HOW THE EAST WAS WON: A CRITIQUE OF U.S. TACTICS IN NEGOTIATING PATENT PROTECTION FOR PHARMACEUTICALS IN THAILAND

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Abstract: In February 1992, Thailand amended its patent law to provide patent protection for drugs. The amendment resulted from pressure by the United States pharmaceutical industry and the United States Trade Representative; it was not a Thai internal policy decision. Bleak prospects in the U.S. drug market due to a climate of increasing restraints on drug prices have led the Pharmaceutical Manufacturers Association to push for patent protection for their products abroad. Consequently, the United States Trade Representative pressured Thailand to amend its Patent Act to include pharmaceuticals, threatening to use Section 337 of the Trade and Tariff Act of 1930 and Section 301 of the Trade and Tariff Act of 1974 against it, and threatening the revocation of GSP (Generalized System of Preferences) benefits. This Comment examines the tactics employed by the United States between 1988 and 1992 in its negotiations with Thailand for patent protection for pharmaceuticals and the assumptions underlying those tactics. The evidence indicates that Thailand may not yet be economically, structurally and socially ready for drug patent protection and the step toward industrialization it represents. The Comment further concludes that the United States' tactics do not accord with a rational concept of trade negotiations, and are likely to harm its interests in the long term by injuring its relationship with Thailand. Moreover, the United States' moral claims with regard to the necessity of patent protections are unjustified. The Comment suggests that a truly multilateral resolution of international drug patent problems is appropriate and proposes that the World Intellectual Property Organization be reconsidered in that regard in future patent protection negotiations with Thailand and other developing countries.

I. INTRODUCTION

Over the past two decades, the United States has seen its position in the global economy change. Trading partners such as Germany, Japan and the European Economic Community threaten to replace the United States as the world's economic leader, while smaller, still-developing countries such as those in Southeast Asia are cutting into the U.S. share of the world market for goods and services. As a consequence, the American people, industry and government are beginning to reassess their position.1

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1 See Elizabeth Uphoff, Intellectual Property and U.S. Relations with Indonesia, Malaysia, Singapore, and Thailand 8 (Cornell University Southeast Asia Program, 1991). Ms. Uphoff explains that...
Powerful U.S. industries have pressured Congress and the President to enact protectionist legislation. One of the most powerful of these lobby groups is the U.S. Pharmaceutical Manufacturers Association (PMA). PMA member corporations have become concerned about declining profits resulting from the recent trend toward drug price regulation in North America and elsewhere. Their response has been to push for complete patent protection in countries, such as Thailand, that protect medicine product patents not at all or to a degree that does not satisfy the PMA. Other private U.S. and international organizations have taken up the cause; in the past decade the United States government has become the champion of organizations that depend on intellectual property protection for their profits.

Toward the end of increasing patent protection in its intellectual property markets around the world, the United States has said it will revoke preferential treatment for non-compliant countries, enacted protectionist trade legislation and forced intellectual property issues into the General Agreement on Tariffs and Trade (GATT). The United States has targeted Thailand for such tactics on the issue of drug patents. Four avenues were open to the United States in trying to bring drugs under Thailand's patent law: unilaterally enforced demands, bilateral trade negotiations, the multilateral trade negotiations in the Uruguay Round of the GATT, and negotiations within the existing forum for international intellectual property agreements, the World Intellectual Property Organization (WIPO). The United States government, in effect if not in appearance, has adopted the unilateral approach, a strategy that has been described as aggressive unilateralism. Thus far, the United States has not quite achieved the desired level of drug patent protection in Thailand, but most of its demands are being met. The United States government will no doubt consider this evidence of a successful

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Since the 1970s, the domestic consensus on free trade has been called increasingly into question... the perceived role of the government in the success in Japan and the East Asian countries has raised doubts about the continued validity of liberal trade theory. The recession in 1981-82, followed by an unprecedented trade deficit, even in manufactured goods, brought considerable pressure on Congress to do something to relieve suffering industries and make America competitive again.

2 See note 28 and accompanying text.
3 Although the United States is not the only country pressuring Thailand and other developing countries to strengthen their intellectual property laws, the United States has spearheaded the international pressures on developing countries in the past decade, especially in the case of Thailand. This comment, therefore, focuses on the U.S. position as representative.
strategy; the tactics the United States has resorted to, however, may unnecessarily damage its long-term relationship with Thailand.\(^5\)

This Comment critiques the tactics that the United States has employed in seeking to establish its own brand of patent protection for pharmaceuticals in Thailand. The discussion first examines the development of the United States government's position on obtaining patent protection for pharmaceuticals in Thailand. The U.S. position comprises two elements: the tactics it has employed in negotiations and its justifications for seeking to force changes in the Thai Patent Act. These tactics and the arguments advanced by commentators and officials to justify their use in seeking patent protection are then evaluated in light of Thailand's current economy, infrastructure and culture. Several conclusions are drawn from the foregoing analysis. The United States is pressuring Thailand to enact patent protection for which it is not yet economically, structurally or culturally prepared. In doing so, the United States has violated concepts of moral rights and trade liberalization that it claims to hold, and may have jeopardized its own interests by damaging its trading relationship with Thailand for a relatively minor, short-term gain. The Comment concludes with the observation that instead of pursuing bilateral agreements or a GATT agreement on intellectual property protection, the United States could promote its long-term interests more effectively by concentrating on developing an uncoerced international consensus on intellectual property, and enlarging the scope and power of the existing multilateral body on intellectual property, the World Intellectual Property Organization.

II. DEVELOPMENT OF THE U.S. POSITION

A. Thailand's Patent Law and Pharmaceuticals

Thailand first began to consider patent legislation in 1931, the year it joined the Berne Convention.\(^6\) A draft patent act was considered in that

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\(^6\) The Berne Convention for the Protection of Literary and Artistic Works of 1886, September 9,
year, but the country did not pass its first patent legislation until forty-eight years later. Based on the model proposed by the World Intellectual Property Organization (WIPO), which Thailand joined recently, the 1979 Patent Act protected new inventions for fifteen years, and new product designs for seven years. The Act also featured a compulsory licensing system. Most importantly to the PMA, Section 9 of the 1979 Act excluded pharmaceutical products and ingredients from patent protection.

In February 1992, after a protracted legislative struggle, Thailand...
passed amendments to the 1979 Act. These amendments extend protection to pharmaceutical products and increase patent term from fifteen to twenty years. However, the amendments do not protect drugs invented and tested but not yet approved for use in Thailand, the so-called pipeline drugs. The amendments also include a compulsory licensing scheme designed to prevent patent holders from exploiting their monopoly power, and a special Pharmaceutical Patent Board to supervise drug patenting. The immediate reaction of the United States government and the pharmaceutical industry was disapproval. These changes are the result of the U.S. pressure discussed infra.

B. Private Sector Pressure

The U.S. Pharmaceutical Manufacturers' Association has led the efforts to apply pressure on Thailand to enact strict patent laws. The PMA persuaded the United States government to take up its cause, and rallied support from other private sector groups and governments to push for stronger intellectual property protection throughout the world in response to a claimed steady decline in profits. Critics complain that for 30 years the

17 Id.
18 Id.
20 See II.C.3.b., Section 301 Pressure on Thailand infra.
21 In Thailand, the Pharmaceutical Products Association (Thailand), a group representing foreign drug companies, and the American Chamber of Commerce in Thailand issued a "white paper" on August 23, 1985 titled Patent Protection and the Pharmaceutical Industry in Thailand. See American businessmen issue 'White Paper', The Nation (Aug 24, 1985). The paper pushed for amendments to Section 9 of the Patent Act, warning that if patents are not issued for drug products, "eventually no new foreign-developed drugs will reach Thailand" because foreign pharmaceutical companies will be forced out of Thailand. Id. The goal of this paper, it would seem, was to persuade the Thai public to support patents for drugs.
22 For a description of the efforts of the private sector lobby groups in the Uruguay Round of the GATT talks, see Carol J. Bilzi, Towards an Intellectual Property Agreement in the GATT: View from the Private Sector, 19 Ga J Intl & Comp L 343 (1989). The U.S. group is the Intellectual Property Committee (IPC). Among the twelve corporations that comprise IPC are Bristol-Myers (now Bristol-Myers-Squibb), DuPont, Johnson & Johnson, Merck and Co. and Pfizer, all of which produce
brand name drug makers "have enjoyed the fattest profits in big business." 23 The pharmaceutical industry is suffering from a "trend . . . where the profits of the R&D-intensive pharmaceutical industry are squeezed by the double effect of government regulations and generic drug competition" in the domestic market. 24 Patent protection, claim drug manufacturers, provides the necessary incentive to spend hundreds of millions of dollars on research and development each year. The people who need the drugs counter, however, that patents make the drugs unavailable to most people by making them expensive and raise the cost of health insurance, both public and private.

