Switzerland's Patent Law History

Dominique S. Ritter*

INTRODUCTION 463
I. THE TRIPS AGREEMENT 467
II. LEGISLATIVE HISTORY 470
A. *From the Middle Ages Until 1888* 470
B. *From 1888 to the Law of 1907*.....478
III. THE REASONS FOR THIS OPPOSITION 482
A. *The General Reasons* 482
B. *The Chemical Industry*.....486
IV. THE QUESTION OF THE ETHICS OF THE SWISS INDUSTRIES ... 488
V. ANALYSIS OF THE NORTH-SOUTH DEBATE UNDER THE TRIPS AGREEMENT WITH RESPECT TO THE SWISS PATENT LAW HISTORY 490
A. *Impact of the Political Structure*.....491
B. *International Pressure* 493
C. *Influence of the Experiences of Other Countries*.....495
CONCLUSION..... 495

INTRODUCTION

"Geniuses, just as the stars, must shine without pay." So goes the Swiss saying on the morality and justice of financial awards for inventors.[1] Similarly, a memorandum submitted to the Swiss

* Law degree, University of Geneva, Geneva, Switzerland, 1988; LL.M. in Trade Regulation, New York University School of Law, New York, N.Y., 2002. All translations in this Article are the author's own.

government circa 1884 by a group of industrialists pleads "[t]hat in the interest of the general prosperity of industry and trade, patent protection, that cup of sorrows, may pass from [us]."[2]

With such strong public feeling against patent protection it is no wonder that it took Switzerland—a conservative country where national referenda often determine important policy decisions[3]—almost half a century to enact its first national patent law in 1888.[4] The law was so limited in scope, however, that its usefulness for patent protection was at best dubious.[5] Indeed, successful lobbying by the Swiss chemical industry resulted in the 1888 national patent law protecting only inventions that could be represented by mechanical models.[6] Two decades and some international pressure were necessary for the legislature to rectify this Swiss anomaly.[7] One explanation for this long and laborious legislative history can be found in the Swiss constitutional requirements. Switzerland is a federal state with a strict separation of powers between the confederation and the cantons, and a patent law on a national scale could not be enacted by the federal government in the absence of constitutionally granted authority.[8] It was only after three attempts that in 1887 such a constitutional mandate was successfully given by the Swiss citizens to the

---

[1] Fritz Machlup & Edith Penrose, *The Patent Controversy in the Nineteenth Century*, 10 J. ECON. HIST. 1, 17 (1950) (quoting WILHELM ROSCHER, 3 SYSTEM DER VOLKSWIRTSCHAFT 758 (Stuttgart 1881)).

[2] ERIC SCHIFF, INDUSTRIALIZATION WITHOUT NATIONAL PATENTS: THE NETHERLANDS, 1869–1912; SWITZERLAND, 1850–1907, at 87 (Princeton Univ. Press 1971).

[3] *See generally* BBC News, *Country Profile: Switzerland*, *at* http://news.bbc.co.uk/1/hi/world/europe/country_profiles/1035212.stm (last visited Jan. 28, 2004) (noting that "[u]niquely in Europe, important policy decisions often rest on the results of national referenda" and that "the Swiss Confederation's long-standing neutral status has given it political stability that has helped it become one of the world's wealthiest countries").

[4] *See* SCHIFF, *supra* note 2, at 85–86.

[6] Economic historian Eric Schiff calls the period between 1888 and 1907, when the first Swiss national patent law was in effect, "the semi-patentless interlude." *Id.* at 86. He also refers to the 1888 law as "probably the most incomplete and selective patent law ever enacted in modern times." *Id.* at 93.

[6] *Id.* at 85–86.

[7] *See id.* at 94–95 (noting that in 1907 the Swiss legislature enacted a law that eliminated the "mechanical model" requirement and extended protection to chemical processes after pressure from Germany, the biggest market for Swiss chemical products).

[8] *Id.* at 85.

confederation.[9] The fourth vote, in 1905, was then necessary to expunge the Swiss constitution ("Constitution") of the previous error by removing the "mechanical model" requirement from the Constitution—where it never should have been in the first place.[10] Indeed, as patent protection became more prevalent in neighboring countries, international opinion turned against Switzerland's industries, which were considered thieves because it was common practice among Swiss manufacturers to use foreign inventions.[11] This phenomenon reached its peak during the semi-patentless era when Swiss chemical industries were not only still imitating German inventions, but also exporting the imitated substances to Germany.[12] It was only when both the Constitution and the Swiss law were modified that it was possible for Switzerland to enter an era of patent protection with a true patent law.[13]

The multilateral trade system established by the World Trade Organization ("WTO") agreements, the successor to the General Agreement on Tariffs and Trade ("GATT"), includes the Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods ("TRIPS Agreement"), which entered into force on January 1, 1995.[14] The TRIPS Agreement was called "the most ambitious international intellectual property convention ever attempted."[15] It provides for minimal requirements for its members to implement for the effective and adequate protection of intellectual property, which covers copyright and related rights, trademarks, geographical indications, industrial designs, patents, layout-designs (topographies of integrated circuits), as well as the protection of

[9] *See id.*
[10] *See id.* at 86.
[11] *See id.* at 94.
[12] *See id.*
[13] *See id.* at 86.
[14] Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization [hereinafter WTO Agreement], Annex 1C, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 31, 33 I.L.M. 81 (1994) [hereinafter TRIPS Agreement].
[15] J.H. Reichman, *Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate*, 29 VAND. J. TRANSNAT'L L. 363, 366 (1996).

undisclosed information.[16] The TRIPS Agreement also contains measures and procedures designed to enforce those requirements.[17] Because not all WTO member countries are at the same stage of development—there are the developed countries, the developing countries, and the least developed countries—the TRIPS Agreement grants different transition periods for the implementation of its obligations.[18] Although Switzerland's economic and political situation differs from the current conditions in developing countries, its patent history is comparable to the challenges that developing countries face in the implementation of the TRIPS Agreement.[19] Indeed, the main difference is that nineteenth-century Switzerland, like the other major European countries after the industrial revolution, was making the transition from an agricultural-based to an industrial-based economy.[20] History indicates that Switzerland's position was peculiar because, unlike its neighbors, it did not have any natural resources.[21] This did not prevent Switzerland from moving into large-scale industrial production, however.[22] In addition, although Switzerland did not have a true patent protection system for a long period of time, it joined the Paris Convention for the Protection of Industrial Property ("Paris Convention") voluntarily,[23] unlike the developing countries that entered the Uruguay Round as part of a broader "package deal."[24]

---

[16] *Id.* at 366 n.12. A summary of the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS Agreement") objectives and requirements is available at http://www.wto.org/english/docs_e/legal_e/ursum_e.htm#nAgreement (last visited Feb. 9, 2004).

[17] *See* Reichman, *supra* note 15, at 368–69.

[18] *Id.* at 365 n.8; TRIPS Agreement, *supra* note 14, arts. 65–66.

[19] *See infra* text accompanying notes 195–199.

[20] *See generally* SCHIFF, *supra* note 2, at 96.

[21] *See id.* at 97; *see also* Harold R. Newman, *The Mineral Industry of Switzerland*, 2002 MINERALS Y.B. (U.S. Geological Survey) vol. III, at 23.1, *available at* http://minerals.er.usgs.gov/minerals/pubs/country/europe.html#sz (last visited Feb. 9, 2004).

[22] *See* SCHIFF, *supra* note 2, at 97.

[23] Switzerland joined the Convention of Paris for the Protection of Industrial Property on July 7, 1884. *See* WIPO, Paris Convention for the Protection of Industrial Property, *Contracting Parties*, *at* http://www.wipo.int/treaties/en/ip/paris/index.html (last updated Oct. 15, 2003) [hereinafter WIPO, *Paris Convention Parties*].

