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The Application of Japanese Article 35 regarding Reasonable Compensation for Patents by Employed Inventors in Syuji Nakamura v. Nichia Corporation

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CASENOTES

THE APPLICATION OF JAPANESE ARTICLE 35 REGARDING ‘REASONABLE’ COMPENSATION FOR PATENTS BY EMPLOYED INVENTORS IN *SYUJI NAKAMURA V. NICHIA CORPORATION*

Jean E. Healy[†]

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I. INTRODUCTION

In today’s society, “most inventions are employment-related.”¹ In Japan, “the ratio of patent applications by corpora-

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¹ C.C. Bjorklund, *Employee’s Right to Compensation for Employer’s Use of Employee’s Inventive Idea*, 23 AM. JUR. 2d *Proof of Facts* § 1 (2004) (“Independent American inventors, who routinely were awarded almost all of the United States patents, initially propelled the American economy with their new technology.

tions and government offices to the total of patent applications is approximately 97%.² The majority of industrialized countries have patent laws that cover the rights of employed inventors for patented inventions.³ "The rules concerning allocation of inventors' rights and inventors' remuneration are of considerable importance."⁴ "In general, these laws provide that employees hired specifically to invent will not receive additional compensation unless the invention is extremely successful or profitable."⁵

However, "Germany throughout the twentieth century has been a world leader in patent scholarship and innovation of patent laws,"⁶ and West Germany has "maintain[ed] a comprehensive system. . . governing the rights of employee inventions since 1957."⁷ German patent law offers employed inventors "a share of the value of the invention in addition to salary."⁸ Japan has followed Germany's system of compensation for employee-inventors.⁹ Japanese Article 35 of the current 1959 Patent Law¹⁰ covers the employee-invention system.¹¹ Japan's Article 35¹² of the patent law "stipulates that even when new

Now, American inventors are typically employed by American corporations. Employed inventors account for seventy-five percent to ninety percent of all inventions made in the United States."); See Mark B. Baker & Andre J. Brunel, *Restructuring the Judicial Evaluation of Employed Inventors' Rights*, 35 ST. LOUIS U. L.J. 399 (1991).

² Patent System Subcommittee, Intellectual Property Policy Committee, Industrial Structure Council, *Improvement of Employee-invention System*, 3, n.1 (2003) available at <http://www.jpo.go.jp>.

³ Henrik D. Parker, *Reform for Rights of Employed Inventors*, 57 S. CAL. L. REV. 603, 615 (1984).

⁴ Christopher Heath, *Harmonizing Scope and Allocation of Patent Rights in Europe - Towards a New European Patent Law*, 6 MARQ. INTELL. PROP. L. REV. 11, 18 (2002).

⁵ See Parker, *supra* note 3.

⁶ Harold C. Wegner, *Patent Harmonization on the Pacific Rim*, 8 (May 1995) available at <http://www.apli.org/ftp/pacific-rim.pdf>.

⁷ See Parker, *supra* note 3, at 616.

⁸ *Id.*

⁹ See Patent System Subcommittee, *supra* note 2, at 7.

¹⁰ Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *The Case Studies of the Procedures under the New Employee Invention System (draft)*, 9-11 (2004) available at http://www.jpo.go.jp/iken_e/pdf/200408_newep/001.pdf.

¹¹ See Patent System Subcommittee, *supra* note 2, at 4.

¹² Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

discoveries are made as part of one's employment, the researcher maintains the right to receive reasonable compensation."¹³ Legal disputes and societal impact result from "rules that unduly favor either the employer or employee."¹⁴ The *Syuji Nakamura v. Nichia Corporation* case¹⁵ illustrates this point.¹⁶

Syuji Nakamura, a Nobel candidate, "sued his former employer Nichia Corporation for approximately two billion Yen over the invention of the blue light-emitting diode (LED) used for display panels."¹⁷ Nichia Corporation received significant profits from the LED technology, "but Nakamura claimed in a Mainichi Shimbun interview that all he received for the patent was 20,000 yen."¹⁸ The Mainichi newspaper wrote:

Some 436,800 patent applications were posted in Japan in 2000, a figure regarded as being the highest of any country. The number of applications by Japanese individuals and corporations—including those filed overseas—had risen to No. 2 in the world by around the early 1990s. But, a salient feature of these petitions was that they were overwhelmingly filed by businesses. In 95 percent of these cases, moreover, the inventor conceded the patent rights to the employed. Businesses reap big payoffs from the discoveries. The blue LED is one such example.¹⁹

In January 2004, the Tokyo District Court awarded \$190 million USD to Nakamura.²⁰ This decision has made Japan's Article 35,²¹ employed inventors law, "the most controversial patent law provision in the world."²² This award "supersede[d]

¹³ See Heath, *supra* note 4, at 18.

¹⁴ See *id.*

¹⁵ *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004)(Translation on file with author).

¹⁶ See Heath, *supra* note 4, at 18; See *Nakamura*, Case No. Heisei 13 (wa) 17772.

¹⁷ See *id.*

¹⁸ See Heath, *supra* note 4, at 18.

¹⁹ See *id.* at 18 (quoting Editorial, *Payoffs for Patents*, MAINICHI DAILY NEWS, Aug. 8, 2001, available at <http://mdn.mainichi.co.jp/news/archive/200108/26>).

²⁰ See Sharon R. Barner & Harold C. Wegner, *The Employed Inventor in Japan and California: A Comparative View of the Two Systems*, 1, Mar. 2004, <http://www.foley.com>.

²¹ Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

²² See Barner & Wegner, *supra* note 20.

an employment regulation award of \$200.00²³ for an invention patented during Nakamura's employment with Nichia Corporation.²⁴

The *Nakamura*²⁵ decision referenced the Supreme Court case in *Olympus Optical Co., Ltd. v. Tanaka*.²⁶ In May 2001, the Tokyo High Court issued its decision in the *Olympus*²⁷ case by "underlin[ing] the idea that work-related inventions belong first and foremost to the inventor, while the employer is allowed to enjoy a gratuitous licen[s]e to work the invention."²⁸ The *Olympus*²⁹ decision also stands for the proposition that "the employer can legitimately become an applicant only after the inventor has received fair compensation for his contribution to the invention."³⁰ "In early 2003, the Supreme Court in the *Olympus*³¹ case interpreted Article 35³² as permitting a judicial determination of fair compensation to an employed inventor keyed to the profits of the employer."³³ Then, on January 28, 2004, the Tokyo High Court decided the *Hitachi*³⁴ case, holding "compensation is to be calculated based not only upon domestic Japanese patents but also based upon American and other foreign patents."³⁵ The Tokyo District Court one day later, on January

²³ See *id.*

²⁴ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

²⁵ See *id.*

²⁶ *Olympus Optical Co., Ltd. v. Tanaka*, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003). (English translation available at <http://courtdomino2.courts.go.jp/promjudg.nsf?OpenDatabase&Start=82>).

²⁷ See *Olympus Optical Co., Ltd.* 57 MINSHU at 477, referencing the case for the original decision by the Tokyo High Court, Heisei 11 (ne) 3208 (May 22, 2001).

²⁸ Sonada & Kobayashi, *Japan Courts back compensation for inventors*, MANAGING INTELLECTUAL PROPERTY, (Mar. 2003), available at <http://www.managingip.com> (Follow "Full Archive" hyperlink; then follow "2003" hyperlink to "March 2003" hyperlink to "full contents").

²⁹ *Olympus Optical Co., Ltd.*, 57 MINSHU at 477.

³⁰ See Sonada & Kobayashi, *supra* note 28.

