property Law in China 3 (Christopher Heath ed., 2005); Wu, supra note 1, at 533-54.
54. Id.; Wu, supra note 1, at 553.
55. Wu, supra note 1, at 554.
56. Id.
58. Gabriel, supra note 24, at 328 (stating that "[w]hen Deng Xiaoping resumed power . . . the Chinese government began an ambitious program of economic and legal reform").
59. Id. at 328-29 (explaining that Deng Xiaoping believed a national patent system would attract overseas investment).
61. See McCabe, supra note 38, at 17.
that involved food, pharmaceuticals, and beverages.\textsuperscript{63} Although the law was later amended in 1992 to cover pharmaceutical patents, it still offered little protection.\textsuperscript{64} The second and third amendments were adopted in 2001 and 2008 in an attempt to expand the intellectual property regime.\textsuperscript{65}

In the most recent decades, China has made continuous efforts to expand its intellectual property system.\textsuperscript{66} But local governments have hindered these efforts because of their increasing autonomy and power.\textsuperscript{67} In an effort to gain recognition in the global arena and strengthen its intellectual property regime, China joined the WTO in 2001.\textsuperscript{68} Upon China’s acceptance into the WTO, member states demanded that China assume more obligations than other member states due to its under-developed IP system.\textsuperscript{69} Member states further argued over China’s status as a developing country.\textsuperscript{70} Developing countries were afforded more benefits and flexibility than developed countries in the WTO.\textsuperscript{71} China was ultimately classified as a developed country for the purposes of IP laws, as it was the third largest trading nation and received more foreign investment than any other country.\textsuperscript{72} Thus, China was forced to agree to implement patent provisions that met the requirements of Trade-Related Aspects of Intellectual Property Rights (TRIPS).\textsuperscript{73} Instead of the five-year grace period that was afforded to developing countries, the WTO required China to immediately implement IP laws that would meet the minimum requirements of TRIPS.\textsuperscript{74} The nation has largely complied with the provisions of TRIPS by enacting laws that meet the minimum requirements,\textsuperscript{75} but other nations within the WTO have criticized China for ineffectively enforcing these new laws.\textsuperscript{76}

II. Present: China’s Current IP Regime

With its most recent IP laws and amendments, China has come a long way from the political and cultural history that strongly discouraged individual ownership. But its patent law system today contains two of the same flaws that caused China’s two previous attempts to fail: (1) the fact that IP laws were not voluntarily implemented in China, but rather were encouraged or required by Western countries; and (2) the significant amount

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\textsuperscript{63} Id. art. 25(4)-(5).
\textsuperscript{64} Wu, supra note 1, at 553.
\textsuperscript{65} Id. at 553.
\textsuperscript{66} Id. at 555.
\textsuperscript{68} See Gabriel, supra note 24, at 1008.
\textsuperscript{69} See Wu, supra note 1, at 556.
\textsuperscript{70} Harris, supra note 4, at 110-11.
\textsuperscript{71} Id. at 109-11.
\textsuperscript{72} Id. at 111; Wu, supra note 1, at 556.
\textsuperscript{74} See Protocol on the Accession of the People’s Republic of China, pt. I, ¶ (2)(A), Nov. 23, 2001, WT/L/432; Harris, supra note 4, at 112.
\textsuperscript{76} Smith, supra note 73, at 645.
of control China retains over issued patents, resulting in a decreased sense of ownership and a reduced incentive to invent. These two qualities were exhibited in both the Treaty of 1903 and Regulations of the 1950s. This pattern might signal that, despite China's best intentions, Chinese IP law has not laid a foundation capable of change.

A. The Three Amendments to Chinese Patent Law Since 1984

Since its first patent law was enacted in 1984, China has amended its patent law three times over the past two decades. In 1992, Chinese patent law was amended to expand patentable subject matter to include pharmaceuticals as well as to extend the patent length from fifteen to twenty years. In 2000, China amended its patent law for the second time, in anticipation of accession to the WTO. The second amendment strengthened patent protection and enforcement and attempted to assist foreign countries and individuals to file patents in China. The second amendment was ultimately unclear in its terms, resulting in a large amount of bad faith applicants who filed for patents of prior arts and immediately accused others of infringing on their patents. Due to these deficiencies, China again amended its patent law for a third time in 2008.