[24] *See, e.g.*, Adronico Oduogo Adede, *The Political Economy of the TRIPs Agreement: Origins and History of Negotiations*, July 30, 2001 (presented at the Eastern and

Part I of this Article will provide a brief description of the general requirements under the TRIPS Agreements for its member countries with regard to patent law. Part II will recount and discuss the legislative history of Switzerland's patent laws, while Part III will present the arguments invoked by the industries that have opposed patent protection. Part IV will also briefly examine from an ethical perspective the conduct of the Swiss industries that imitated foreign patented inventions during the patentless era (before 1888). The final part will analyze the similarities and differences in today's North-South debate and yesterday's controversy between Switzerland and the members of the Paris Convention.

I. THE TRIPS AGREEMENT

WTO members are required, under article 1 of the TRIPS Agreement, to implement minimal intellectual property protections that are defined within the agreement.[25] Article 2 mandates that they comply with articles 1 through 12 and 19 of the Paris Convention, as embodied in the Stockholm Act of 1967,[26] the purpose of which is to grant national treatment to all nationals of countries of the European Union in all the industrial property rights covered.[27] An essential principle embodied in article 4 of the Paris Convention is the right of priority for patents.[28] The Paris Convention does not, however, contain any specification as to the scope of patent protection, leaving this choice to the European Union members.[29]

Southern Africa Multi-Stakeholder Dialogue on Trade, Intellectual Property and Biological Resources, Nairobi, Kenya), *available at* http://www.ictsd.org/dlogue/2001-07-30/30-07-01-docu.htm (last visited Feb. 9, 2004).

[25] *See* TRIPS Agreement, *supra* note 14, art. 1.

[26] *See id.* art. 2.

[27] Convention of Paris for the Protection of Industrial Property, Mar. 20, 1883 (as revised July 14, 1967), 21 U.S.T. 1583, 828 U.N.T.S. 305 [hereinafter Paris Convention], *available at* http://www.wipo.int/clea/docs/en/wo/wo020en.htm (last visited Jan. 29, 2004).

[28] *See id*. art. 4.

[29] *See, e.g.*, Dr. Harriet Strimpel, *Patents Promote the Useful Arts in a Free Market*, Center for International Development at Harvard University, *at* http://www.cid.-harvard.edu/cidbiotech/comments/comments42.htm (last visited Jan. 29, 2004).

The TRIPS Agreement differs in that article 27 of the TRIPS Agreement defines a minimal standard of patentable subject matter by specifying that the "patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application."[30] This article further provides that there shall be no discrimination as to the place of invention, the field of technology, and whether the products are imported or locally produced.[31] The definition was modeled after the standards of the developed countries, and contains few narrowly defined exceptions in paragraphs 2 and 3 of the article.[32] Inventions may be excluded if their commercial exploitation violates the *ordre public* or morality of a given member country.[33] Moreover, if use is inconsistent with diagnostic, therapeutic, and surgical methods for the treatment of humans, animals, plants, and other organisms excluding micro-organisms, or is inconsistent with biological processes for the production of plants or animals other than non-biological and microbiological processes, such inventions may also be excluded.[34] It is important to note that under the TRIPS Agreement, plant varieties are not included in these exceptions and must be protected by a patent or a special system.[35] The TRIPS Agreement has other minimal requirements, such as the twenty-year term of a patent,[36] judicial review for the revocation or forfeiture of a patent,[37] permission for member countries to require compulsory licenses subject to certain conditions,[38] and effective enforcement by the member countries of any of the intellectual property rights covered by the agreement.[39]

---

[30] *See* TRIPS Agreement, *supra* note 14, art. 27.

[31] *Id.*

[32] *See, e.g.*, Leanne M. Fecteau, *The Ayahuasca Patent Revocation: Raising Questions About Current U.S. Patent Policy*, 21 B.C. THIRD WORLD L.J. 69 (2001).

[33] *See* TRIPS Agreement, *supra* note 14, art. 27.

[34] *Id.*

[35] *Id.*

[36] *Id.* art. 33 (specifying that the twenty-year duration begins at the filing date).

[37] *Id.* art. 32.

[38] *Id.* art. 31.

[39] *Id.* art. 42.

According to article 65, member countries have one year from the entry into effect of the TRIPS Agreement—that is, until January 1, 1996—to implement these minimal requirements.[40] The developing countries are entitled to four additional years in order to harmonize their legislation with the TRIPS Agreement standards.[41] The four-year period benefits members moving from a centrally-planned economy into a market, free-enterprise economy who undertake structural reform of their intellectual property system and face special problems in the preparation and implementation of the intellectual property laws.[42] Furthermore, if a member country is obligated to introduce patent protection to areas of technology not previously protected within its territory, it may delay the initiation of such protection for an additional period of five years.[43] Pursuant to article 70 paragraph 8, however, a member country not offering patent protection for pharmaceutical and agricultural chemical products in its national law on January 1, 1995 shall, during the transitional period, provide a means by which patent applications for such inventions can be filed—the so-called "mailbox" provision.[44] Finally, pursuant to article 66, the least developed countries are entitled to a transition period of eleven years from the date of entry into force, which can be extended upon duly motivated request.[45]

The WTO is novel because of the Dispute Settlement Understanding ("DSU"), annex 2 to the Marrakesh Agreement Establishing the World Trade Organization,[46] and the applicable TRIPS Agreement dispute settlement process pursuant to article 64.[47] The members have an enforcement mechanism at last. As stated in article 23(2) of the DSU, any unilateral trade sanctions

---

[40] *Id.* art. 65.
[41] *Id.*
[42] *Id.*
[43] *Id.*
[44] *Id.* art. 70.
[45] *Id.* art. 66.
[46] Understanding on Rules and Procedures Governing the Settlement of Disputes, WTO Agreement, Annex 2, 33 I.L.M. 1226 (1994) [hereinafter DSU], *available at* http://www.wto.org/english/docs_e/legal_e/28-dsu_e.htm (last visited Jan. 29, 2004).
[47] TRIPS Agreement, *supra* note 14, art. 64.

from a WTO member against another for the failure to implement the TRIPS Agreement is prohibited:

> [Members shall] not make a determination to the effect that a violation has occurred, that benefits have been nullified or impaired or that the attainment of any objective of the covered agreements has been impeded, except through recourse to dispute settlement in accordance with the rules and procedures of this Understanding . . . and [shall] obtain [Dispute Settlement Body] authorization in accordance with those procedures before suspending concessions or other obligations under the covered agreements in response to the failure of the Member concerned to implement the recommendations and rulings within that reasonable period of time.[48]

The Dispute Settlement Body ("DSB") may authorize member countries to enforce trade sanctions for non-compliance with obligations in the TRIPS Agreement only as a means of last resort, at the end of the proceedings.[49]

II. LEGISLATIVE HISTORY

A. From the Middle Ages Until 1888

Before analyzing Switzerland's patent law history, it is important to recall some important landmarks of the country's origin and examine specific features of its Constitution. The first

---

[48] DSU, *supra* note 46, art. 23.

[49] *See id.* art. 22; *see also* WTO, Understanding the WTO: Settling Disputes, *The Panel Process*, *at* http://www.wto.org/english/thewto_e/whatis_e/tif_e/disp2_e.htm (displaying, by means of a flowchart, the various stages in the dispute settlement process) (last visited Jan. 29, 2004). In spite of the provisions of article 22 of the DSU, the United States continues to use its "Special 301" mechanism before any proceedings conclude. In the proceeding commenced by the European Union, although the panel held that section 304 of the Trade Act of 1974 constitutes a serious threat to article 23 of the DSU, the statements made by the United States before the panel removed the prima facie inconsistencies and fulfill the guarantees required under article 23. *See* WTO, REPORT OF THE PANEL WT/DS152/R ¶ 7.131 (1999), *available at* http://www.sice.oas.org/-DISPUTE/wto/tract40e.asp (last visited Jan. 29, 2004).

or "old" confederation was founded in 1291.[50] It was a union of three confederates, each of which maintained its independent sovereignty.[51] This confederation eventually grew during the centuries by the admission of new cantons, but remained a union of independent confederates until its occupation by Napoleonic France in 1798.[52] This invasion transformed the confederation into the Helvetic Republic, which had a centralized government that vitiated the previous autonomy of the cantons.[53] The unpopular republic, viewed by the people as antithetical to the spirit of Switzerland, was abolished in 1803.[54] After a transitional period, a new federal pact was signed in 1815, reinstalling the former confederation—a union of sovereign states without centralized power.[55]

Modern Switzerland was created in 1848, when the union of all twenty-two cantons adopted a constitution modeled after the American constitution, under which the cantons agreed to give up part of their sovereignty to the confederation.[56] All authority not expressly attributed to the confederation remains with the cantons.[57] Switzerland's legislative power is exercised by the Federal Assembly, which is composed of two chambers: the National Council and the Council of States, the former being the larger one.[58]

---

[50] Nationmaster.com, Encyclopedia, *History of Switzerland*, *at* http://www.-nationmaster.com/encyclopedia/History-of-Switzerland (article last updated Jan. 6, 2004).

