

Alan R. Singleton, Esq. singleton@singletonlawfirm.com

2001 South First Street, Suite 209, Champaign, IL 61820, USA

phone 217-352-3900 fax 217-352-4900

# **Patenting in the United States**

### I. INTERNATIONAL

Owning a patent only gives protection for that invention in the country where the patent was granted.<sup>1</sup> Therefore, an inventor must file for a patent in each country in which protection is desired by a deadline specified by that country.<sup>2</sup> Usually, the filing must be done before any "public disclosure" of the invention. This creates difficulties in filing patents in a foreign country due to time and financial constrains. Fortunately, international treaties have been created to ameliorate that problem.

### A. Paris Convention and the PCT

Both China and the United states entered into the Paris Convention for the Protection of Industrial Property treaty (Paris Convention).<sup>3</sup> The key concept to arrive from this treaty is the "claim to priority"<sup>4</sup> which allows for a patent owner to still be able to file a patent as if it were filed on the original day in a member country within a certain grace period.<sup>5</sup> The original date is known as an effective filing date.<sup>6</sup> The grace period for filing a foreign patent is six months for a design patent or a trademark and one year for a utility patent.<sup>7</sup> Therefore, an inventor can file a patent in his or her home country, release it to the public for sale, and still file a patent in a foreign country if it is within the grace period even though the patent has been publicly disclosed.

The United States and China are also part of the Patent Cooperation Treaty (PCT).<sup>8</sup> This treaty provides a uniform filing procedure for international patents known as the "International Patent Application." However, this treaty is only effective with inventions, not design patents or trademarks. Applying for a patent under the PCT acts as an effective filing of all member states. Unfortunately, this application merely prolongs the time allowed to file a patent in the other counties, it does not act as an actual "international patent." National Stage Applications must still be filed in each country where the patent is desired to take effect. In the end, the application gives an additional eighteen months to file a patent beyond the initial twelve months from the Paris Convention.

## B. The TRIPS Agreement

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is the newest international patent treaty. <sup>15</sup> In order to become a member of the World Trade Organization (WTO), a country needs to ratify the TRIPS agreement. <sup>16</sup> Therefore, in order to have access to the international markets granted by the WTO, both the United States and China have ratified the treaty. <sup>17</sup>

Three main standards come from the TRIPS treaty. First, the treaty sets out a minimum standard of intellectual property procedural protection for ratifying countries. Next, the treaty sets out enforcement rules, policies, and remedies to protect intellectual property. Finally, the treaty sets out the WTO dispute settlement procedures which govern all disputes on the TRIPS treaty.

#### II. PATENT LAW IN CHINA

Patent law in China is constantly updating; the most recent amendments to the law arrived in 2009.<sup>20</sup> These amendments were brought about to help increase protection of patents in China and to align Chinese patent law more with the international standard.

In order to receive a patent, a product must possess novelty, inventiveness, and practical applicability.<sup>21</sup> Novelty requires that the product has not been publicly disclosed in China before the date of the filing.<sup>22</sup> To have inventiveness, a product must have substantial differences from other technology and must represent "notable progress."<sup>23</sup> The requirement of practical applicability means that the product must produce effective positive results.<sup>24</sup>

Chinese patent law contains three types of patents: inventions, utility models, and designs.<sup>25</sup> The rights to an invention patent last for 20 years from the date of filing and 10 years for the utility and design patents.<sup>26</sup> Throughout the duration of a patent, an inventor must pay an annual fee to maintain it.<sup>27</sup> A patent can be lost if the fees are not paid or if an entity or individual challenges it and the Patent Reexamination Board declares the patent invalid.<sup>28</sup>

The 2009 amendment will update and improve some of the current deficiencies of patent law in China. Chinese individuals and entities will no longer have to file an application for a Chinese patent for inventions made in China before filing elseware.<sup>29</sup> The inventor will be able to apply to a foreign company first, though the invention will still have to be reviewed by Chinese authority before it is given out of the country.<sup>29</sup>