China's Third Amendment signaled new hope for a sufficient national patent regime. On June 5, 2008, China's State Council issued the National Intellectual Property Strategy Outline, which set a goal of improved creation, utilization, protection, and administration by 2020. This led to the finalization of the Third Amendment in December of 2008, which increased monetary damages against infringers and provided additional administrative and judicial tools to better enforce IPRs.

The Third Amendment also clarified that two types of patent law violations are illegal: (1) acts of "passing off" patents and (2) patent infringement. "Passing off" occurs when

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77. McCabe, supra note 38, at 15.
78. Id.; Allison & Lin, supra note 43, at 749-50 (explaining how the intermittent regulations in the 1950s provided little patent protection and significant government control).
79. McCabe, supra note 38, at 15.
80. Wu, supra, note 1, at 574.
81. Gao Xia-yun, Comment, An Introduction to Administrative Protection for Pharmaceuticals, 9 Duke J. Comp. & Int'l L. 259, 259 (1998) (stating that in 1992 administrative protection for pharmaceutical products was provided); Yang & Yen, supra note 17, at 18 (mentioning that the 1992 amendment allowed pharmaceuticals to fall under patentable subject matter).
83. Id. at 67-69.
84. Xiaoqing Feng, The Interaction Between Enhancing the Capacity for Independent Innovation and Patent Protection: A Perspective on the Third Amendment to the Patent Law of the P.R. China, 9 U. Pitt. J. Tech. L. & Pol'y 1, 126-27 (2009) ("Somed illegal actors will make use of [the patent system] to apply for patent of the knowingly prior art or design, and immediately accuse others of infringing upon his patent rights after he has obtained patent right.").
85. Wu, supra note 1, at 575.
88. Id.
an individual deceptively portrays that an unpatented invention is patented. This includes manufacturing a product with a patent marking, continuing to manufacture a product with an invalidated patent, advertising unpatented technology as patented technology, and forging any patent certificate, document, or application. The Third Amendment increased the civil fines for “passing off.” In addition to confiscating the profit earned on a product that has been “passed off,” the Patent Administrative Department may impose a fine four times the illegal income and three times the illegal earnings. Furthermore, the Third Amendment provided more resources to investigate “passing off” patents in an attempt to reduce their overall occurrence.

The Third Amendment further mandated that compensation for patent infringement be based on the actual losses of the patentee or the profit made by the infringer. To clearly define infringement, the amendment added three paragraphs to article 2 which clarified the meaning of “design,” “invention,” and “utility.”

Despite these harsher penalties, the Third Amendment also made it harder for patentees to obtain patents and easier for infringers to assert defenses. Article 22 was amended to adopt the “absolute novelty” national standard. This heightened novelty standard increased the requirements for obtaining a patent. On the other hand, the Third Amendment also expanded non-infringement defenses by codifying the prior art defense, thereby permitting a defendant to argue that the invention or design was revealed by prior art.

These changes to China's patent system have stirred national optimism and encouraged market growth in the patent area. But many argue that despite an improved legal system, China has failed to ensure that these regulations are enforced at the local level.

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91. 2008 Patent Law, supra note 89, art. 3.

92. Wu, supra note 1, at 576.

93. Id. at 577.

94. 2008 Patent Law, supra note 89, art. 65.

95. Id. art. 2.

96. See Wu, supra note 1, at 578-80.

97. 2008 Patent Law, supra note 89, art. 22 (“Novelty means that the invention or utility model concerned is not an existing technology; no patent application is filed by any unit or individual for any identical invention or utility model with the patent administration department under the State Council before the date of application for patent right, and no identical invention or utility model is recorded in the patent application documents or the patent documentation which are published or announced after the date of application.”).