[51] *Id.*

[52] History of Switzerland, *Swiss Revolution and Helvetic Republic* (1798), *at* http://history-switzerland.geschichte-schweiz.ch/swiss-revolution-helvetic-republic-1798.html (last updated Dec. 30, 2003).

[53] *See id.*

[54] *See id.*

[55] *Id.*

[56] More precisely, the federal government now controlled the national defense, trade, and legal affairs. History of Switzerland, *supra* note 52. In 1848, the cantons did not grant any rights to the confederation with respect to patent protection. Pierre-André Morand, *Les Lois Cantonales Relatives aux Brevets* [*The Cantonal Laws Concerning Patents*], *in* KERNPROBLEME DES PATENTRECHTS 3, 4 (Institut für gewerblichen Rechtsschutz, INGRES, Zurich 1988).

[57] Morand, *supra* note 56, at 4.

[58] Nationmaster.com, Europe: Switzerland, *Government*, *at* http://www.nationmaster.-com/country/sz/Government (last visited Jan. 29, 2004).

It is often written that Switzerland did not have a patent system until the adoption of the patent law of 1888.[59] This is not entirely accurate, however. Prior to 1888, various patent protections existed, although they were not very significant. In the Middle Ages, under the old confederation, the sovereign cantons could, if they wished to do so, grant privileges to inventors.[60] Such privileges were mainly seen in towns where intellectual, commercial, and industrial activities flourished, such as in Basel, where in 1531 the legislator granted protection to printed books.[61] Other examples include Berne, where in 1577 privileges were given to a citizen for his use and reproduction of original apparatuses used to collect salt, and Zurich, where a man received protection for a fountain.[62]

At the turn of the eighteenth century, the Helvetic Republic, which replaced the old confederation, enacted its first patent law.[63] Article 1 of the law of 1801 allowed a citizen of the Republic who invented, improved, or introduced from abroad a new essential industry and practiced it in the country, to apply for a patent, which was protected for up to seven years.[64] This law, however, was abolished with the fall of the Helvetic Republic in 1803.[65] After the transition period that lasted from 1803 until 1815, the old confederation system was reinstated.[66] Some of the sovereign states, but not all, used their competence to enact patent legislation, resulting in great diversity.[67] In 1832, Zurich was the first canton to enact legislation in this area, but the law appears to never have been used.[68] In September of 1837, Basel-Stadt granted protection for inventions in its a criminal law, but never described the

[59] *See generally* SCHIFF, *supra* note 2, at 86–87.
[60] Morand, *supra* note 56, at 4.
[61] *Id.*
[62] *Id.* at 5.
[63] Switzerland's first patent law was enacted on April 25, 1801. *Id.* at 7; *see also* Hans Bracher, *Entstehung und bedeutung des schweizerischen patentwesens* [*Coming into Existence and Meaning of the Nature of the Swiss Patent*], at 5, 6 (1923).
[64] Bracher, *supra* note 63, at 5; Morand, *supra* note 56, at 7.
[65] Morand, *supra* note 56, at 9; *see also supra* notes 52–54 and accompanying text.
[66] *See* Morand, *supra* note 56, at 9.
[67] *Id.*
[68] *Id.*

conditions to be met in order to receive protection.[69] Solothurn introduced patent protection in its civil code in 1847, but included it in the chapter devoted to illicit acts.[70] Finally, the canton of Thurgovie did not pass legislation, but included in its constitution an affirmation under which intellectual property was protected.[71] In general, the protection granted appears vague and narrow, limited to the specific canton.[72] Most of the other cantons did not legislate on this matter, mainly because they felt that patents did not need particular protection.[73] Diversity in legislation favored the protectionism of the cantons to the detriment of the national interest.[74]

This state of affairs continued until the adoption of a federal patent law on November 15, 1888.[75] This legislation, however, was not adopted without long debates, much opposition, and considerable compromise. As early as 1849, a year after the birth of the federal state, a member of the Council of States submitted to colleagues the draft of a patent law and urged them to adopt it promptly.[76] This motion was followed by a second motion in the same year;[77] however, both were both rejected, as was a petition filed in 1852.[78] The basis for the rejections was that the confederation was not competent to pass laws in this matter because there was no express clause in the Constitution that enabled such action.[79] As a result, in 1854, the Federal Council, at the request of the National Council, examined the possibility of granting such protection through a treaty, or concordat, between the cantons.[80] Despite repeated efforts over the next few years to

---

69 *Id.* at 10.
70 *Id.*
71 *Id.* at 11.
72 *Id.* at 12.
73 Other cantons that enacted legislation to protect intellectual property did not clearly define the scope of protection and often did not extend the protection to patents. *See id.* at 11–12.
74 *Id.* at 12.
75 *Id.* at 16.
76 *Id.* at 14.
77 *Id.* at 14–15.
78 *Id.* at 15.
79 Morand, *supra* note 56, at 15; *see also* Bracher, *supra* note 63, at 6.
80 Morand, *supra* note 56, at 15; *see also* Bracher, *supra* note 63, at 6.

implement this solution, however, it was rejected due to cantonal disagreement.[81] Further rejection of a Swiss patent regime followed in 1863, when a new proposal was dismissed by the government "with reference to the fact that political economists of greatest competence had declared that the principle of patent protection was pernicious and indefensible."[82]

In 1864, Switzerland signed a bilateral treaty with France,[83] pursuant to which the citizens of both countries could require of each other exclusive protection for their trademarks as well as their artistic and literary works.[84] The treaty did not address the protection of patents, despite France's efforts to include it.[85] The signing of this treaty signaled to Switzerland the urgency of enacting legislation to protect intellectual property, especially because all Switzerland had at the time was a concordat between some of the cantons for the protection of literary and artistic property.[86] Thus, in 1865, the Federal Assembly submitted for the first time a referendum for an amendment to the Constitution to grant the confederation the power to legislate intellectual property matters.[87] This proposition, however, was rejected by the popular vote held on January 14, 1866.[88]

Those in favor of a national patent law did not renounce the cause and continued to pursue their efforts both in Switzerland and abroad. Two motions were filed by a representative of the

---

[81] Morand, *supra* note 56, at 15; *see also* Bracher, *supra* note 63, at 6–7.

[82] Machlup & Penrose, *supra* note 1, at 5 (citations omitted); *see also* Roland Grossenbacher, *Die Schweiz und die PVÜ* [*Switzerland and the Paris Convention*], *in* KERNPROBLEME DES PATENTRECHTS: FESTSCHRIFT ZUM EINHUNDERTJÄHRIGEN BESTEHEN EINES EIDGENÖSSISCHEN PATENTGESETZES 389 (Institut für gewerblichen Rechtsschutz, INGRES, Stämpfli 1988).

[83] France already had enacted a new patent law in 1844. Morand, *supra* note 56, at 12–13.

[84] *Id.* at 13.

[85] Bracher, *supra* note 63, at 8; Grossenbacher, *supra* note 82, at 389.

[86] Morand, *supra* note 56, at 13; *see also* Bracher, *supra* note 63, at 7.