The result has been a trend toward drug price regulation in the United States and other countries. 25 Insurance companies have begun to encourage doctors to prescribe alternative or generic drugs when they are available. The old system, whereby a patent on a prescription drug remained effective long after the patent expired because of prescribing inertia, 26 is being replaced by


24 Nogués, 24:6 J World Trade 81, 98 (cited in note 13).

25 O'Reilly, 124 Fortune 48 at 60. This trend and the election of Bill Clinton as President have resulted in the major drug companies voluntarily limiting price increases to the inflation rate, in the hope of averting mandatory price controls. See Joseph Weber, A bitter pill to swallow, Business Week 42 (Nov 16, 1992) and Jane H. Cutai, Swallowing a bitter pill, Business Week 82 (Jan 11, 1993). At the moment, President Clinton's health reform program is focused on "managed competition," which relies on large purchasing cooperatives to bargain down the cost of medical care, so price controls are not yet anticipated. But if the new administration's goals of capping annual spending on health care while also providing health insurance to the tens of millions of uninsured Americans cannot be reconciled, "he may have to resort to mandatory price controls." Susan B. Garland and Mike McNamee, Clinton's risky faith in a health-care fix, Business Week 35 (February 8, 1993). Some early signs indicate a willingness to grapple with drug prices directly. See Murray Campbell, Clinton takes a shot at drug industry, The [Toronto] Globe & Mail A1 (February 13, 1993); see also Hillary Clinton to Head Panel on Health Care, NY Times A1, A20 col 6 (Jan 26, 1993), and Ann Reilly Dowd, His First 100 Days: The Outlook for Business, Fortune 41, 46–47 (Nov 30, 1992). In Canada, for example, along with the granting of pharmaceutical patent protection in 1987 came the Patented Medicine Prices Review Board, the goal of which is to curtail increases in prices of patented drugs and to try to keep the prices of new patented drugs within reasonable bounds. Its powers are set out in the Patent Act, RSC 1985, ch P–3, as amended RSC 1985, ch P–33 (3d Supp) § 15 (proclaimed in force Dec 7, 1987 by SI/88–1), at §§ 39.23 and 39.26, and Regulation (concerning patented medicine prices) SOR/88–474. The Canadian Patent Regulations also provide for payments to provinces to promote research and development of drugs. SOR/88–167.

26 "Prescribing inertia" means that doctors do not become acquainted with generic equivalents of the
a system in which insurance companies are teaching doctors about the lower-cost alternatives in the market.27 At the same time, the U.S. companies have no "blockbuster" drugs on their way to market. Thus, while at present they are earning large profits, the next ten to twenty years could prove to be a "hangover" for the drug companies.28

Sensing the changing attitude of U.S. legislators toward drug patents and pricing in the United States, the PMA has begun to direct its efforts at procuring stronger patent protection in other countries, primarily developing countries such as Thailand, but also including countries such as Canada. These efforts have included lobbying Congress to negotiate bilaterally and in the GATT, and private lobbying in individual countries and at the GATT talks.29 At stake are billions of dollars in revenue.30 Canada, for example, agreed to a compromise in 1987 (shorter patent term and the Patented Medicine Prices Review Board to help keep drug prices in line),31 and

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27 O'Reilly, 124 Fortune 48 at 60 (cited in note 23). This activity will likely be bolstered by the Clinton administration's planned health reforms, which emphasize the provision of health insurance to all Americans and greater control over government health expenditures. The government is likely to become more involved in health insurance, and with its emphasis on deficit reduction it will probably put considerable pressure on doctors and pharmacists to pay more attention to the cost of the drugs they prescribe. See Ann Reilly Dowd, His First 100 Days: The Outlook for Business, Fortune 41 at 46-47 (Nov 30, 1992); and Murray Campbell, Clinton takes shot at drug industry, The [Toronto] Globe & Mail A1 (February 13, 1993).


29 See Bilzi, 19 Ga J Intl & Comp L 343 (see note 22 and accompanying text). Certain PMA members have promoted their interest in patent protection internationally through the Intellectual Property Committee, which has a mandate to promote the protection of all forms of intellectual property.

30 Harvey Bale, PMA senior Vice President for International Affairs, has claimed that U.S. drug companies lose "about five billion dollars per year in lost sales due to inadequate patent and trademark protection worldwide." News Highlights, 9 Intl Trade Rep 49 (Jan 8, 1992). In Thailand, the PMA estimates that its members annually lose nineteen million dollars (484.5 million baht) in sales due to "patent piracy." Pornpimol Kanchanalak, US to press new govt to amend patent law, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992).

31 See note 25.
numerous other countries have begun to reform their patent laws. The PMA continues to work on extending effective patent term in the industrialized countries, but lately has put enormous effort into trying to establish patent protection in countries like Thailand. The pressure has not diminished, notwithstanding the amendments to Thailand's patent law that were passed in February of 1992.

Private sector pressure from these companies was not enough to sway the Thai government, however. The promise of technology transfer and incentives for innovation held out by the PMA did not, from the Thai point of view, outweigh the benefits of free technology and low drug prices they enjoy without stringent patent protection. Undeterred, the PMA lobbyists took advantage of protectionist sentiment in Congress and sought support from the United States government. As a result, the "bilateral" talks between Thailand and the United States began, while Congress began to seek ways to apply pressure unilaterally.

C. United States Government Pressure

In the past decade of trade negotiations with Thailand, the United States government has relied on the threat of three sanctions available to it under strengthened trade laws: (a) removal of Thailand's preferred status under the Generalized System of Preferences (GSP) system; (b) an embargo pursuant to Section 337 on the importation of Thai goods that infringe U.S. intellectual property laws; and (c) the ultimate unilateral trade sanction,

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33 Effective patent term, in the case of drugs, refers to the period during which the final product is on the market and under patent. In the United States, health protection regulation (through the requirement of FDA approval of new drugs) and drug company clinical trials delay the release of a new drug by an average of ten years from the initial patent application, thus reducing the effective patent term to roughly seven years, since the U.S. patent term is seventeen years from the date of patent grant. See Noguds, 24:6 J World Trade 81 at 92–93 and 100 (cited in note 13); and Peter C. Richardson, The Need For Adequate and Effective Protection of Intellectual Property: Perspective of the Private Sector—Patents, 19 Ga J Intl & Comp L 352, 354 (1989). Richardson indicates that most of Europe has a similar effective term.
35 For an example of Thai concern about higher drug prices resulting from patent protection of drugs, see P. Gorton, Bangkok has become the fake–Gucci, phoney–Rolex capital of the world, The [Montreal] Gazette B4 (May 21, 1989).
Section 301. All three options are discussed infra; Section 301, however, has been the primary tool in negotiating patent protection for drugs in Thailand.

1. Generalized System of Preferences Status

The developed countries have set up a system of trade preferences for certain developing countries known as the Generalized System of Preferences. As one writer describes it, this system allows certain developing countries to "import selected commodities duty-free in order to encourage developing country national progress." Inclusion in the U.S. list of GSP countries depends on two sets of criteria: mandatory criteria that define ineligible countries, and discretionary criteria chosen by the President. The Trade Act of 1984 added intellectual property protection to both the mandatory and discretionary criteria.

The threat of removal from the GSP list was exercised in the mid-1980s when the United States Trade Representative (USTR) identified Thailand as a country that had failed to protect adequately the intellectual

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40 19 USC § 2462(b)(1)–(7) (cited in note 36). Those ineligible are (1) Communist countries, (2) OPEC members, (3) countries that treat preferentially developed countries other than the United States, to the detriment of the United States, (4) countries that nationalize U.S. property, (5) nations that do not enforce international arbitral awards in favor of the United States, (6) countries that aid or harbor an international terrorist group, and (7) states that do not adequately protect worker rights, which are defined in 19 USC § 2462(d).

41 19 USC § 2462(c).


43 19 USC § 2462(b)(4)(A). This provision deals with nationalizing U.S. property. The change was to specifically include patents, trademarks and copyright in the meaning of property.

44 19 USC § 2462(c)(5). This amendment has been described as a switch from an altruistic system, designed to "extend advantages to developing countries" and thereby "promote world trade, encourage poor countries to sell to richer nations and lessen trade imbalances," to a system "intended to prompt developing countries to adopt policies that served US economic interests." Thailand gains little from US duty exemption—bank report, Bangkok Post Weekly Rev 18 (Nov 9, 1990).

45 The USTR is the primary administrative body for the enforcement of U.S. international trade law. The USTR was established by Pub L 97–456, 96 Stat 2505 (Jan 12, 1983) and is codified at 19 USC § 2171. Its relevant powers and duties are set out infra.
The Reagan Administration demanded that Thailand change its laws by December 15, 1988. The Thai government responded by submitting amendments to the Thai Copyright Act to the National Legislative Assembly. Opposition to the proposed changes was immediate and the resulting furor led to an election, out of which came a new coalition government. The pressure on the Thai government from industry, academics and the general public was great. Many Thais opposed any "unpatriotic caving-in to U.S. demands." There was also opposition on the merits of the proposed changes, particularly in the drug patent area. Consequently, the new government, led by Prime Minister Chatichai Choonhavan, made no "attempt to resuscitate the Copyright Bill," and was unwilling to address the issue of drug patents until the completion of the Uruguay Round of the GATT talks. Because Prime Minister Chatichai refused to acquiesce to its demands, the United States cut $165 million of Thailand's GSP benefits and threatened to curtail other trade benefits.