98. Id. art. 62.

B. The Essential Problem with the Current IP System: Enforcement

Although China's recently introduced patent reform initially sparked high hopes, time has shown that the country has fallen far behind in enforcement mechanisms.\textsuperscript{100} China relies on administrative or adjudicative mechanisms to enforce IP laws in both the criminal and civil context.\textsuperscript{101} But these mechanisms are often ineffective against infringement.\textsuperscript{102}

Administrative relief is often used to handle pharmaceutical patent infringement cases.\textsuperscript{103} China's State Intellectual Property Office (SIPO) handles the granting and enforcement of patents.\textsuperscript{104} SIPO's enforcement mechanisms include investigation, mediation, imposition of fines, "and providing cease-and-desist orders through provisional offices and agencies."\textsuperscript{105} Patent holders may file a request for an administrative investigation into infringement at a local SIPO office.\textsuperscript{106} If the local SIPO office agrees with the filer and finds for infringement, the patent administrative authority may order the infringer to immediately terminate his or her actions.\textsuperscript{107} The infringer has fifteen days to file an appeal in court.\textsuperscript{108} Starting when the patentee becomes aware of an infringement, a patent holder has two years to file a patent infringement suit before the statute of limitations bars such action.\textsuperscript{109} If the patentee files suit within this two-year period and the infringement is deemed to be criminal, a criminal investigation of the infringer will also ensue.\textsuperscript{110}

Although SIPO has broad power to enforce equitable remedies, the office more often merely issues monetary penalties that are insufficient to discourage infringers from repeat violations.\textsuperscript{111} SIPO has the power to enjoin the infringer from continuing to manufacture, to order the destruction of infringing products, and to confiscate machinery used to make infringing products.\textsuperscript{112} However, infringers often receive only a monetary penalty, which is not distributed to patentees, but kept by the government.\textsuperscript{113}

\textsuperscript{100} Wu, supra note 1, at 557.
\textsuperscript{102} Id. at 452, 455-56.
\textsuperscript{103} Id. at 452, 454.
\textsuperscript{104} Id. at 453.
\textsuperscript{105} Wu, supra note 1, at 557.
\textsuperscript{108} Id. (explaining that if the party concerned is not satisfied with the decision, he or it may, within fifteen days from the receipt of the notification of the order, institute legal proceedings in the people's court according to the Administrative Procedure Law of the People's Republic of China).
\textsuperscript{109} Id. art. 62.
\textsuperscript{110} Id. art. 58 (explaining that where the infringement constitutes a crime, the party shall be prosecuted for his criminal liability).
\textsuperscript{111} See Bronshtein, supra note 101, at 455-56.
\textsuperscript{112} Id. at 453-54.
\textsuperscript{113} Id.
The SIPO office itself lacks the financial means, and therefore the motivation, to improve enforcement methods and train staff. Because the counterfeiting business may be a significant portion of the local economy, local governments may be hesitant to provide more financing to SIPO offices despite the fact the SIPO offices receive no outside funding. Consequently, staff is insufficiently trained to enforce cease-and-desist orders, and little incentive is provided by the local community to do so. Infringement cases are often not sent to criminal authorities because doing so would disrupt the local economy.

Because of these difficulties and because of the overwhelming complexity of patent infringement cases, adjudicative relief is more often sought by patentees. China's judicial system consists of four levels. First, the Basic People's Court handles the first instance of cases at a local level. Second, the Intermediate People's Court handles relevant important local cases in the first instance and hears appeals from the Basic People's Court. Third, the Higher People's Court is the highest local court in China, and its jurisdiction corresponds with the province or large city in which it is located. The Supreme People's Court is the highest court in the mainland area of China (excluding Hong Kong and Macau).

In these courts, the method used for determining whether infringement has occurred is simple. Chinese courts have not yet developed effective methods for determining infringement and cannot use case law to guide future cases. Additionally, plaintiffs must gather and present "their own evidence to meet" the burden of proof. Chinese courts only permit evidence "in its original form" and only sometimes allow evidence from certain previous court proceedings. If evidence originates from outside of China, it "must be notarized in the originating country" and authenticated by the Chinese embassy.

114. See id. at 454.
115. Evans, supra note 99, at 591 (explaining that local governments are often reluctant to provide funding for administrative agencies' operations because they benefit financially from the piracy).
116. Id.
117. See id.
118. Intellectual Property Rights, supra note 106 (stating in relevant part that "[p]atent disputes remain the most likely of intellectual property right disputes to be adjudicated, due in large part of their relative complexity").
120. Id.
121. Id. at 457-58.
122. Id. at 457.
123. Id.
125. Id.; see also Laurie Self & Jison Ma, Amending China's Trademark Law: A Discussion of the Possible Changes to Trademark Law in China, 218 TRADEMARK WORLD 18, 20 (2009) (noting that there is no stare decisis in China and that case law is not binding on lower courts).
127. Wu, supra note 1, at 560.