[87] *See* Morand, *supra* note 56, at 15. A referendum is compulsory for all amendments to the Swiss Constitution ("Constitution"), and a double majority is needed for the amendment to take place. This means that both a majority of the popular vote and a majority of the cantons in which the majority of the voters adopted the proposal are required.

[88] The proposal was rejected by a margin of 40,000 votes. *Id.*; *see also* Bracher, *supra* note 63, at 7–8.

National Council in 1871 and 1873.[89] Both were rejected, however, one of them on the basis that Switzerland was purportedly too small to have patent laws.[90] These setbacks did not prevent the proponents from actively participating in the international realm and further advocating international protection. The advocates brought forth their cases at the two privately organized congresses concerning patent protection held at the Universal Exhibition in Vienna in 1873 and in Paris in 1878 (referred to as Congrès du Trocadero).[91] In 1880, Switzerland was also represented at the Paris Convention, the first diplomatic conference regarding patents.[92] Switzerland played an important role in drafting the text of the Paris Convention, which was eventually signed on March 20, 1883.[93] This is the primary reason why Berne was chosen as the headquarters for the Central Bureau of the Union, which was in charge of the administration and supervision of the convention.[94]

Because the text of the Paris Convention and the pending motions were sent to the states by France in November 1880, Switzerland was able to take advantage of the impact of the 1880 conference.[95] On February 8, 1881, the National Council was urged to submit to the citizen vote a new amendment to the Constitution to add article 64*bis*. Pursuant to this new article, the confederation would be granted the necessary power to protect industrial and agricultural inventions as well as offer protection for designs and models.[96] In its message of support for this amendment, the Federal Council emphasized the number of countries that had laws concerning patent protection and that

[89] Bracher, *supra* note 63, at 8, 16; Walther Stuber, *Die Patentirbarkeit chemischer Erfindungen* [*The Patentability of Chemical Inventions*], *in* ABHANDLUNGEN ZUM SCHWEIZERISCHEN RECHT, Heft 20, at 7 (1907).

[90] *See* Morand, *supra* note 56, at 14; *see also* Bracher, *supra* note 63, at 8.

[91] Morand, *supra* note 56, at 13; *see also* Grossenbacher, *supra* note 82, at 391.

[92] Morand, *supra* note 56, at 13; WIPO, *Paris Convention Parties*, *supra* note 23.

[93] Morand, *supra* note 56, at 13; Grossenbacher, *supra* note 82, at 391; WIPO, *Paris Convention Parties*, *supra* note 23.

[94] Grossenbacher, *supra* note 82, at 391–92.

[95] From 1875 to 1881, different voices were raised in favor of a national patent law, and motions as well as petitions were filed both at the national and states councils. *See* Grossenbacher, *supra* note 82, at 391–92.

[96] Grossenbacher, *supra* note 82, at 392–93; Bracher, *supra* note 63, at 8–9.

favored Berne as the seat for the Central Bureau of the Union. The National Council also warned that the absence of a patent protection system could leave the Swiss inventors behind and might create an exodus of highly qualified specialists.[97] Despite these seemingly strong arguments, the amendment was rejected by the Swiss citizenry in 1882.[98] One explanation is that the vote was influenced by the fact that on the same day, the population also voted on an unpopular law concerning the control of contagious diseases and epidemics.[99] Regardless of the reason, the negative outcome turned out to have far more consequences than those foreseen at the time. Indeed, up to that point, the chemical industry had not brought about strong resistance against the amendment because the text voted on was neutral in that it did not contain the model requirement that existed in the version submitted to the people in July 1887.[100] The adoption of the 1881 proposal would have saved much time and energy. More importantly, it would have avoided the need for the second constitutional modification, which came in 1906.[101]

Even though Berne was designated as the headquarters of the Central Bureau of the Union, the reality was that Switzerland was still without a patent law when the Paris Convention was signed in March 1883.[102] This failure, however, did not prevent the proponents of patent protection to continue their efforts. A motion was filed in 1883 to determine whether this question should be submitted to the citizens once more, despite the initial negative outcome.[103] Many petitions in favor of establishing a patent law were filed[104] and, during the assembly of the delegates of the Paris Convention in Rome in early 1886, it was requested that the countries that did not yet protect all types of intellectual property

[97] Grossenbacher, *supra* note 82, at 393.
[98] Morand, *supra* note 56, at 15.
[99] Grossenbacher, *supra* note 82, at 393 n.11; Alfred Simon, *Der Patentschutz mit besonderer berücksichtigung der schweizerischen gesetzgebung* [*The Patent Protection with a Special Emphasis on Swiss Statute*] 32 (1891); Stuber, *supra* note 89, at 11.
[100] Stuber, *supra* note 89, at 11.
[101] *Id.*
[102] *See* Morand, *supra* note 56, at 15.
[103] *Id.* at 15–16.
[104] Morand, *supra* note 56, at 15–16.

should do so without further delay.[105] In light of the foregoing, the National Council again delivered a message on June 1, 1886 in favor of the addition of article 64*bis* to the Constitution.[106] On July 10, 1887, the voters finally agreed by a large majority to grant the confederation the competence to enact patent legislation.[107]

The powers given to the Swiss government, however, were limited in scope because the legislation that could be passed was limited to inventions represented by mechanical models applicable to the industry.[108] This peculiarity made Switzerland's legislation unique because no other country had such a requirement.[109] A better way to draft the constitutional clause would have been to give it a broader scope, thus, allowing the legislation to carve narrower requirements.[110] This constraint was defined in article 14 of the 1888 patent law, and stated that a model of the invention comprised any execution of the invention or any artistic representation that clearly showed the nature and object of the invention.[111] Its main goal was to exclude chemical inventions to avoid the strong opposition of the chemical industry, which had challenged all other versions of the amendment.[112] According to the National Council, this requirement was supposed to have two other advantages. First, it was intended to exclude all inventions that were not ripe enough or for those in which the inventor was

[105] Simon, *supra* note 99, at 33.
[106] *See* Morand, *supra* note 56, at 16; Simon, *supra* note 99, at 33.
[107] Morand, *supra* note 56, at 16.
[108] *See* SCHIFF, *supra* note 2, at 85–86.
[109] *Id.* at 86.
[110] Stuber, *supra* note 89, at 18. The author concurs with Walther Stuber that such detail had no place in the Constitution.
[111] Loi fédérale sur les brevets d'invention, du 29 juin 1888, publié au Recueil officiel des lois et ordonnaces de la Confédération Suisse, nouvelle série, tome X, 1888, 688-689, [Federal Patent Law of June 29, 1888, published in the official report of the laws and regulations of the Swiss Confederation, new series, vol. X, pp. 688–89].
[112] Message du Conseil fédéral à l'assemblée fédérale concernant le projet de loi sur les brevets d'invention, 20 janvier 1888, FF 1888 I 187, 189 [Message from the Federal Council to the Federal Assembly concerning the draft law about patentable inventions] [hereinafter Message of 1888]; Message du Conseil fédéral à l'Assemblée fédérale relatif à la revision de l'article 64 de la Constitution fédérale, 13 novembre 1903, FF 1903 V 47, 49, 50 [Message from the Federal Council to the Federal Assembly concerning the modification of article 64 of the Swiss Federal Constitution] [hereinafter Message of 1903].

not able to fully describe the implementation.[113] Second, the model requirement was believed to facilitate procedural steps in patent infringement disputes.[114] The model requirement left out inventions for chemical and pharmaceutical products, foodstuffs, and stimulants.[115]

B. From 1888 to the Law of 1907

Soon after the patent law of 1888 entered into force, voices were raised about the inappropriateness of the model requirement:

> This restriction finds no justification in the law; indeed there is no justification to create a special category with the inventions that can be represented by a model; the possibility of a model is a completely secondary circumstance, which has nothing to do with the nature of the invention; no substantial legal argument has been seriously invoked in favor of the adopted system.[116]

Furthermore, this model requirement, which at first seemed to have a straightforward application and was supposed to ease the work of the Intellectual Property Office, led to uncertainties due to its lack of clarity.[117] There was an interpretation discrepancy regarding the scope of application—more precisely, determining which invention could actually be represented by a model.[118] Since no case was ever brought to the supreme court of Switzerland, the Tribunal fédéral suisse (Federal Tribunal), this question remained unresolved.[119] Additionally, "[d]oubts were soon raised as to whether Switzerland, in enacting so selective a

---

[113] Message of 1888, *supra* note 112; Message of 1903, *supra* note 112.

