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Cover Page Footnote

The author is grateful for the guidance and support of William T. Fryer, III, Professor of Law, University of Baltimore School of Law, Baltimore, Md. The author also wishes to acknowledge Yoichiro Yamaguchi, Esq., Beveridge, DeGrandi, Weilacher & Young, Washington, D.C., for his comments on this Article.

ARTICLE

Japanese Patent Law and the WIPO Patent Law Harmonization Treaty: A Comparative Analysis

Mark S. Cohen*

A country without a patent office and good patent laws is just a crab, and couldn't travel any way but sideways or backwards.¹

INTRODUCTION

A patent is a grant of privilege or authority by a government to one or more individuals which precludes others from manufacturing, using, or selling the patentee's invention without a license.² The granting of a patent can provide the impetus and incentive for an individual or company to invest substantial sums of capital in the technology.³ In Japan, as in the United States, patents are not only central to the advancement of science but they are also pivotal

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1. MARK TWAIN, A CONNECTICUT YANKEE IN KING ARTHUR'S COURT 118 (Bernard L. Stein ed., Univ. of Cal. Press 1979) (1889).

2. See BLACK'S LAW DICTIONARY 1125 (6th ed. 1990).

3. Friedrich-Karl Beier & Joseph Straus, *Patents in a Time of Rapid Scientific and Technological Change: Inventions in Biotechnology*, in BIOTECHNOLOGY AND PATENT PROTECTION 15, 17 (Organization for Economic Cooperation and Development [OECD] 1985).

to the development of technology.⁴

Generally, three parties are involved in the granting of any patent: the private inventor, the government, and industry.⁵ The degree of each party's involvement varies, depending upon the philosophy of the particular patent system involved.⁶ Japan and the United States diverge in the philosophies underlying their patent law systems and the manner in which each system attains the goal of promoting scientific progress. Japanese patent law emphasizes the industry-government relationship whereas American patent law emphasizes the inventor-government relationship.⁷ Although this Article does not focus on U.S. patent law, a brief summary of the American approach provides a background against which Japanese patent law can be better understood.

The United States patent system encourages individual innovation and the advancement of technology by rewarding and protecting individual entrepreneurs.⁸ When the first patent laws of the United States were enacted in 1790,⁹ a quid pro quo between the government and the individual inventor was established. This quid pro quo requires that an individual disclose his or her invention to the public in exchange for a governmental grant of a limited monopoly, which includes the right to exclude others from making, using or selling the invention.¹⁰ Thus, in the United States, a contract is established between the government and the individual.

Conversely, Japanese patent law encourages the creation of "inventions by promoting their protection and utilization so as to

4. See Donald S. Chisum, *Introduction: The Harmonization of International Patent Law*, 26 J. MARSHALL L. REV. 437, 450 (1993).

5. See Samson Helfgott, *Cultural Differences Between the U.S. and Japanese Patent Systems*, 72 J. PAT. OFF. SOC'Y 231, 235 (1990).

6. *Id.* at 236.

7. *Id.* at 234.

8. See Chisum, *supra* note 4, at 447.

9. Patent Act of 1790, §§ 1-7, 1 Stat. 109-12 (1790) (repealed 1793).

The grant of power for the United States patent laws is based on the Constitution. It states that "Congress shall have Power . . . [t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

10. See, e.g., *Scott Paper Co. v. Marcalus Mfg. Co.*, 326 U.S. 249, 255 (1945).

contribute to the development of industry.”¹¹ In Japan, the granting of a patent is not viewed in a contractual sense with obligations flowing between the parties involved. Rather, patents are granted under a “rights confirming” doctrine, wherein an applicant (i.e., industry) requests a patent and the government confirms that the applicant has the exclusive right to exclude others.

During the evolution of Japan’s economy from a developmental stage into a highly sophisticated economy, the patent laws paralleled the level of change in the economic structure so as to contribute to the nation’s progress.¹² The Japanese patent system is “systematic” and “fully interwoven” into the economic and cultural fabric of the country.¹³ As Zenji Kumagai, former Commissioner of the Japanese Patent Office (“JPO”), pointed out:

[T]he significance of the patent system for the development of the Japanese economy is obvious, when one considers

11. TOKKYOHŌ (Patent Law), Law No. 121 of 1959, § 1, *translated in* JAPANESE LAWS RELATING TO INDUSTRIAL PROPERTY (AIPPI Japan 1992) [hereinafter Japanese Patent Law]. An “invention” is defined under Japanese patent law as “the highly advanced creation of technical ideas by which a law of nature is utilized.” *Id.* § 2(1). A technical idea is

[n]ot strictly applied, it is different from a scientific idea. It is enough for a scientific idea to be established academically, but a technical idea must be safely operable in the industrial field. The subject invention is insufficiently described in the Patent specification in that the means for avoiding accidents and securing its safety is not concretely disclosed. Therefore, the disclosure lacks sufficient detail for operating the generator safely in the industrial field. accordingly it should be regarded as an incomplete technique.

Judgment of Jan. 28, 1969 (Commissaire à l’Energie Atomique v. Patent Office (Atomic Energy Generator Case)), Saikōsai [Supreme Court], 23 Minshū 52.

12. See Duane W. Layton, Note, *Japan and the Introduction of Foreign Technology: A Blueprint for Less Developed Countries?*, 18 STAN. J. INT’L L. 171 (1982). For a discussion of the history and development of Japan’s patent laws, see Guntram Rahn, *The Role of Industrial Property in Economic Development: The Japanese Experience*, 14 INT’L REV. INDUS. PROP. & COPYRIGHT L. [I.I.C.] 449 (1983); see also Japanese Group, *Introduction of New and Harmonization of the Existing Utility Model Protection Systems*, in V AIPPI ANNUAL 62-65 (1993); Chen Ruifang, *The Utility Model System and Its Benefits for China—Some Deliberations Based on German and Japanese Legislation*, 14 I.I.C. 493 (1983); Carter Mackley, Note, *The Role of the Patent System in Technology Transfer: The Japanese Experience*, 26 COLUM. J. TRANSNAT’L L. 131 (1987).

13. ARTHUR WINEBURG, *INTELLECTUAL PROPERTY PROTECTION IN ASIA* § 2.01, at 2-2 (1991).

that 60 percent of Japan's economic growth after the end of [World War II] is considered to be attributable directly to technological progress, and that most of the technology that Japan introduced from abroad was patented.¹⁴

In addition, the JPO, indicating the importance of technology transfer,¹⁵ stated that:

The patent system exercises great influence on technological innovation. To establish the basis for a technology state, it is necessary to protect the results of our own technological development internationally, and also to accumulate bargaining power, i.e. technological negotiating power. Thus the qualitative improvement of patent management [and] the strategic implementation of the patent system, become increasingly important.¹⁶

The Japanese patent system may give Japanese firms, active in technological development (e.g., biotechnology), "a long competitive edge" over other countries, such as the United States.¹⁷

Japanese patent law has been termed the "non-tariff" barrier to foreign businesses due to its restrictive patent practices.¹⁸ Ameri-

14. Rahn, *supra* note 12, at 490.

15. "Technology transfer" is the application of knowledge necessary for the productive functioning of an enterprise via engineering, management, and marketing techniques. Implicit in this definition is the efficient relationship between the inventor and those entities who apply the technology. Maximization of technology transfer surfaces when technology is transmitted, received, and applied in a direct, efficient, and rapid manner. The result of technology transfer is the stimulation and development of a country's economic base. See Mackley, *supra* note 12, at 131.

16. Rahn, *supra* note 12, at 489 n.85 (quoting Kidokoro Hiroshi, *Jishu Gijutsu Kahatsu ni Okeru Tokkyo Kanri Jokyo [The Situation of Patent Management Concerning Self-Developed Technology]*, 31 TOKKYO KANRI 1347 (1981)).

17. *Intellectual Property Rights and U.S.—Japan Competition in Biotechnology: Report of a Workshop* (National Research Council, Washington D.C., Jan. 18, 1991) [hereinafter *1991 IPR Report*]; see also STEPHANIE EPSTEIN & JAMES M. JONES, *INTELLECTUAL PROPERTY AT A CROSSROADS: GLOBAL PIRACY AND INTERNATIONAL COMPETITIVENESS* 87-95 (Congressional Economic Leadership Inst. 1990).

18. See Michael Todd Helfand, *How Valid Are U.S. Criticisms of the Japanese Patent System?*, 15 HASTINGS COMM. & ENT. L.J. 123 (1992). For an in-depth analysis of Japanese patent law practice, see MASAMI HANABUSA, *AN ANALYSIS OF JAPANESE LAW: TRANSLATED FROM THE ORIGINAL TREATISE* (1992); AM. INTELL. PROP. L. ASS'N

can critics of the Japanese patent system argue that the Japanese view their patent system simply as a vehicle by which to accelerate the development of technology in order to benefit Japanese industry as a whole.¹⁹ Moreover, such critics find that the Japanese patent system institutionalizes discrimination at each turn of the Japanese patent application process.²⁰ As one American chief executive officer has stated, "U.S. companies entering the Japanese market with the expectation of American-style protection are in for a rude awakening."²¹

A venue for concrete proposals which address such concerns is being provided in the current world patent law harmonization effort that has been conducted by intellectual property and trade negotiators over the past few years.²² Negotiations under the auspices of the World Intellectual Property Organization ("WIPO")²³ have been underway since 1984²⁴ and led to the Diplomatic Conference for

[AIPLA], *JAPANESE PATENT PRACTICE PROSECUTION/LITIGATION* (1992) [hereinafter *JAPANESE PATENT PRACTICE*]; ALAN JACOBS, *PATENTS THROUGHOUT THE WORLD* (1991).

19. See, e.g., Donald M. Spero, *Patent Protection or Piracy—A CEO Views Japan*, *HARV. BUS. REV.*, Sept.-Oct. 1990, at 58, 58.

20. See generally Helfgott, *supra* note 5, at 231-32 (discussing America's perception of discrimination in the Japanese patent system).

21. Spero, *supra* note 19, at 58; see also *Intellectual Property Rights, U.S. Companies' Patent Experience in Japan, Report to the Honorable John D. Rockefeller IV and the Honorable Dennis DeConcini*, U.S. Senate GAO/GGD-93 126 [hereinafter *GAO Report*]. According to the GAO Report, "more than three times as many companies responding to the GAO survey were dissatisfied with their overall patent experience in Japan as compared with the United States and Europe." *Id.* at 3. However, problems in acquiring Japanese patents were attributed to "a lack of their own understanding, translation difficulties, and poor communication between U.S. firms and Japanese patent representatives." *Id.*

22. See R. Carl Moy, *The History of the Patent Harmonization Treaty: Economic Self-Interest as an Influence*, 26 *J. MARSHALL L. REV.* 457, 458-59 (1993).

23. WIPO was created by the United Nations on July 14, 1967, with a mission to address the protection of worldwide issues relating to patents, trademarks and copyrights. See *Convention Establishing the World Intellectual Property Organization*, July 14, 1967, 21 *U.S.T.* 1770, 828 *U.N.T.S.* 3.

24. See Heinz Bardehle, *The WIPO Harmonization Treaty and the Grace Period*, 30 *INDUS. PROP.* 372 (1991); Edward G. Fiorito, *The "Basic Proposal" for Harmonization of U.S. and Worldwide Patent Laws Submitted by WIPO*, 73 *J. PAT. & TRADEMARK OFF. SOC'Y* 83 (1991); William T. Fryer, III, *Patent Law Harmonization Treaty Decision is Not Far Off—What Course Should the U.S. Take?: A Review of the Current Situation and Alternatives Available.*, 30 *IDEA: J.L. & TECH.* 309 (1990); Jochen Pagenberg, *The*

the Conclusion of a Treaty Supplementing the Paris Convention as Far as Patents are Concerned ("Diplomatic Conference"). The first part of the Diplomatic Conference, held in 1991,²⁵ produced the draft WIPO Patent Law Harmonization Treaty ("Patent Law Treaty").²⁶ The thirty-nine Articles and thirteen Rules of the Patent Law Treaty cover the filing, application, and substantive requirements of patent prosecution. However, compliance with the treaty would require countries like the United States²⁷ and Japan to

WIPO Patent Harmonization Treaty, 19 AM. INTELL. PROP. L. ASS'N Q.J. [AIPLA Q.J.] 1 (1991).