³¹ See *Olympus Optical Co., Ltd.* 57 MINSHU at 477.

³² Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

³³ See Harold C. Wegner, *The 2004 Japan Employed Inventor Law Amendments*, Mar. 24, 2004, <http://www.foley.com>.

³⁴ *Hitachi Ltd. v. Seiji Yonezawa*, Case No. Heisei 14 (ne) 6451 (Tokyo High Ct., Jan. 29, 2004) (Translation on file with author).

³⁵ See Wegner, *supra* note 33, at 2.

29, 2004 awarded the unprecedented \$190 million USD to Nakamura for his work as an employed inventor.³⁶

In the *Olympus*, *Hitachi* and *Nakamura*³⁷ cases, the employer had “assigned the patent rights to his employed for minimal compensation.”³⁸ In these three cases, the Japan judicial system applied Article 35³⁹ of the Japan Patent Law as “permitting the courts to look beyond the employment agreement where the initial amount was not ‘reasonable.’”⁴⁰

The question then becomes what is ‘reasonable’ compensation for an employed inventor, how is ‘reasonable’ compensation determined, and what impact does it have on innovation in the global marketplace in the twenty-first century for multi-national companies operating in Japan?

Part I of this article looks at the historical background of Japanese Patent Law, Article 35. Part II examines the key case regarding Article 35 compensation for employed-inventors, *Syuki Nakamura v. Nichia Corporation*. Part III contains a critical analysis of the case and considers additional cases within the employed-inventor classification and their potential negative impact on multi-national firms in light of the case. Part IV states a conclusion for the application of Japanese Article 35 within Japan and the implications of its 2003 revision—to take effect after April, 2005—on innovation in the twenty-first century.

II. BACKGROUND: JAPAN PATENT LAW, ARTICLE 35

Patent law in Japan covers the employee-invention system as first seen in “the German rules for employees’ inventions. . . codified in the Employees’ Inventions Act of July 25, 1957. . . .”⁴¹ The drafters of the current Japan 1959 Patent

³⁶ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004); See Wegner, *supra* note 33, at 2.

³⁷ See *Olympus Optical Co., Ltd. v. Tanaka*, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003); *Hitachi Ltd. v. Seiji Yonezawa*, Case No. Heisei 14 (ne) 6451 (Tokyo High Ct., Jan. 29, 2004); *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

³⁸ See Wegner, *supra* note 33, at 2.

³⁹ Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11.

⁴⁰ See Wegner, *supra* note 33, at 2.

⁴¹ See Heath, *supra* note 4, at 6.

Law, Article 35 “saw the benefits of the German system that offered employed-inventors a statutory compensation right keyed to the value of the contribution of the employee.”⁴² Therefore, Japan enacted the employee-invention system in Article 35 of Japan’s 1959 patent system.⁴³ This system was stipulated in Japan’s 1921 Patent Law⁴⁴ and occurs in similar form in Japan’s 1959 Patent Law.⁴⁵ Japan’s system also links the profits of employers to possible compensation available for the inventor(s) under the 1959 law.⁴⁶ Historically, however, additional compensation for corporate employed inventors could be characterized as ‘modest’⁴⁷ until the recent *Olympus*⁴⁸ decision that opened the door for landmark financial awards granted in the *Nakamura*⁴⁹ decision.

Contract principles typically govern the relationship between employer and employee concerning intellectual property for inventions.⁵⁰ “A research scientist is typically given an employment contract (as in the United States). . . [and therefore], operates under a regulation of his company. . . assign[ing] his rights to an invention *prospectively*, before he starts his employment, to any inventions that are made in the course of employment.”⁵¹ However, Japan Article 35, section (2) makes

⁴² See Barner & Wegner, *supra* note 20, at 5.

⁴³ Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11. See Barner and Wegner, *supra* note 20, at 5.

⁴⁴ See Patent System Subcommittee, *supra* note 2, at 4.

⁴⁵ Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11. See Patent System Subcommittee, *supra* note 2, at 4.

⁴⁶ See Barner & Wegner, *supra* note 20, at 4.

⁴⁷ See *id.*

⁴⁸ See *Olympus Optical Co., Ltd. v. Tanaka*, 57 MINSHU 477 (Sup. Ct. Apr. 22, 2003). See Barner & Wegner, *supra* note 20, at 4 (“Nothing of great significance took place under the 1959 law for nearly two full generations. In the landmark *Olympus* case, the Tokyo judiciary in a series of pronouncements established the right of the employed inventor to a *retroactive* compensation right *after commercialization of the invention*. The final chapter of the *Olympus* case was the 2003 Supreme Court affirmation of the Tokyo High Court ruling that throws out employment agreements for future compensation of inventors; it has opened a Pandora’s box of controversy and uncertainty for innovation in Japan that is protected by patents in that country.”); See Barner & Wegner, *supra* note 20, at 4.

⁴⁹ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004). See Barner & Wegner, *supra* note 20, at 4.

⁵⁰ See Barner & Wegner, *supra* note 20, at 5.

⁵¹ *Id.*

prospective employment contracts null and void.⁵² "A patent for an invention is a grant of a property right by the Government to the inventor (or his heirs or assignees)."⁵³ A patent that is secured within the scope of the employer's business and is part of the employee's job responsibilities is referred to as a 'service' invention.⁵⁴ Generally, "the employee, as the inventor, owns the service invention, but the employer is entitled to have a nonexclusive license to practice it."⁵⁵ However, Article 35(2)⁵⁶ "allows reserved succession of the right to obtain a patent or the right to a patent granted, or the establishment of an exclusive license for the employers."⁵⁷ Yet, the purpose of a patent system is to encourage innovation and the specific purpose of Patent law No. 121 of 1959⁵⁸ "shall be to encourage inventions by promoting their protection and utilization so as to contribute to the development of industry."⁵⁹ "It is necessary to increase the motivation for invention among the numerous personnel engaged in research in Japan."⁶⁰ Therefore, Japan's patent law "provides the right to demand payment of 'adequate remuneration' to the employees who have actually created the invention, in return for allowing the employers to succe[ed] to the right to obtain a patent or the right to a patent granted or the establishment of an exclusive license for the employers."⁶¹

⁵² Japan Patent Law, Law No. 121 of 1959, art. 35, no. 2 *referenced in* Japan Patent Office, *supra* note 10, at 9-10; *See* Barner & Wegner, *supra* note 20, at 6.

⁵³ *See US Patent and Trademark Office General Information Concerning Patents*, A.B.A. SEC. INTELL. PROP. L. 3, *available at* <http://www.abanet.org/intelprop/comm106/106general.html>.

⁵⁴ *See* Vai Io Lo, *Employee Inventions and Works for Hire in Japan: A Comparative Study Against the U.S., Chinese, and German Systems*, 16 TEMP. INT'L & COMP. L.J. 279, 282 (2002).

⁵⁵ *See id.* ("The right to obtain a patent may be transferred."); Japan Patent Law, Law No. 121 of 1959, art. 33, n. 1 *referenced in* Japan Patent Office, *The Case Studies of the Procedures under the New Employee Invention System (draft)*, 8, Aug. 2004, *available at* http://www.jpo.go.jp/iken_e/pdf/200408_newep/001.pdf.

⁵⁶ *See* Japan Patent Law, Law No. 121 of 1959, art. 35, no. 2 *referenced in* Japan Patent Office, *supra* note 10, at 9-10.

⁵⁷ *See* Patent System Subcommittee, *supra* note 2, at 6; Japan Patent Law, Law No. 121 of 1959, art. 35, n. 2.