[114] Message of 1888, *supra* note 112; Message of 1903, *supra* note 112; *see also* Simon, *supra* note 99, at 55.

[115] Simon, *supra* note 99, at 59.

[116] Stuber, *supra* note 89, at 3 (quoting J. Spiro: "Cette restriction ne se justifie pas en droit; il n'y a en effet aucune raison de faire des inventions représentables par modèle une catégorie spéciale; la possibilité d'un modèle est une circonstance tout à fait accessoire et qui ne touche en rien à l'essence de l'invention; aucun argument juridique n'a d'ailleurs été sérieusement invoqué en faveur du système adopté").

[117] Message of 1903, *supra* note 112, at 52; *see also* SCHIFF, *supra* note 2, at 93.

[118] *See* Message of 1903, *supra* note 112, at 52.

[119] *Id.*

law, had really met her moral obligations as a Member of the International Union."[120]

Early on, some discrepancies appeared in the three official versions of the text—French, German, and Italian[121]—requiring some minor modifications of the law, which were undertaken in 1893.[122] At that time, it was not possible to drop the model requirement because it was not only embedded in the law, but also in the Constitution.[123] A constitutional amendment, therefore, was necessary. This process was much more burdensome because it required a new popular vote on the legislative proposal.[124] It was only a decade later in 1904 that the Parliament agreed to submit to the citizens an amendment to article 64*bis* of the Constitution that would drop the model requirement.[125] The vote was favorable, and the change was accepted on March 19, 1905.[126] The law subsequently was changed on June 21, 1907.[127]

In addition to the reasons mentioned above, the following circumstances also prompted this change. First, the Swiss government realized that based on the experiences of other countries, it was possible to grant protection to chemical inventions in a way that suited the Swiss industries.[128] Second, it recognized that a balanced patent law could benefit the entire economy.[129] Third, it took notice of the current absence of abolitionist views in the industrialized countries—in other words, the trend was to improve, and not eliminate, the existing patent laws.[130] In fact, it would have been illogical to deny patent protection to the chemical

---

[120] SCHIFF, *supra* note 2, at 93.
[121] Bracher, *supra* note 63, at 11.
[122] Stuber, *supra* note 89, at 2.
[123] *Id.*
[124] *Id.*
[125] *See* Message du Conseil fédéral à l'Assemblée fédérale relatif au projet d'une loi fédérale sur les brevets d'invention, 17 juillet 1906, FF 1906 IV 325, 326 [Message from the Federal Council to the Federal Assembly concerning the draft of a federal law about patentable inventions of July 17, 1906] [hereinafter Message of 1906].
[126] *Id.*
[127] SCHIFF, *supra* note 2, at 86.
[128] *See* Message of 1903, *supra* note 112, at 50.
[129] *See id.* at 50–51.
[130] *Id.* at 51.

industries when the other industries whose products were covered by the existing patent law benefited from it.[131]

At the same time, the chemical industry had loosened its opposition, although not completely.[132] It was still opposed to patent protection for the application processes, the methods of fabricating pharmaceuticals, the production of food and stimulants, as well as the products themselves.[133] What also weighed in the balance was, on one hand, the proposal made by the United States to amend the Paris Convention by adding a clause under which "any invention that is not patentable in the country of origin, may be excluded from protection in any other Member country that finds it expedient to include it."[134] This proposition was contrary to the spirit of the Paris Convention and presumably would not have been accepted by the majority of the members of the European Union, but Switzerland did not want to risk the recurrence of such proposals, or worse, acts of retaliation.[135] On the other hand, the German government did threaten Switzerland with retaliatory measures. Specifically, the German government threatened the imposition of custom duties on the import of certain chemical products from Switzerland, such as aniline and other coal-tar dyestuffs, if the patent law was not modified to include the protection of chemical inventions by December 31, 1907.[136]

It is these two last circumstances which had, in reality, the most impact on Switzerland's decision. Professor Heinrich Kronstein and Doctor Irene Till shed an interesting view on these episodes of the Paris Convention that is worth citing here:

> In at least one specific instance Germany did use the International Patent Convention to cement its monopolistic position. This was in connection with Switzerland. At the turn of the century Switzerland loomed as a real

[131] *See id.* at 52.
[132] *See* Message of 1906, *supra* note 125, at 326.
[133] *Id.*
[134] This U.S. proposal was made at the 1897 Conference of the Union in Brussels. SCHIFF, *supra* note 2, at 93.
[135] *See* Message of 1903, *supra* note 112, at 54–55; *see also* SCHIFF, *supra* note 2, at 89–90, 93–95.
[136] EDITH TILTON PENROSE, THE ECONOMICS OF THE INTERNATIONAL PATENT SYSTEM 16–17 (1951); SCHIFF, *supra* note 2, at 94–95; Stuber, *supra* note 89, at 27–28.

> competitive threat to Germany's dyestuffs industry; and it persistently refused to grant patents for the protection of chemical processes. In this case the United States came to the aid of Germany. At the 1897 patent convention in Brussels, the United States—with no dyestuff industry of its own—proposed that Switzerland should be punished for its dereliction in the chemical field by discriminatory measures against it. Was this an expression of the American-German patent alliance? In 1904 Germany sent a virtual ultimatum to Switzerland, demanding that it grant patents on chemical processes under the patent convention's requirement of equality of treatment to nationals and foreigners. To force compliance, it threatened Switzerland with an import tariff on Swiss goods based on the total volume of its exports into Germany.
>
> The Swiss parliamentary debates of 1904 and 1907 give a dramatic account of the conflict. From one side comes the charge that Switzerland is opposed to the grant of chemical patents because she wishes to enrich her own industries by securing technological developments from abroad for nothing. The defense of those opposed to the grant of such patents is that they inevitably lead to monopoly; and the German dyestuffs industry is cited as the prime example. The very fact that the German government and the German chemical industry were demanding that Switzerland grant chemical patents was taken as an indication that the real purpose was to compel Swiss industry to join the German dyestuffs cartel. History proved that this charge was correct, for in the end the Swiss industry was compelled to become a junior partner in the German dyestuffs group.[137]

Switzerland's resistance was finally overcome. Whether this was a welcome change depends on the viewpoint of patentees and consumers, respectively. The new patent law clearly benefited the patent holders and the German industry, who gained a

[137] Heinrich Kronstein & Irene Till, *A Reevaluation of the International Patent Convention*, 12 LAW & CONTEMP. PROBS. 765, 778–79 (1947).

monopoly.[138] On the other hand, the consumer had to pay more for the same products once the Swiss competition was destroyed.[139] It should be noted, however, that the scope of the new patent law adopted on June 21, 1907 was still limited because only chemical processes were protected and not chemical products or substances themselves.[140] Furthermore, the new law excluded the protection of all chemical processes related to the fabrication of products, whether chemically or not, for human or animal nutrition.[141] The *serien-patente* on chemical processes, as well as the chemical processed for the treatment of textile fibers, were also excluded from protection.[142] Despite the large gaps in protection, this was in fact not the last Swiss resistance to the German industry. Section 4 of the German law in effect at that time also excluded from its scope inventions on food, stimulants, or pharmaceutical products, as well as chemically-produced substances, as long as the invention did not concern a specific process for the production of the object.[143]

III. THE REASONS FOR THIS OPPOSITION

A. *The General Reasons*

The arguments raised by the opponents were diverse, but can be summarized and categorized as follows:

- The protection of inventions did not bring any advantages; on the contrary, it was only giving the state more work than necessary.[144]
- "The principle of patent protection is pernicious and indefensible."[145]

---

138 *See id.*
139 *See id.*
140 SCHIFF, *supra* note 2, at 95.
141 Bracher, *supra* note 63, at 33.
142 PENROSE, *supra* note 136, at 17; Bracher, *supra* note 63, at 34.
143 *See* Stuber, *supra* note 89, at 51.
144 Bracher, *supra* note 63, at 13.
145 Morand, *supra* note 56, at 15.