25. The second part of the Diplomatic Conference, which was to be held in July 1993, has been postponed indefinitely due to U.S. refusal to change its patent policy, in particular, its first-to-file system. See Teresa Riordan, *The Patent Office Takes a Stand on International Patent Policy, But It's Confusing to Many*, N.Y. TIMES, Feb. 7, 1994, at D2.

26. World Intellectual Property Organization (WIPO), Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as Far as Patents Are Concerned, The Hague, June 3-28, 1991, The "Basic Proposal" for the Treaty and the Regulations, WIPO Doc. PLT/DC/3 (English) (Dec. 21, 1990) [hereinafter Patent Law Treaty]; Notes on the Basic Proposal for the Treaty and Regulations, WIPO Doc. PLT/DC/4 (English) (Dec. 21, 1990) [hereinafter Notes on Patent Law Treaty]; History of the Preparations of the Patent Law Treaty, WIPO Doc. PLT/DC/5 (English) (Dec. 21, 1990).

Harmonization efforts exist in other forms as well, such as in the provisions of the North American Free Trade Agreement ("NAFTA") and in the General Agreement on Tariffs and Trade ("GATT"). See Moy, *supra* note 22, at 458. An analysis of intellectual property rights adopted in GATT is outside the scope of this Article. For further discussion, see CHRISTOPHER M. GACEK, U.S. GOALS FOR PATENT PROTECTION IN THE GATT TRADE TALKS 8 (Heritage Foundation Background No. 863, Oct. 31, 1991); Thomas Cottier, *The Prospects for Intellectual Property in GATT*, 28 COMMON MKT. L. REV. 383 (1991); Rajan Dhanjee & Lawrence Boisson de Chazournes, *Trade-Related Aspects of Intellectual Property Rights (TRIPS): Objectives, Approaches and Basic Principles of the GATT and of Intellectual Property Conventions*, 24 J. WORLD TRADE L. 5 (1990); Brent W. Sadler, Comment, *Intellectual Property Protection Through International Trade*, 14 HOUS. J. INT'L L. 393 (1992).

This Article also omits discussion of the Structural Impediments Initiative ("SII"). For further discussion, see Syed Tariq Anwar, *The Impact of the Structural Impediments Initiative (SII) on U.S.-Japan Trade—Issues and Progress*, WORLD COMPETITION, Dec. 1992, at 53; Y.S. Lanneaux, *International Trade: Joint Report of the United States-Japan Working Group on the Structural Impediments Initiative, June 28, 1990*, 32 HARV. INT'L L.J. 245 (1991); Gary R. Saxonhouse, *Japan, SII and the International Harmonization of Domestic Economic Practices*, 12 MICH. J. INT. L. 450 (1991); W. David Westergard, *Harmonization Enforcement: The Reality Behind the Panacea*, 26 J. MARSHALL L. REV. 593 (1993).

27. Whether the United States should harmonize its patent system is beyond the

change some of their domestic patent laws.

This Article will examine the Patent Law Treaty as it relates to particular provisions in Japanese law and determine if Japanese patent law is in conflict or in agreement with the proposed treaty. It will discuss the changes that are required for Japan's compliance with the Patent Law Treaty if the treaty is adopted in its present form.²⁸ Part I examines the substantive requirements for patentability under the Patent Law Treaty and Japanese patent law. Part II discusses the procedural aspect of patent applications under both laws. Part III outlines the extent of protection of claims and enforcement of patents, and it briefly surveys provisions in Japanese patent law that are not addressed by the Patent Law Treaty. This Article concludes that Japan can and should amend its patent laws to effect global harmonization, but that Japan will do so only if countries such as the United States agree to implement certain modifications, thereby creating, in essence, a bilateral harmonization effort.

I. SUBSTANTIVE REQUIREMENTS FOR PATENTABILITY UNDER THE PATENT LAW TREATY AND JAPANESE PATENT LAW

A. *First-to-File System and the Right to a Patent*

Article 9(2) of the Patent Law Treaty establishes a first-to-file

scope of this Article. For further discussion, see Donald W. Banner, *Fleeing the Golden Fleece*, 74 J. PAT. & TRADEMARK OFF. SOC'Y 811 (1992); William Kingston, *Is the United States Right About First-to-Invent?*, 7 World Intell. Prop. Rep. (BNA) 223 (1992); Ned L. Conley, *First-to-Invent: A Superior System for the United States*, 22 ST. MARY'S L.J. 779 (1991); Karen M. Curesky, Note, *International Patent Harmonization Through W.I.P.O.: An Analysis of the U.S. Proposal To Adopt a "First-to-File" Patent System*, 21 LAW & POL'Y INT'L BUS. 289 (1989); Charles R.B. Macedo, Note, *First-to-File: Is American Adoption of the International Standard in Patent Law Worth the Price?*, 1988 COLUM. BUS. L. REV. 543.

28. A number of Articles and Rules in the Patent Law Treaty are purely administrative in nature, of little substantive significance, or likely to be deleted. See Richard C. Wilder, *An Overview of Changes to the Patent Law of the United States After the Patent Law Treaty*, 26 J. MARSHALL L. REV. 497, 499-500 (1993). Thus, this Article will discuss Articles 1, 3-5, 7(1), 8(5), 9, 11-16, 18(2), 21 and 23, as well as the Rules corresponding to these Articles. For a comprehensive discussion of the entire Patent Law Treaty, see HAROLD C. WEGNER, PATENT HARMONIZATION (1993).

system as the international standard for the grant of patents.²⁹ Under Article 9(2), when two or more inventors independently invent the same item and only one application is filed, the right to receive a patent belongs to the one who filed the application, provided it is not withdrawn, abandoned or rejected.³⁰ In the event that more than one application is filed, the right belongs to the inventor whose application is filed earliest, or when applicable, the one with the earliest foreign priority date.³¹

Japanese patent law maintains a first-to-file system that is in agreement with the Patent Law Treaty.³² Unlike in the United States,³³ no inchoate rights exist in Japan pertaining to the invention. Thus, the first person to add the invention to the storehouse of public knowledge by filing receives the patent.³⁴

Japanese patent law further provides that if two applications relating to the same invention are filed on the same date, then mutual consultations are conducted, and if no agreement is reached, neither applicant receives the patent.³⁵

Article 9(1) of the Patent Law Treaty provides that the right to

29. Patent Law Treaty, *supra* note 26, art. 9(2). Article 9(2) states that the right to a patent where several inventors independently have made the same invention belongs:

(i) where only one application is filed in respect of that invention, to the applicant, as long as the application is not withdrawn or abandoned, is not considered withdrawn or abandoned, or is not rejected, or

(ii) where two or more applications are filed in respect of that invention, to the applicant whose application has the earliest filing date or, where priority is claimed, the earliest priority date, as long as the said application is not withdrawn or abandoned, is not considered withdrawn or abandoned, or is not rejected.

Id. art. 9(2)(i)-(ii).

30. *Id.* art. 9(2)(i).

31. *Id.* art. 9(2)(ii). For discussion of provisions pertaining to claims of priority, see *infra* part II.A.

32. Compare Japanese Patent Law, *supra* note 11, § 39 with Patent Law Treaty, *supra* note 26, art. 9.

33. See 35 U.S.C. § 102 (1988).

34. Japanese patent law originally had awarded patents based on priority of inventorship. The first-to-invent system was abolished, however, in 1921.

35. Japanese Patent Law, *supra* note 11, § 39(2); see also *id.* § 39(4) (where invention claimed in patent application is the same as device claimed in utility model application).

receive a patent belongs to the inventor, but any Contracting Party³⁶ is free to determine the circumstances under which the right to the patent belongs to the employer or to the person who commissioned the work of the inventor.³⁷

Japanese patent law provides that a patent application filed by a person who is "neither the inventor nor the creator nor the successor in title to the right to obtain a patent . . . registration" is not considered to be a patent application.³⁸ In Japan, the right to obtain a patent may be transferred.³⁹ Further, Japan has determined the circumstances under which the right to a patent belongs to the employer of the inventor.⁴⁰

B. *Conditions of Patentability*

Article 11(1) of the Patent Law Treaty provides that "[i]n order to be patentable, an invention shall be novel, shall involve an inventive step (shall be non-obvious) and shall be, at the option of the Contracting Party, either useful or industrially applicable."⁴¹

1. Novelty Requirement

Article 11(2) of the Patent Law Treaty deems an invention "novel" if it "does not form part of the prior art."⁴² In other words, everything that is available to the public anywhere in the world prior to filing a patent application constitutes prior art.⁴³ Notwithstanding this provision, subparagraph (c) allows Contracting Parties the option to exclude from the prior art "matter made available to the public, by oral communication, by display or through use, in a

36. "Contracting Parties" are defined as "[t]he States and intergovernmental organizations party to" the Patent Law Treaty. Patent Law Treaty, *supra* note 26, art. 1.

37. *Id.* art. 9(1).

38. Japanese Patent Law, *supra* note 11, § 39(6).

39. *Id.* § 33(1); *see id.* § 34.

40. *See id.* § 35 (providing that employer has non-exclusive license on the patent right).

41. Patent Law Treaty, *supra* note 26, art. 11(1).

42. *Id.* art. 11(2)(a).

43. *Id.* art. 11(2)(b).

place or space which is not under its sovereignty."⁴⁴

As provided in Section 29 of the Japanese patent law, statutory bars to novelty include inventions which were: (1) "publicly known in Japan prior to the filing of the patent application";⁴⁵ (2) "publicly worked in Japan prior to the filing of the patent application";⁴⁶ or (3) "described in a publication distributed in Japan or elsewhere prior to the filing of the patent application."⁴⁷

The novelty requirement under Article 11(2) of the Patent Law Treaty seems reconcilable with Japanese patent law. The broad definition of what constitutes novelty in the Patent Law Treaty seems not to require Japan to modify its patent law. Further, if subparagraph (c) is adopted, the Patent Law Treaty would expressly allow Japan's law to exclude matter from the prior art/novelty bar which was made public in countries outside of Japan.

2. Inventive Step (Nonobviousness) Requirement

Article 11(3) of the Patent Law Treaty states:

An invention shall be considered to involve an inventive step (be non-obvious) if, having regard to the prior art as defined in paragraph (2), it would not have been obvious to a person skilled in the art at the filing date or, where priority is claimed, the priority date of the application claiming the invention.⁴⁸

Japanese patent law also requires that an inventive step appear in the invention.⁴⁹ The inventive step ostensibly requires both technical judgment and experience. Specifically, Japanese patent law

44. *Id.* art. 11(2)(c). However, subparagraph (c) is only a proposal for amendment to the treaty and there is doubt that it will be adopted by the Diplomatic Conference. See Wilder, *supra* note 28, at 516-17.

45. Japanese Patent Law, *supra* note 11, § 29(1)(i). This represents an adaptation from the old German patent laws. See Rahn, *supra* note 12, at 467.

46. Japanese Patent Law, *supra* note 11, § 29(1)(ii).

47. *Id.* § 29(1)(iii); *cf.* 35 U.S.C. § 102(a) (1988).

48. Patent Law Treaty, *supra* note 26, art. 11(3).

49. See Japanese Patent Law, *supra* note 11, § 29(2). This requirement is similar to the non-obviousness standard in the United States. *Cf.* 35 U.S.C. § 103 (1988).

states that “[w]here an invention could easily have been made, prior to the filing of the patent application, by a person with ordinary skill in the art to which the invention pertains,” the invention is not patentable.⁵⁰ The provisions in the Patent Law Treaty are substantially similar to Japan’s patent law such that Japan could retain its inventive step standard.