Also, the novelty requirement will be tightened as the new requirement changes the law from "publicly disclosed in China" to "publicly disclosed anywhere." Furthermore, the new amendments have added articles to more effectively strengthen enforcement of patent rights in China. <sup>31</sup>

Finally, criminal penalties can be inflicted for violations that pose a serious harm to society.<sup>32</sup> However, the actual deterrent effects of the penalties are unclear at this point.<sup>33</sup>

## III. PATENT LAW IN THE UNITED STATES

## A. Basics

In the United States, anyone can apply to the United States Patent and Trademark Office (USPTO) for a patent as long as they are the true inventor.<sup>34</sup> In the United States there are three types of patents: utility, design, and plant.<sup>35</sup> Utility patents are actual inventions, design patents cover the shape and surface of an object, and plant patents cover uniquely created plants.<sup>36</sup>

The USPTO created four legal requirements to obtain a patent in the U.S. The first is that it must be within a certain statutory class.<sup>37</sup> This includes processes, machines, manufactures, compositions, and new uses of any of the previous.<sup>38</sup> These classes are very broad and comprehensive and most new inventions fit into them without any problems.<sup>39</sup> The next requirement is utility.<sup>40</sup> Any invention will pass this test as long as there is a functional usefulness.<sup>41</sup> This is done to weed out immoral, illegal, non-operable, and nuclear inventions.<sup>42</sup> The third requirement is novelty, in which the invention must be different in some way from any other publicly available

invention, known as prior art.<sup>43</sup> The final requirement is that of un-obviousness, which means that the difference in the invention must have be substantial and significant.<sup>44</sup>

In the U.S. utility and plant patents last for 20 years from the date of the filing while design patents last 14 years from the date of issuance.<sup>45</sup> During this time of ownership, an inventor may have to pay some maintenance fees, as well as the initial patent filing and application fees.<sup>46</sup>

Once an inventor receives the patent, there is no absolute guarantee of a monopoly over the invention. The patent can be lost if: 1. fees are not paid, 2. the patent does not adequately describe the invention, 3. prior art is found, 4. the inventor engages in illegal activity, and 5. the application was committed under fraud.<sup>47</sup>

The official set of Patent laws can be found under the United States Code Title  $35.^{48}$ 

# **B.** Unique Aspects

The United States has more lawsuits than any other country including a 2007 estimate of 2000-3000 patent suits.<sup>49</sup> The owner of a patent can file for a lawsuit for any infringement that occurs in the U.S., which may include some foreign activities which affect domestic sales.<sup>50</sup> Plaintiffs in a patent lawsuit have two major goals: injunctions and/or monetary damages.<sup>51</sup>

Patent lawsuits can be tried before a federal district court or the International Trade Commission (ITC), both which follow the Federal Rules of Civil Procedure.<sup>52</sup> From the Rules, the district courts need to look to see if they have jurisdiction over the parties.<sup>53</sup> The ITC deals only with the importation of goods, so proper jurisdiction is not

a requirement.<sup>54</sup> The district courts are presided over by a federal judge whereas the ITC cases are decided by an Administrative law judge.<sup>55</sup> ITC cases generally take a year or more to be decided whereas district courts can take several years.<sup>56</sup>

## C. Foreign Inventors in the United States

An inventor of a patent will not be discriminated against with respect to the citizenship of the inventor.<sup>57</sup> Any foreign inventor can apply for a patent on the same basis as a United States citizen.<sup>58</sup> Nonetheless, United States patent law contains different requirements than other foreign countries.