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47 The U.S. demands concerned copyright, trademarks and patents. The patent-related demands were for protection of food and beverages, agricultural machinery, and pharmaceutical ingredients; a longer term of protection to twenty years; milder compulsory licensing provisions; and the removal or loosening of the requirement that the patent holder work the invention in Thailand. See USTR's report: IP rights, IP Asia 19 (Apr 19, 1990).
50 O'Neill, 11 U Pa J Intl Bus L 603 at 621 (cited in note 11). O'Neill points out that most of the debate focused on the international power politics at work, rather than the merits of the proposed changes to the law. On this point he cites Surin Pitsuwan, Copyright Bill Now More of A 'Political Plaything', Bangkok Post 6 (Apr 28, 1988); and Surin Pitsuwan, Democrat MP Recounts Battle Over Copyright, Bangkok Post 2 (Apr 30, 1988).
51 The Thai Pharmaceutical Manufacturers' Association argued that drug product patents would lead to foreign takeover of the Thai market, which would in turn lead to higher prices and inaccessibility of drugs to the poor. USTR names India, Thailand and PRC as priority foreign countries, IP Asia 11 (May 30, 1991); Patent protection, IP Asia 20 (February 14, 1991).
52 Chavalit Utasart, Impasse on IP protection, IP Asia 17 (Mar 17, 1989).
53 The announcement was made on Jan 19, 1989. O'Neill, 11 U Pa J Intl Bus L 603 at 606 (cited in note 11); and GSP: President Reagan Denies Thailand Larger GSP Benefits, Citing Intellectual Property Record, 6 Intl Trade Rep 96 (Jan 25, 1989). See also USTR, The 1992 National Trade Estimate Report on Foreign Trade Barriers 241 (USTR, 1992) ("National Trade Estimate" or "NTE"). The Trade Representative here states that "the U.S. government has denied Thailand up to $644 million in GSP benefits through 1990." Id.
54 O'Neill, 11 U Pa J Intl Bus L 603 at 606, n 24, 612-614 and 616 (cited in note 11). Benefits were reduced pursuant to 19 USC § 2464(a)(1), which allows the President to "withdraw, suspend or limit" duty free treatment to a beneficiary developing country. The provision specifies that, in making such a decision, the President may consider the factors in §§ 2461 and 2462(c), including § 2462(c)(5), viz., the extent to which the country has adequate and effective intellectual property protection for foreign nationals.
While in the past three years these bilateral talks have intensified, the United States is relying less and less on its GSP leverage. Instead, possible retaliatory trade measures, particularly pursuant to Section 301, are being relied on to pressure Thailand.

2. **Section 337 of the Trade and Tariff Act of 1930**

Section 337 was changed recently to make it a powerful potential negotiating tool in bilateral discussions. This change is one of the United States government's efforts to strengthen its retaliatory trade law arsenal. While the United States government has not yet taken formal action against Thailand under this provision, it empowers the U.S. International Trade Commission (ITC) to investigate foreign products that infringe U.S. patents.

56 The USTR recently recommended "that President Bush extend benefits to Thailand under the GSP, but for less than a year and pending changes in Thailand's stance on workers' rights"; thus it appears that the USTR is focusing on Section 301 as its source of intellectual property pressure and is using the GSP to promote worker rights. Pornpimol Kanchanalak, *U.S. likely to extend GSP benefits for Thailand*, Bangkok Post Weekly Rev 14 (May 8, 1992).
57 The Trade Representative referred to Section 301 measures during the announcement of the revocation of GSP benefits: "[i]f there are not significant changes in Thailand's policies in the next few months, it is my view that Thailand should be designated a priority foreign country under the 1988 trade act." *GSP: President Reagan... 6 Intl Trade Rep 96 (Jan 25, 1989).* Note that these trade measures, although authorized under Section 301, may include a change in Thailand's GSP status. After Thailand was again cited as a priority foreign country (see note 151 and accompanying text), a representative of the International Intellectual Property Alliance stated that "Thailand's GSP status is very precarious. If no progress is being made by Thailand, we will recommend under special 301 provisions a total withdrawal of GSP benefits and additional sanctions." Pornpimol Kanchanalak, *New complaints keep Thais on list for U.S. trade action*, Bangkok Post Weekly Rev 11 (May 8, 1992).
59 The ITC is the agency that investigates alleged unfair import practices, including Section 337 actions. See Krosin and Koziolowski, 2 Eur Intell Prop Rev 58 n 8. It was established by the Trade Act of 1930, and is codified at 19 USC §§ 1330 (1992). The ITC's powers and responsibilities are set out at 19 USC §§ 1331-41.
or other intellectual property laws.\textsuperscript{60} It may do so on its own initiative or in response to complaints from patent holders.\textsuperscript{61} In practice, "[p]atent–based Section 337 actions are usually initiated by the filing of a complaint by the U.S. patent owner."\textsuperscript{62} Section 337 is not simply a private remedy, however. It stands alongside traditional patent infringement remedies.\textsuperscript{63} It relieves the private company of the burden of enforcing its patent by permitting the government to step in and protect U.S. companies from "international thievery."\textsuperscript{64}

That was the phrase used by President Reagan when he signed into law the 1988 amendments to the Trade Act of 1930.\textsuperscript{65} The amendments established a separate category for intellectual property violations. Previously, in any action under Section 337, the complainant had to prove five elements:

\begin{itemize}
  \item[(1)] unfair acts or methods of competition
  \item[(2)] in the importation of goods into, or sale of goods in, the United States,
  \item[(3)] the effect or tendency of which is to destroy or substantially injure
  \item[(4)] a United States industry
  \item[(5)] that is efficiently and economically operated.\textsuperscript{66}
\end{itemize}

All but the fifth element are still required for complaints unrelated to intellectual property.\textsuperscript{67} Under the amended version, however, the complainant must now prove only three elements for a patent complaint:

\begin{itemize}
  \item[(1)] goods that infringe the patent of a U.S. patent owner;
  \item[(2)] the importation of the goods into, or sale of goods
\end{itemize}

\textsuperscript{60} 19 USC § 1337(b)(1).
\textsuperscript{61} \textit{id}.
\textsuperscript{62} Krosin and Kozlowski, 2 Eur Intell Prop Rev 58 at 60 (cited in note 59).
\textsuperscript{63} A private action for patent infringement may be undertaken in addition to a Section 337 investigation. 19 USC § 1337(a)(1).
\textsuperscript{64} President Reagan Signs Trade Bill Into Law, Saying Nation Now Speaks With One Voice, 5 Intl Trade Rep 1184 (Aug 24, 1988).
\textsuperscript{66} Rogers, 8 Eur Intell Prop Rev 275 (cited in note 58). \textit{See} 19 USC § 1337(a) (1987), which also prohibits, in the alternative to (3) and (4) in the list above, acts the effect of which is "to restrain or monopolize trade and commerce in the United States."
\textsuperscript{67} 19 USC § 1337(a)(1)(A).
in, the United States;
(3) a U.S. (domestic) industry.68

Importation or sale is broadly defined in the legislation,69 and the 1988 amendments explicitly deem a U.S. industry to exist even where there is mere ownership or licensing of patent rights,70 reversing previous ITC policy.71

Unchanged are the time limits and remedies. The ITC must complete each investigation and issue a final order within 12 months of the start of the investigation.72 In cases that the ITC determines to be "complicated," the time limit is 18 months.73 If the Commission finds that Section 337 has been violated, it may choose one or both of two types of remedy: a permanent exclusion order, either general (no person shall import the infringing article) or limited (the respondents in this case shall not import the infringing article),74 and a cease and desist order.75 Section 337 is a powerful tool for limiting access to the U.S. market, and its recent changes respecting patent claims are another indication of how successful the PMA lobby has been in influencing U.S. trade law.76

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68 19 USC § 1337(a)(1)(B) and (a)(2).
69 Krosin and Kozlowski, 2 Eur Intell Prop Rev 58 (cited in note 58). Section 337 actions encompass not only the importation or the sale after importation of products which infringe U.S. patents, but also products which are manufactured abroad by a process that infringes a U.S. patent (19 USC § 1337(a)(B)(ii)). The phrase "owner, importer or consignee" includes any agent of the owner, importer or consignee. 19 USC § 1337(a)(4).
70 An "industry" exists where there is substantial investment in the exploitation of a patent right, including licensing. 19 USC § 1337(a)(3)(C).
71 For examples of the previous ITC policy, see Certain Ultra-Microtone Freezing Attachments, USITC Pub No 771 at 8-9; and Schaper Manufacturing Co v U.S. International Trade Commission, 717 F2d 1368, 219 USPQ 665 (Fed Cir 1983). See also Krosin and Kozlowski, 2 Eur Intell Prop Rev 58 (cited in note 58). Note that, in all cases, the complainant need no longer plead a prima facie case when the alleged violator fails to submit a defense. Rogers, 8 Eur Intell Prop Rev 275 at 276 (cited in note 58).
72 19 USC § 1337(b)(1).
73 Id. The ITC must publish its reasons for designating an investigation as "complicated" in the Federal Register.
74 19 USC § 1337(d). Note, however, that if during the investigation the ITC has reason to believe that the parties involved have violated the statute, it may issue a temporary exclusion order under 19 USC § 1337(e). See also Krosin and Kozlowski, 2 Eur Intell Prop Rev 58 at 59 (cited in note 58).
75 19 USC § 1337(f). The order prohibits the person(s) named from engaging in acts that violate Section 337.
76 It is worth noting that a GATT Panel has concluded that Section 337 violates Article III:4, the national treatment provision, of the GATT and was not justified as necessary under Article XX(d). Re United States Litigation Between E.I. DuPont de Nemours & Co. and Akzo N.V. 1 CMLR 717, 750-81 (1989) ("Akzo dispute"). See also Rogers, 8 Eur Intell Prop Rev 275 at 279-84 (cited in note 58), for a description and analysis of the Panel decision. The United States has indicated that it will make its acceptance of the ruling "dependent on a satisfactory result of the negotiations on intellectual property..."
3. **Section 301 of the Trade and Tariff Act of 1974**

   a. **The Mechanics of Section 301**

   Section 301 is the most important legislative tool available to the United States in its campaign to shape the world's intellectual property laws. This section of the Trade Act of 1974 figures in almost every discussion of the U.S.-Thai patent dispute. Its influence is felt far beyond bilateral trade talks; it has played a key role in the Uruguay Round of the GATT talks as well. The Section breaks into three interdependent components: the industry-driven, "generic" 301, essentially the Section as it was in 1974, with some amendments; Super 301, and Special 301. The latter two comprise new provisions added by the Trade Act of 1988.