3. Utility Requirement

Article 11(1) requires that “an invention shall be . . . either useful or industrially applicable” to be patentable.⁵¹ Likewise, Japanese patent law states that “any person who has made an invention which is industrially applicable may obtain a patent.”⁵² These two standards are essentially similar so that no conflict arises between the Patent Law Treaty and Japanese patent law.

C. “Grace Period” Provisions: Circumstances of Disclosure Not Affecting Patentability

Article 12 of the Patent Law Treaty requires the establishment of “grace period” provisions in domestic patent laws.⁵³ It provides that disclosure of information by certain parties⁵⁴ which otherwise

50. Japanese Patent Law, *supra* note 11, § 29(2).

51. Patent Law Treaty, *supra* note 26, art. 11(1).

52. Japanese Patent Law, *supra* note 11, § 29(1). For example, “a pharmaceutical composition for combatting a certain disease which contains a compound X as an active ingredient” is acceptable, while “a method for treating human beings suffering from a certain disease [requiring the administration of] compound X” is not acceptable. Yasuo Shibata, *Overview of Japanese Patent Office Practice*, in JAPANESE PATENT PRACTICE, *supra* note 18, 1, 5. Further, unpatentable inventions include inventions of substances manufactured by the transformation of atoms and inventions liable to contravene public order, morality or public health. Nevertheless, drugs that are useful to cure certain diseases while maintaining some harmful effects are patentable. In addition, there is no express prohibition against the granting of a patent for genetically engineered animals. The generally applicable test balances the utility of such patents with the degree of harmful effects. For example, in 1989, a patent was granted on genetically engineered pigs and in 1991 on rats. III AIPPI ANNUAL 65 (1991).

53. Patent Law Treaty, *supra* note 26, art. 12.

54. Such parties are: (i) the inventor; (ii) the national patent office and the information was contained (a) in another application filed by the inventor and should not have been disclosed, or (b) in an application filed without the knowledge or consent of the

would affect the patentability of an invention claimed in an application will not do so where the information was disclosed during the twelve months preceding the filing date or priority date of the application.⁵⁵ If the applicability of a grace period is contested, the party invoking the grace period has the burden of proving that the conditions have been fulfilled.⁵⁶

In contrast, Japanese patent law presently allows for a six-month grace period and only under specific circumstances.⁵⁷ Furthermore, Japan's patent law and the Patent Law Treaty have slightly different administrative requirements. For example, in Japan, the grace period does not allow for a broader claim with a different "gist."⁵⁸ Conversely, the Patent Law Treaty is very broad and could possibly be construed to apply the grace period to different versions of the same invention.

A more clearly defined difference between the Patent Law Treaty and Japanese patent law is found in the time limits on invoking the grace period. Under the Patent Law Treaty, there is no time constraint for invoking the grace period.⁵⁹ By contrast, Japanese patent law places strict requirements on the invocation of the grace period.⁶⁰ If Japan signs the Patent Law Treaty, it will be required to broaden the grace period's applicability.

inventor by a third party; and (iii) a third party. *Id.* art. 12(1)(i)-(iii).

55. *Id.* art. 12(1).

56. *Id.* art. 12(4).

57. Japanese Patent Law, *supra* note 11, § 30(1)-(3). These circumstances include: (1) an experiment conducted by the person entitled to obtain the patent, provided the applicant files within six months; (2) material presented in printed publication; (3) a presentation made in writing to a scientific body designated by the Commissioner of the JPO; (4) an application laid open contrary to the will of the owner; and (5) technology that was shown at an officially recognized exhibit with the consent of the government. *Id.*

58. See *JPA-AIPLA Bilateral Meeting*, 1987 AIPLA BULL., Oct.-Nov., at 402, 404.

59. Patent Law Treaty, *supra* note 26, art. 12(3).

60. Japanese Patent Law, *supra* note 11, § 30(4). Japanese patent law provides that any party who wishes to invoke the grace period must submit within thirty days of filing the patent application a document proving that the invention falls under Section 29(1). *Id.*

D. Prior Art Effects of Certain Applications

1. "Whole Contents"

Article 13(1)(a) of the Patent Law Treaty provides that the "whole contents" of a patent application shall be considered as prior art for the purpose of evaluating the novelty of a subsequent invention.⁶¹ The whole contents of a patent application may be considered as prior art also for purposes of determining whether a subsequent invention satisfies the requirement of inventive step (nonobviousness).⁶²

The whole contents approach is defined in Japanese patent law under Section 29^{bis} and is discussed below.

2. Applications No Longer Pending

Under Article 13(2) of the Patent Law Treaty, if the former application "has been published in spite of the fact that, before the date of its publication, it was withdrawn or abandoned, . . . or was rejected, it shall not be considered as prior art."⁶³

Japanese patent law contains similar, but not identical, provisions. Under Section 39(5), "[w]here a patent application . . . is withdrawn or invalidated, such application shall . . . be deemed never to have been made."⁶⁴ Further, pursuant to Section 52(3), "[w]here a patent application has been abandoned, withdrawn or invalidated after the publication of the application," the applicant's exclusive right to commercially work the invention will be deemed never to have arisen.⁶⁵ However, the end result of this approach is that, in Japan, abandoned applications are considered prior art whereas withdrawn or invalidated applications are not.

61. Patent Law Treaty, *supra* note 26, art. 13(1)(a). "Whole contents" includes the description, drawings, and claims, but not the abstract. *Id.* art. 13(1)(c).

62. *Id.* art. 13(1)(a).

63. *Id.* art. 13(2).

64. Japanese Patent Law, *supra* note 11, § 39(5).

65. *Id.* § 52(3).

3. "Self-Collision"

Article 13(4) of the Patent Law Treaty addresses the problem that arises under Article 13(1)(a) when the former and subsequent applications are filed by the same person. Thus, Article 13(4) provides that Article 13(1)(a) does not apply when the applicant in each application "is one and the same person."⁶⁶

Japanese patent law contains a similar provision regarding self-collision. Under Section 29^{bis}, an earlier application, where the invention or device disclosed in the specification or drawings is identical to a subsequent application claim, is a bar to the subsequent claim unless the same person makes both applications.⁶⁷ In other words, the provision bars from patentability an invention claimed in a patent application identical to an earlier application and which was laid open for public inspection after the application was filed.⁶⁸ Thus, no change is required to this provision of Japanese patent law.

E. *Disclosure and Description of an Invention*

Article 3(1)(a) of the Patent Law Treaty requires that "[t]he application shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art."⁶⁹ Where the application refers to biologically reproducible material which cannot be disclosed in a manner sufficient to allow a person skilled in the art to carry out the invention and which is not available to the public, the applicant is required to deposit the undisclosed material with a depository institution.⁷⁰

66. Patent Law Treaty, *supra* note 26, art. 13(4).

67. Japanese Patent Law, *supra* note 11, § 29^{bis}. Compare *id.* § 29^{bis} (original applicant's specification to subsequent claims) with *id.* § 39 (claims of both applicants).

68. *Id.* § 29^{bis}(1); cf. 35 U.S.C. § 102(e) (1988).

69. Patent Law Treaty, *supra* note 26, art. 3(1)(a).

70. *Id.* art. 3(1)(b). The Contracting Party may determine the time for deposit and filing priority date. *Id.*

The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purpose of Patent Procedure, of which Japan is a member, harmonized the worldwide requirements for deposits through the recognition of a single depository system and the creation of international depository authorities. See Budapest Treaty on the

According to Article 3(2)(a), the application must also contain a description.⁷¹ The contents of the description are dictated by the regulations that accompany the Patent Law Treaty.⁷² The regulations state that, after stating the title of the invention,⁷³ the description shall: (i) specify the technical field(s) to which the invention relates; (ii) indicate, via citation if possible, the background art which is useful for the understanding and examination of the invention; (iii) describe the invention so that the technical problem and its solution can be understood, and state any advantageous effects of the invention with reference to the background art; (iv) in the case where a deposit of biologically reproducible material is required under Article 3(1)(b), indicate the fact that the deposit was made, list the depository institution's name and address, provide the date of deposit and the accession number, and describe the nature and characteristics of such material as relevant to the invention's disclosure requirement; (v) briefly describe the figures and drawings; (vi) set forth at least one mode of carrying out the invention; and (vii) indicate, where not obvious, the way(s) in which the invention is useful or industrially applicable.⁷⁴

The underlying theory of the Japanese patent application is a problem-solution approach that points out the disadvantages as well as the advantages presented by the prior art.⁷⁵ In Japan, the appli-

International Recognition of the Deposit of Microorganisms for the Purpose of Patent Procedure, *opened for signature* Apr. 28, 1977, 32 U.S.T. 1242. The omission of a sample culture deposit of a microorganism in a specification is fatal to a patent application. In Japan, such material may be deposited at the Japanese Fermentation Research Institute of the Japanese Agency of Industrial Science and Technology, considered an "internationally recognized depository," but local deposit is not required by Japan under the treaty. See Sadano Amemiya & Kikuo Nijhimoto, *Patents and Utility Models*, in 6 DOING BUSINESS IN JAPAN, VI 2-47, VI 2-48 (Zentaro Kitagawa ed., 1994).

71. Patent Law Treaty, *supra* note 26, art. 3(2)(a).

72. *Id.* art. 3(2)(b); *see id.* art. 2(iii).

73. *Id.* Rule 2(1).

74. *Id.* Rule 2(1)(i)-(vii). In addition, Alternate A of Rule 2(2) of the Patent Law Treaty would allow Contracting Parties the flexibility to exclude specification of technical field statements, background of figures, and statements of technical problems and solutions, if a different approach would "afford a better understanding or a more economical presentation." *Id.* Rule 2(2) (Alternative A).

75. Samson Helfgott, *Differences Between U.S. and Japanese Patent Applications*, 1 U. BALT. INTELL. PROP. L.J. 1, 2-3 (1992).

cation must contain: (i) the name and domicile or residence of the applicant; (ii) the date of submission; (iii) the title of the invention; (iv) the name and domicile or residence of the inventor; and (v) the specification, any drawings necessary, and the abstract.⁷⁶ The specification must contain: (i) the title of the invention; (ii) a brief explanation of the drawings; (iii) a detailed explanation of the invention; and (iv) the patent claim(s).⁷⁷ This detailed explanation of the specification is required to state the "purpose, constitution and effect of the invention in such a manner that it may easily be carried out by a person having ordinary skill in the art to which the invention pertains."⁷⁸

Despite a variety of textual differences between Article 3 of the Patent Law Treaty and Section 36 of the Japanese patent law, it appears that Japan need not change its requirements pertaining to disclosure and description.

F. *Patent Claims in an Application*

Article 4 of the Patent Law Treaty enumerates the requirements of claims in a patent application.⁷⁹ The application must contain one or more claims.⁸⁰ The claims must "define the matter for which protection is sought,"⁸¹ be "clear and concise,"⁸² and "be supported by the description."⁸³ Similarly, Japanese patent law provides that statements of the patent claim shall set forth "the invention(s) for which a patent is sought and which is described in the detailed explanation of the invention"⁸⁴ or be limited to "only

76. Japanese Patent Law, *supra* note 11, § 36(1)(i)-(iv), (2).

77. *Id.* § 36(3)(i)-(iv).

78. *Id.* § 36(4).

79. Patent Law Treaty, *supra* note 26, art. 4.

80. *Id.* art. 4(1). Claims must be numbered consecutively in arabic numerals. *Id.* Rule 3(1).

81. *Id.* art. 4(2).

82. *Id.* art. 4(3).

83. *Id.* art. 4(4). Contracting Parties are free not to require compliance with all of the prescribed requirements. *Id.* art. 4(5)(b).