⁵⁸ *See* Japan Patent Law, Law No. 121 of 1959, art. 1 *referenced in* Japan Patent Office, *supra* note 10, at 8.

⁵⁹ *See* Japan Patent Office, *supra* note 10, at 8.

⁶⁰ *See* Patent System Subcommittee, *supra* note 2, at 3.

⁶¹ *See* Patent System Subcommittee, *supra* note 2, at 6-7; Japan Patent Law, Law No. 121 of 1959, art. 35, n. 3.

On the other hand, corporations who employ the researchers also play a critical role in making inventions possible by "bear[ing] the burden of risks of providing the research and development funds."⁶² This burden borne by employers, such as investment risks and the costs of commercialization for inventions, can be included in the 'adequate remuneration' equation for employees.⁶³ Therefore, with these purposes in mind, Article 35 of Japan's 1959 Patent Law⁶⁴ strives to provide a stable environment for innovation⁶⁵ and to strike a balance between the employee's contribution to an invention and the employer's investment and profits from that invention when determining 'reasonable' compensation due to the employee who secured the patent.⁶⁶

There are three applicable sections in Article 35 to employee compensation: (1) section 35(3) grants the 'right' to reasonable remuneration for employed-inventors when the employee transfers the property right of the patent;⁶⁷ (2) section 35(4) stipulates that employers and employees need to agree to the standards set for 'reasonable' payments by employers to employees for inventions⁶⁸ by setting, in advance, a framework;⁶⁹ and, (3) section 35(5) provides the amount of remuneration will be based on the profits of the employer and the proportionate contribution by the employee to the invention itself.⁷⁰ With the increase of Japan's interest in intellectual property to promote industrial competitiveness,⁷¹ "the existence of the provisions of Section 35 of the Patent law has attracted attention [with] the number of lawsuits concerning this Section. . .drastically in-

⁶² See *id.* at 4.

⁶³ See Japan Patent Law, Law No. 121 of 1959, art. 35, no. 5 referenced in Japan Patent Office, *supra* note 10, at 11.

⁶⁴ See Patent System Subcommittee, *supra* note 2, at 6.

⁶⁵ See Patent System Subcommittee, *supra* note 2, at 6-7; Japan Patent Law, Law No. 121 of 1959, art. 35, n. 3 referenced in Japan Patent Office, *supra* note 10, at 10.

⁶⁶ See Patent System Subcommittee, *supra* note 2, at 6-7; Japan Patent Law, Law No. 121 of 1959, art. 3 referenced in Japan Patent Office, *supra* note 10, at 9-11.

⁶⁷ See Patent System Subcommittee, *supra* note 2, at 6-7.

⁶⁸ See *id.*

⁶⁹ See Wegner, *supra* note 33, at 4.

⁷⁰ See Japan Patent Office, *The Case Studies of the Procedures under the New Employee Invention System (draft)*, *supra* note 10, at 11.

⁷¹ See Patent System Subcommittee, *supra* note 2, at 3.

creas[ing]. . .and its significance being questioned.”⁷² The ‘reasonable’ compensation in the *Nakamura*⁷³ case is just such a case that has attracted attention for Japan’s Article 35.⁷⁴

III. PRESENTATION OF THE CASE – S. NAKAMURA V. NICHIA CORPORATION

A. *Procedural History*

In 2001, Syuji Nakamura brought suit in the Tokyo District Court against his former employer, Nichia Corporation, for an invention “concerning a growth method for nitride-semiconductor crystal films”⁷⁵ which was filed in 1990 and granted a patent in 1997.⁷⁶ Nakamura was registered as the inventor in the 1990 filing and Nichia Corporation was designated as the patentee for the invention.⁷⁷ Nakamura made three claims in his suit: (1) Nakamura, as the inventor, is owner of the patent and patent ownership has not been transferred, but, by registering the transfer of the patent (joint share), 0.1 billion Yen from excess profits, plus delayed damages, should be awarded to him;⁷⁸ (2) if patent ownership has been “transferred to the defendant on the ground that the present invention was a service invention[,]”⁷⁹ then “0.1 billion Yen, as a partial pecuniary claim of the deserved consideration”⁸⁰ should be given to Nakamura, the inventor, under Article 35(3);⁸¹ and, (3) “if the claim for registering the transfer of a part of the present patent (joint share) is not permitted,”⁸² then 20 billion yen is the deserved consideration under Article 35(3).⁸³

⁷² See *id.* at 9.

⁷³ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

⁷⁴ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

⁷⁵ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 2. (Translation on file with author) (Page designation refers to English translation).

⁷⁶ See *id.*

⁷⁷ See *id.* (The Patent No. for Nakamura’s invention is No. 2628404).

⁷⁸ See *id.* at 2-3.

⁷⁹ See *id.* at 3.

⁸⁰ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772, 3 (Tokyo D. Ct., Jan. 30, 2004).

⁸¹ See *id.*

⁸² See *id.*

⁸³ See *id.*

The District Court, regarding claim (1), “made an interlocutory judgment on 09/19/2003, which admitted the grounds of the defendant’s argument that the right to obtain the present patent. . . was transferred to the defendant Nichia.”⁸⁴ Therefore, based on the determination that Nichia Corporation owns the invention, the issue to be decided by the court was whether Nakamura had been awarded “adequate compensation” under Article 35(3) for claims (2) and (3).⁸⁵

B. *Facts*

Nakamura became an employee of Nichia Corporation in 1979⁸⁶ and remained in the employ of Nichia until 1999.⁸⁷ Nichia Corporation is a chemicals company primarily in “the business of the production/distribution of phosphor materials (calcium phosphate).”⁸⁸ When Nakamura joined Nichia, the company “was being challeng[ed] [in] the production of GaP (gallium phosphate) for the use as a material of semiconductor crystal films for red LEDs (Light-Emitting Diode) etc., as a new development field other than phosphor materials.”⁸⁹ “Soon after employed, the plaintiff engaged in R&D of GaP (gallium phosphate), and GaAs (gallium arsenic) for use as a material of infrared and red LEDs.”⁹⁰ Nakamura also began research “on a liquid-phase epitaxial growth method for GaAlAs (gallium aluminum arsenic crystal films. . . .”⁹¹ Nakamura began research in 1988 on blue LED (Light-Emitting Diode) which is the subject matter of the patent in question.⁹²

⁸⁴ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

⁸⁵ See *id.* “[T]he plaintiff increased the amount of the preliminary claim (I-3) [i.e., claim no. 3] to . . . 5 billion [yen] by Plaintiff’s Brief No. 28, dated 06/17/2003, to . . . 10 billion [yen] by Plaintiff’s Brief No. 29 dated 06/19/2003, and to 20 billion [yen] by Plaintiff’s Brief No. 46 dated 09/19/2003.”

⁸⁶ See *id.* at 4.

⁸⁷ See *id.* at 12; Wegner, *supra* note 33, at 4.

⁸⁸ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 4.