If a patent is filed in a foreign country, a U.S. patent can only be obtained if a U.S. application is on record within a specific grace period after the original filing.<sup>59</sup> But if the patent is filed in that time, the U.S. patent will have the same legal force as if the patent was granted at time of the original filing in the foreign country.<sup>60</sup> Also, a patent applicant must make an oath or declaration for every application disclosing any prior patent filing in another country.<sup>61</sup> There are also distinct rules for oaths given in a foreign country.<sup>62</sup> Finally, a foreign patent applicant may be represented by an United States patent attorney or agent.<sup>63</sup>

## IV. MAJOR DIFFERENCES AND DIFFICULTIES

### A. The Basics

The United States has 195 more years of patent history than that of China and therefore the two systems of law have differences between them.<sup>64</sup> A basic comparison is shown in the table below.

No.	Contents	US	China
1	Subject of patent protection	Very wide	Wide
2	Plants and animals patent	yes	no
3	Term extension for drug patent	yes	no
4	Clinical trial data protection	5 years +3	6 years
5	First for file	no	yes
6	Unauthorized license	no	yes
7	Special IP Appeal Court	yes	no
8	Court litigation parties for invalidation	Original parties	PRB-defendant

Also, the laws differ in what types of "things" can be patented in the two countries. In the U.S., there are utility patents, design patents, and plant patents.

However, in China there are invention patents, utility model patents, and design patents. Each type of patent also has differing lengths of protection. For utility patents and patents for inventions, both countries have a term of 20 years. For design patents, the U.S. protects for 14 years whereas China protects for 10 years. In the United States, plant patents have a length of 20 years and in China utility model patents have a 10 year life span.

## B. Rights of the Applicant and Prior Art

China and the U.S. also differ in the rights of the applicant. In the U.S., the only person eligible for a patent is the person who thinks they are the original inventor or an assignee.<sup>70</sup> The patent is filed by this person and the patent is then issued to that same person.<sup>71</sup> On the other hand, in China an entity, such as the employer of a worker who used the employers resources to create the invention, can apply directly for a patent as well as the inventor for non service patents.<sup>72</sup>

Also, in the United States, the first person to invent is the one who the patent is granted to whereas in China the first person to file can be granted the patent.<sup>73</sup>

Therefore, if two inventions were created separately, the senior inventor would prevail in the U.S. but whoever filed the application first would win in China.

In the U.S. prior art is considered publication anywhere in the world prior to the date of invention or public use or sale more than one year before the filing date.<sup>74</sup> In China, there is no 1 year grace period for sale.<sup>75</sup> However, China does have a six month exceptions for academic meetings or international exhibits which the United States does not have.<sup>76</sup>

# C. Patentable Subjects

The majority of un-patentable subjects in the United States are the same as in China. However, China is more restrictive as they do not allow for patents of plant and animal varieties or for methods of diagnosing or treating diseases, unlike the U.S.<sup>77</sup>

Another major difference between the two counties is in the patenting of software and pure business methods. In China, pure software and pure business methods are not

allowed to be patented unless there is a combination of software and hardware.<sup>78</sup> This is unlike patenting in the U.S. which allows for software and business method patents as long as there is a "practical application."<sup>79</sup>

# D. Substantive Requirements

As mentioned above, the novelty requirement in the United States differs from the China as there is a one year "grace period" for patents in the U.S. <sup>80</sup> This allows for more leniency in the publication or commercialization of an invention in the U.S.

There is also a difference in the "non-obvious" requirement for patents between the two countries. In China, the invention must be substantively different before the date of filing.<sup>81</sup> However, in the United States, the requirement applies at the time the invention was made, not at the time of filing.<sup>82</sup> Also, China's standard of inventiveness is lower than the United States standard of non-obvious.<sup>83</sup>

In China there is a practical application requirement which states that an invention must be able to be manufactured or used in industry for a positive result.<sup>84</sup> In the U.S., there is only a utility requirement which requires the patentable invention to be useful, which distinguishes harmful and beneficial inventions.<sup>85</sup> Therefore, this requirement is more lax in the United States than in China.