84. Japanese Patent Law, *supra* note 11, § 36(5)(i). For a detailed description of the claiming system in Japan, see Fumiaki Ohtsuka, *Claims to be Filed in Japan, in JAPANESE PATENT PRACTICE*, *supra* note 18.

the features indispensable for the constitution of the invention(s) for which a patent is sought.”⁸⁵

Regulations under the Patent Law Treaty require that the form of the claims be either in a two-part format⁸⁶ or in one single statement “containing a recitation of a combination of several elements or steps, or a single element or step, which defines the matter for which protection is sought.”⁸⁷ With regard to the technical features of the invention, no claim may contain references to descriptions or drawings.⁸⁸ The Japanese courts have held, however, that the meaning of the claim can be determined from the detailed explanation and the drawings.⁸⁹ Additionally, when the claim is vague or abstract, it is limited to the actual disclosure and technical equivalence.⁹⁰

Furthermore, dependent claims under the Patent Law Treaty may hinge on another dependent claim or on a multiple dependant claim.⁹¹ A multiple dependent claim may hinge on a dependent

85. Japanese Patent Law, *supra* note 11, § 36(5)(ii).

86. Under the two-part format, the first part consists of “a statement indicating those technical features of the invention which are necessary in connection with the definition of the claimed subject matter.” The second part is “introduced by the words ‘characterized in that,’ ‘characterized by,’ ‘wherein the improvement comprises’ or other words to the same effect consisting of a statement indicating those technical features which, in combination with the features stated in the first part, define the matter for which protection is sought.” Patent Law Treaty, *supra* note 26, Rule 3(3)(i).

87. *Id.* Rule 3(3)(ii).

88. *Id.* Rule 3(4)(a).

89. Amemiya & Nijimoto, *supra* note 70, at VI 2-124.

90. According to the Tokyo District Court, the claim describes the invention in language such as “means for inserting and removing the key” and “means for shutting the plate.” *Id.* at VI 2-126. The expression regarding those means, however, is

too abstract for the reader to understand from the claim alone what concrete intermediate mechanism is necessary to link the inserting or removing of the key and the operation of the shutting plate. Such abstract “means” expressions do not show a solution for the technical problem. The technical scope should be limited to the exact contents as disclosed in the specification. Accordingly, it cannot be said that every apparatus having all elements defined in the very abstractly worded claim is within the technical scope of this utility model.

Id.

91. A dependent claim is a claim which contains all the features of another claim and is in the same category of claims as that other claim. A multiple dependent claim is a dependent which includes *several* other claims of the same category. Patent Law Treaty,

claim or another multiple dependent claim.⁹² Likewise, under Japanese patent law, statements of patent claims where an invention claimed in one claim is the same as an invention claimed in another claim are not precluded.⁹³

Strict interpretation of claim language is enforced by the courts in Japan to ensure fairness, stability and certainty.⁹⁴ Moreover, “[t]he statement in the specification that supports the claim should correspond to the wording in the claim, and should be such that it makes the wording of the claim meaningful.”⁹⁵ Interpretation of the claim is the only basis for determining the scope of the invention.⁹⁶

The JPO has changed its claim analysis to allow broad patent claims for “pioneering inventions,”⁹⁷ and overall, the flexibility of Article 4 should allow Japan to adopt it with little fear of having to revamp its entire approach to patent claims.

II. PROCEDURAL ASPECTS OF FILING AND PROSECUTING PATENT APPLICATIONS

A. *Belated Claiming of Priority*

Article 7(1) of the Patent Law Treaty provides that where an application “could have claimed the priority of an earlier application but, when filed, did not contain such priority claim, the applicant shall have the right to claim such priority in a separate declaration.”⁹⁸ The time limit for submitting such a claim is “at least two months from the filing date of the subsequent application and not more than four months from the date on which a period of 12

supra note 26, Rule 3(5)(a), (b).

92. *Id.* Rule 3(5)(b).

93. Japanese Patent Law, *supra* note 11, § 36(6).

94. James A. Forstner, *Japan/U.S. Study Group*, 1992 AIPLA BULL., Oct.-Nov., at 130, 130.

95. *Id.*

96. Japanese Patent Law, *supra* note 11, § 70(1).

97. NIKKEI, May 20, 1992, Nihon Keizai Shinbun. The basis for Japan's change in position may be its desire to maintain strong patents internationally and concomitantly to allow Japanese technology firms to acquire more intellectual property rights.

98. Patent Law Treaty, *supra* note 26, art. 7(1).

months from the filing date of the earlier application expired.”⁹⁹

In contrast, under Japanese patent law, priority claims for inventions must be done at the time of filing.¹⁰⁰ Thus, priority of inventorship in Japan is based solely on the time the application is filed at the JPO or in the country from which priority was claimed.¹⁰¹

B. Amendment of Application

1. Amendment Following Patent Office Findings

Article 14(1) of the Patent Law Treaty provides that whenever a national patent office finds that an application does not comply with applicable requirements, at least one opportunity to amend or correct the application must be offered.¹⁰² Japanese patent law does not expressly require that the JPO provide an opportunity for amendment or correction but does state that the JPO may invite amendment in certain cases.¹⁰³

2. Amendment on Applicant's Initiative

Article 14(2) of the Patent Law Treaty states:

The applicant shall have the right, on his own initiative, to amend or correct the application or to comply with a requirement applicable to the application up to the time when the application is in order for grant; however, any Contracting Party which provides for substantive examination may provide that the applicant shall have the right to amend or correct, on his own initiative, the description, the claims

99. *Id.*

100. Japanese Patent Law, *supra* note 11, §§ 42^{bis}(4), 43(1).

101. *Id.* § 42^{bis}(2). Japanese patent law also provides for Paris Convention priority claims. *Id.* § 43.

102. Patent Law Treaty, *supra* note 26, art. 14(1). Article 14(3) provides that no amendment or correction may go beyond what has been disclosed in the application. *Id.* art. 14(3).

103. Japanese Patent Law, *supra* note 11, § 17(2); *see also id.* § 50 (providing that when the examiner intends to refuse an application, the examiner shall notify the applicant of the reasons for refusal and give him or her an opportunity to submit a statement of his or her arguments).

and any drawings, only up to the time allowed for the reply to the first substantive communication from the Office.¹⁰⁴

In Japan, as a general rule, voluntary amendments prior to requests for examination are allowed during the pendency of the case but not more than fifteen months from the filing date or from the earliest priority date, if convention priority has been claimed.¹⁰⁵ After the fifteen-month period, however, an applicant can amend the application only in specific cases.¹⁰⁶ Post-publication amendments will only be accepted to restrict claims, correct errors, or clarify ambiguities.¹⁰⁷

3. Limitations of Amendments or Corrections

Article 14(4) of the Patent Law Treaty provides that "[n]o amendment or correction of the application may go beyond what has been disclosed in the application as filed."¹⁰⁸ Japanese patent law similarly limits the extent of amendments.¹⁰⁹

104. Patent Law Treaty, *supra* note 26, art. 14(2).

105. Japanese Patent Law, *supra* note 11, § 17; see Masahi Yanagida & Yoshiro Hashimoto, *Prosecution of a Japanese Patent Application*, in *JAPANESE PATENT PRACTICE*, *supra* note 18, 1, 8. Although on April 16, 1993, the Japanese Diet passed a bill, effective January 1, 1994, which revised amendment practice, the period when the amendment can be filed is substantially the same. Jun Ishida, *The Amendment Process in Japanese Patent Practice*, *Y.K.I. REP.*, June 1, 1993, at 1 (Yoshida Kanayama Ishida & Assocs. 1993).

106. Japanese Patent Law, *supra* note 11, § 17^{bis}. An applicant may amend the application only where the applicant: (i) makes a request for examination and amendment simultaneously; (ii) has received notification by a third party request for examination and amendment is made within three months from receipt of such notification; (iii) has received notification from an examiner who has issued a notice of refusal and amendment is made within the prescribed time limit; and (iv) demands a trial and amendment is made within thirty days of such demand. *Id.* § 17^{bis}(i)-(iv). Furthermore, an applicant whose application was refused may amend under specific circumstances. *Id.* § 17^{ter}.

107. Yanagida & Hashimoto, *supra* note 105, at 9.

108. Patent Law Treaty, *supra* note 26, art. 14(4).

109. Section 40 of the Japanese patent law provided that where, after registration of the patent right, an amendment of the specification or drawings attached to the request changed the gist of the application, the patent application was deemed to have been filed at the time when the amendment in writing was submitted. Japanese Patent Law, *supra* note 11, § 40. However, Japan recently revised this provision, disallowing the entering of new matters into a specification or drawing regardless of the period. See Ishida, *supra*

Amendments to patent claims in Japan are thus severely limited and very restrictive. Given the Patent Law Treaty's structured approach to application amendments,¹¹⁰ Japan's acceptance of the treaty would require the JPO to provide an opportunity for amendment on an applicant's initiative but would not require the JPO to greatly relax its strict application amendment practice. Rather, even under the Patent Law Treaty, Japan could limit the scope of patent application amendments.

C. Publication of Pending Applications

Article 15(1) of the Patent Law Treaty requires that all countries publish applications "as soon as possible after the expiration of 18 months from the filing date or, where priority is claimed, the priority date."¹¹¹ Japanese patent law states that after eighteen months from the filing date or priority date, the JPO shall "lay open" the application for public inspection, unless the application has already been published.¹¹² *Kokai* is a provisional publication in which the specification, claims, drawings and amendments are published eighteen months after the filing of an application irrespective of any request for an examination.¹¹³ Since Japan provides

note 105, at 3 ("[a]s long as an amendment is not beyond the disclosure of the original specification or drawings, it is acceptable"); see also Japanese Patent Law, *supra* note 11, § 53(1) (providing that where an amendment made to the specification or drawings before publication includes addition of new matters into claims, the amendment shall be declined).

110. See Yanagida & Hashimoto, *supra* note 105, at 9.

111. Patent Law Treaty, *supra* note 26, art. 15(1). The national patent office does not have to distribute pamphlets containing the application since an application is deemed published if any person can obtain from the patent office copies of the application, inspect the application, or "take cognizance" of the application by "electronic communication." *Id.* Rule 1(3)(i)-(iii).

112. Japanese Patent Law, *supra* note 11, § 65^{bis}(1); *cf. id.* § 51(1)(2) (providing that when the examiner finds no reason for refusing a patent, the JPO shall publish the application).

113. *Id.* § 65^{bis}(2). Rule 8 of the Patent Law Treaty regulations requires that the publication of the application be announced in the *Official Gazette* with indications of the name of the applicant, the title of invention, the filing date and serial number of application, where priority is claimed, the filing date and serial number of the priority country, and the name of the patent office and symbols for classification if available. Patent Law

for the publication of applications after eighteen months,¹¹⁴ the treaty provision allowing Contracting Parties to elect a fixed period of time of twenty-four months¹¹⁵ is inapplicable.¹¹⁶

The Patent Law Treaty also provides that under certain circumstances, an application may not be published.¹¹⁷ A Contracting Party need not publish an application based on reasons of national security.¹¹⁸ Further, an application may not be published where: (1) an application is withdrawn or abandoned, or is considered withdrawn or abandoned, earlier than two months before the expiration of the eighteen-month time limit;¹¹⁹ (2) the national patent office completes the technical preparations for publication later than two months before the time limit;¹²⁰ and (3) the application has been rejected.¹²¹ These provisions do not appear to conflict with Japanese patent law.

D. *Examination Procedures*

1. Patent Law Treaty

Article 16 of the Patent Law Treaty requires countries which maintain substantive examination procedures to publish, at the same time as the application, a search report containing "any documents that reflect the prior art relevant to the invention claimed in the application."¹²² Substantive examination must begin not later than

Treaty, *supra* note 26, Rule 8. Japanese patent law requires that patent applications are similarly published in Japan's *Patent Gazette*. Japanese Patent Law, *supra* note 11, § 65^{bis}(2).

114. Japanese Patent Law, *supra* note 11, § 65^{bis}(1).

115. Patent Law Treaty, *supra* note 26, art. 15(1)(b).

116. Further, in Japan, after laying open the patent application, but before publication for opposition, the applicant may demand compensation from any individual who commercially works on the invention, provided that the applicant warned the infringer in writing. See Japanese Patent Law, *supra* note 11, § 65^{ter}(1).