⁸⁹ See *id.*

⁹⁰ *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

⁹¹ See *id.*

⁹² See *id.* at 4. “In the year 1988, the plaintiff made up to deal with a new research on a blue LED (Light-Emitting Diode) which has not been achieved at the time and supposed to be able to put it to actual utilization only in the 21st century, and went abroad to study an organic-metal chemical vapor-phase deposition

Nakamura received 10,000 yen from Nichia when the patent application was filed in 1990⁹³ according to the company regulations in effect for 'service' inventions at Nichia.⁹⁴ In 1993, Nichia publicly announced the first double-hetero structure blue LEDs.⁹⁵

A NICHIA chief researcher Mr. A who undertook the research on blue LEDs. . . developed an original 'two-flow MOCVD (organic-metal chemical vapor-phase deposition) apparatus) . . . allow[ing] crystals to be accurately aligned on a substrate. . . ." NICHIA decided to skip pre-production stage and advance directly into full-production . . . [and] plan[s] to make shipment of one million pieces/month from April [with] the price [being] 500 [yen]/piece.⁹⁶

It should be noted that the Japan Patent Office rejected and cancelled the patent for the invention in question twice and the Nichia Corporation had to defend and amend the present patent application by filing a correction.⁹⁷ The Patent Office did accept the amendment and allowed for the continuation of the patent in question (Patent No. 2628404).⁹⁸

Therefore, the patented invention in dispute was in Nichia's line of business⁹⁹ and Nakamura was employed as a researcher to work on the subject matter of the patented invention.¹⁰⁰ The patent in question was filed (1990) and granted (1997) during Nakamura's tenure at Nichia.¹⁰¹ In addition, Nichia had to defend and amend the patent in question on more

(MOCVD) method, as a method for growing a semiconductor crystal film, in Florida State University for about one year with the defendant's consent. . . ."

⁹³ See *id.* at 8.

⁹⁴ See *id.* at 11.

⁹⁵ S. Nakamura v. Nichia Corporation, Case No. Heisei 13 (wa) 17772, 9 (Tokyo D. Ct., Jan. 30, 2004).

⁹⁶ See *id.* at 9-10 (*citing* "Nihon Keizai Shimbun, Inc. dated 02/07/1994 on the commercialization of the Blue LED. . . .").

⁹⁷ See *id.* at 10-12.

⁹⁸ See *id.* at 2, 12.

⁹⁹ See *id.* at 4.

¹⁰⁰ S. Nakamura v. Nichia Corporation, Case No. Heisei 13 (wa) 17772, 5 (Tokyo D. Ct., Jan. 30, 2004); "In September 1990, the plaintiff made the present invention concerning a growth method for nitride-semiconductor crystal films, using a MOCVD apparatus. . . designed by himself such that a reaction gas and an inert gas could be supplied to a substrate from directions approximately parallel to and perpendicular to the substrate, respectively."

¹⁰¹ See *id.* at 2, 12.

than one occasion.¹⁰² These are the foundational facts that the Tokyo District Court took into consideration in determining the adequate compensation for the invention in question under Article 35(3).¹⁰³

C. *Nakamura's Allegations and Argument*

Nakamura claimed the amount of compensation due to him for the patent in question should be based on a 'monopolization profit' formula.¹⁰⁴ "Deserved consideration = Monopolization-based profit according to the number of patents x the contribution rate of the present patent x the contribution rate of the plaintiff (inventor)."¹⁰⁵ This calculation takes into consideration the value derived from the current service invention until the expiration of the patent.¹⁰⁶ Nakamura claimed the value derived included the revenue from sales until patent expiration minus the capital (operating capital, fixed capital) from after-tax business profits and an 'expected' profit from the invention.¹⁰⁷ Nakamura asserted that the expected profits from the invention could be calculated at the time of the assignment of the invention to the employer.¹⁰⁸

The monopolization formula also takes into consideration the 'contribution rate'¹⁰⁹ of the present patent when an employer combines multiple patents to commercialize a product.¹¹⁰ Nakamura claimed that even though Nichia did combine other patents in the commercialization of the present patent, without the present patent, commercialization would not be possible.¹¹¹ Therefore, Nakamura maintained that the contribution rate of the present patent was 100% and the monopolization profit should be calculated on that full contribution rate.¹¹²

¹⁰² See *id.* at 10-12.

¹⁰³ *Id.*; See Japan Patent Law, No. 121, Article 35 (1959) referenced in Japan Patent Office, *supra* note 10, at 9-11.

¹⁰⁴ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 13.

¹⁰⁵ See *id.*

¹⁰⁶ See *id.* at 14.

¹⁰⁷ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 13.

¹⁰⁸ See *id.* at 26.

¹⁰⁹ See *id.* at 14 -16.

¹¹⁰ See *id.*

¹¹¹ See *id.* at 20.

¹¹² See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 20.

In addition, Nakamura claimed the contribution rate should be 100% because the present patent enabled market dominance for Nichia which would not be overcome until competitors could exploit the technology in the present patent.¹¹³ Nakamura asserted market exploitation of high-intensity blue LED is not possible prior to patent expiration.¹¹⁴ Nakamura's claim for 20 billion in deserved compensation was based on the monopolization-based profit formula at a 100% contribution rate.¹¹⁵

D. *Nichia's Defense*

Nichia pointed out that there is "no established method of calculating the deserved consideration."¹¹⁶ Nichia's proposed calculation for "deserved consideration = defendant sales amount x rate of sales obtained as the result of preventing competitors from implementing an invention x royalty x contribution rate of an inventor."¹¹⁷

Nichia has held that competitors have similar "growth method[s] equal or superior to the present invention."¹¹⁸ Therefore, Nichia maintained that the 'rate of sales'¹¹⁹ should be zero in terms of "the result of preventing competitors, such as Toyota Gosei, from implementing the present invention."¹²⁰ In addition, the 'royalty'¹²¹ component of the proposed formula is zero because no license agreement with another company exists concerning the present patent in this case.¹²²

Nichia maintained that the "contribution of the inventor"¹²³ needed to be balanced against the investment Nichia made to enable the inventor to actually invent and secure a patent, and to carry out the business development.¹²⁴ Nichia in

¹¹³ See *id.* at 16.

¹¹⁴ See *id.* at 18.

¹¹⁵ See *id.* at 16.

¹¹⁶ See *id.* at 22.

¹¹⁷ See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772, 22 (Tokyo D. Ct., Jan. 30, 2004).

¹¹⁸ See *id.* at 23.

¹¹⁹ See *id.* at 22.

¹²⁰ See *id.*

¹²¹ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 23.

¹²² See *id.*

¹²³ See *id.* at 24.

¹²⁴ See *id.* at 25.

particular argues that Article 35's "share out of a profit"¹²⁵ "should not be a mere enumerative profit but a profit eventually left in the company's own hand after deducting nonoperating losses, such as interest costs and exchange loss."¹²⁶ Nichia claimed that if the profit for the present patent is measured by after-tax current income balanced against the investment costs and fixed assets associated with R&D,¹²⁷ then Nakamura's deserved consideration is zero.¹²⁸

In addition, Nichia proposed that equity capital costs, i.e., "net assets derived by subtracting debts from assets,"¹²⁹ should be deducted from the profit numbers used to determine deserved consideration under Article 35.¹³⁰ Therefore, based on the total cost of development and the investment risk incurred by defendant, Nichia asserted the contribution rate of Nakamura should be no more than the 5% contribution rate awarded in *Olympus Optical*,¹³¹ since Nichia bore more risk.¹³²

E. Court's Holding and Reasoning

The Tokyo High Court held that the plaintiff's invention for blue LEDs and LDs enabled the defendant, Nichia Corporation, to hold a dominant position in the marketplace¹³³ and ordered Nichia to pay 20 billion yen (approximately \$192 million USD) in remuneration to Nakamura.¹³⁴ The court rejected the defendant's argument that Nakamura's invention was incomplete since it is considered an "'industrially utilizable invention' (Patent Law section 29a-1 preamble) at the time [the] present invention was filed. . . ."¹³⁵ The court used the monopolization-

¹²⁵ Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11; *See Nakamura*, Case No. Heisei 13 (wa) 17772, at 28.

¹²⁶ *See Nakamura*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004) at 28.