   Generic Section 301 permits a person or company to petition the USTR to investigate the trade practices of a foreign country, on the grounds that the country (1) has unfairly denied market to a United States national, (2) has violated an international agreement, or (3) inadequately protects U.S. intellectual property. Hence, this provision is industry-driven, but the USTR decides whether to investigate the alleged unfair trade practice. The USTR also has the option to commence a Section 301 investigation on its own initiative. The purpose of the investigation is to determine whether the rights of United States nationals under a trade agreement are being denied or

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**Notes:**

77 19 USC §§ 2411-2420 (cited in note 37). Provisions covering the National Trade Estimates are codified at 19 USC §§ 2241-42.

78 See, for example, the articles and panel discussions in the report of the Georgia Law School Conference, *Overview of the Uruguay Round*, 19 Ga J Intl & Comp L, starting at 287 (1989).


80 The most significant of the changes was the substitution of the United States Trade Representative for the President in most provisions. Bello and Holmer, 13 Fordham Intl L J 259 at 264-65.

81 19 USC § 2420.

82 Special 301 is intertwined with the rest of Section 301. It adds substantially addition to the factors to be considered in a Section 301 investigation, providing for unreasonable practices which include "provision of adequate and effective protection of intellectual property rights." 19 USC § 2411(d)(3)(B)(i)(II).

83 Bello and Holmer, 13 Fordham Intl L J 259 at 259 and 263 (cited in note 79).

84 19 USC § 2412(a)(2).

85 19 USC § 2412(a)(2). The decision must be made within 45 days of filing the petition.

86 19 USC § 2412(b)(2). On the other hand, if the country has been named a priority country under Super or Special 301, the USTR is obliged to begin the Section 301 process. 19 USC § 2240(b) and 19 USC § 2412(b)(2).
if an act, policy or practice exists that is "unjustifiable," "discriminatory," or "unreasonable" and burdens or restricts U.S. commerce, and, if so, to determine what action to take. The deadline for this determination is one year from the start of the investigation.

Special 301 focuses on intellectual property and foreign market access for U.S. intellectual property owners. Super 301 was a temporary measure that required the USTR to "probe a wide variety of unfair trade practices over a twelve- to eighteen-month period, in 1989 and 1990 only." Special 301, on the other hand, is a permanent addition to Section 301. Aside from its narrower focus, "Special 301" differs from the rest of Section 301 in the timing of the process.

Under Special 301, within 30 days after the USTR has submitted the annual National Trade Estimate Report to Congress, the USTR must identify countries that have inadequate intellectual property protection or that deny market access to U.S. intellectual property owners. The worst offenders are to be named "priority foreign countries." Within 30 days of naming the priority offenders, the USTR must investigate the practices or policies of these countries. The USTR then has six months to complete the

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87 19 USC §§ 2414(a)(1), 2411(a)(1)(B), and 2411(b)(1). These three terms are defined at 19 USC §§ 2411(d)(4), 2411(d)(5) and 2411(d)(3)(A), respectively. Examples of "unreasonable acts, policies or practices" are found at 19 USC § 2411(d)(3)(B).

88 19 USC § 2414(a)(2)(B). The USTR can choose from several possible actions. These include withdrawing benefits granted to the identified country by a trade agreement, including the GSP (19 USC § 2411(g)(A)), imposing duties or import restrictions on any goods or economic sector of the offending country (19 USC § 2411(g)(B)), and bilateral negotiations (19 USC § 2411(c)(1)(C)).

89 19 USC § 2414(a)(2)(B). A different deadline applies only in cases involving certain trade agreements, in which case the determination must be made within 30 days from the conclusion of a dispute settlement proceeding (19 USC § 2414(a)(2)(A)(i)), or where no such proceeding took place, within eighteen months from the start of the Section 301 investigation (19 USC § 2414(a)(2)(A)(ii)).

90 Bello and Holmer, 13 Fordham Int'l L J 259 at 263 (cited in note 79). The results of the Super 301 investigations, apparently, were meant to be used in the implementation of the other provisions of Section 301. Any Super 301 recommendations would be enforced under the Special or generic 301 rules.

91 This Report was first used in 1985 in a general review of the GSP. Thailand was targeted, and the result was the revocation of GSP benefits totaling up to $644 million. 19 USC § 2241(a)(1) requires the USTR to analyze foreign acts harmful to U.S. trade and to estimate the impact of these acts on U.S. commerce. 19 USC § 2241(b)(1) requires the Trade Representative, on or before March 31 of each year, to submit "a report on the analysis and estimates made under subsection (a) of this section" to the President and to certain Congressional Committees. The reports, called the National Trade Estimates, must describe any 301 actions or negotiations with foreign governments by which the USTR intends to redress the unfair foreign acts. 19 USC § 2241(b)(2).

92 19 USC § 2242(a)(1)(A).

93 19 USC § 2242(a)(1)(B). The words of the statute are "United States persons that rely on intellectual property protection." This phrase is defined at 19 USC § 2242(b).

94 19 USC § 2242(a)(2). Rules for assigning this status are found at 19 USC § 2242(b).

95 19 USC § 2412(b)(2)(A).
investigation and seek bilaterally negotiated solutions. The USTR must monitor each named country to ensure that the remedial measures are implemented. If the country does not comply, the USTR has the discretion to retaliate with a broad range of restrictions on imports. This discretion formerly was the President's. The USTR may also add new priority countries at any time.

b. **Section 301 Pressure on Thailand**

The first time the USTR publicly threatened Thailand with a Section 301 investigation appears to have been on the day the Trade Representative, then Clayton Yeutter, announced the cuts to Thailand's GSP benefits. He stated that "Thailand should be designated as a priority foreign country under the 1988 Trade Act." When the time came to name priority countries, however, Yeutter's successor, Carla Hills, did not include Thailand among those named as Super 301 priority countries, and did not designate any nations as Special 301 priority foreign countries. Instead, the USTR placed twenty-five countries on a watch list. Eight of these, including Thailand, were named to a "priority watch list," and the rest, to a secondary list. The eight countries were told in what areas they were to improve.

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96 19 USC § 2414(a)(3)(A). If, however, the USTR decides that the issue is complex, or if the named country appears to be mending its ways, the USTR has nine months to complete its investigation and attempt a resolution.
97 19 USC § 2416(a).
98 19 USC § 2416(b).
99 This transfer of authority did not appear in the Senate bill (S 490, § 305, 100th Cong, 1st Sess (1987); S 1420, § 305, 100th Cong, 1st Sess (1987); see also S Rep No 71, 100th Cong, 1st Sess 79-80 (1987)); it was part of the proposal of the House of Representatives. During legislative negotiations, the Senate receded on this issue. HR Conf Rep No 576, 100th Cong, 2d Sess 580-81, printed in 1988 US Code Cong and Admin News 1547, 1613-14. The USTR's only constraint is that it is "subject to the specific direction, if any, of the President." 19 USC § 2411(a)(1)(b)(2).
102 Id.
103 Id.
104 See Pornpimol Kanchanalak and Ratchaphol Laovanitch, US keeps Thailand on 'priority watch list', Bangkok Post Weekly Rev 3 (Nov 10, 1989). The demands were substantially the same as the ones made before Thailand lost some of its GSP benefits.
and were given 150 days to show some progress on their intellectual property protection, during which time the USTR would informally investigate their trade practices and monitor their progress.\textsuperscript{107} Failure to make significant progress could make them "targets for investigation and possible retaliation under the Special 301 measure," the USTR warned.\textsuperscript{108}

Prime Minister Chatichai expressed little concern over the threat of U.S. trade retaliation, believing that Thai lobbying in Washington and "close contacts with American politicians and business interests" had nullified the problem.\textsuperscript{109} But at the end of the 150 day period, Thailand was one of the five countries remaining on the priority watch list.\textsuperscript{110} Soon thereafter, the Thai Commerce Ministry struck a committee to amend the Thai patent and copyright law.\textsuperscript{111} In April of 1990 the Trade Representative reevaluated Thailand's position and again declined to designate Thailand or the other countries on the watch list as priority foreign countries.\textsuperscript{112}

In the ensuing months considerable pressure was applied on Thailand, particularly on the copyright issue.\textsuperscript{113} On June 25, Trade Representative Hills spelled out in a letter to the Thai Commerce Minister what Thailand had to do to be removed from the Special 301 priority watch list.\textsuperscript{114} She demanded the introduction of patent law amendments in the 1991 parliamentary session, which amendments were to eliminate the free importation provision in the Thai Patent Act and limit the use of compulsory licensing to national emergencies and violations of competition law.\textsuperscript{115} The letter included other, more flexible requests, and "urged the Thai Government to vigorously