117. Patent Law Treaty, *supra* note 26, art. 15(3), (4).

118. *Id.* art. 15(3).

119. *Id.* art. 15(4)(a)(i).

120. *Id.* art. 15(4)(a)(ii).

121. *Id.* art. 15(4)(b).

122. *Id.* art. 16(1)(a). If an applicant has requested an earlier publication, the search report need not be published at the same time, provided that it is published as soon as

three years from the filing of the application¹²³ and "wherever possible, reach a final decision on the application not later than two years after the start of substantive examination."¹²⁴

2. Japanese Requests for Examination

The Japanese patent system is fashioned on a "deferred" examination basis, whereby a request for examination may be made by an applicant or third party within seven years from the date of filing.¹²⁵ Failure to request examination within a seven-year period results in the withdrawal of the application.¹²⁶ The examination process incorporates a substantive examination as well as search requirements.

a. Preferential and Accelerated Examination

The two mechanisms by which an applicant can expedite the patent granting procedure are preferential examination and accelerated examination. When an invention claimed in a patent application is commercially worked in Japan by a third party, the applicant can request preferential examination. However, when such an invention is commercially worked in Japan by its applicant or licensee, the applicant can request accelerated examination.¹²⁷

Preferential examination can be requested between the time the application is laid open and the time it is published, provided that a third party is commercially working the invention.¹²⁸ In order to

possible, but not later than the time limit applicable under Article 15(1). *Id.* art. 16(1)(b). For exceptional reasons, the search report can be published no later than six months after the time limit. *Id.* art. 16(1)(c).

123. *Id.* art. 16(2)(a).

124. *Id.* art. 16(2)(c).

125. Japanese Patent Law, *supra* note 11, § 48^{ter}(1). In 1991, 146,008 requests for examination of a patent were made, of which 13,967 were for applications filed in 1991, 4,747 for 1990, 9,951 for 1989, 11,790 for 1988, 17,378 for 1987, 15,189 for 1986, 24,120 for 1985, 48,840 for 1984, and 26 for 1983. Richard S. Kanter, *Analysis of the Annual Report of the Japanese Patent Office 1992*, ¶ 15 (U.S. & FOREIGN COM. SERV. TOKYO 1992) [hereinafter *1992 JPO Report*].

126. Japanese Patent Law, *supra* note 11, § 48^{ter}(4).

127. Yanagida & Hashimoto, *supra* note 105, at 4.

128. Japanese Patent Law, *supra* note 11, § 48^{sexies}. Section 48^{sexies} reads:

When the [Commissioner of the JPO] recognizes that a person other than the applicant is commercially working the invention claimed in a patent application

receive preferential examination: (1) the applicant must request examination; (2) the application must have been laid open, but not yet published for opposition purposes; (3) a third party must be working on the applied-for invention without a license; and (4) the applicant must prove the necessity for such an examination, such as by showing damages suffered.¹²⁹

A request for accelerated examination is initiated by an "Explanation of Circumstances Concerning Accelerated Examination" petition.¹³⁰ This petition must establish, inter alia, the time of working and the relationship between the invention and the work-related act, and it must also contain a prior art analysis which can be filed after the application is laid open.¹³¹ In 1991, there were 300 requests for accelerated examination, of which examination was completed with publication for opposition in non-rejected cases in an average of six months.¹³²

b. Delays in Prosecuting

In 1993, the JPO reported that as of December 31, 1991, the average pendency of an application in Japan was two years and six months,¹³³ with a backlog of unexamined patents and utility models totaling just under 600,000.¹³⁴ Delays in prosecution present addi-

after the laying-open of the application but before the publication thereof, he may, if necessary, direct the examiner to examine the application in preference to other patent applications.

Id. § 48^{series}.

129. See Yanagida & Hashimoto, *supra* note 105, at 5-6.

130. See *id.* at 6-7.

131. See *id.*

132. See 1992 JPO Report, *supra* note 125, ¶ 4.

133. International Trade Administration, *Japan-Patent Procedures*, in MARKET RESEARCH REPORTS, IMI930125 ¶ 2 (1993) [hereinafter *ITA Report*]. The average pendency for a given patent application is misleading:

[E]ven if an applicant for a Japanese patent files a request for examination on the date of application, the earliest possible date the applicant may do so, the applicant must still wait an average of 3-4 years for the first Office Action on the application. From that point, the [JPO] takes an average of almost 2 years to grant the patent, assuming that there is no third-party opposition filed. Thus from filing date to grant is a minimum of 5 years.

Id. ¶ 3.

134. *Id.* ¶ 2. This is in contrast to the United States which has a pendency time of 18.2 months and a backlog of 288,055 utility patent applications in fiscal year 1991. COMMISSIONER OF PATENTS AND TRADEMARKS, ANNUAL REPORT FISCAL YEAR 1991,

tional difficulties since, by the time a patent is granted, its economic life is limited. The market for the patent may be lost or the disclosed technology obsolete.¹³⁵ Typically, the examination period will take three to four years if the applicant requests examination immediately.¹³⁶ Routine processing will take one year, and opposition proceedings take six months.¹³⁷ Adding a typical six-month delay from the time of the grant to its official registration, the normal patent application process takes a total of seven years by the time the patent is ultimately granted.¹³⁸

c. Understaffed Japanese Patent Office

The staffing of a patent office plays an important role in the efficient granting of patents which is necessary to accelerate and protect innovation. When a patent office runs efficiently, the patentees receive prompt protection from would-be infringers. If, however, a patent office is understaffed and slow in its examination procedures, or maintains an unduly long delay period, patents will be granted with shortened duration and thus a patentee's potential revenue decreases. In 1991, there were 955 patent and utility model examiners, 54 design examiners, 114 trademark examiners, 292 trial examiners, a clerical staff of 952 members and 7 classification examiners, totaling 2,374 employees.¹³⁹ The Japanese maintain that the proposed changes embodied in the Patent Law Treaty would burden their system and are thus "requesting time to lessen [their] pending applications."¹⁴⁰

at 19 (1992).

135. Spero, *supra* note 19, at 66.

136. *ITA Report*, *supra* note 133, ¶ 14.

137. *Id.*

138. *Id.*

139. See 1992 *JPO Report*, *supra* note 125, ¶ 8. In contrast, the U.S. Patent and Trademark Office maintains a staff of 1,890 patent professionals (including design examiners and immediate supervisors), of which 227 utility patent examiners were hired during fiscal year 1991, a clerical staff of 2,262, and others for a total of 4,394. See COMMISSIONER OF PATENTS AND TRADEMARKS, *supra* note 134, at 20.

140. Merrill Goozner, *Global Patents Pending*, CHI. TRIB., Apr. 13, 1992, Bus., at 1 (quoting Nobuo Yoshikuni, Director of the multilateral negotiations policy office of the JPO).

d. Delays Due to "Off the Record" Comments

The JPO is willing to accept opinions or requests from third parties regarding applications during the application process.¹⁴¹ All comments among examiners and third parties are "off the record" upon the requests of such parties.¹⁴² Therefore, a competitor can contact the examiner by fax, by telephone, in person or by mail¹⁴³ and either delay the process or persuade the examiner against granting the applicant a patent which the competitor "believes will have serious economic consequences for his company."¹⁴⁴

E. Unity of Invention

The Patent Law Treaty requires unity of invention under Article 5 and the corresponding Rule 4. Article 5(1) requires that an application "relate to one invention only or to a group of inventions so linked as to form a single general inventive concept"¹⁴⁵ containing "special technical features."¹⁴⁶ Unity of invention is considered only in the case of independent claims and not with respect to dependent claims.¹⁴⁷ Under Article 5(2), however, the grant of a patent cannot be invalidated or revoked on the basis of lack of

141. Frederick M. Ritchie, *So, You Want a Commercially Important Patent in Japan?*, 74 J. PAT. & TRADEMARK OFF. SOC'Y 186, 190 (1992).

142. *Id.*

143. *Id.* at 198.

144. *Id.* at 191.

145. Patent Law Treaty, *supra* note 26, art. 5(1).

146. "Special technical features" relates to those technical features that define a contribution that each of the inventions, considered as a whole, makes beyond the prior art. *See id.* Rule 4(1); Notes on Patent Law Treaty, *supra* note 26, R4.01.

147. Notes on Patent Law Treaty, *supra* note 26, R4.02. No problem arises in the case of a genus/species where the genus is patentable. Likewise, there is no problem in a combination/subcombination claim when the subcombination is patentable and the combination includes all features of subcombination. *Id.* R4.03.

Furthermore, Rule 5 of the treaty allows the filing of a divisional application at any time up until when the initial application is ready for a grant. Patent Law Treaty, *supra* note 26, Rule 5(1)(a). Priority documents and any translations filed in the parent document are deemed to have been submitted with respect to the divisional application. *Id.* Rule 5(2). A Contracting Party can establish, however, that no divisional application may be filed during the six months preceding the expiration of the time limit for compliance with the grant requirements. *Id.* Rule 5(1)(b).

unity of invention.¹⁴⁸

Japan's unity of invention requirements are specified in Section 37 of the Japanese patent law. According to this provision, two or more inventions may be the subject of one patent application provided that the industrial applicability and "the problem to be solved" or "the substantial part of the features indispensable for the constitution of the invention" are the same.¹⁴⁹ Unity of invention is also fulfilled where the inventions relate to a product or process.¹⁵⁰

In a Japanese patent application, there exists both independent and dependent claim forms.¹⁵¹ The independent claim form must only state indispensable elements, while the dependent form—or embodiment claim form—allows multiple claims if they refer back to a single claim.¹⁵² Multiple inventions are permitted in one application if they are linked so as to form a single inventive concept.¹⁵³ Thus, Japan's unity of invention requirements appear in compliance with the Patent Law Treaty.

F. Translation Requirement

Article 8(5) of the Patent Law Treaty maintains that any Con-

148. Patent Law Treaty, *supra* note 26, art. 5(2).

149. See Japanese Patent Law, *supra* note 11, § 37(i)-(ii).

150. *Id.* § 37(iii)-(iv).

151. See generally Ohtsuka, *supra* note 84.

152. *Id.* In 1975, Japan introduced the so-called "multiple claiming system" under limited circumstances. The law was revised in 1987 and allowed for the filing of various types of different claims in a single application. See *id.* at 1-2. Applications filed under the 1975 revision are still pending. *Id.* at 1. Many applications filed under the 1987 revision are only beginning to be examined. *Id.* For example:

Most examiners in Class C07 (organic chemicals) were working on applications filed no more recently than 1984 or 1985, while the Examiners in area G01 (measuring and testing equipment) HOL (basic electronic circuits), and almost every other examination area were working on applications filed no more recently than 1985, 1986, 1987, or 1988. In fact, only a very small percentage of examiners had reached applications filed in 1989, and only a handful had reached applications filed in 1990, with no examiner having started examining cases filed after April 1990.

ITA Report, *supra* note 133, ¶ 8.

153. See Japanese Patent Law, *supra* note 11, § 37.

tracting Party may require that the application be in the official language of the country granting the patent¹⁵⁴ or demand an official language translation two months from the date on which the item requiring translation was received by the patent office.¹⁵⁵

In Japan, however, patent applications must appear in Japanese.¹⁵⁶ The JPO requires that all documents be filed in Japanese and does not allow corrections on language translational problems that arise further along the prosecution phase.¹⁵⁷

Furthermore, Section 41 of the Japanese patent law states that:

154. Patent Law Treaty, *supra* note 26, art. 8(5)(a).

155. *Id.* art. 8(5)(b), Rule 7(1)(c). Article 8(5)(b) states, in part, that:

Any Contracting Party may . . . require that a translation thereof in the official language be received by its Office within the prescribed time limit. If the translation is so received, the filing date of the application shall be the date of receipt by the Office of the elements referred to in paragraph (1) in the language in which they were first received.