¹²⁷ *See id.* at 30.

¹²⁸ *See id.*

¹²⁹ *See id.* at 29.

¹³⁰ *See id.*

¹³¹ *See id.* at 26 (*referencing* *Olympus Optical Co., Ltd. v. Tanaka*, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003)).

¹³² *See S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772, 26 (Tokyo D. Ct., Jan. 30, 2004).

¹³³ *See id.* at 48.

¹³⁴ *See id.* at 48, 72.

¹³⁵ *See id.* at 49.

based profit method to determine the “profit based on an excess sales amount to be obtained by an employer before the expiration of a patent.”¹³⁶ Nichia’s profit based on this method was determined to be 120 billion yen.¹³⁷ The court determined Nakamura’s contribution rate to the present invention to be “by himself based on his totally unique idea in the situation where the defendant NICHIA has neither technical information about blue LEDS nor human resource for giving advices to the plaintiff or supporting the plaintiff. . . .”¹³⁸ The court reasoned that the 10 year extinctive prescription right for claiming additional compensation for Nakamura’s invention has not run out¹³⁹ since it “shall be on and after 04/18/1997 when the patent was registered.”¹⁴⁰ Therefore, the court granted remuneration of the plaintiff’s claim of 20 billion yen.¹⁴¹

F. *Nichia’s Appeal and the January 2005 Settlement*

The Nichia Corporation appealed the Tokyo District Court’s decision to the Tokyo High Court.¹⁴² Judge Hisao Sato from the Tokyo High Court indicated that he would hand down a ruling on March 28, 2005.¹⁴³ However, Judge Sato recommended that Nakamura and Nichia Corporation mediate a settlement.¹⁴⁴ The high court suggested the remuneration for the blue LED invention be “of a sufficient amount to motivate employees and at the same time be of a level that allows the company to survive and develop amid severe economic conditions and international competition.”¹⁴⁵ On January 11, 2005, Nakamura and

¹³⁶ See *id.* at 53.

¹³⁷ See *id.* at 61.

¹³⁸ S. Nakamura v. Nichia Corporation, Case No. Heisei 13 (wa) 17772, 65 (Tokyo D. Ct., Jan. 30, 2004).

¹³⁹ See *id.* at 68, 69.

¹⁴⁰ See *id.* at 68.

¹⁴¹ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 53; Note: Even though the court determined Nichia’s monopolization-based profit was 120 billion yen and that the plaintiff was entitled to 50% of that amount, the plaintiff’s claim was only for 20 billion yen and this is the remuneration the court ordered. See *id.* at 61, 72.

¹⁴² *Blue LED Inventor Not Happy with Compensation From Company*, MAINICHI DAILY NEWS, Jan. 11, 2005. (on file with author).

¹⁴³ *Court Calls for Mediated Settlement in Blue-LED Case*, MAINICHI DAILY NEWS, Dec. 24, 2004 (on file with author).

¹⁴⁴ *Id.*

¹⁴⁵ *Record Settlement Fails to Satisfy Inventor of Blue LED*, THE ASAHI SHIMBUN, Jan. 12, 2005 (on file with author).

Nichia Corporation reached a settlement for 608.57 million yen, plus interest for delayed payment¹⁴⁶ (i.e., 840 million yen total¹⁴⁷ or approximately \$8 million USD).¹⁴⁸ This settlement amount is only 4.2% of the record 20 billion yen (approximately \$192 million USD) amount awarded to Nakamura by the lower court in 2004.¹⁴⁹ Although the settlement amount is a low percentage of the 20 billion yen previously awarded,¹⁵⁰ it is still “substantially higher than the 20,000 yen [approximately \$190 USD] ‘reward’ that Nichia paid Nakamura when he was an employee.”¹⁵¹

IV. ANALYSIS OF THE CASE

Nakamura’s claim was based on Article 35, paragraph 3 of Japan’s Patent Law¹⁵² which gives the right to ‘reasonable compensation’¹⁵³ for employed inventors such as Nakamura.¹⁵⁴ This means that employer-specific remuneration policies are no longer the basis for determining due consideration.¹⁵⁵ In determining ‘reasonable compensation’¹⁵⁶ for patents awarded within the scope of one’s employment, Article 35, paragraph 4¹⁵⁷ allows for consideration of company profits as well as the

¹⁴⁶ *See id.*

¹⁴⁷ *See supra* note 142, at 1.

¹⁴⁸ *Inventor settles over LED patent*, THE AGE, Jan. 11, 2005 available at <http://www.theage.com.au/articles/2005/01/11/1105206096144.html?oneclick=true>.

¹⁴⁹ *See id.*

¹⁵⁰ *See id.*

¹⁵¹ *See supra* note 145, at 1.

¹⁵² *See* Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

¹⁵³ *See id.*

¹⁵⁴ *See* Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

¹⁵⁵ Yoshikazu Tani, JPAAS and AIPLA Joint Meeting on the occasion of the 25th Mid-Winter Institute, *Current Status of Employee Inventions in Japan*, 2 available at <http://taniabe.co.jp/e/infomation/index.html> (Jan. 22, 2002); “In the past, a reasonable amount of remuneration is determined according to a remuneration policy of each employer.” *Id.*; “Usually, a fixed amount is paid at the time of filing (7,400 yen) and at the time of granting (16,000 yen).” *Id.*; “A variable amount (35,000 yen – 600,000 yen) is paid according to the contribution of the patent to the company’s profit and business, but normally has an upper limit (1,000,000 yen or 10,000,000 yen).” *Id.*

¹⁵⁶ *See* Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

¹⁵⁷ *See id.*

employee's contribution to the invention.¹⁵⁸ The problem in determining the consideration due to the employee comes in because "there is no clear definition as to 'profit contribution' by law"¹⁵⁹ under Article 35.¹⁶⁰ The court's award of an unprecedented amount of \$190 million USD¹⁶¹ to Nakamura for his invention may be due in part to this lack of clear definition. Although the \$8.1 million USD¹⁶² settlement amount still was 'unprecedented in a lawsuit filed by an individual over an invention,'¹⁶³ Nakamura was not at all satisfied with the judicial system or the decision.¹⁶⁴ Nakamura's dissatisfaction may be attributed, at least in part, to a couple of factors. First, Tokyo District Court's decision that Nakamura was entitled to 50 percent of the anticipated 120.8 billion yen in profits for the blue LED invention (60.4 billion yen or approximately \$570 million USD) prior to its patent expiration in 2010.¹⁶⁵ Yet, Nakamura had only requested 20 billion yen in his claim and was thus awarded that amount by the lower court.¹⁶⁶ Second, the 50 percent contribution to Nichia's profits acknowledged by the lower court was put at only 5 percent level by the higher court.¹⁶⁷

In making the decision, the high court looked to other litigation involving employed inventors in Japan seeking additional compensation for patents secured on their inventions.¹⁶⁸ The *Hitachi*¹⁶⁹ case was one such case where an employed inventor was awarded additional compensation based on company

¹⁵⁸ See *id.*

¹⁵⁹ See Tani, *supra* note 155, at 2.

¹⁶⁰ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

¹⁶¹ See *supra* note 145, at 1; See S. Nakamura v. Nichia Corporation, Case No. Heisei 13 (wa) 17772, 2 (Tokyo D. Ct., Jan. 30, 2004) (Translation on file with author) (Page designation refers to English language translation).

¹⁶² Todd Zaun, *Japanese Company to Pay Ex-Employee \$8.1 Million for Invention*, N.Y. TIMES, Jan. 12, 2005, at C3.