### E. Appeal Re-examination and the Courts

In both countries there is a standard examination process and an appeals process in the application for a patent.<sup>86</sup> A major difference between the two is that in China an inventor can appeal after one rejection whereas in the U.S. two rejections are needed.<sup>87</sup> Also, patents can be granted through civil action in the United States

whereas they cannot in China.<sup>88</sup> Finally, in the United States an inventor can request for a continuous application whereas this is not possible in China.<sup>89</sup>

Another major difference between the U.S. and China is that the U.S. has a centralized appellate court system. This allows for more uniform decision making on patent cases whereas in the Chinese system there is a possibility of different decisions for identical cases. <sup>90</sup>

Finally, the U.S. courts have a formal process for the discovery of evidence whereas China does not.<sup>91</sup> In the United States, each party conducts discovery based on the Federal Rules, whereas in China the judges conduct discovery.<sup>92</sup> Also, the United States allows more access to confidential business information than does China.<sup>93</sup>

#### V. CONCLUSION

China is strongly developing its patent laws, but the United States has been established for a much longer period of time. International treaties have helped to unify and streamline the process for foreign patents in which both countries have ratified. While there are some key differences between the two systems, the basic premise is the same: to protect the rights of the inventor.

- 1. Ladas and Perry, *Protecting Technology and inventions Internationally*, 2005, http://www.ladas.com/Patents/patintl.html.
- 2. Id.
- 3. Elizabeth Chien-Hale, Intellectual Property Aspects of Doing Business in China, PLI, 2007.
- 4. Ladas and Perry, supra note 1.
- 5. *Id*.
- 6. *Id*.
- 7. Id.
- 8. Chien-Hale, supra note 3.
- 9. World Intellectual Property Organization, Member States, http://www.wipo.int/members/en/.
- 10. Ladas and Perry, supra note 1.
- 11. *Id*.
- 12. Id.
- 13. Id.
- 14. *Id*.
- 15. World Trade Organization, *Overview: The TRIPS Agreement*, http://www.wto.org/english/tratop\_e/trips\_e/intel2\_e.htm.
- 16. Id.
- 17. World Trade Organization, *FAQS*, http://www.wto.org/english/tratop\_E/TRIPS\_e/tripfq\_e.htm#Who'sSigned.
- 18. WTO Overview, supra note 15.
- 19. Id.
- 20. Sutherland, The Third Amendment to the Chinese Patent Law, LEGAL ALERT 2009.
- 21. Patent Law of the People's Republic of China
- 22. Id.
- 23. Id.
- 24. Id.
- 25. Id.
- 26. *Id.*
- 27. Id.
- 28. Id.
- 29. Sutherland, supra note 20.
- 30. Id.
- 31. Id.
- 32. Chien-Hale, supra note 3.
- 33 Id
- 34. David Pressman, Patent it Yourself, 2005.
- 35. Id.
- 36. Id.
- 37. Id.
- 38. *Id.*
- 39. *Id.*
- 40. *Id.*
- 41. *Id.*
- 42. *Id.*
- 43. *Id*.
- 44. *Id.*
- 45. *Id.*
- 46. *Id.*
- 47. Id.

- 48. U.S.C. tit. 35.
- 49. Yoches E. Robert, *Unique Aspects of U.S. Patent Litigation*, China Legal Review, 2007.
- 50. Id.
- 51. *Id.*
- 52. *Id*.
- 53. Id.
- 54. *Id.*
- 55. Id.
- 56. *Id.*
- 57. United States Patent and Trademark Office, *General Information Concerning Patents*, 2005, <a href="http://www.uspto.gov/go/pac/doc/general/#foreign">http://www.uspto.gov/go/pac/doc/general/#foreign</a>.
- 58. *Id.*
- 59. Id.
- 60. *Id.*
- 61. *Id*.
- 62. Id.
- 63. *Id*.
- 64. Lulin Gao, Comparison Between Patent Systems of China and the United States, 2008.
- 65. -90. *Id.*
- 91. Yoches E. Robert, *Unique Aspects of U.S. Patent Litigation*, China Legal Review, 2007.
- 92. Id.
- 93. Id.