Id. art. 8(5)(b).

If Article 8(5)(b) is not satisfied, the patent office will "promptly invite the applicant to comply with such requirement within a time limit fixed in the invitation." *Id.* Rule 7(2). Nevertheless, Article 8(5)(b) may be corrected "at any time up to the time when the application is in order for grant [so as] to conform to the wording of those parts or that text matter furnished in a language other than the official language." *Id.* Rule 7(5).

156. Japanese Patent Law, *supra* note 11, § 184^{quater}(1). There is no provision that specifically requires that all patent applications shall be filed in Japanese. Rather, Section 184^{quater}(1) provides that if an application is filed in a language other than Japanese, pursuant to the Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 9 I.L.M. 978, the applicant shall file a translation in Japanese within a prescribed time limit. This provision was introduced to handle the exceptional application filed under the Patent Cooperation Treaty.

157. The JPO only permits applications in the Japanese language because it would be difficult for third parties in Japan to understand the original disclosure of the application in any other language other than Japanese.

On January 20, 1994, Bruce Lehman, Commissioner of the U.S. Patent and Trademark Office, reached an agreement with Wataru Asou, Commissioner of the JPO. Under the agreement, the United States will introduce legislation changing the length of the current seventeen-year patent term from the date of grant to a twenty-year patent term from the filing of the application. The legislation would take effect six months from the date of enactment. Andrew Pollack, *U.S. Agrees to Alter Patents' Period of Coverage*, N.Y. TIMES, Jan. 24, 1994, at D2. In return, the Japanese agreed to accept English language patent applications so long as Japanese translation follows within two months thereafter. The Japanese will also allow corrections until a response is received to the first substantive communication on the merits. *Patents, U.S. Says 'Not Now' on First-to-File, Agrees with Japan on Patent Term*, DAILY REP. FOR EXECUTIVES, Jan. 26, 1994, at A16.

An amendment enlarging, restricting or changing the patent claim or claims within the scope of the features disclosed in the specification or drawings originally attached to the request, made prior to the transmittal of the ruling that the application is to be published, shall be deemed not to change the gist of the specification.¹⁵⁸

Thus, the effect of Section 41 is embodied by a translation mistake and the subsequent amendment to correct it. One cannot correct, however, translational errors simply by referencing the original language of an application. In addition, Japanese patent documents, indexes, foreign names and addresses are transliterated into Japanese *Katakana* script instead of the *Hiragana* equivalents of Japanese sounds written which would help searching and translation. More pointedly, Japan does not allow conforming amendments when it is determined later during the prosecution of the patent application that there is an error in the translation.¹⁵⁹

The Tokyo High Court has held that mistranslation cannot be corrected if the correction changes the gist of the specification.¹⁶⁰ Examples of mistranslation include: "polyvinylacetal" instead of "polyvinylacetate," "bromine" instead of "boron," and a temperature range from three to five degrees fahrenheit instead of three to five degrees celsius.¹⁶¹ Therefore, substantial elements of the specification must be precisely and correctly translated into Japanese.¹⁶²

Although the language requirements of the Patent Law Treaty appear to conflict with those in the Japanese patent law, the language in the treaty may not "express what is meant by 'broad interpretation.'"¹⁶³ The JPO allows translation errors that are non-sub-

158. Japanese Patent Law, *supra* note 11, § 41.

159. WINEBURG, *supra* note 13, § 5.04, at 5-8.

160. James A. Forstner, *AIPLA Japan/U.S. Study Group*, 1992 *AIPLA BULL.*, July-Aug.-Sept., at 701, 701 (citation omitted).

161. *Id.*

162. *See, e.g.*, General Elec. Co. v. Komatsu Diamond (Manmade Diamond Case), Chisai [District Court], Showa 40 (wa) 11018 (Tokyo 1975), *aff'd*, Kōsai [High Court] (Tokyo) (translation of the terms "tapered" and "coordinately work" were in question); *see* WEGNER, *supra* note 28, §§ 1651-52, at 203-06.

163. *Proceedings on the U.S. Bar/JPO Liaison Council Meeting With JPO Officials*, 1 *U. BALT. INTELL. PROP. L.J.* 95, 97 (1992) [hereinafter *U.S./JPO Proceedings*] (com-

stantive. If, however, that constitutes the only problem, then the priority document would support all mistranslations and all translation problems would become non-substantive.¹⁶⁴ Translation problems can be diminished in the following manner: (1) after translating the document into Japanese, re-translating it into English to see if there are any translation problems; (2) bracketing the English word in the text beside the Japanese for edification purposes, when a specific interpretation problem exists; and (3) disclosing in drawings where appropriate. Should safety measures such as these be adopted, Japan's transition into the Patent Law Treaty would become much smoother.

III. ADMINISTRATIVE REQUIREMENTS RELATED TO ISSUED PATENTS

A. *Prohibition of Pre-grant Opposition*

Article 18(2)(a) of the Patent Law Treaty states that "[n]o Contracting Party may allow any party to oppose, before its Office, the grant of patents."¹⁶⁵ Nevertheless, under Article 18(2)(b), Contracting Parties who maintain such a system of pre-grant opposition may defer compliance with this procedure for up to ten years after the Patent Law Treaty is adopted.¹⁶⁶

Japan currently provides for the pre-grant opposition prohibited by Article 18(2). Under Japanese patent law, once a request for examination has been made, the examiner renders a decision either refusing the application or allowing publication.¹⁶⁷ Once publication has occurred, the patent term commences,¹⁶⁸ and any person

ment by Mr. Samson Helfgott).

164. The Japanese maintain that the priority certificate is only evidence of the filing date and not of the translation.

165. Patent Law Treaty, *supra* note 26, art. 18(2)(a).

166. *Id.* art. 18(2)(b).

167. Japanese Patent Law, *supra* note 11, § 51(1). The publication is printed in the *Patent Gazette*, which includes the name of the applicant, the number and date of the application, and particulars of the specification and drawings. *Id.* § 51(3).

168. *See id.* § 67(1). The application then becomes provisionally protected, and as a result, the applicant can collect compensation after opposition proceedings if the invention is worked on by someone else. *See id.* § 52; *Ex parte Iizuka*, 171 U.S.P.Q. (BNA) 50 (Pat. Off. Bd. App. 1970) (holding that since exclusive rights of a patentee arise under

may file an opposition to the grant of the patent within three months from the publication.¹⁶⁹ The applicant thereafter has an adequate amount of time set by the examiner to respond.¹⁷⁰ The person who files an opposition may file a formal notice within three months, but within thirty days thereafter, he or she must file a supplemental statement including prior art and evidence of conflicting patents.¹⁷¹

The purpose behind the opposition system is to ensure the validity of the issued patent. Stronger patents are produced by accepting opinions from outside experts. Furthermore, the system accelerates the speed and quality of the examination by "reserving Patent Office resources for examinations of the most valuable technology, reflected by the demand of private parties for examination."¹⁷² A response to an opposition must be filed within sixty days for Japanese or within three months for foreigners after receiving written opposition.¹⁷³ However, an examiner must designate an "adequate time limit."¹⁷⁴

Japanese firms generate large numbers of oppositions,¹⁷⁵ perhaps to intentionally delay the granting of the patent while they develop their own products and technology based on it. The problem with the Japanese system is that anyone with an economic interest in the case can make an opposition, and the applicant only

Japanese law from publication, the effective date used as a statutory bar is the date of publication).

169. Japanese Patent Law, *supra* note 11, § 55(1).

170. *Id.* § 57.

171. *Id.* § 55.

172. Rahn, *supra* note 12, at 49.

173. See Takashi Ishida, *Helpful Hints to Effective Japanese Patent Protection*, in PRACTICAL STRATEGIES—PATENT, at 93 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. 319, 1991).

174. Japanese Patent Law, *supra* note 11, § 57.

175. In 1991, 5,317 oppositions were filed, of which 1,683 were sustained, 2,567 rejected, and 446 otherwise disposed of. Despite these figures, there was a backlog of 8,680 pending opposition cases. 1992 *JPO Report*, *supra* note 125, ¶ 10. That same year, there were 2,182 utility model opposition cases, of which 610 were sustained, 901 rejected, and 318 otherwise disposed of, leaving a backlog of 3,304 pending opposition cases. *Id.* ¶ 11. Data is not available as to whether a Japanese national or a foreigner filed these oppositions.

has three months to respond to what could be a deluge of charges.¹⁷⁶

The burden on the applicant is enormous because the applicant must reply to every opposition. Potentially, a number of companies seeking to prevent another company from receiving a patent on a certain technology could coordinate a strategy so as to effectively prevent the patentee from enjoying any benefit of the patent grant.

In accordance with Japan's commitment to global development of intellectual property, Japan's Ministry of International Trade and Industry ("MITI") has announced the establishment of a subcommittee of its Industrial Structural Council which is responsible for proposing amendments to Japan's competition and intellectual property laws. The Industrial Property Council, an advisory council established by the MITI, issued a report entitled *Subcommittee Report on Patent & Utility Model Laws and Their Practices Leading to International Harmonization*. Japan has indicated that if the United States adopts a first-to-file system, Japan would amend its pre-grant opposition to a post-grant opposition for "more expeditious granting of rights and international harmony."¹⁷⁷

B. *Extent of Protection and Interpretation of Claims: Doctrine of Equivalents*

Article 21 of the Patent Law Treaty defines the extent of protection conferred by the patent.¹⁷⁸ This is determined by the claims, which are to be interpreted in light of the description and

176. In comparison, the United States maintains a very restrictive opposition period. See *Protest by the Public Against Pending Application*, 37 C.F.R. § 1.291 (1993). It is not used to any significant extent since applications are secret until a patent is granted.

177. 6 *World Intell. Prop. Rep. (BNA)* 272 (1992). The report urged that "Japan should positively examine the possible revision of its system based on the viewpoint that it can contribute to the global harmonization of patent systems." The Council has already implemented some changes to the patent procedures in Japan. See James A. Forstner, *The U.S. and Patent Harmonization: Potential Problems and Benefits*, 7 *World Intell. Prop. Rep. (BNA)* 18-19 (1993) (commenting, in particular, that the current Japanese pre-grant opposition procedure can delay the grant of a patent for much too long).

178. Patent Law Treaty, *supra* note 26, art. 21(1).

drawings.¹⁷⁹ These claims are to be interpreted so “as to combine fair protection for the owner of the patent with a reasonable degree of certainty for third parties.”¹⁸⁰ Therefore, these claims are to be interpreted neither in a strictly literal sense nor as mere guidelines that allow patent protection to extend to things contemplated but not claimed.¹⁸¹

Notwithstanding this provision, a claim would also cover equivalent recited elements in the following situations: (i) where equivalent elements perform substantially the same function and produce substantially the same results;¹⁸² and (ii) when it is obvious to a person skilled in the art that the result that would be achieved by the expressed element can be achieved via the equivalent element.¹⁸³

Claims are not limited to the example disclosed in the specification and drawing.¹⁸⁴ Rather, “the mere fact that a product or process includes additional features not found in the examples disclosed in the patent, lacks features found in such examples or does not achieve every objective or possess every advantage cited or inherent in such examples shall not remove the product or process from the extent of protection conferred by the claims.”¹⁸⁵

The analysis conducted determines whether the element that is the object of comparison is interchangeable, whether the element would have easily been conceived by those skilled in the art at the time of the application, and whether the function or effect of the element is substantially identical.¹⁸⁶ If these criteria are met, then they are deemed equivalent.

In Japan, the Doctrine of Equivalents is applied in a limited manner. The analysis focuses on what the inventor had in mind

179. *Id.*

180. *Id.* art. 21(1)(b).

181. *Id.* The abstract is not taken into account in interpreting the extent of claim protection. *Id.* art. 21(5).

182. *Id.* art. 21(2)(b)(i).

183. *Id.* art. 21(2)(b)(ii).

184. *Id.* art. 21(4).