- "[I]t is pure fantasy to believe that the protection of inventions would result in greater activity or encouragement of workers."[146]
- "The inventing spirit . . . follows his ideas, not for gain but driven by an inner compulsion which will not let him rest."[147]
- Switzerland was too small to have patent protection;[148] such a law would only be efficient in larger countries or internationally.[149]
- A major invention was generally not achieved by the work of one person, but was the result of the general development in the industry, or the work of a group of inventors.[150] Therefore, it was unfair to grant a patent, which resulted to a monopoly for the inventor who was lucky enough to come up with the last inventive step or final touch on an invention, and reap all the advantages and economic rewards to the detriment of the others.[151]
- Patents were considered useless, since Switzerland's industries were able to expand successfully and reach high levels of productivity and quality without patent protection.[152]

Furthermore, patents were considered damaging because they could prevent the free use of foreign industries.[153] In addition, granting patents was seen as a hindrance to free trade.[154] The Swiss industries also feared that the enactment of a patent law would lead to a massive importation of goods protected by

[146] PENROSE, *supra* note 136, at 37 (citing a silk industry manufacturer's response to a survey published in 1886 by the Zurich Chamber of Commerce).

[147] *Id.* (citing a pottery industry manufacturer's response to a survey published in 1886 by the Zurich Chamber of Commerce).

[148] Morand, *supra* note 56, at 14.

[149] In this respect, the opponents referred to the Netherlands, a country that had abolished its patent law in 1869, saying that patent protection could only work if done on an international scale. Bracher, *supra* note 63, at 8, 16.

[150] Morand, *supra* note 56, at 14.

[151] Simon, *supra* note 99, at 8; Bracher, *supra* note 63, at 17.

[152] Morand, *supra* note 56, at 14.

[153] *Id.*; *see also* Bracher, *supra* note 63, at 14–15.

[154] *Id.*; *see also* Bracher, *supra* note 63, at 14–15.

patents.[155] These views were expressed in a survey published by the Zurich Chamber of Commerce in 1886:

> The majority of the big industrialists of Zurich are not in favor of the granting of patents. They do not wish to give up the freedom to make use of the improvements of foreign competitors as they see fit. Many see in the present situation the last advantage, which remains, to them in foreign competition and they do not wish to see it wrenched from their hand. This is held to be the case—as we especially set out—not only with respect to imitation but also particularly with respect to the free development of the play of forces. This attitude is connected, we must record for the sake of truth, with consideration of tariff policy.[156]

These views were echoed in a report to the federal department of commerce and agriculture:

> Above all, people feared that it [a patent law] would facilitate the introduction of foreign manufactured goods by the foreign holders of Swiss patents because of our own tariff policy, and we should expect a real flood to the harm of our own industry.[157]

In response to this fear, the advocates of patent protection enacted a working requirement and compulsory licensing:

> This disadvantage is easily overcome; compulsory working will be introduced in any patent law to be created. It is in the contract connected with the issue of a patent that the invention as a rule should promote domestic needs and advance domestic technique. Without such provision half of the present patent protection would certainly refuse their support.[158]

---

[155] PENROSE, *supra* note 136, at 122–23.

[156] *Id.* (quoting Zurich Chamber of Commerce survey results published in 1886).

[157] *Id.* at 123 (quoting Bericht an das Eidg. Handels- und Landwirthschafts-Departement [report to the federal department of commerce and agriculture]).

[158] *Id.* at 123 (citing Zurich Chamber of Commerce survey results published in 1886).

The patent law of 1888 did contain such requirements in article 9, sections 3 and 4. Specifically, the law stated that the patent would be cancelled

> if the invention has not been worked after the expiration of three years from the date of the application for a patent [and] if the patented object is introduced into Switzerland from abroad and the holder of the patent has refused a license requested by a Swiss on reasonable terms.[159]

As an alternative to patent protection, the anti-patent movement suggested that the state should reward the inventor through a specific fund to be established.[160] A suggestion was made in 1865 to set up this fund internationally.[161] This proposal was never implemented because it presented too many obstacles. The first obstacle was the difficulty in raising the amount of money necessary to reward numerous inventions.[162] The second obstacle was the question of how to ascertain the amount of the reward to be allocated.[163] This was the general view prevailing amongst all industries in the mid-eighteenth century when the first proposition for patent protection was introduced.[164]

These opinions were also widespread amongst the parliamentarians.[165] As a result, the proponents of patent law saw many of their motions and petitions rejected for many years.[166]

Opinions evolved, however. The general hostility was lifted with the economic crisis that started in Europe in 1873.[167] Confronted with harsh economic times, countries tend to generate protectionist measures such as patent protection. Switzerland's lawmakers realized the advantages of the patents, namely, that patents could preserve the national industry from foreign

---

159 PENROSE, *supra* note 136, at 124 n.18 (citations omitted).
160 Simon, *supra* note 99, at 6.
161 Simon, *supra* note 99, at 6; *see also* Bracher, *supra* note 63, at 17, 18.
162 Bracher, *supra* note 63, at 18.
163 Simon, *supra* note 99, at 6.
164 Bracher, *supra* note 63, at 18, 19.
165 *Id.*
166 *See supra* text accompanying notes 89–94.
167 Morand, *supra* note 56, at 14.

competition.[168] They started thinking that the absence of patent law actually could be prejudicial to their industry.[169] They also relied on the example set by the United States which demonstrated that a country could enact strong patent protection while achieving a high level of development in the industry.[170] The chemical industry was not so easily convinced by these arguments, however, and kept fighting against strong patent laws.[171]

B. The Chemical Industry

In addition to the general arguments raised and summarized above, the chemical and paint industries brought up the following contentions against a patent protection in their field:

- Based on experiences in other countries, a clear process could not be followed to suit patent chemical substances or chemical reactions.[172]
- In the chemical field it was often difficult to know who the inventor was because chemical inventions were generally a series of chemical reactions.[173] Therefore, there was a risk that a patent could be granted to an individual who just stepped in at the end of the process and did not contribute a lot of work, but simply put the final touch on the invention. Such persons should not be entitled to reap all the benefits and advantages of a patent.[174]
- Patents hindered the growth of the chemical industry.[175] Unlimited freedom, as known in Switzerland, was more favorable to the development of the industry than patent protection.[176] Germany, whose industry had a stronger

[168] *Id.*
[169] *Id.*
[170] *Id.*; *see also* Bracher, *supra* note 63, at 23.
[171] *See generally* SCHIFF, *supra* note 2, at 85–86.
[172] Message of 1903, *supra* note 112, at 50.
[173] Stuber, *supra* note 89, at 9–10.
[174] *Id.*
[175] *See* SCHIFF, *supra* note 2, at 94.
[176] *See id.*

expansion before the patent era, was an example of the downfalls of patent law.[177]

- A patent application was a costly proceeding, which can be too expensive for small inventors.[178] Hence, if inventors did not have enough funds, they had two solutions, renounce their patent opportunity or give it to big a manufacturer. The consequence of this cost of patenting an invention was that the monopoly would end up, in most cases, in the hands of the big industries and not in those of small inventors, who would lose all the advantages that patent protection was designed to give them.[179]
- In many countries, only the manufacturing process was protected, but not the product itself.[180] With certain products, however, it was impossible to know if they had been manufactured using the patented invention or another process. Difficulties might have arisen, therefore, if two competing manufacturers were making the same product, but only one of them was using the patented process. Money would then be lost in infringement proceedings, instead of being invested.[181]
- If there were only one method of making a product, then the patent holder would have undue power.[182]
- Since only the manufacturing processes were patentable, and not the chemical reactions, it would be difficult to draw a line between these two notions and establish whether there was an invention.[183]

---

[177] Machlup & Penrose, *supra* note 1, at 21. This assertion, however, is historically untrue. German chemical industries further flourished and developed even after the patent law was enacted in 1877. Stuber, *supra* note 89, at 13–14. This was most certainly due in part to the monopoly position this industry gained in Germany. Kronstein & Till, *supra* note 137, at 779.