\textsuperscript{107} 6 Intl Trade Rep 684 (cited in note 103).
\textsuperscript{108} Id.
\textsuperscript{109} PM says Section 301 no longer a big threat, Bangkok Post Weekly Rev 3 (Aug 27, 1989).
\textsuperscript{110} Intellectual Property: Hills Removes Taiwan, Korea, Saudi Arabia From Priority List, Five Countries Remain, 6 Intl Trade Rep 1436 (Nov 8, 1989); Pornpimol Kanchanalak and Rachaphol Laovanitch, US keeps Thailand on 'priority watch list', Bangkok Post Weekly Rev 3 (Nov 10, 1989).
\textsuperscript{111} Panel seeks sweeping change in intellectual property rights laws, Bangkok Post Weekly Rev 16 (Jan 5, 1990). The committee first met December 22–24, 1989. The members discussed copyright and trademark law and concluded that there should be patents for pharmaceutical products, but they did not discuss other contentious patent issues such as compulsory licensing and the duration of protection.
\textsuperscript{112} Intellectual Property: Hills, Citing Significant Progress, Declines To Name Countries Under Special 301 Provision, 7 Intl Trade Rep 616 (May 2, 1990). This decision, announced on April 27, 1990, was made despite strong pressure from the International Intellectual Property Alliance, a copyright group that filed comments on the countries on the watch list before the Special 301 review deadline of February 23, 1990. Intellectual Property: Six Parties Comment on 17 Countries In Second Round Under Special 301 Provision, 7 Intl Trade Rep 300 (February 28, 1990).
\textsuperscript{113} Intellectual Property: Senators, Copyright Industries Criticize Thailand's Alleged Failure To Stop Piracy, 7 Intl Trade Rep 854 (June 13, 1990).
\textsuperscript{114} US outlines Thailand's way off priority watch list, Bangkok Post Weekly Rev 16 (July 13, 1990).
\textsuperscript{115} Id at cols 2 and 3.
prosecute patent, copyright and trademark infringers." On July 6, the Thai Commerce Ministry announced the creation of the Patent and Trademark Office, a "new and tougher body" to administer patents and trademarks. But pressure on the copyright front continued, and resulted in the USTR agreeing to investigate Thailand's copyright practices under Section 301. Then, on January 30, 1991, the PMA filed a Section 301 petition against Thailand. Then, on January 30, 1991, the PMA filed a Section 301 petition against Thailand. The Trade Representative accepted it on March 15. With the publication of the 1991 National Trade Estimate came the announcement on April 26 that Thailand, along with China and India, were designated as priority foreign countries under Special 301.

While these events were occurring, Thailand was busy preparing to revise its intellectual property law. In January of 1991, the government announced plans for an International Trade Policy Committee and an administrative panel of senior Cabinet ministers. Thailand had prepared draft amendments for its trademark law and its patent law, and the Commerce

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116 Id at cols 4–5.
117 Get-tough body being formed to monitor patents, Bangkok Post Weekly Rev (July 20, 1990).
118 Intellectual Property: U.S. Copyright Coalition Announces Intention To File Section 301 Complaint Against Thailand, 7 Intl Trade Rep 1645 (Oct 31, 1990).
119 Intellectual Property: U.S. Copyright Industry Coalition Files Unfair Trade Complaint Against Thailand, 7 Intl Trade Rep 1768 (Nov 21, 1990); Intellectual Property: U.S. Launches Investigation of Thailand's Weak Enforcement of Copyright Legislation, 8 Intl Trade Rep 4 (Jan 2, 1991); USTR initiates Section 301 Investigation, IP Asia 38 (Jan 10, 1991). The industry petition was accepted on December 21, 1990, giving the USTR until December 21, 1991 to conclude the investigation and announce its decision.
122 Intellectual Property: USTR Designates China, India, and Thailand Most Egregious Violators Under Special 301, 81 Intl Trade Rep 643 (May 1, 1991); USTR names India, Thailand and PRC as priority foreign countries, IP Asia 10 (May 30, 1991); Intellectual Property: China Calls Designation Under Special 301 'Unacceptable', Warns Trade Ties Endangered, 8 Intl Trade Rep 644 (May 1, 1991). The latter two reports indicate the force of China's objection to the designation. It may help explain why China was later treated more leniently by the United States than was Thailand. The Thai Prime Minister's Office Minister recently expressed resentment toward the United States over its more lenient dealings with China and India. See Pornpimol Kanchanalak, US to press new govt to amend patent law, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992).
123 Ratchaphol Laovnititch, Govt plans new panel to handle overseas trade, Bangkok Post Weekly Rev 15 (February 10, 1991). The purpose of these new bodies was to better evaluate international trade issues and present a unified, coherent front "in adopting both 'offensive' and 'defensive' roles when dealing with bilateral or multilateral issues." This goal indicates both a willingness to respond to the U.S. demands and a growing sense that the United States was bullying Thailand.
Ministry was ready to submit them to the National Legislative Assembly.\textsuperscript{124} After a two-day meeting with the USTR in Los Angeles, the Thai delegation believed that the amendments would "comply with international standards and best serve the country's interests," as well as alleviate pressure from the United States.\textsuperscript{125} It would seem that the Thai officials did not anticipate the designation as a priority foreign country.\textsuperscript{126} Commerce Minister Amaret Silaon pledged to review Thailand's export policy "to avoid any adverse effects from possible sanctions."\textsuperscript{127}

The question of intellectual property amendments became, once again, a hot political issue in Thailand.\textsuperscript{128} The debate intensified after the legislature's passage of the draft amendments on first reading.\textsuperscript{129} On the one

\textsuperscript{125} Id. A "highly-placed source" in the Thai Ministry of Commerce said that he was not surprised that the USTR accepted the PMA position, but "he expected that USTR would put Thailand on the 'priority watch list' for another year after it expired on April 30, and then observe Thailand's progress on the issue for about six months." Id. Even the acceptance of the petition was a disappointment to some: "[t]he USTR's decision has dashed the hopes of some Thai officials who feel that Thailand has made enough progress toward adequate and effective pharmaceutical patent protection. Permanent Secretary of Commerce Bajr Israsena said he had hoped the US government would decide not to take action because the Patent Act was currently undergoing reform and details of the proposed revisions had been submitted at the Los Angeles talks."


\textsuperscript{127} US trade action prompts review of export policy, Bangkok Post Weekly Rev 11 (May 10, 1991). This statement again reflects a willingness to comply with the U.S. demands mixed with a growing desire to become less dependent on the United States. Consider in this regard the following statement: "[Mr. Amaret] said it [is] necessary in the long run to promote or expand Thai exports to other potential markets, particularly the Middle East and Eastern Europe."

\textsuperscript{128} See, for example, Ex-MPs call on US to delay 301 sanctions, Bangkok Post Weekly Rev 5 (May 10, 1991). The article includes a picture of a student protest against capitulation to American interests. The students held up placards that depicted Commerce Minister Amaret as a traitor who is in the back pocket of the U.S. drug industry. See also United stance needed against US—minister [Amaret], Bangkok Post Weekly Rev 13 (May 24, 1991); Ratchaphol Laovanitch, Tape producers protest crackdown, Bangkok Post Weekly Rev 13 col 4 (May 24, 1991); Minister predicts trouble ahead in patent issue talks, Bangkok Post Weekly Rev 14 (July 26, 1991); Academics praise new amended patent draft, Bangkok Post Weekly Rev 11 (Aug 2, 1991); and Cabinet likely to decide on key drug patent issue, Bangkok Post Weekly Rev 13 (Sept 27, 1991). This was the second time that U.S. pressure had caused public upheaval in Thailand (the furor over copyright amendments four years previous had led to the toppling of the Thai government). See text accompanying note 49.

\textsuperscript{129} The first reading allows the legislature to vote on the bill in principle, without debating its details. The bill then goes to a committee for examination. After winning cabinet approval on October 22...
hand, the USTR and the PMA pressured the Thai government to provide protection for drugs already invented but not yet marketed in Thailand ("pipeline" drugs), to limit compulsory licensing and to make the amendments effective immediately on passage in the legislature. On the other, students, academics, lawyers, doctors, pharmacists, some drug producers, and non-governmental organizations opposed "pipeline" protection and limits on the compulsory licensing scheme, insisting that full drug patents would make health care too expensive for the poor and that U.S. firms would monopolize the production of new drugs in Thailand. The Public Health Ministry joined the debate by arguing for a transition period of at least four years before the amendments would take effect, instead of the 180-day period being considered by the Intellectual Property Committee. Those campaigning against drug patents called for a public hearing and issued their own "white paper" criticizing the proposed amendments, but the Chair of the Intellectual Property Committee refused to grant one, promising to "consider the impact of the bill on all parties." The government was clearly committed to passing the bill as soon as possible, in order to satisfy the United States while also acting in Thailand's best interests.