185. *Id.*

186. *See id.* art. 21(2)(b)(i), (ii).

when he or she filed the application.¹⁸⁷ That is, the technical scope of the patented invention is determined on the basis of the statements of the patent claim.¹⁸⁸ However, expansive judicial interpretations of Japan's Doctrine of Equivalents recently have been rendered.¹⁸⁹ In order to comply with the Patent Law Treaty, the Japanese must amend their patent law to clarify its Doctrine of Equivalents.

C. Enforcement of Rights

1. Patent Law Treaty Provisions

Article 23(1)(i) of the Patent Law Treaty provides the patent owner with the right to obtain an injunction to restrain any person from making or using his or her invention without authorization.¹⁹⁰ Alternatively, the patent owner may obtain adequate damages from any such unauthorized person, provided such person was or should have been aware of the patent.¹⁹¹

Article 23(2) states that a Contracting Party shall provide reasonable compensation for the unauthorized use of an invention claimed in a published application, provided the infringer had actual knowledge or received written notice that the invention was the

187. See Japanese Patent Law, *supra* note 11, § 70. In contrast, in the United States, the focus is on what falls within the scope of the claims which is determined at the time of infringement. Wilder, *supra* note 28, at 535-36.

188. Japanese Patent Law, *supra* note 11, § 70(1). Furthermore, statements of the abstract attached to the request are not taken into account for determining the scope of the invention. *Id.* § 70(2).

189. See Judgment of Feb. 3, 1994 (THK v. Tsubaki (Unlimited Recirculating Ballspline Bearings)), Kōsai [High Court], Hei 3-1627 (Tokyo) (expansively interpreting the Doctrine of Equivalents and applying an interchangeability analysis for the method claims); Judgment of Mar. 14, 1986 (Matsushita Elec. Works, Ltd. v. Braun Japan K.K.), Chisai [District Court] (Osaka) (Japanese alternative to the Doctrine of Equivalents, called the Expansive Interpretation of Claim Language, expands the meaning of terms which define constituent elements of the claim); see also Judgment of Mar. 24, 1983 (Eno Indus. Co. v. Sato Indus. Co. (Pulpwood Barking Machine Case)), Chisai [District Court], Showa 55 (wa) 61 (Asahikawa) (recognizing the Doctrine of Equivalents), *aff'd*, Judgment of Dec. 25, 1984, Kōsai [High Court], Showa 58 (ne) 116/246 (Sapporo), *aff'd*, Judgment of May 29, 1987, Saikōsai [Supreme Court], Showa 60 (o) 381.

190. Patent Law Treaty, *supra* note 26, art. 23(1)(i).

191. *Id.* art. 23(1)(ii).

subject matter of a published application.¹⁹² Protection is determined by the claims as they appear in the published application.¹⁹³

2. Infringement Under Japanese Patent Law

In cases of patent infringement, Japanese patent law provides for civil remedies, in the form of injunctions and damages,¹⁹⁴ as well as criminal punishment.¹⁹⁵ Japanese patent law defines the right of the patentee as "the exclusive right to commercially work the patented invention."¹⁹⁶ Thus, anyone who trespasses on this exclusive right as claimed by the patentee is deemed an infringer. Specifically, acts of "manufacturing, assigning, leasing, displaying for the purpose of assignment or lease, or importing, in the course of trade, the articles to be used exclusively" for (i) the manufacture of the patented product, or (ii) the working of the patented process, are deemed to be an infringement of a patent right or exclusive license.¹⁹⁷ An accused infringer's negligence is presumed.¹⁹⁸

Infringement actions can only be commenced after publication and full examination, and the patentee must give advance warning to third parties or prove that the working of the invention has taken

192. *Id.* art. 23(2)(a)(i), (ii).

193. *Id.* art. 23(2)(c).

194. Japanese Patent Law, *supra* note 11, §§ 100, 102. What are considered injunctive remedies include, but are not limited to: (i) injunction barring the infringing act; (ii) destruction of the articles by which the act of infringement was committed; and (iii) removal of the facilities used for the act of infringement. *Id.* § 100(1)-(2). To obtain an injunction, one must prove actual infringement or likelihood of infringement. *See id.* § 100(1).

Damages may also be recovered. *Id.* § 102. The amount of compensation for the damage caused is presumed to be the profits gained by the infringer, but it may also be the amount of money the patentee or exclusive licensee "would normally be entitled to receive for the working of the patented invention." *Id.* § 102(1)-(2). No punitive damages are awarded.

195. *Id.* § 196. Section 196 states that "[a]ny person who has infringed a patent right or an exclusive license shall be liable to imprisonment with labor not exceeding five years or to a fine not exceeding 500,000 yen." *Id.* § 196(1).

196. *Id.* § 68. Section 68 does not apply to an exclusive licensee. *Id.*

197. *Id.* § 101(i)-(ii).

198. *Id.* § 103.

place.¹⁹⁹ Importantly, the Japanese judicial system has exclusive jurisdiction in patent infringement cases but not the right to hold a patent invalid.²⁰⁰ Such a determination is made by the JPO.²⁰¹

The enforcement of rights provisions in Japan's patent law do not appear to conflict with Article 23 of the Patent Law Treaty.

3. Japanese *Bengoshi* and *Benrishi*

Although discussion of the current litigation problems in Japan—and the solutions to those problems—as well as the appeal process from the JPO remain outside the scope of this Article,²⁰² this section will briefly discuss two important players in the prosecution and litigation history of a patent: the *Bengoshi* and the *Benrishi*.²⁰³

A *Bengoshi* (Attorney-at-Law) is a Japanese legal specialist and is the professional authorized to represent clients in court and in the JPO.²⁰⁴ A *Bengoshi* must have passed Japan's National Legal Examination and completed training at the Legal Training and Research Institute.²⁰⁵ A *Benrishi* (Patent Attorney) holds authority to prosecute patent applications and can provide licensing and opinion

199. *Id.* § 65^{er}.

200. See Mark F. Wachter, *Patent Enforcement in Japan: An American Perspective for Success*, 19 *AIPLA Q.J.* 59, 66 (1991).

201. *Id.*

202. For analysis of current patent litigation in Japan and reform, see MICHAEL N. MELLER, *INTERNATIONAL PATENT LITIGATION: A COUNTRY-BY-COUNTRY ANALYSIS 1983-89* (1990); Takeshi Kojima, *Civil Procedure Reform in Japan*, 11 *MICH. J. INT'L L.* 1218 (1990); R.C. Stewart, *Pharmaceutical and Biotechnological Litigation in Japan*, in *1991 IPR Report*, *supra* note 17, at 1; Wachter, *supra* note 200. For a better understanding of interference practice in Japan, see John Kakinuki, *How the Japanese Handle Interference Issues in Their First-to-File World*, 18 *AIPLA Q.J.* 80 (1990).

203. It is important to stress that Japan is a civil law country, while the United States is a common law country. Japanese legal procedures are customary laws developed during the Meiji government and Taisho. In 1890, a civil procedure evolved from the German Code of Civil Procedure and parts of French Civil Procedure. See generally Rahn, *supra* note 12.

204. Christopher E. Chalsen, *Glossary of Important Patent Terms*, in *JAPANESE PATENT PRACTICE*, *supra* note 18, 1, 1.

205. *Id.*; Susan Sayuri Kigawa, Note, *Gaikoku Bengoshi Ho, Foreign Lawyers In Japan: The Dynamics Behind Law No. 66*, 62 *S. CAL. L. REV.* 1489, 1493 (1989).

services in patent-related cases.²⁰⁶ In court, *Benrishi* can work with *Bengoshi* in infringement litigation, but in cases involving trials for invalidation within the JPO or the revocation of JPO decisions in the Tokyo High Court, *Benrishi* can represent clients alone.²⁰⁷

Japanese law forbids Japanese-American law firm partnerships.²⁰⁸ This is problematic in that it does not afford foreign corporations and firms the same opportunities as it does domestic corporations and firms.²⁰⁹ However, in 1986, the Japanese Diet passed a law to allow foreign lawyers to practice in Japan as foreign law business lawyers.²¹⁰ A foreign lawyer, however, may only advise clients rather than appear in court or before an administrative agency. In fact, the only foreign lawyers who maintain the ability to represent a client in a Japanese court are lawyers who, prior to 1955, practiced in Japan and thus were grandfathered.²¹¹ Therefore, an inventor who is not a Japanese domicile or resident of Japan cannot file his or her own application but rather must have a *Benrishi* or *Bengoshi* file it on his or her behalf.²¹²

4. Venues in International Agreements

The WIPO has proposed the establishment of a body to arbitrate international patent disputes, with the goal of a neutral settle-

206. Chalsen, *supra* note 204, at 1.

207. *Id.* Article 281 of the Japanese Code of Civil Procedures allows the patent attorney to refuse to testify, but no such privilege is mentioned for a client with regard to documents prepared in connection to the relationship. See *Alpex Computer Corp. v. Nintendo Co.*, No. 86 Civ 1749, 1992 WL 51534 (S.D.N.Y. Mar. 10, 1992) (district court affirming the magistrate's ruling). However, this is because Japanese Code of Civil Procedures does not provide for discovery of any kind.

208. Kigawa, *supra* note 205, at 1508 & n.95.

209. *See id.*

210. Gaikoku Bengoshi niyoru Horitsujimu no Toriatsukai ni Kansuru Tokubetsusochi Ho [Act Providing Special Measures Law Concerning the Handling of Legal Business by Foreign Lawyers], Law No. 66 of 1986, translated in 2 DOING BUSINESS IN JAPAN app. at 613 (Zentaro Kitagawa ed., 1987).

211. See Clyde H. Farnsworth, *Japan to Open Door to American Lawyers*, 133 CHI. DAILY L. BULL., Feb. 27, 1987, at 1; Paul Hayden, *To Be or Not to Bengoshi in Japan*, LAW INST. J., Jan.-Feb. 1985, at 118; C. Norman, *A Statutory Analysis of the Right of U.S. Lawyers to Practice in Japan*, 7 MICH. Y.B. INT'L LEG. STUD. ANN. 45 (1985).

212. Japanese Patent Law, *supra* note 11, § 8.

ment of such disputes.²¹³ Similarly, the MITI has proposed the use of arbitration as an alternative venue for international patent disputes.²¹⁴ This is a result of increased international litigation.²¹⁵ The International Association for the Protection of Industrial Property ("AIPPI") is of the opinion that arbitration should be made available for all forms of intellectual property disputes.²¹⁶ It reasons that arbitrators: (1) afford confidentiality and neutrality; (2) offer flexibility; (3) favor resolution of the dispute; and (4) may decide issues pertaining to similar subject matters but arising in different countries.²¹⁷ Such arbitrators should have the power, *inter alia*, to award damages, grant injunctions, decide the enforceability of patents between parties and infringement, act as mediators or conciliators, and order delivery or destruction of infringing items.²¹⁸

Moreover, Japan could become a member state to the Hague Convention on the Taking of Evidence Abroad in Civil or Commercial Matters.²¹⁹ By joining the Convention, a mechanism is established to obtain discovery during litigation. Under the Convention, the three available options are to: (1) file a "Letter of Request"; (2) take evidence through diplomatic or consular channels; and (3) request a "competent authority" of state to appoint an

213. See *IP Treaty Developments*, J. PROPRIETARY RTS., Nov. 1992, at 28.

214. I AIPPI ANNUAL 99 (1992). Arbitration in Japan covers any dispute which is resolved between parties and follows Japanese Civil Code 786-805. The problem with arbitration as it relates to intellectual property involves the question of enforceability under Japanese civil law. See *id.*

215. The *Nikkei* Business Newspaper estimates that Japanese firms face about 1,000 patent disputes. Clayton Jones, *U.S., Japan Closer to Pact on Patent Procedure Technology: The Two Countries' Different Ways of Granting Patents Have Caused Trade Friction and a Multitude of Lawsuits*, L.A. TIMES, Oct. 12, 1992, at D3.