[178] Stuber, *supra* note 89, at 9.

[179] *Id.* at 8.

[180] *Id.* at 9.

[181] Stuber, *supra* note 89, at 8.

[182] *Id.*

[183] SCHIFF, *supra* note 2, at 92; Stuber, *supra* note 89, at 9–10.

Since the Swiss chemical industry primarily argued that it wished to continue to freely imitate the inventions protected by patents in foreign countries,[184] this Article will briefly examine the ethicality of such an attitude.

IV. THE QUESTION OF THE ETHICS OF THE SWISS INDUSTRIES

The moral principles underlying the attitude of the Swiss industries toward patents can be analyzed from both legal and philosophical perspectives. From the legal standpoint, the answer is usually straightforward because it depends on whether the law confers exclusive rights to the patentee. If there are no such rights granted, the invention is available to everyone and mere copying does not pose ethical problems. This is the same situation as when the invention cannot be patented due to lack of novelty or any other requirement set in the law—the invention falls in the public domain. On the other hand, if the invention is removed from the public domain through the grant of an exclusive property right to the inventor, then, as with any other property right, it is illegal and, hence, unethical to imitate it. It is important to keep in mind that the laws under which property rights are granted usually have effects limited to the territory of the country that enacted them. A gap necessarily will exist if not all the countries grant the same protection, as it was the case with Switzerland and Germany. This is precisely what the TRIPS Agreement seeks to remedy by providing a minimum standard of protection that the Members are obligated to implement in their own national laws.[185]

The philosophical perspective offers a different theory for the protection of intellectual property rights against piracy. This theory is known as a natural property right, under which

[184] Amongst the inventions that were invented abroad and exploited in Switzerland is the aniline dye ("mauve") invented and patented in England by William Perkin in 1856. SCHIFF, *supra* note 2, at 100. A dyeing factory in Basel started manufacturing it as soon as 1859. *Id.* In the next decade, the artificial dye factories were flourishing in Switzerland. *Id.* They were not only using techniques developed in foreign countries, however, but also those processes they had realized themselves. *Id.* at 109–10. Inventions made by Zenobe T. Gramme and Werner Siemens were also used by an engineer to build generators. *Id.* at 105–06.

[185] *See* TRIPS Agreement, *supra* note 14, art. 1

> [a] man has a natural property right in his own ideas. Their appropriation by others must be condemned as stealing. Society is morally obligated to recognize and protect this property right. Property is in essence exclusive. Hence enforcement of exclusivity in the use of a patented invention is the only appropriate way for society to recognize this property right.[186]

This idea of a natural property right, which is not a universally accepted principle in international law, was one argument raised by proponents in favor of patent protection. For example, this theory was extremely popular in France, so much that it was embedded in the patent law of 1791.[187] It was later abandoned, however, because taken literally, it would have meant that a patent granted on the basis of a natural right could not be limited in time, which would have been unacceptable even to the patent advocates.[188]

Nonetheless, this principle of natural property right could be used as a standard in cases of imitation:

> So long as the idea of the inventor's natural property right influences the thinking, it is difficult to avoid the corollary notion that imitation is unethical even when no written law or treaty and no consideration of good international sportsmanship forbids it. . . . When the "natural-rights" idea is rejected, objections to imitation must be based on grounds other than general philosophical ethics.[189]

The German industries recognized that the property rights to their inventions, as well as the more general property right to their ideas, extended beyond the geographical constraints of the German borders.[190] As such, they considered the Swiss who imitated their inventions thieves.[191] The Swiss had mixed reactions to this accusation. Some were indifferent, emphasizing that "[the Swiss]

---

[186] Machlup & Penrose, *supra* note 1, at 10; *see also* PENROSE, *supra* note 136, at 21.
[187] Machlup & Penrose, *supra* note 1, at 11; *see also* PENROSE, *supra* note 136, at 21–22.
[188] *See* PENROSE, *supra* note 136, at 24.
[189] SCHIFF, *supra* note 2, at 74.
[190] *See id.* at 94.
[191] *Id.*

industry has reached its present stage of development only because it was able to exact tribute from the foreigner—if this is thievery, then all our industries are thieves."[192] Others denounced such statements, especially when German industries tried to eliminate this "illegal" competition by paying large sums of money to the Swiss in exchange for the promise that they would stop imitating the German products.[193] It is ironic that in this type of situation, the thieves were actually compensated for their prior theft.[194]

V. ANALYSIS OF THE NORTH-SOUTH DEBATE UNDER THE TRIPS AGREEMENT WITH RESPECT TO THE SWISS PATENT LAW HISTORY

In the 2002 Special 301 Report of the U.S. Trade Representative, Robert B. Zoellick indicates that more than two years after the end of the transition period, some WTO member countries still did not fully implement in their national laws all the patent-related requirements contained in the TRIPS Agreement.[195] Switzerland's struggles to enact a patent law in the nineteenth century may shed some light on these difficulties.

History shows that there are two key reasons for the Switzerland's delay in adhering to the TRIPS Agreement, namely, the opposition of the industries—mainly the chemical ones—and the constitutional and legislative requirements specific to Switzerland.[196] Despite this opposition, changes were possible due to international pressure and adjustments in the national perception of patent rights.[197] The positive experience of other countries demonstrated to the Swiss government and industries that a patent system was not the "cup of sorrows" initially thought;[198] when

[192] *Id.* at 88 n.6.
[193] *Id.* at 89 n.7.
[194] *Id.* at 89 n.7; *see also* Stuber, *supra* note 89, at 39–40.
[195] U.S. TRADE REPRESENTATIVE, 2002 SPECIAL 301 REP., *available at* http://www.ustr.-gov/reports/2002/special301.htm (last visited Feb. 6, 2004). This report lists Argentina, Brazil, Colombia, Dominican Republic, Egypt, India, and Uruguay among the developing countries that have not fully implemented their patent obligations.
[196] *See generally* SCHIFF, *supra* note 2, at 85–86.
[197] *See id.* at 87–89.
[198] *See supra* note 2 and accompanying text.

soundly applied, it benefited not only the industries themselves, but also the national economy.[199]

Hence, the analysis in this part will focus on three specific issues: (1) how the role of the political structure of a country can influence the implementation of their international obligations, (2) to what extend does international pressure have an impact on the government of a country, and (3) whether the experience of some nations influences the thought process of others.

A. Impact of the Political Structure

The TRIPS Agreement grants developing and least developed countries up to ten years to implement their obligations and introduce patent legislation in areas where such laws are absent.[200] It took Switzerland fifty-eight years to enact a "real" patent law.[201] Even after it did, the scope of its protection was much narrower than that required by article 27 of the TRIPS Agreement.[202] Taking into account the time elapsed after the signing of the 1883 Paris Convention, it can be seen that it still took Switzerland more than two decades to comply with its international obligations under the convention. This argument presupposes that the patent law of 1888 was not suitable to the members of the European Union due to its peculiar mechanical model requirement.

As suggested above, this is significantly due to the political structure of this federal state. It took three voting attempts to finally amend the Constitution to grant the confederation the requisite authority.[203] When the Amendment finally passed in 1886, the clause was so narrow that the Constitution had to be amended again before the law could be modified.[204] Since a popular vote is seen as a test to gauge how the citizens respond to a

---

[199] Message of 1903, *supra* note 112, at 51.

[200] *See* TRIPS Agreement, *supra* note 14, arts. 65–66.

[201] The time period from 1849, a year after the constitution of the federal state, until 1907. *See supra* note 56 and accompanying text.

[202] For example, the "chemical substances," which are the products of the processes, are still not protected by the law of 1907. SCHIFF, *supra* note 2, at 95. Article 27 of the TRIPS Agreement requires that both processes and products be protected. TRIPS Agreement, *supra* note 14, art. 27.