¹⁶³ See *supra* note 145, at 1.

¹⁶⁴ *Japan Inventor, After Patent Settlement, Lambasts Legal System*, WALL ST. J. ONLINE, Jan. 12, 2005, <http://online.wsj.com>; *Id.* quoting S. Nakamura "Japan is treating people as though they're all robots. . . ." *Id.* quoting S. Nakamura; "The judicial system in Japan is rotten. . . I am outraged."

¹⁶⁵ See *supra* note 145, at 3.

¹⁶⁶ See *id.*

¹⁶⁷ See *id.*

¹⁶⁸ See *id.*

¹⁶⁹ See *Hitachi Ltd. v. Seiji Yonezawa*, Case No. Heisei 14 (ne) 6451 (Tokyo High Ct., Jan. 29, 2004).

profits.¹⁷⁰ The calculation method to determine additional compensation based on company profits was “the amount of profits gained by the defendant from licensing agreements is considered to be the amount of profit gained by the employer based on its exclusive right to work the invention, and this can therefore be considered to be a reasonable basis for calculating the amount of ‘due consideration.’”¹⁷¹ In prior lower court rulings, profits by an employer were established to mean not actually realized profit, but “profit resulting from exploiting or monopolizing their patent right.”¹⁷²

The Nichia Corporation, which “initially [was] a small, rural chemicals company based in Anan, Tokushima Prefecture, has a virtual monopoly on the once-elusive blue LED.”¹⁷³ Nakamura’s patent is used commercially in “auto dashboard lighting, traffic signals, liquid-crystal-display panel backlighting,”¹⁷⁴ “mobile phones, large screens and next generation DVDs,”¹⁷⁵ “and other applications around the world.”¹⁷⁶ The invention “is widely recognized as being as valuable as Nobel Prize winning achievements.”¹⁷⁷ Nichia noted in a statement regarding the settlement that “the court acknowledged that the invention of the blue LED was the result of efforts and creativity of not just Nakamura alone but of many people.”¹⁷⁸ Yet, “last year’s district court ruling found that Nakamura’s sole contribution to the invention was worth 60 billion yen based on company sales and licensing fees.”¹⁷⁹

One has to look at whether the settlement amount did reflect a “judicial system. . . rigged to favor companies over workers.”¹⁸⁰ Nakamura’s lawyer, Hidetoshi Masunaga, stated at a news conference, “I have the impression that the court restricted the amount to avoid adversely affecting corporate activ-

¹⁷⁰ See Wegner, *supra* note 33, at 2.

¹⁷¹ See Sonada & Kobayashi, *supra* note 28, at 2.

¹⁷² See Tani, *supra* note 155, at 2.

¹⁷³ See *supra* note 145, at 1.

¹⁷⁴ See *id.* at 2.

¹⁷⁵ See *supra* note 164, at 1.

¹⁷⁶ See *supra* note 145, at 2.

¹⁷⁷ See *supra* note 142, at 1.

¹⁷⁸ See *supra* note 145, at 3.

¹⁷⁹ *Blue LED inventor to get 843 million yen*, THE JAPAN TIMES, Jan. 12, 2005, available at <http://www.japantimes.co.jp/cgi-bin/getarticle.pl5?nn20050112a1.htm>.

¹⁸⁰ See *supra* note 164, at 1.

ities.”¹⁸¹ This impression is not unfounded since the Tokyo High Court proposed a settlement “cap of 600 million yen, apparently out of concern over the effect that a larger amount would have on Nichia’s financial health.”¹⁸² “A company’s reward for an employee’s invention should be offered within limits that would keep the employer competitive, presiding Judge Hisao Sato of the high court said in recommending a settlement last year.”¹⁸³ Japan’s Prime Minister, Junichiro Koizumi, even commented on the settlement sum as “nothing to complain about.”¹⁸⁴ “Inventors may feel they deserve more because the company reaps much bigger profits. . .but the amount is somewhat mind-boggling.”¹⁸⁵ However, we do not know what Japan’s Supreme Court would say on the matter since Nakamura’s lawyers “advised him he had no chance of winning [if he appealed in the Supreme Court] because the higher courts would likely be determined to reduce the cash award.”¹⁸⁶ “There are no jury trials in Japan and the higher courts tend to have more conservative judges.”¹⁸⁷ Based on the fact that the Tokyo High Court recommended the settlement¹⁸⁸ and on the advice of his lawyers, Nakamura settled on a fractional amount of the Tokyo District Court’s \$190 million landmark decision.¹⁸⁹

In looking at prior litigation for employed inventors, the percentage between what is claimed by the inventor and what is awarded by the court has ranged from lower single digits to double digits.¹⁹⁰ The court in determining the compensation

¹⁸¹ See *supra* note 142, at 2.

¹⁸² See *supra* note 179, at 2.

¹⁸³ See *id.*

¹⁸⁴ See *supra* note 148, at 1 (quoting Prime Minister Junichiro Koizumi).

¹⁸⁵ See *id.*

¹⁸⁶ See *supra* note 164, at 1.

¹⁸⁷ See *id.*

¹⁸⁸ See *id.*

¹⁸⁹ See *supra* note 145, at 2.

¹⁹⁰ See Tani, *supra* note 155, at 2, 3 (referencing Zojirushi Mahobin, Osaka District Court (1994), Case No. Heisei 3 (wa) No.5984 (ID: 27828238)) (also referencing Kaneshin, Tokyo District Court (1992), Case No. Heisei 1 (wa) No. 6758 (ID: 27816808) available at <http://taniabe.co.jp/e/infomation/index.html> (Jan. 22, 2002)). The percentage between what is claimed by the inventor and what is awarded by the court has ranged from lower single digits, as in the 1994 *Zojirushi Mahobin* case (i.e., 4.2%) to double digits as in the 1992 *Kaneshin* case (20.7%) See THE ASAHI SHIMBUN, *supra* note 145, at 2; See *id.* Yet, the *Mahobin* and *Kaneshin* awards were under \$50K USD (i.e., \$49,000 and \$49,400 USD, respectively); See *id.* However, the award dollars were roughly even for these two cases despite the

also took into account the contribution percentage by the employer and the royalty rate as factors influencing the percentage awarded.¹⁹¹

The Tokyo High Court in the *Hitachi*¹⁹² case determined that the deserved consideration "for the transfer of patent rights related to optical disc technologies such as DVDs in the 1970s"¹⁹³ was 163 million yen (\$1.5 million USD)¹⁹⁴ which is 17% against 952 million yen (\$9.1 million USD) claimed by the plaintiff.¹⁹⁵ The court in *Hitachi*¹⁹⁶ "dealt with a quite complicated issue of calculating the amount of profits which the employer will obtain from the plaintiff's invention by reviewing many license and cross-license agreements."¹⁹⁷ "What complicated the calculation was the fact that the defendant licensed or cross-licensed a patent covering the plaintiff's invention in combination with many other patents to many licensees."¹⁹⁸ The court ended up calculating the profits based on the contribution of the employee's invention to "each license or cross-license agreement."¹⁹⁹

In its 2003 decision in the *Olympus*²⁰⁰ case, the Supreme Court upheld the \$19.2 thousand USD (2.5 million yen) award²⁰¹ which is 2.5% against the inventor's claim of \$7.7 mil-

contribution rate of the employer varying from 35% in the *Kaneshin* case to 80% in the *Mohabin* case, while the royalty rate remained at 2% for both cases.

¹⁹¹ See Tani, *supra* note 155, at 2, 3.