At this stage it became apparent that, despite early signs of U.S. satisfaction with the Thai government's efforts, the USTR and PMA would not approve of the amendments. Nonetheless, the Thai government

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*Note:* (PM to decide on pharmaceutical grace period, Bangkok Post Weekly Rev 12 (Nov 8, 1991)), the patent amendments were introduced into the National Legislative Assembly. They were approved on November 8, 1991. *Intellectual Property: Thailand Attempts To Approve Patent Bill To Head Off Future U.S. Trade Sanctions,* 9 Intl Trade Rep 64 (Jan 8, 1992).


131 Academics praise new amended patent draft, Bangkok Post Weekly Rev 11 (Aug 2, 1991). See also Drug producers [foreign companies in Thailand] express support for Patents Bill, Bangkok Post Weekly Rev 5 (Nov 22, 1991) (some doctors cite surveys of rural hospitals that indicate that the prices of medicines would rise 400 percent if the amendments were passed).


133 PM to decide on pharmaceutical grace period, Bangkok Post Weekly Rev 12 (Nov 8, 1991);


134 Drug producers express support for Patents Bill, Bangkok Post Weekly Rev 5 (Nov 22, 1991);


136 Minister puts job on line over US trade reprisals, Bangkok Post Weekly Rev 11 (Nov 29, 1991);


137 See notes 123–26.

proceeded with the legislative process, while the USTR prepared to make its decision on the Section 301 investigation into Thailand's patent protection, and on Thailand's Special 301 Status.

On February 27, 1992, the Thai legislature passed the amendments to the Patent Act. The changes accommodated many of Washington's demands, principal among them the protection of pharmaceuticals and the extension of patent life to twenty years. The changes did not include protection of "pipeline" drugs, however. They did include compulsory license provisions to prevent monopolistic abuse of patents, and they created a Pharmaceutical Patent Board to help prevent excessive prices for drugs. On March 13, 1992, Trade Representative Hills announced the results of the Section 301 investigation into Thai patent protection. The USTR found against Thailand, but decided to delay any punitive action or negotiations.
until after the Thai general election scheduled for mid-March. Among the reasons for the negative judgment were "deficiencies" in the amended Patent Act, which PMA President Mossinghoff declared were "completely unacceptable." The deficiencies were principally the lack of protection for "pipeline" drugs, the "onerous" compulsory licensing provisions and the "appalling" Pharmaceutical Patent Board, which is empowered by section 55 of the Act to demand pricing and cost information from drug patent applicants.

In the 1992 National Trade Estimate Report, the USTR said that the above "deficiencies" "effectively negate the other provisions in the amendment." Following the release of the Report, the Trade Representative announced on April 29, 1992 that Thailand would remain a priority foreign country. In the announcement, the "pipeline" drug issue was emphasized, and Trade Representative Hills said that revoking Thailand's GSP benefits would be an option. The then–new Commerce Minister, Anuwat Wattanapongsiri, and his officials expressed frustration with the U.S. actions, and complained that Thailand's amended patent law "conforms with proposed new international rules that have virtually been agreed upon in General Agreement on Tariffs and Trade." The announcement on October

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146 Id. This decision came as a blow to Thai exporters and officials, who had hoped the amended act would eliminate the threat of sanctions.
147 Id.
148 Id. The United States had won on one issue in contention. The four–year grace period advocated by the Thai Health Ministry was not adopted. Instead, a transition period of 180 days was chosen. See PM to decide on pharmaceutical grace period, Bangkok Post Weekly Rev 12 (Nov 8, 1991); Patent Bill: Why new amendments are needed, Bangkok Post Weekly Rev 8 (Jan 3, 1992); see note 133 and accompanying text.
149 This board is, apparently, similar to Canada's Patented Medicine Prices Review Board, created at the end of 1987, in response to U.S. pressure on Canada to provide drug patents. The Canadian Board may also demand annual pricing and cost information from patent applicants and holders. See note 25.
152 Id.
153 Id. Not only does the GATT proposal exclude protection for "pipeline" drugs, but it includes a ten year grace period to allow developing countries to prepare for drug patenting. Of course, the PMA has objected to the GATT text. GATT: GATT Intellectual Property Text Called "Unacceptable" To Pharmaceutical Firms, 9 Intl Trade Rep 642 (Apr 8, 1992). Some members of Congress are sympathetic with the view of the PMA. See Trade Policy: Baucus Urges Comprehensive Trade Bill, Saying Passage Is Possible This Year, 9 Intl Trade Rep 673 (Apr 15, 1992). For an analysis of the draft GATT text on intellectual property in relation to Thailand's patent law amendments, see Peter Mytri Ungphakorn and Ratnapool Laswanitch, Where Thailand really stands on protection for pharmaceuticals, Bangkok Post (Feb 21, 1992).
10, 1992 that Thailand will remain on the priority foreign country list indicates that the United States is not retreating from its position.

4. GATT and WIPO

In addition to its negotiations directly with Thailand, the United States has worked to obtain a multilateral agreement setting out minimum standards of intellectual property protection. Its efforts in this regard have been within the Uruguay Round of the GATT multilateral trade negotiations and, to a lesser degree, the World Intellectual Property Organization. Rather than pursuing numerous bilateral negotiations and agreements, The United States hoped the Uruguay Round would yield a comprehensive treaty providing the intellectual property rights that the U.S. private sector desires. Moreover, Congress has shown that it feels justified in using Section 301 and Section 337 threats within the GATT negotiations. Thus, even in its multilateral

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155 Indeed, the climate in the U.S. Senate may be even more amenable to protectionism and "aggressive unilateralism." Another aggressive trade bill is on its way through that body. See Trade Policy, 9 Intl Trade Rep 673 (Apr 15, 1992); and Susumu Awanohara, Super 301: the sequel, Far Eastern Economic Review 49, 50 (May 28, 1992) (Trade Representative Hills was quoted as saying that "the effect of the proposed trade bill is very likely to be a trade contraction."). Early signals from the Clinton administration hint that an aggressive trade stance may be promoted by the President. See Dan Goodgame, No Sleeping Dog, Time 18 (Jan 18, 1993).

The Clinton administration is likely to restrict domestic drug prices even more than previous governments. See notes 25 and 27, and Murray Campbell, Clinton takes a shot at drug industry: Vaccine manufacturers accused of profiteering by President, The [Toronto] Globe & Mail A1 (February 13, 1993). As a likely result, the PMA will step up pressure on the government to obtain unrestricted patents in Thailand and elsewhere. In light of the potential for price controls in the United States, the PMA may pursue its goal of eliminating any price controls in Thailand with greater vigor. See Pornpimol Kanchanalak, US to press new govt to amend patent law, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992). Thailand is already quite concerned about President Clinton's potentially aggressive stance on international trade. Dr. Surakiart Sathirathai, Dean of the Law Faculty of Chulalongkorn University in Bangkok, has expressed his concerns over "Mr. Clinton's stated intention to strengthen the United States' international trade policy in order to bolster its competitive edge." See Surakiart sees Clinton win hurting Thai exports to US, Bangkok Post 1 (Nov 2, 1992).

156 As one commentator observed, failure to reach a consensus on a comprehensive intellectual property agreement will result in a proliferation of bilateral and unilateral actions. Bilzi, 19 Ga J Intl & Comp L 343 at 350 (cited in note 22). Moreover, with the unified participation in Uruguay of private sector pressure groups such as the IPC (Intellectual Property Committee, a collection of U.S. firms with a stake in intellectual property protection, on which PMA members are well represented), the UNICE (Union of Industrial and Employers' Confederations of Europe) and the Keidanren (the Japanese Federation of Economic Organizations), it is hard to believe that the developing countries will be able to band together and prevent the unilateralization of the GATT process. For a description of the efforts of these groups, see Bilzi, 19 Ga J Intl & Comp L 343 (cited in note 22).
negotiations with the developing countries, the United States has arrogated to itself the power unilaterally to define unfair trade practices, the time period for their elimination and suitable retaliation against continued offenders. In fact, Congress is not only quite willing to use these provisions, they are not considered tough enough.

The approach adopted by the United States, however, raises the question whether GATT is the appropriate forum in which to implement a set of minimum standards, dispute settlement procedures and enforcement mechanisms for intellectual property. A full discussion of this issue is beyond the scope of this paper. It should be noted, however, that a GATT minimum standards agreement would have significant consequences for Thailand. Thailand is likely to sign a version of GATT that includes a minimum standards agreement on patents rather than forfeit the potential economic gains it offers. Thus, while Thailand ostensibly has more bargaining power in the GATT than it would have alone, it is in fact almost as vulnerable there as it is in its bilateral talks with the United States.