[203] *See* SCHIFF, *supra* note 2, at 85.

[204] *Id.* at 85.

particular proposal or political position, if the motion is rejected, the government will be reluctant to immediately return with the same amendment proposal because it would not be well perceived by the people. This illustrates that had the TRIPS Agreement been signed in 1883 instead of the Paris Convention, Switzerland never would have met the requirements within the limited transition period, of one, five, or even eleven years. Considering the restricted subject matter of the 1888 patent law, drafted in a manner as to overcome the opposition of the chemical industries, it would have been totally unsatisfactory with respect to article 27 of the TRIPS Agreement.

Some of the developing countries that are WTO members, despite lack of full compliance with the requirements of the TRIPS Agreement, are nonetheless striving to implement the necessary legislation, but have difficulty because of factors such as political structure and pressure from opponents.[205] India, for example, was involved in a dispute settlement procedure initiated against it by the United States which claimed that it violated patent protection provisions regarding pharmaceutical and agricultural chemical products by not having implemented an adequate filing system for such patent applications.[206] India argued that

> [t]he Government of India's initial preference for establishing a "means" for filing mailbox applications under Article 70.8(a) was the Patents (Amendment) Ordinance (the "Ordinance"), promulgated by the President of India on 31 December 1994 pursuant to Article 123 of India's Constitution. Article 123 enables the President to promulgate an ordinance when Parliament is not in session, and when the President is satisfied "that circumstances exist which render it necessary for him to take immediate action." India notified the Ordinance to the Council for TRIPS, pursuant to Article 63.2 of the TRIPS Agreement, on 6 March 1995. In accordance with the terms of Article 123 of India's Constitution, the Ordinance expired on 26

[205] A survey in this area is beyond the limited scope of this Article.

[206] WTO, INDIA - PATENT PROT. FOR PHARMACEUTICAL & AGRIC. CHEM. PRODS.: COMPLAINT BY THE UNITED STATES, WT/DS50/AB/R, ¶ 62 (1997), *available at* http://www.wto.org/english/tratop_e/dispu_e/distab_e.htm (last visited Feb. 6, 2004).

> March 1995, six weeks after the reassembly of Parliament. This was followed by an unsuccessful effort to enact the Patents (Amendment) Bill 1995 to implement the contents of the Ordinance on a permanent basis. This Bill was introduced in the Lok Sabha (Lower House) in March 1995. After being passed by the Lok Sabha, it was referred to a Select Committee of the Rajya Sabha (Upper House) for examination and report. However, the Bill was subsequently not enacted due to the dissolution of Parliament on 10 May 1996.[207]

This demonstrates that even though the willingness to fulfill the mailbox requirement was there, political changes, such as the dissolution of the Indian parliament, resulted in the failure to pass the bill that would have precisely enabled India to comply with this obligation.

Furthermore, some developing countries might have higher priorities than implementing laws to protect intellectual property. Factors such as being at war, political instability, or economic struggles come into play when it comes to prioritizing legislation, in addition to cultural differences, which might also play a significant role. Five or ten years may be not sufficient in the face of such circumstances. Developed countries should not be so prompt to judge others and should exercise pressure mindfully.

B. International Pressure

Moral pressure flowing from its adherence to the Paris Convention, with Berne being chosen as headquarters for the Central Bureau of the Union, and direct pressure exercised by Germany aided by the United States from 1897 to 1907 had a significant impact on the Swiss government's willingness to submit a new referendum to the people to amend the Constitution and change the law.[208] The National Council took seriously the threats of retaliatory measures, either by an increase in the tariffs or within the Paris Convention.[209] What worked for Switzerland,

---

[207] *Id.*
[208] *See* SCHIFF, *supra* note 2, at 89, 93–94.
[209] *See id.*

however, may not provide a solution for another nation. The circumstances differ for each country. Henceforth, the hardest part will be to evaluate the type and the amount of pressure needed to tip the balance favorably and obtain a positive response.

Although the international pressure was important in Switzerland's case, history shows that it was not driven solely by concern for the well being of Switzerland, but by Germany's own national concerns to protect its industries, inventors, and the German dyestuff cartel.[210] It was a clash between one "selfish" position against another. While Germany wanted to protect its industries, Switzerland was trying to preserve its free riders. The same is still true today: the developed countries, including the United States, are more virulent with their unilateral trade measures under the Special 301 provision under the Trade Act of 1974 to fight against free riders. U.S. Trade Representative Zoellick stated that

> U.S. creativity and ingenuity improves the lives of people all over the world. American innovators, like our scientists, artists and writers, rely on intellectual property protection to safeguard their inventions and creations. Strong [intellectual property rights] protection should also be a priority for other countries because it will help them attract investment and technology . . . This report reflects the Administration's continued commitment to ensure effective intellectual property protection around the world.[211]

Only experience will show whether the WTO dispute settlement mechanism can balance the tension between developed countries, who want the maximum protection for intellectual property, and developing countries, who believe that some free riding is needed to enhance their industrialization, while restraining pressure to an adequate level.

---

[210] *See id.* at 93–94.

[211] Press Release, U.S. Trade Representative, USTR Releases Annual "Special 301" Report on Global Intellectual Property Protection (Apr. 30, 2002) (quoting U.S. Trade Representative Robert B. Zoellick), *available at* http://www.ustr.gov/releases/-2002/04/02-48.htm (last visited Mar. 22, 2004).

C. *Influence of the Experiences of Other Countries*

The laws and the experiences of the neighboring countries influenced the way the Swiss industries and government appreciated patent protection. At first, Switzerland's perception was very negative—it seemed that the concept was not defined well enough, that it was hindering the development of the industries, and that it was restraining free trade and creating monopolies instead.[212] With time, however, Switzerland realized that a patent law could also have advantages, that it could preserve the national industries from foreign competition, stimulate the development of the industries by giving incentives to inventors, and avoid the emigration of scholars and scientists who sought better protection for their intellectual products. It is, therefore, important to allow developing countries—and even more so for the least developed countries–to carve their own paths. Indeed, the patent laws of the developed countries have evolved. They were perfected and improved for over a century alongside the industrialization and development of their industries. Therefore, is it realistic to impose the implementation of minimal requirements drafted to suit the standards of the developed countries in such a short period of time?

CONCLUSION

Although the protagonists and the circumstances are different, history is played anew every century. Countries with patent protection use international treaties and other means to convince the nations that have not yet enacted such protection to do so. Switzerland's experience shows that generalization is impossible, considering that each country has its own problems, struggles, and opponents. Perseverance, patience, and some pressure do seem to work, however, and eventually, developing countries like Switzerland will realize that their position is not endurable any longer. They also will ultimately come to understand that the disadvantages of patent protection are outweighed by the advantages it can bring them. Such balancing takes time and

[212] *See* Message of 1903, *supra* note 112, at 51.

involves broader economic consideration, but ultimately it comes down to assessing the impact of granting better incentives to national industries to invent new products as opposed to allowing them to "rob" the inventions of other countries and, thus, reduce the cost for the consumer.

The reality for developing the least developed countries still resisting patent protection laws is that the most important battle in this fight has long been solved in favor of protection. As one commentator remarked, "Nowadays, it's hard to find any rock-ribbed, dyed-in-the-wool patent abolitionists. Indeed, it is hard to find any patent abolitionists at all. Contemporary patent policy debates seem invariably to start form the premise that the patent system is a '*fait accompli*.'"[213] This may not be so much due to its intrinsic virtues or advantages, rather because this system has existed for such a long period of time:

> If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.[214]

[213] Mark D. Janis, *Patent Abolitionism*, 17 BERKELEY TECH. L.J. 899, 900 (2002).

[214] STAFF OF SUBCOMM. ON PATS., TRADEMARKS, & COPYRIGHTS OF THE COMM. ON THE JUDICIARY, 85TH CONG., AN ECONOMIC REVIEW OF THE PATENT SYSTEM 80 (Comm. Print 1958).