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or consulate. For these reasons, the analysis portion of a trial may last for several days.

Furthermore, monetary penalties that courts actually impose for patent infringement are an insufficient deterrent. Before the third amendment to Chinese patent law, the maximum for civil penalties was set at 500,000 Yuan, or about $62,500. But the number of patent infringement cases has continuously risen in China, and the maximum fine today is three times the infringer's income, which includes calculations of the infringer's profit and the patentee's losses. Despite this heightened ceiling, actual fines imposed average less than $800. Thus, what seems to be an effective penalty regulation is, in reality, not much of a deterrent.

In the criminal context, China's IP system is also lacking. Chinese law suggests criminal prosecution only if "the circumstances are serious." Such ambiguous statutory language allows for broad interpretation and generally results in overlooking infringement. In fact, local governments often pressure judges to utilize this broad discretion to ignore patent infringement cases before them. When a criminal prosecution is actually successful, the system allows for a three-year maximum sentence if "the circumstances are serious" and a seven-year maximum sentence if "the infringement is of 'a more serious nature.'" Once again, this broad statutory language leaves significant ambiguity and

129. Wu, supra note 1, at 560.
130. Bai, Wang & Chen, supra note 124, at 6 (stating that "claim construction and infringement analysis occur at trial, which might last between half a day and a couple of days").
132. Id.
133. Id. (stating that the number of IP infringement civil cases has increased from 5200 in 2001 to 7800 in 2002).
134. 2000 Patent Law, supra note 107, art. 58.
136. U.S. Trade with China: Hearing Before the Subcomm. on Trade of the H. Comm. on Ways and Means, 110th Cong. 13 (2007) (statement of Gerald Ritter, Senior Vice President of International Affairs, Pharmaceutical Research and Manufacturers Association) (commenting that patent infringement cases often are not tried for criminal liability, which results in very few criminal sanctions); see also Wu, supra note 1, at 563 ("In 2002, the courts had convicted infringers in less than one percent of the counterfeiting cases that administrative agencies had handled.").
137. 2000 Patent Law, supra note 107, art. 66.
139. Id.; Wu, supra note 1, at 563.
permits courts to exercise minimum enforcement penalties. Furthermore, local legislatures may enact their own IP laws, resulting in inconsistent IPRs across China.

C. A COMPARISON OF AMERICAN AND CHINESE PATENT LAW

In addition to the U.S. concern that China’s enforcement mechanisms are lacking, major differences between American and Chinese patent law have furthered tension and distrust between the two countries. These differences previously included defenses to infringement, patent priority, prior use rights, grace periods, and best-mode requirements. But two of these differences disappeared with the Leah Smith America Invents Act (AIA), the most significant change to U.S. patent law in decades.


President Barack Obama signed the AIA into law on September 16, 2011, thus eliminating two major differences between Chinese and American patent law that previously existed: (1) patent priority and (2) prior use rights. Although the new language has yet to be interpreted by courts, the AIA might actually soothe some of the tension between China and the United States that erupted from differing patent systems.

Most significantly, the AIA switched the U.S. patent system from “first to invent” to “first to file.” Thus, America’s patent priority laws now comport with China as well as most other countries around the world, moving it toward the international standard. This change will also greatly reduce patent litigation in the United States through the implementation of post-grant review proceedings.

141. Wu, supra note 1, at 563.
143. See Wu, supra note 1, at 561-62.
146. Id.; compare Wu, supra note 1, at 563, with Corbett, supra note 144, at 718-19.
148. See SCHACHT & THOMAS, supra note 144, at 8.
Secondly, the AIA also brought prior use rights into the American patent arena, a defense inherent in a first-to-file system.\textsuperscript{150} Previously, the American Patent Act employed a narrow prior use defense limited to infringement claims of business methods.\textsuperscript{151} The new statute greatly expands the prior use defense to include any good-faith commercial uses, arm's length sales, and commercial transfers that occurred at least one year before the earlier of either (1) the effective filing date of the patent application or (2) the inventor's public disclosure that is an exception to prior art under the AIA's limited grace period.\textsuperscript{152}

Despite these recent legislative changes that bring China and the United States closer into alignment, many significant differences in IP still exist between the two countries.\textsuperscript{153} The following sections will explore three of the most significant differences: infringement defenses, grace periods, and the best-mode requirement.