With the United States concentrating its efforts on bilateral talks with Thailand and other developing countries and the multilateral forum of GATT, the World Intellectual Property Organization has been given short shrift over the past decade. This neglect seems to indicate that the United States has

159 A significant body of literature has developed regarding the GATT and intellectual property. See, for example, P.M. Kelly and J.M. Melton, Select Bibliography: The General Agreement on Tariffs and Trade, 25 Tex Intl L J 317, 325 (1991).
160 Many countries, developed and developing, expect to gain a great deal from an Uruguay Round agreement. See Free trade's fading champion, The Economist 65 (Apr 11, 1992). As that article points out at 66, stronger countries, particularly the United States, rely less on the GATT to improve trade relationships. Instead they are able to use their clout to chart "an increasing unilateral course in trade policy." They have less to lose if the Uruguay Round fails. It is for the developing countries that rely on international trade to maintain their economic growth that a GATT agreement is almost imperative.
161 See Bilzi, 19 Ga J Intl & Comp L 343 at 347 (cited in note 22) ("Increased bilateralism is harmful to weaker countries, which rely on the multilateral system to discipline those that are more powerful."). This statement seems to presume that the developing countries are a strong, unified bargaining block. Even if that were true, these countries are still in the weaker position—they need to be a member nation if they hope to develop further via world trade, so they are unlikely to refuse to sign a GATT agreement, even if there are requirements, such as patents for drugs, that are contrary to their domestic policies. While this dilemma does not smack of coercion in the way that the United States' bilateral negotiations with Thailand do, the end result is the same. For its economic well being, Thailand has no choice but to sign an agreement over the content of which it has had little influence.
rejected the idea of revising the treaties that WIPO oversees and redesigning the structure of the organization. Some writers have questioned the United States' preference for the GATT over WIPO, suggesting that intellectual property protection, while trade-related, is a more appropriate subject for WIPO negotiations than GATT talks.163

WIPO is well suited to deal fully with intellectual property issues and their relation to trade. For a country like Thailand, which may not yet be ready to protect drug patents without any protection against monopoly abuse or high prices, WIPO's potential for greater flexibility is attractive.164 In contradistinction, the U.S. position in GATT talks has not been flexible.165 The United States has sought a single set of standards, effective immediately, at its own level of protection. It is improbable that such an agreement would be ratified within WIPO, because developing countries would gain nothing by it. GATT provides the United States with the leverage—trade benefits—to induce Thailand to acquiesce to U.S. demands for intellectual property protection. Perhaps this is why the United States has turned away from WIPO.

III. EVALUATION OF THE U.S. POSITION

This section focuses on the unilateral stance of the United States in pressing Thailand to revise its pharmaceutical patent law. It first considers whether Thailand is economically, structurally and socio-culturally ready for patent protection for drugs and the step to industrialized status that such protection symbolizes. Then, in light of these economic, structural and cultural considerations, the U.S. position is analyzed from a "principle of trade" perspective, including a discussion of what would best serve U.S. interests. Finally, the section addresses the question whether the U.S. tactics

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164 For example, a graduated treaty with levels of protection corresponding to the stage of economic development reached could be designed to accommodate the disparate levels of economic development among developing countries. Intellectual property experts within WIPO could sit on a tribunal with the power to adjudicate disputes and enforce the treaties. Some such scheme would fit well within the existing administration of WIPO. Rather than extending the GATT Secretariat's authority to an area in which it lacks expertise, why not use the existing body?
165 The U.S. response to the GATT text on intellectual property has been disapproval, particularly of the ten year transition period before compliance is required. See GATT Intellectual Property Text Called "Unacceptable" to Pharmaceutical Firms, 9 Int'l Trade Rep 642 (Apr 8, 1992); for evidence of Congress' sympathy with the pharmaceutical industry's position, see Trade Policy: Baucus Urges Comprehensive Trade Bill, Saying Passage Is Possible This Year, 9 Int'l Trade Rep 673 (Apr 15, 1992).
have a basis in a moral concept of property or in the goal of international trade liberalization.

A. Patent Protection of Drugs and Thailand's Economy

Thailand is often referred to as the "fifth tiger"—the next country to join the ranks of the newly industrialized countries in East Asia (Hong Kong, Taiwan, South Korea and Singapore). One author takes the view that Thailand has reached the level of economic "development of Korea and Taiwan fifteen years ago." These four countries have outgrown their "developing country" status and have emerged as developed economic tigers, as the metaphor goes. Thailand, however, has not yet reached that stage—it is still in its tiger infancy.

The United States has concluded that Thailand is ready to enact laws and regulatory programs similar to those of the United States. Because Thailand has a fast-developing industrial sector, the country's intellectual property laws are considered an aberration among the industrialized countries. This perception is inaccurate. It assumes that there are only two possible economic states: the impoverished, agrarian Third World country, and the polished, innovative industrial powerhouse. Thailand, however, is in the process of shifting from a rural (rice-producing) economy to an urban, industrial economy. It is still well below the economic level of Japan, Hong Kong or even Taiwan or Korea. Why should its patent laws be the same as theirs?

167 See, for example, Into Bo Champon, The Next "Little Tiger": Manufacturing and Intellectual Property Rights in Thailand, 3 Transnatl Lawyer 275, 318 ("Thailand is no longer a Third World country.").
168 Only recently have several of the world's developed countries adopted patent laws similar to those that the United States demands of Thailand. The Federal Republic of Germany, Spain and Japan have only in the past twenty-five years adopted patent protection for drugs, and some of these countries still allow parallel importing of patented products. See Rajan Dhanjee and Laurence Boisson de Chazournes, Trade Related Aspects of Intellectual Property Rights (TRIPS): Objectives, Approaches and Basic Principles of the GATT and of Intellectual Property Rights in Thailand, 24:5 J World Trade 5, 8 (1990); see also Preeya Seebunrueng, Drug patents: who benefits? Manager 5 (Sept 24, 1990). Preeya Seebunrueng points out that South Korea developed well "in the manufacture of pharmaceuticals and fine chemicals, before being forced to adopt complete product patent protection of pharmaceuticals in July 1987." The U.S.-style patent, then, has not been universally accepted as good even for developed economies. The system has come under fire recently on several fronts. An article in The Economist suggests that, in the United States, "attempts to encourage innovation through the stricter application of patent and copyright laws are now threatening to crush it," and concludes that, while "international cooperation on intellectual property is needed . . . America would do better to lower the expectations of innovators, instead of trying to export its own over-ambitious principles." The harm of patents, The
Some commentators endeavor to analyze the development of third world countries more carefully. They propose that a country, such as Thailand, that is still shifting from a rural to an urban economy, can benefit from patent protection because a transfer of technology and know-how will only come about when a country provides adequate patent protection. In their view, large companies such as Pfizer and Merck will license their patents to Thai firms and show these firms how to use the technology and how to develop their own new drugs. As a result, Thai companies will expand and will adopt new technology. They will invent new drugs, thus maximizing their own (private) benefits and simultaneously maximizing social welfare by supplying consumers with better drugs and driving down the prices of the older drugs, even those still under patent.\(^\text{169}\)

Several problems arise in connection with this viewpoint.\(^\text{170}\) To begin with, many of these big firms have already entered the Thai market.\(^\text{171}\) Those

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\(^{170}\) The following analysis focuses on Thailand and drug patents. It does not deal with the general question whether patents are an effective economic policy for any country, be it developing, nearly industrialized or fully industrialized. It is still uncertain in the United States whether the negative effects of patents outweigh the benefits they are supposed to provide. See William G. Shepherd, *The Economics of Industrial Organization*, (Prentice Hall, 3d ed 1990). The central concern revolves around the difference between autonomous inventions and induced inventions. Autonomous inventions "arise naturally from the flow of knowledge and technology," and from "the sheer curiosity of creative geniuses." *Id.* at 143. Induced inventions arise from the incentive to make money; money comes as a result of the exclusivity of use or sale that a patent provides. Society gains if patent law induces a beneficial invention, such as a new drug, but the cost of high prices and potential exploitation during the patent term may outweigh the benefit. Some inventions may occur sooner than without patents, but perhaps only a few months or years sooner. *Id.* Moreover, the monetary incentive may cause excessive research and development spending, because of duplication in research. *Id.* at 162. The patent incentive is indefinite as opposed to a finite, efficient reward. As Shepherd suggests, "supra-competitive profits tend to induce lesser amounts of later innovation because the creative activity is voluntary rather than compelled by strict competition." *Id.* at 162. Thus, the case for drug patents in Thailand is not as clear-cut as some commentators imply. The recent trend in the United States toward controlling the price of drugs may indicate that the costs of drug patent protection have begun to exceed the costs.

In addition to concerns about the efficacy of patent protection in the United States, there are numerous concerns specific to developing countries that supporters of the PMA have not acknowledged. See Douglas F. Greer, *The Case Against Patent Systems in Less-Developed Countries*, 8 J Intl L & Econ 223 (1973), and Samuel Oddi, *The International Patent System and Third World Development: Reality or Myth?* 1987 Duke L J 831.

\(^{171}\) Most of the large U.S. firms have representative offices or distribution centers in Thailand; Bristol-Myers-Squibb, Eli Lilly, Glaxo, Pfizer, Upjohn and Wellcome are a few of the multinational companies with offices in Thailand. The following companies operate through local companies: DuPont, Eli Lilly, Merck, Sharpe & Dohme, Roche, SmithKline Beecham. See the Manufacturers' Index of the *TIMS Annual* 1991 (MIMS, 1991). Foreign-controlled companies that manufacture drugs in Thailand include Bayer Laboratories Ltd. (100% German), International Capsule Co. (100% Dutch), Olic (Thailand) Ltd. (89% Swiss), Organon (Thailand) Ltd. (100% Dutch), SmithKline & French (Thailand)
companies are not likely to license their drug patents to local firms. While they might expand their operations in Thailand, their tactics so far indicate that they are likely to squeeze many of the Thai firms out of the market.\textsuperscript{172}

Of particular concern is the possibility that the U.S. firms will use patent law and trademark law to monopolize the sale in Thailand of all new U.S.-manufactured drugs. By setting up authorized distributors in the country and registering trademarks and patents for all new drugs, the U.S. pharmaceutical manufacturers might be able to prevent Thai "parallel importers" from competing in the sale of U.S.-manufactured drugs. Thus not only would U.S. firms monopolize the manufacture of new drugs, they might be able to monopolize all new drug sales, without even setting up manufacturing and research and development facilities—with the resulting economic linkages—in Thailand.\textsuperscript{173} This point finds support in several studies that indicate that, at present, drug patenting is likely to be detrimental to Thailand.\textsuperscript{174}

\textsuperscript{172}There are precedents for this situation. Gabriel Wilner talked about a fairly industrialized Western African country that he and some others had studied:

\begin{quote}
We looked at the number of patents that had been registered in the country over a period of years, and in particular, at patents that concerned manufacturing sectors. In one of the years studied, a number of patents had been registered; all but one had been registered by foreign companies. Yet, no manufacturing had been commenced using any of the inventions or processes that had been registered.