216. *Contacts of the International Bureau of WIPO with Governments and International Organizations in the Field of Industrial Property*, 31 INDUS. PROP. 228, 233 (1992).

217. *Id.*

218. *Id.*

219. Hague Convention on the Taking of Evidence Abroad in Civil or Commercial Matters, *opened for signature* Mar. 18, 1970, 847 U.N.T.S. 231, 23 U.S.T. 2555 [hereinafter *Hague Convention*]. Other member nations include: Argentina, Barbados, Cyprus, Czechoslovakia, Denmark, Germany, Finland, France, Israel, Italy, Luxembourg, Mexico, Monaco, Netherlands, Norway, Pakistan, Portugal, Singapore, Spain, Sweden, United Kingdom and the United States.

individual to take evidence in that state.²²⁰

D. Mandatory Cross-Licensing

The Patent Law Treaty does not contain provisions regarding mandatory cross-licensing. However, sections 92 and 93 of the Japanese patent law establish a procedure by which one can receive a compulsory non-exclusive license for another's patented invention.²²¹ Section 92(1) provides that where a patented invention would utilize another person's patented invention under an application filed prior to the filing date of the patent application concerned, "the patentee or exclusive licensee may request the other person . . . to hold consultations on the grant of a non-exclusive license to work the patented invention."²²² The Commissioner of the JPO, however, shall not order a non-exclusive license to be granted if it would not be equitable.²²³ Section 93 provides for compulsory non-exclusive license practice where the working of a patented invention is particularly necessary in the public interest.²²⁴ If consultations are not possible or agreement cannot be reached, then the MITI will decide the issue by arbitration.²²⁵ These provisions thereby allow a company in Japan to force a foreign company to cross-license a patentable invention.

220. *Id.*

221. Japanese Patent Law, *supra* note 11, §§ 92-93.

222. *Id.* §§ 72, 92(1).

223. *See id.* § 92(5).

224. *Id.* § 93(1). Only a few applications have been filed under Section 92, and not one has issued into a compulsory non-exclusive license. No applications have been filed under Section 93. Telephone interview with Yoichiro Yamaguchi, Esq., Beveridge, DeGrandi, Weilacher & Young, Washington, D.C. (May 12, 1994).

225. *Id.* § 93(2). MITI exerts influence over the JPO such as through administrative guidance on private persons and enterprises in the public interest. In contrast, the U.S. Department of Commerce takes a *laissez faire* approach. The influence can take the form of encouragement, suggestion, warning, request or directive. Even though the administration directives are considered non-legal in its effect, few decline the guidance.

MITI determines which technologies are of national importance, acts as an arbitrator in cross-licensing cases, and could act as the central coordinator in opposition proceedings regarding technologies that have national importance. An example of the relationship between MITI and the JPO is the cycling through of administrators in the JPO and MITI on a one- or two-year cycle. Conversation with Satoshi Moriyasu, Mar. 1993.

American executives have criticized the Japanese for their practice of "patent flooding," which is the filing of scores of unworthy patents surrounding the core technology of another inventor.²²⁶ The purpose of patent flooding is to gain access or bargaining power to a particular technology by extracting cross-licensing agreements.²²⁷ So common is cross-licensing in Japan that former U.S. Patent Office Commissioner Donald J. Quigg has stated that the Japanese "indirectly have a massive mandatory licensing system."²²⁸ For example, when IBM announced a breakthrough in the field of warm-temperature superconductivity, Japanese firms raced to file applications to ensure that their patents would be in a position to require competitors to cross-license.²²⁹ Sumitomo Electronic Co. filed more than 700 applications on the IBM technology.²³⁰

Patent flooding is possible in Japan in part because the Japanese patent system allows a narrow scope of patent claims, actually granting patents based on minor variations from existing technologies.²³¹ The result of patent flooding is that U.S. firms receive royalties but are forced to license their technology to the Japanese and thereafter compete against their own technology.²³² The impact on competitiveness could be enormous—especially to small firms—because firms that are compelled to license lose one of their advantages, i.e., the patent, and must rely on other factors to compete in the marketplace. "U.S. executives tend to focus on the few percentage points of royalty flow without realizing that it's ultimately gained at the expense of the company's technology."²³³ What is lost is the next generation of technology, or in essence, a company's future products.

226. See, e.g., Spero, *supra* note 19, at 59, 60.

227. *Id.* at 60.

228. *Id.* at 66.

229. Philip J. Hilts, *IBM Reports Giant Advance in Superconductivity*, ST. PETERSBURG TIMES, May 11, 1987, at 6A.

230. *Id.*

231. Spero, *supra* note 19, at 66.

232. See *id.* at 59.

233. *Id.*

CONCLUSION

The Patent Law Treaty attempts to bridge the waters of national sovereignty and form an international body of patent laws. Like all international treaties, however, some Articles of the treaty comply with the domestic law of its signatories while others do not. The success of Japan's harmonization effort will depend on which Articles of the Patent Law Treaty are in compliance with current Japanese laws and which are not.

Japanese patent law is in compliance with Patent Law Treaty Article 3 (Disclosure and Description), Article 4 (Claims), Article 5 (Unity of Invention), Article 9 (Right to a Patent), Article 11 (Conditions for Patentability), Article 13(1), (3), (4) (Prior Art Effect of Certain Applications), Article 14(1), (3) (Limitation of Amendment or Correction of Application), Article 15 (Publication of Application), and Article 23 (Enforcement of Rights).

Japan will have to amend its existing civil law or introduce new legislation to the Diet in order to comply with Patent Law Treaty Article 7(1) (Belated Claiming of Priority), Article 8(5) (Filing Date), Article 12 (Disclosures Not Affecting Patentability (Grace Period)), Article 13(2) (Prior Art Effect of Certain Applications), Article 14(2) (Amendment or Correction of Application on Applicant's Initiative), Article 16 (Time Limits for Searches and Substantive Examination), Article 18(2) (Administrative Revocation), and Article 21 (Extent of Protection and Interpretation of Claims).

Article 7(1) of the Patent Law Treaty establishes a time limit for submitting a belated claim of priority of at least two months from the filing date and not more than four months from the date on which a period of twelve months from the filing date of an earlier application has expired.²³⁴ Sections 42^{bis}(4) and 43(1) of the Japanese patent law require that priority claim for an invention must be done at the time of filing.²³⁵ Therefore, Japan's compliance with the Patent Law Treaty necessitates amending its priority requirement.

234. See *supra* notes 98-99 and accompanying text.

235. See *supra* note 100 and accompanying text.

Article 8(5)(b) of the Patent Law Treaty mandates that an application in a language other than the official language must be admitted.²³⁶ Japanese patent law requires, in principle, that all documents be filed in Japanese, except as provided under Section 184^{quater}, and does not allow corrections on language translational problems that arise further down the prosecution phase.²³⁷ Compliance with the Patent Law Treaty necessitates some modification of Japan's language requirement.

Article 12(1) of the Patent Law Treaty maintains a twelve-month grace period which precedes the filing date or the priority date, whichever is earlier.²³⁸ Japanese patent law allows for a six-month grace period.²³⁹ Consequently, Section 30 of the Japanese patent law will have to be amended from six months to twelve months for compliance.

Article 13(2) requires that where an application is published but has been withdrawn or abandoned, the application is deemed never to have been made.²⁴⁰ Since Section 39(5) of the Japanese patent law only provides for applications which have been withdrawn or invalidated,²⁴¹ it must be amended to provide for abandoned applications.

Article 14(2) of the Patent Law Treaty allows a Contracting Party who provides substantive examination to endow the applicant with the right to amend, on his own initiative, the description, the claims, and any drawings.²⁴² This right may be conveyed only up to the time allowed for the reply to the first Office Action.²⁴³ Japanese patent law provides an opportunity for the applicant to correct the application but only within fifteen months of filing the application.²⁴⁴ Japan will have to amend Section 17 of its patent law to

236. See *supra* note 155 and accompanying text.

237. See *supra* note 156-157 and accompanying text.

238. See *supra* note 55 and accompanying text.

239. See *supra* note 57 and accompanying text.

240. See *supra* note 63 and accompanying text.

241. See *supra* note 64 and accompanying text.

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

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

244. See *supra* note 105 and accompanying text.

comply with the Patent Law Treaty's more liberalized amendment system.

Article 16(2) of the Patent Law Treaty mandates that: (1) countries maintaining substantive examination procedures begin examination no later than three years from the filing of the application and wherever possible; and (2) that such countries reach a final decision on the application no later than two years after the start of substantive examination.²⁴⁵ The current Japanese patent system maintains a deferred examination procedure in which examination does not have to begin for seven years.²⁴⁶ In addition, the current JPO pendency time of an application is two years and six months.²⁴⁷ Japan's compliance with the treaty would require a shortening of the pendency period. The period could be shortened by an increase in JPO examiners, adoption of a "continuation" application process, and revising the deferred examination system.

Article 18(2) of the Patent Law Treaty prohibits a pre-grant opposition period and allows for a ten-year catch-up period for countries like Japan that maintain such a procedure.²⁴⁸ The Industrial Property Council has indicated in its report a willingness to amend its procedure and switch to a post-grant opposition period.²⁴⁹

Article 21(2) of the Patent Law Treaty maintains that a claim must be considered to cover not only all the elements as expressed in the claim but also equivalents.²⁵⁰ Article 21(2)(b) limits the application of the Doctrine of Equivalents, however, to the equivalent elements which perform the same function in substantially the same way and produce substantially the same result.²⁵¹ The Doctrine also applies where it is obvious to a person skilled in the art that the same result as that achieved by means of the element as expressed in the claim can be achieved by means of an equivalent

245. See *supra* notes 123-124 and accompanying text.

246. See *supra* notes 125-126 and accompanying text.

247. See *supra* note 133 and accompanying text.

248. See *supra* notes 165-166 and accompanying text.

249. See *supra* note 177 and accompanying text.

250. See *supra* notes 182-183 and accompanying text.

251. See *supra* notes 182-183 and accompanying text.

element.²⁵² Since the Patent Law Treaty provides that a Contracting Party is free to determine whether an element is equivalent to an element as expressed in either Article 21(2)(b)(i) or (ii),²⁵³ Japan will choose (ii), which complies with its current practice. However, compliance with the Patent Law Treaty will ultimately require Japan to amend or modify Section 70 of the Japanese Patent Law so as to codify the Doctrine of Equivalents.

The WIPO negotiations on the harmonization of the patent laws provide a vehicle for change for all countries involved. Nevertheless, for change to truly occur, there must be concrete movement toward adoption of the Patent Law Treaty's enumerated Articles. The Japanese have indicated that upon bilateral movement by the United States they are willing to conform to Articles 16 and 18(2).²⁵⁴ Article 21(2) of the Patent Law Treaty could present an obstacle unless a balanced package is reached with the United States.²⁵⁵

There are those who argue that if the

basic rules of the Japanese and United States systems were to change, business practice may not. This is because Japanese corporations would continue to use patents in a defensive manner and refrain from litigation, while American corporations would continue to use patents as an economic asset and enforce them in courts.²⁵⁶

The correctness of the foregoing statement requires the test of time. As of this writing, the United States has indicated an unwillingness to proceed in the current WIPO negotiations which effectively closes, for now, one venue for harmonization of the patent laws.²⁵⁷ The ultimate passage of the Patent Law Treaty hinges on Japan's willingness to cooperate with the United States. The process, however, is not a one-way street. If global patent harmonization is desired, the United States will also have to cooperate.

252. See *supra* note 183 and accompanying text.

253. Patent Law Treaty, *supra* note 26, art. 21(2)(c).

254. See *supra* notes 140 and 177 and accompanying text.

255. The Japanese view the tradeoff with the United States as contingent upon the adoption of a first-to-file system which the United States has recently indicated an unwillingness to embrace.

256. *Patent and Licensing*, JAPANESE ENGLISH NEWS, at 7 (1990).

257. See *supra* note 25.