2. Defenses to Infringement in China and the United States

First, China provides defenses to infringement that are not available in the United States.\textsuperscript{154} The United States provides few specific defenses to infringement.\textsuperscript{155} Judicially created defenses include experimental use,\textsuperscript{156} inequitable conduct,\textsuperscript{157} and patent misuse.\textsuperscript{158} U.S. courts have generally justified these defenses on public policy grounds.\textsuperscript{159} In addition, 35 U.S.C. §§ 273 and 282 provide statutory defenses to infringement.\textsuperscript{160} Section 282 lists the most commonly used defenses to infringement that permit argument as to the validity of the patent.\textsuperscript{161} This type of argument depends on establishing bars to patentability, such as a finding of prior public use,\textsuperscript{162} obviousness of the invention,\textsuperscript{163} prior art,\textsuperscript{164}

\begin{thebibliography}{99}
\bibitem{151} American Invents Act: Prior Use Defense, supra note 150.
\bibitem{153} See supra section II(C) (stating that the major differences between the United States and China are definitions of infringement, grace periods, and prior user rights); see also Chow, supra note 135.
\bibitem{154} McCabe, supra note 38, at 21.
\bibitem{155} Id.
\bibitem{156} ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 321-25 (rev. 4th ed. 2007) (explaining that experimental use allows the inventor to use the product for the purpose of perfecting it or verifying its operability).
\bibitem{157} Id. at 325-31 (explaining that even where the court determines that infringement has occurred, the court may still choose not to enforce the patent if the patentee has engaged in inequitable conduct).
\bibitem{158} Id. 331-37 (explaining that patent misuse is an affirmative defense that broadly describes any misuse of a patent).
\bibitem{159} McCabe, supra note 38, at 21.
\bibitem{161} See id. § 282(2) (invalidity based on prior art); § 282(3) (invalidity based on failure to describe the invention clearly and with sufficiency).
\bibitem{162} Evans Cooling Sys., Inc. v. Gen. Motors Corp., 125 F.3d 1448, 1452 (Fed. Cir. 1997) (stating that prior public sale invalidated the patent).
\bibitem{163} KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 422 (2007) (combining prior art references to hold that respondent's patent was invalid for obviousness).
\bibitem{164} Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1282 (Fed. Cir. 2000) ("[I]nvalidity by anticipation requires that the four corners of a single, prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.").
\end{thebibliography}
and non-patentable subject matter.\textsuperscript{165} Section 273 previously only allowed a defendant to argue prior use of a business method, an exceedingly narrow defense.\textsuperscript{166} But the AIA has expanded prior use rights under § 273 to apply broadly to infringement for commercial purposes.\textsuperscript{167}

In comparison to U.S. law, Chinese patent law expands upon these defenses significantly.\textsuperscript{168} These defenses are often nebulously worded and provide vague limitations.\textsuperscript{169} Most notably, a general provision of Chinese patent statutes proscribes patents that are "contrary to the laws of the state or social morality or that [are] detrimental to public interest."\textsuperscript{170} This vague statutory defense permits courts to invalidate a patent ad hoc if sharing the invention is determined "to promote the progress and innovation of science and technology, and meet[s] the needs of the socialist modernization drive."\textsuperscript{171} Furthermore this ambiguity is a catchall provision that gives the government the right to permit exploitation of the invention "where public interest so requires."\textsuperscript{172}

Chinese statutes also expand on U.S. infringement defenses by implementing two "innocent infringer" defenses.\textsuperscript{173} The first provides a defense to an infringer who, before the filing date, "has already manufactured identical products, used identical method[s], or has made necessary preparations for the manufacture or use and continues to manufacture the products or use the method within the original scope."\textsuperscript{174} Although there is a somewhat analogous principle under U.S. trademark law,\textsuperscript{175} there is no such defense in U.S. patent law unless the patent itself is invalid due to prior use.\textsuperscript{176}

Second, under Chinese patent law an infringer may be innocent if he or she does not know "that [the invention was] produced and sold without permission of the patentee."\textsuperscript{177} The statute explicitly rules out damage awards, stating that the infringer "shall not be liable for compensation provided that the legitimate source of the product can be

\textsuperscript{165} In re Bilski, 545 F.3d 943, 949 (Fed. Cir. 2008) (en banc), aff'd sub nom., Bilski v. Kappos, 130 S. Ct. 3218 (2010).