¹⁹² See *Hitachi Ltd. v. Seiji Yonezawa*, Case No. Heisei 14 (ne) 6451 (Tokyo High Ct., Jan. 29, 2004).

¹⁹³ See *supra* note 148, at 2.

¹⁹⁴ See *id.*

¹⁹⁵ See *Hitachi Ltd.*, Case No. Heisei 14 (ne) 6451.

¹⁹⁶ See *id.*

¹⁹⁷ Takamitsu Shigetomi, *Two Judgments on Japanese Patent Law Article 35 Amazed Industry All Over the World*, CASRIP (Center for Advanced Study and Research of Intellectual Property, Univ. of Washington School of Law) Winter 2004, at 2 available at <http://www.law.washington.edu/casrip/Newsletter/BackIssues.html>.

¹⁹⁸ See *id.*

¹⁹⁹ See *id.*

²⁰⁰ See *id.*

²⁰¹ Paul Morico & Thomas Morrow, *Smart Pills: Shifting the Balance, the Nakamura case dramatically illustrates how Japanese patent law can sometimes favor inventors over their employers. U.S. inventors aren't as lucky*, INTELL. PROP. L. AND BUS., June 2004, at 1 available at <http://www.ipwww.com/texts/0604/smartpills0604.html>.

lion USD (1 billion yen).²⁰² Although "Nakamura wanted to take the case to the Supreme Court despite the likelihood of a smaller settlement sum,"²⁰³ his lawyers discouraged him.²⁰⁴ Therefore, Nakamura's belief that "he could not expect the high court to uphold the sum ordered by the district court"²⁰⁵ may not have been unfounded based on the *Olympus*²⁰⁶ decision.

Even though some Japanese companies have begun to provide greater compensation for employed inventors' patents,²⁰⁷ the risk of litigation is still present since Article 35(4)²⁰⁸ does not provide a clear definition of the 'profit contribution'.²⁰⁹ Japan's "aversion to litigation is fading,"²¹⁰ and overall patent litigation is on the rise.²¹¹ "In the past Japanese companies rarely sued infringers because of cultural traditions of showing respect—even to competitors."²¹² However, suing foreign busi-

²⁰² See Tani, *supra* note 155, at 2 referencing Olympus, Case No. Heisei 7 (wa) 3841 and Heisei 11(ne) 3208 (Tokyo D. Ct., Apr. 16, 1999) available at <http://taniabe.co.jp/e/infomation/index.html> (Jan. 22, 2002).

²⁰³ See *supra* note 145, at 2.

²⁰⁴ See *id.*

²⁰⁵ See *id.*

²⁰⁶ See Olympus Optical Co., Ltd. v. Tanaka, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003).

²⁰⁷ See Shigetomi, *supra* note 197, at 2; See *id.* ("Shimazu Corp., which is well-known by news that an employee Koichi Tanaka was awarded the Nobel Prize in Chemistry 2002, decided to not only abolish the upper limit of the amount of remuneration but also assure its employees to pay at least JPY 10 million yen as remuneration for Service Invention if sales amount of the product based on such invention goes beyond JPY 10 billion yen per year."); See Tani, *supra* note 155 (Additional examples of revised Japanese company policies around maximum remuneration include: "Sony, no upper limit (Apr. 1997)[;] Hitachi, no upper limit (Apr. 1991)[;] Toshiba, no upper limit (Apr. 1998)[;] JVC, no upper limit (Apr. 1999)[;] Kenwood, non upper limit (Jan. 1999)[;] Honda, no upper limit (2002)[;] Omron, 100 million yen (Apr. 1999)[;] Mitsubishi Chemical, 250 million yen (Dec. 2001)[;] Sankyo Pharmaceutical, 60 million yen (Sept. 1999).")

²⁰⁸ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

²⁰⁹ See Tani, *supra* note 155, at 2.

²¹⁰ Eriq Gardner, *Land of the Rising Patent Suit, Once strictly on the defensive, Japanese companies are increasingly initiating litigation*, INTELL. PROP. L. AND BUS., Oct. 2004, at 1, available at <http://www.ipww.com/texts/1004/asia-gardner1004.html>.

²¹¹ See *id.* ("According to an April article in The Japan Times, the main English-language newspaper in Tokyo, the number of IP suits filed by Japanese businesses has doubled in the past two years.")

²¹² See *supra* note 210, at 1.

nesses is not considered disrespectful²¹³ and could be a problem for U.S. businesses.²¹⁴

Since litigation specific to Article 35²¹⁵ is also on the rise,²¹⁶ "ex-employees of companies [who] are demanding reasonable remuneration for their inventions made during employment, [have a reasonable expectation of success because] . . . the Japanese courts are listening to these demands."²¹⁷ The impact to foreign business could be significant in light of Japan's commitment to "develop an overall national goal to enhance Japan's competitiveness through maximization of intellectual property value"²¹⁸ especially in the "science and technology fields where Japan is on the cutting edge."²¹⁹ Since "Japan is a part of the global market, and many non-Japanese corporations have, or plan to have, facilities, laboratories, and employees in Japan,"²²⁰ under Article 35,²²¹ "if employees of these non-Japanese companies invent in Japan, the companies risk similar lawsuits."²²²

"Historically, the employee-employer relationship in Japan"²²³ has been one of respect and trust where the employee "seldom questioned the nature of their employer's rights to any inventions."²²⁴ However with cultural changes such as the dis-

²¹³ *Id.* at 1 (*referencing* Alan Johnston, a Tokyo-based IP partner with Morrison & Foerster, on suing a foreign business is "more acceptable.")

²¹⁴ *See supra* note 210, at 2 ("American businesses have already been targeted in several recent patent cases: In February 2003 [t]he Furukawa Electric Co., Ltd., sued Hickory, North Carolina based Corning Cable Systems LLC over patents for optical-fiber wire, in Tokyo district.") *See id.* for other examples.

²¹⁵ *See* Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11.

²¹⁶ Michael Kelly & Naoki Yoshida, *Companies pay up for employee's inventions*, MANAGING INTELLECTUAL PROP., Feb. 2004 at <http://www.managingip.com>.

²¹⁷ *See id.*

²¹⁸ Toshiko Takenaka, *Prime Minister's Science Council Submits recommendations for Improving Competitiveness Through Intellectual Property*, CASRIP (Center for Advanced Study and Research of Intellectual Property, Univ. of Washington School of Law), Spring-Summer 2002, at 1 *available at* <http://www.law.washington.edu/casrip/Newsletter/BackIssues.html>.

²¹⁹ *See id.*

²²⁰ *See* Kelly & Yoshida, *supra* note 216, at 2.

²²¹ *See* Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11.

²²² *See* Kelly & Yoshida, *supra* note 216, at 2.

²²³ *See* Morico & Morrow, *supra* note 201, at 1.

²²⁴ *See id.*

appearance of lifetime employment²²⁵ increased litigation is not surprising, especially since "Japan is in the midst of a recession."²²⁶

V. CONCLUSION

Prime Minister Junichiro Koizumi has mandated a national intellectual property strategy to help Japan recover from its current recession and to ensure Japan's competitiveness in the global marketplace.²²⁷ The strategy is aimed at "developing an effective intellectual property protection mechanism . . . based on the value of intellectual property in the science and technology fields where Japan is on the cutting edge."²²⁸ However, this strategy needs to be balanced against Japan's Article 35²²⁹ which ensures 'reasonable compensation'²³⁰ for employed inventors. It is a delicate balance between Article 35's²³¹ motivating force for inventors with its 'reasonable compensation'²³² mandate and protection of a corporation's ability to gain a hold on the market in their areas of business without being bankrupted²³³ by high remuneration awarded out of their profits by Japan's courts under Article 35.²³⁴ However, large corporations who have research and development in Japan face increased

²²⁵ See Tani, *supra* note 155, at 4.