\textsuperscript{166} 35 U.S.C. § 273(b) (2006) (stating that business method patents may not be enforced against certain prior users).


\textsuperscript{168} McCabe, supra note 38, at 21.

\textsuperscript{169} Id. at 22.

\textsuperscript{170} 1984 Patent Law, supra note 62, art. 5; cf. id. art. 45. ("[I]f a unit or individual believes that such grant does not conform to the relevant provisions of this Law, it or he may request that the patent review board declare the said patent right invalid.").

\textsuperscript{171} Id. art. 1; see generally KARLA C. SHIPPEY, A SHORT COURSE IN INTERNATIONAL INTELLECTUAL PROPERTY RIGHTS; PROTECTING YOUR BRANDS, MARKS, COPYRIGHTS, PATENTS, DESIGNS, AND RELATED RIGHTS WORLDWIDE (3d ed. 2009).

\textsuperscript{172} 1984 Patent Law, supra note 170, art. 49.

\textsuperscript{173} McCabe, supra note 38, at 23.

\textsuperscript{174} 1984 Patent Law, supra note 170, art. 69(2).

\textsuperscript{175} See Weiner King, Inc. v. Wiener King Corp., 615 F.2d 512, 523 (C.C.P.A. 1980) (holding that a business may use its trademark in any geographic area except that of another entity holding a prior similar mark).

\textsuperscript{176} See Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370, 1373 (Fed. Cir. 1998) (holding that a claim of prior use ineffective and stating that "in order to invalidate a patent based on prior knowledge or use, that knowledge or use must have been available to the public").

\textsuperscript{177} 1984 Patent Law, supra note 170, art. 63.
proved." The language does leave open the possibility for injunctive remedies. But once again, the statutory language is not entirely clear as to the scope of the defense. Interpreted broadly, infringers may claim ignorance in order to validate their actions. This type of attitude creates a risk of fraud, discouraging an infringer from investigating its suppliers and encouraging willful blindness. Therefore, although China does not employ stare decisis, and thus lacks any judicial defenses to infringement, China's statutory defenses greatly outnumber the defenses available in the United States and provide for a comparatively weaker IP system.

3. The Grace Period

China and the United States also differ in terms of the "grace period," a statutory exception in the United States that gives an inventor one year to freely publicize his or her invention in the market without waiving any patent rights. This is an exemption from the general rule that a patent shall not be issued for an invention that is already publicly available. For example, a patent will not be issued in the United States for an invention that was described in a printed publication anywhere in the world more than one year before the application was filed in the country. Additionally, a patent will not be issued in the United States for an invention that was in public use or on sale in the country more than one year before the file date. The purpose of this one-year grace period is to allow the inventor to attract investors, to tweak the invention, and to develop market strategies. The grace period starts when the inventor or a third party runs a printed publication of the invention, initiates public sale, or initiates public use.

The implementation of the America Invents Act has altered grace periods only slightly, although the real effect of the Act remains to be seen. After much Congressional debate, the AIA grace period does not change the one-year time period. But the final version of the AIA redefines what disclosures inventors can make. Commentators note that this section of the AIA is highly ambiguous, and inventors will have to wait and see how courts will interpret the language.

Regardless of the future implications of the AIA, China differs starkly from the United States because it lacks a grace period entirely for public use, public availability, or printed

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178. Id.
179. Id.
180. See McCabe, supra note 38, at 24.
181. Id.
183. Wolfe, supra note 182.
184. Corbett, supra note 144, at 719.
185. Id.
186. Id.
187. Id.; SCHACHT & THOMAS, supra note 144, at 16.
188. Wolfe, supra note 182.
190. Wolfe, supra note 182.
191. Id.
In China, a patent will not be issued at all for an invention that has been publicly used, publicly known, or disclosed in a publication in any country.\footnote{192} As a result, Chinese inventors must file for patents before they publish any information about their inventions.\footnote{193} But there are three limited exceptions that provide an inventor with a six-month grace period.\footnote{195} Such a grace period is issued where an invention (1) was first exhibited at a Chinese Government sponsored or recognized international exhibition, (2) was first made public at an approved academic or technological meeting, or (3) was disclosed without the applicant’s consent (“innocent infringer”).\footnote{196}

For example, GlaxoSmithKline was forced to drop its claim that Chinese companies were infringing on its patent of Avandia, a diabetes drug.\footnote{197} The claim failed because the company had published information about the drug before filing for a patent.\footnote{198} Therefore, the novel elements essential to Avandia were available to the public, and Chinese patent law considered them free to be appropriated for commercial use.\footnote{199}

4. Best Mode Requirement

Finally, the AIA modification of U.S. patent law has widened the differential gap between the best mode requirement in China and the United States.\footnote{200} The AIA eliminated the “best mode analysis” as a basis for invalidity.\footnote{201} Before this change, infringers could assert “the defense that the patent [was] invalid because the patentee failed to disclose the best mode of practicing the invention.”\footnote{202} Although the best mode defense is no longer available to invalidate patents, § 112 still requires a patentee to comply with the best mode requirement through disclosure.\footnote{203} The new law simply states that a failure to do so does not result in invalidation.\footnote{204} Language eliminating the best mode requirement was first introduced in the Patent Reform Act of 2007 by Representative Mike Pence.\footnote{205} Analysis

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\footnotetext[193]{Id. ("Any invention that has been publicly known or used in China, or disclosed in a publication anywhere in the world is excluded from patent protection.").}
\footnotetext[194]{Id. at 10-11.}
\footnotetext[195]{1984 Patent Law, supra note 170, art. 24.}
\footnotetext[196]{Id.}
\footnotetext[198]{Wu, supra note 1, at 565-66.}
\footnotetext[199]{Id.}
\footnotetext[200]{Id. at 566-67.}
\footnotetext[201]{Zahra Hayat, Matthew Kreeger & Eric Walters, How the America Invents Act Will Change Patent Litigation, 18 WESTLAW J. INT’L PROP., 1, at *1 (Nov. 16, 2011), available at 18 No. 15 WJINTPROP 1 (Westlaw).}
\footnotetext[202]{Id.}
\footnotetext[203]{Id.; 35 U.S.C. § 112 (2006).}
\footnotetext[204]{Hayat, Kreeger & Walters, supra note 201, at *1.}
\end{footnotes}
of this language provides the rationale for removing the best mode invalidity defense.\textsuperscript{206} Removal of this defense not only reduces the burden on courts, but also prevents an abusive, overly litigious system that encourages defendants to attempt to invalidate patents.\textsuperscript{207} The danger of such a system is that it detracts from the infringement itself and costs American inventors millions of dollars in legal fees.\textsuperscript{208}

In contrast, the Chinese patent law's best mode requirements are much stricter, thereby making it easier for a defendant to invalidate a patent on this basis.\textsuperscript{209} "Under Chinese patent law, the applicant is required to disclose enough information to enable a person skilled in the relevant field of technology to understand and exploit the invention."\textsuperscript{210} Specifically, the patentee must describe "in detail the optimally selected mode contemplated by the applicant for carrying out the invention or utility model."\textsuperscript{211} As a noteworthy example, SIPO invalidated Pfizer's Viagra patent because, instead of one ingredient, it listed nine compounds as "particularly preferred individual compounds."\textsuperscript{212} It was therefore not sufficiently descriptive under Chinese patent law.\textsuperscript{213} Subsequently, the Patent Reexamination Board (PRB) did overturn SIPO's decision and validate Pfizer's Viagra patent.\textsuperscript{214} But the initial conflict represents an example of differences in best mode requirements. After the AIA's abolition of best mode invalidation is implemented, U.S. patent law will be further polarized from Chinese patent law, which more easily permits patent invalidation based on failure to meet China's strict best mode requirements.