²²⁶ See *id.*; See also, Gardner, *supra* note 210, at 1 (*quoting* Christian Dippon, "a San Francisco based senior consultant with NERA Economic Consulting who has conducted a broad historical study of IP litigation in Japan.")

²²⁷ See Takenaka, *supra* note 218, at 1.

²²⁸ See *id.* ("Fields the experts suggested to focus on include (1) life science[s], particularly health care related technology and biotechnology, and (2) information technology.")

²²⁹ See Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11.

²³⁰ See *id.*

²³¹ See *id.*

²³² See *id.*

²³³ See *supra* note 179, at 2 ("A company's reward for an employee's invention should be offered within limits that would keep the employer competitive, presiding Judge Hisao Sato of the high court said in recommending a settlement last year."); See *id.* (The purpose of a patent system "shall be to encourage inventions by promoting their protection and utilization so as to contribute to the development of industry."); See Japan Patent Office, *The Case Studies of the Procedures under the New Employee Invention System (draft)*, *supra* note 10, at 8.

²³⁴ See Japan Patent Law, Law No. 121 of 1959, art. 35 *referenced in* Japan Patent Office, *supra* note 10, at 9-11.

risks in light of recent litigation²³⁵ based on Article 35 of Japan's Patent Law.²³⁶ Article 35²³⁷ allows for 'reasonable compensation'²³⁸ for employed inventors based on an employer's projected profits.²³⁹ However, what is 'reasonable' and how to calculate the profits is not defined in Article 35.²⁴⁰ This lack of definition creates uncertainty²⁴¹ of possible financial payouts for employee inventions for companies — both Japanese and foreign corporations — who employ inventors in Japan.²⁴² The unprecedented \$190 million USD²⁴³ remuneration awarded by the Tokyo District Court in the *Nakamura*²⁴⁴ case is an example of the financial impact that local and foreign companies who operate in Japan may face in the future. Although the *Nakamura*²⁴⁵ case settled out of court in January 2005,²⁴⁶ the fact that the Tokyo District Court determined Nakamura actually could have claimed \$570 million USD²⁴⁷ based on a monop-

²³⁵ See *id.*; See also, Gardner, *supra* note 210, at 2. ("American businesses have already been targeted in several recent patent cases. . . .")

²³⁶ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

²³⁷ See *id.*

²³⁸ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 10.

²³⁹ See Japan Patent Law, Law No. 121 of 1959, art. 35, no. 4 referenced in Japan Patent Office, *supra* note 10, at 10-11.

²⁴⁰ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11; See also, Tani, *supra* note 155, at 2.

²⁴¹ See Shigetomi, *supra* note 197, at 3 ("If we take the *Nichia* case for example, no one can predict in advance a specific numerical percentage of [the] court's finding. . . ."); See *id.* ("To make matters worse, one still cannot understand how the court reached such a specific percentage ("50%") even after reviewing the *Nichia* judgment (in other words, the court uses its discretion to find such a numerical percentage."); See *id.* ("Because of this legal uncertainty of the term 'reasonable,' many Japanese companies complain that they cannot stipulate a remuneration standard which is 'reasonable' enough to avoid future disputes with its employees").

²⁴² See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11; See Tani, *supra* note 155, at 2; See Shigetomi, *supra* note 197, at 2.

²⁴³ See *supra* note 145, at 1; See *S. Nakamura v. Nichia Corporation*, Case No. Heisei 13 (wa) 17772 (Tokyo D. Ct., Jan. 30, 2004).

²⁴⁴ See *Nakamura*, Case No. Heisei 13 (wa) 17772.

²⁴⁵ See *id.*

²⁴⁶ See *supra* note 145, at 1.

²⁴⁷ See *Nakamura*, Case No. Heisei 13 (wa) 17772, at 61, 72 (The court determined that Nakamura was entitled to 50% of the 120 billion yen of Nichia's monopolization-based profits.); See *id.*

olization-based profit calculation,²⁴⁸ may give pause to multinational firms who have inventors in their employ in Japan. However, the 2003 revision of Article 35,²⁴⁹ which is to go into effect after April 2005,²⁵⁰ aids employers in determining "its standard of paying remuneration to some extent, as long as it provides its employees with enough opportunity to negotiate the standard percentage or to determine the amount of remuneration with the employer."²⁵¹ Yet, "if the court finds that the employer's standard to pay remuneration is not still reasonable in the context of Revised Article 35(4); Revised Article 35(5) is applied."²⁵²

Revised Article 35(5)²⁵³ outlines four ways to determine reasonable remuneration: "(i) the amount of profits that the employer will obtain from the invention, (ii) the expense and contribution of the employer in relation to such invention, (iii) treatment of the employee, and (iv) other circumstances."²⁵⁴ Still, Revised Article 35(4) and (5)²⁵⁵ contains ambiguity on what exactly constitutes 'reasonable' compensation.²⁵⁶

Japan's highest court, the Supreme Court, has spoken on Article 35²⁵⁷ in the *Olympus*²⁵⁸ case. The court affirmed the remuneration of approximately \$20,000 USD for an employed inventor.²⁵⁹ More importantly, though, the Supreme Court affirmed the right to base remuneration on company profits.²⁶⁰ Yet, it should be noted that there is a belief that Japan's highest court will not allow remuneration for employed inventors to

²⁴⁸ See *id.* at 61, 72.

²⁴⁹ See *id.*

²⁵⁰ See Shigetomi, *supra* note 197, at 3.

²⁵¹ See *id.*

²⁵² See *id.*

²⁵³ See Shigetomi, *supra* note 197, at 3 (referencing the 2003 revision of Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 11).

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

²⁵⁸ See *Olympus Optical Co., Ltd. v. Tanaka*, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003).

²⁵⁹ See *id.*

²⁶⁰ See *id.* at 3.

bankrupt companies.²⁶¹ If it did, the Prime Minister's intellectual property strategy²⁶² would be null and void. Japan's competitiveness would also be null and void.

Therefore, the 'theory' of Article 35²⁶³ could be a major threat to multinational companies operating in Japan. However, the 'practice' of Article 35²⁶⁴ based on recent court cases²⁶⁵ indicates Japan's courts are not willing to tip the scales to the employed-inventor to the detriment of the corporation.²⁶⁶ The question moving forward is whether multinational companies will risk the 'theory' of Article 35²⁶⁷ based on current 'practice' and continue to invest in Japan's economy? Or, will there will be a disincentive to invest in innovation in Japan until there is clear definition around what is 'reasonable compensation'²⁶⁸ for employed inventors and how it will be calculated? Whatever the answer is to these two questions, one can be certain that multinational companies are watching it closely and weighing their alternatives when it comes to their investment in innovation.

²⁶¹ See *supra* note 145, at 1.

²⁶² See Takenaka, *supra* note 220, at 1.

²⁶³ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9-11.

²⁶⁴ See *id.*

²⁶⁵ See *supra* note 142, at 1 (referencing Tokyo High Court Judge Sato recommending a settlement in the Nakamura case); See Olympus Optical Co., Ltd. v. Tanaka, 57 MINSHU 477 (Sup. Ct., Apr. 22, 2003).

²⁶⁶ See *supra* note 145, at 1.

²⁶⁷ See Japan Patent Law, Law No. 121 of 1959, art. 35 referenced in Japan Patent Office, *supra* note 10, at 9.

²⁶⁸ See *id.*