\section*{III. Future: The Need for a Fourth Amendment?}

In the face of China's apparent progress, scholars still debate whether the latest amendment to its patent law is enough.\textsuperscript{215} Some contend that the Third Amendment falls short of addressing China's full spectrum of patent problems, while some believe it adequately resolves the prominent legal gaps left by the second amendment.\textsuperscript{216}

\begin{thebibliography}{99}
\bibitem{207} Id. at 157-58.
\bibitem{208} Id. at 133, 141-42, 153.
\bibitem{209} Wu, supra note 1, at 567.
\bibitem{210} Id.
\bibitem{213} Id.
\bibitem{215} Bai, Wang & Chen, supra note 124, at 72-73; Wu, supra note 1, at 585.
\bibitem{216} Bronshtein, supra note 101, at 444-45, 447.
\end{thebibliography}
For example, Benjamin Bai, author of *What Multinational Companies Need to Know about Patent Invalidation and Patent Litigation in China*, optimistically comments that the Third Amendment will resolve many of the previous deficiencies in Chinese patent law. He attempts to deflate the belief that Chinese courts favor domestic plaintiffs and encourages foreign investors to familiarize themselves with China's IP system to utilize its patent laws for protection. Other proponents claim that the new absolute novelty requirement will relieve the concerns that international companies have regarding Chinese patents of their ideas and, therefore, encourage foreign investment.

However, many call into question the adequacy of the Third Amendment because of doubts that the new regulations will be enforced on a local level. These scholars believe that local governments fall victim to the pressures of an economy that depends on counterfeiting or other types of infringement. Counterfeitors provide indirect financial benefits to their local economies by putting their profits back into the system—patronizing restaurants, shops, and generally acting as local consumers. Furthermore, local officials are not only known for accepting bribes to look the other way, but sometimes participate firsthand in the counterfeiting business. Without a centralized government that enforces its patent laws at a local level, local Chinese governments will continue to operate as they always have.

Proponents of a fourth amendment encourage the central government to take a stand in several ways. One solution would be to re-route funding previously given to local governments directly into administrative agencies to ensure it is being used for enforcement. Additionally, a uniform SIPO training program could be implemented to remove the disparities between different SIPO locales. Specific solutions such as these could help wean local economies off counterfeiting and encourage creative development at the regional level.

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218. Id.
219. See Wu, *supra* note 1, at 584 (“Under the absolute novelty requirement, Chinese companies cannot file for a drug patent if the drug has been patented elsewhere in the world.”).
221. Bronshtein, *supra* note 101, at 459 (“[T]his central level authority is comprised mainly of legislative and policy-making bodies, while actual implementation and enforcement of law occurs at the local level.”); see Maria Nelson et al., *Counterfeit Pharmaceuticals: A Worldwide Problem*, 96 TRADEMARK REP. 1068, 1089 (2006) (“Enforcement efforts, particularly at the local level, are hampered by poor coordination among Chinese Government ministries and agencies, [and] local protectionism and corruption . . . .”).
223. Id. at 460.
224. Id. at 459-60; Evans, *supra* note 101, at 591 (stating that “many local officials directly profited from piracy through kickbacks and bribes, while other high-ranking officers were involved firsthand in the production of illegal goods and services”).
227. Id. at 591.
228. Id.
Thus, while the Third Amendment represents a significant step toward developing a rigorous IP regime, it will remain largely ineffective unless local government autonomy and corruption is dissolved.²²⁹

IV. Conclusion

Considering China’s tumultuous political and cultural background in the past century, its IP regime has developed relatively rapidly. International trade concerns that China will continue to infringe global IPRs should be tempered with the understanding that China’s IP system is one of the youngest in the world. China has taken several solid steps toward rebuilding its IP laws. First, China has joined the WTO and several international intellectual property organizations to show its dedication to implementing IPRs. Second, China implemented its first patent law since the end of the Communist Regime in 1984. Finally, China has amended this law twice in response to international complaints that its laws were ineffective.

Despite these efforts, China’s patent laws are still not sufficient. Although the Third Amendment promises to make vast improvements to China’s patent law, the enforcement problem in China will persist as long as local government infrastructure is left untouched. To address the enforcement problem, China’s centralized government should assert regulations by directing funding away from unstable local governments and toward administrative agencies. The government should also ensure that SIPO is uniformly training officers and enforcing regulations throughout the country. Although these changes cannot happen overnight, an initial recognition of the root of the problem is necessary to ensuring a sustainable IP regime in China’s future.

²²⁹. See id. at 589 (asserting that “Chinese patent law will continue to be ineffective as long as local government corruption and protectionism exists”).

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