\ldots

Apparently, foreign companies register their patents to exclude imports and to protect their eventual entry into the regional market at some future time. Obviously what the country needed was the capacity to innovate on its own. However, its immediate preoccupation was with whether it could sell its raw materials at prices that would keep its economy going.
\end{quote}

\textsuperscript{173}For a discussion of parallel importing in the context of vertical integration and monopoly, see the U.S. case, \textit{Bell & Howell Mamiya Co. v Masel Supply Co.}, 548 F Supp 1063 (1982). The key is whether the trademark law of the country is universal or territorial in scope. If the latter, the distributor, even if a wholly-owned subsidiary of the foreign firm, is treated as a separate trademark owner (where it has been assigned the registered mark) and can prevent an importer from selling goods manufactured by the (foreign) parent company. An example of such a result is the Canadian case \textit{Remington Rand Ltd. v Transworld Metal Co.}, (1960) 32 Can Patent Rptr 99 (Ex Ct). The international pharmaceutical industry is particularly ripe for the latter scenario, since local distributors of drugs often reformulate or repackage the products to give them a more local appearance. OECD, \textit{The Pharmaceutical Industry} at 13 (cited in note 23). This repackaging identifies the drugs with the local company rather than its international parent, thus facilitating the territorial trademark view. This local distinctiveness was crucial in the \textit{Remington Rand} case.

\textsuperscript{174}Dr. Surakiart Sathirathai, 29 Mal L Rev 329 at 333 (cited in note 13). Dr. Surakiart cites, as an
Even when a patent holder does license the manufacture of the drug to a Thai firm, the terms of licensing can be used to control local production and hamper competition. Even in the United States, abuse of patent protection occurs frequently. Indeed, U.S. anti-trust law has been essential in curbing the use of patents to suppress competition. It has been suggested that in Thailand, the original patent holder "would effectively prevent development of patents for raw materials, since such products must be sought from the licensors only." This danger is significant enough to prompt the Thai government to consider linking its competition legislation with the newly amended Patent Act to help prevent licensing abuses by drug patent holders and, thereby, boost the bargaining power of Thai manufacturers in license negotiations.

Another flaw in the arguments advanced by the foregoing commentators stems from the ease with which drugs can be copied and manufactured. There is little need for the transfer of drug manufacturing know-how, since the U.S. patent divulges to the world the components of a drug. Since Thai firms can use the innovative ideas of the United States without having to pay expensive license fees, there would be little increased example, Dr. Vaivudhi Thanesvorakul's paper, TPMA Position on Intellectual Property Rights, which was presented at a seminar at Siam Intercontinental Hotel, Bangkok on Jan 23, 1987. General studies of patent law and developing countries also support the view that the adoption of a full patent system may not be appropriate for many countries. For example, it has been observed that small nations that do not generate much domestic inventive activity do not gain from patent protection. M.K. Berkowitz and Y. Kotowitz, Patent Policy in an Open Economy 15 Can J Econ 1, 8–12 (1982). Another article proposes that, while the developed countries always gains from increased patent protection, developing countries are better off with weak or no patent protection. J.C. Chin and G.M. Grossman, Intellectual Property Rights and North–South Trade, in R.W. Jones and A.O. Kruger, eds, The Political Economy of International Trade 91 (Basil Blackwell, 1990). This article finds support in Arvind Subramanian, The International Economics of Intellectual Property Rights Protection: A Welfare Theoretic Analysis, 19 World Development 945, 951–54 (1991).


Oranuch Anusaksathien, Drug industry unwavered in attack on bill, The Nation (Jan 17, 1992). The article cites the Japanese control of car manufacturing in Thailand as an example of this use of licensing agreements to exercise control over Thai companies that makes them, in effect, subsidiaries of the patent holder.

Soon after the passage of the amendments to the Patent Act, a working group set up by the Commerce Ministry was drafting a new definition of "unfair trade restriction" in Section 14 of the Patent Act, using the Price Fixing and Anti-Monopoly Act as a standard. See Patent licensees to gain bargaining power from new law, Bangkok Post (June 1, 1992). This proposal was prompted by concern over attempts by patent holders in the past "to take advantage of their licensees by forcing the licensees to buy all of their raw materials from them or by fixing the prices of their patent licenses at very high prices to manipulate the market." Id.

See Nogues, 24:6 J World Trade 81 at 89 (cited in note 13).
technology transfer to the Thai drug industry.\textsuperscript{179}

One final problem with the U.S. position remains. U.S. firms often complain about the high cost of research and development. Yet they maintain that, with the incentive for innovation, the young Thai drug manufacturers will soon be producing new, patentable, drugs.\textsuperscript{180} However, in a young economy that is still far from being wealthy, it will probably be quite some time before Thai companies have the financial resources to invest in large-scale research and development.\textsuperscript{181} Western investment might help, but it is questionable whether patent protection will induce investment.\textsuperscript{182} In any event, investment

\textsuperscript{179} Peter Gakunu, \textit{Intellectual Property: Perspective of the Developing World}, 19 Ga J Intl \& Comp L 358, 361 (1989). Including drugs in Thailand's patent law might actually \textit{restrict} the proliferation of new technology among Thai manufacturing companies. One of the reasons for this possibility is the high cost of purchasing patented drug technology. Also, the adaptation of that technology to local economic and technical conditions is hampered by licensing. \textit{See} Ayhan Cilingiroglu, \textit{Transfer of Technology for Pharmaceutical Chemicals: Synthesis report on the experience of five industrializing countries} 54 (OECD, 1975).

\textsuperscript{180} On this point, consider the following colloquy:

[Scott Birdwell:] It is my understanding that if some of the developing countries did not infringe patents and violate copyrights, many of their industries would collapse. In that vein, the developing countries do not have $125 million to spend on research and development... [demanding increased protection of intellectual property] is like asking developing countries to protect something they might never have... My point is that the industry of the industrial countries is so far beyond the capacity of the industry of the developing countries that it seems unlikely that the industry of developing countries will be in a position to spend $125 million to develop a product to compete with a company like Pfizer. how long are you asking the developing countries to hold off, and is it worth the wait?

[Mr. Richardson:] Obviously that goes with the whole social and economic underpinnings of the country and the system they choose to adopt. There is no reason why what I called stealing should be allowed to continue. I do not see that you can justify stealing as a means of promoting development.


Thus the supporters of the PMA position revert to their moral claim, rather than attempting to refute the argument that a country must be at a certain stage of economic development before a full patent scheme is warranted. For discussion of the validity of this moral claim, see III.F. of this Comment.

\textsuperscript{181} It has been suggested that Canada was unable to reach the required research and development economies of scale. \textit{See} Henderson and Gorecki, \textit{Patent Licensing in Canada} 7:4 Can Pub Pol 559, 565 (1981). This could be because Canada did not at the time have U.S.-style patent protection for drugs. It remains to be seen how successful research and development in Canada will be under a full drug patent regime.

\textsuperscript{182} \textit{See} Patent rights and wrongs, Manager 29 (Sept 24, 1990) ("Opponents [of patent protection for drugs] believe that foreign companies' promises to invest here are merely a way to play developing countries off one another, and that most investment and research and development will remain overseas"). It is a large market, rather than patent protection, that warrants increased investment. This, they claim, is why companies have invested heavily in China, despite its weak patent law. Further support for this argument is found in the example of Brazil. In 1969, that country abolished patent protection for
eral pharmacy policies, but this move did not deter foreign investment. From 1971 to 1979 in Brazil, "direct foreign investment in the Brazilian pharmaceutical industry rose from US $11.4 m to US $646.5 m due to the government's incentives." Preeya Seebunruang, *Drug Patents: who benefits?* Manager 5 (Sept 24, 1990).

183 See Ayhan Cilingiroglu at 34–35 (cited in note 179). Portugal, one of the five countries in the survey, did nothing to limit foreign ownership. As of 1975, locally-owned plants accounted for only 20% of domestic drug sales.


185 Gakunu, 19 Ga J Intl & Comp L 358 at 359 (cited in note 179) (suggesting that it is "inappropriate to require developing countries to adopt any new rules in this area [IP] that may be inconsistent with their national development interests."). See also Sheila Page, *The Role of Trade in the New NICs*, 27:3 J Development Stud 39, 58–59 (1991). Page concludes that, based on the experience of the East Asian countries, policies imposed from outside the country do not always have the desired effect, because the domestic commitment to develop plays a crucial role.

186 Rapp and Rozek, 24:5 J World Trade 75 (cited in note 169).

187 This analysis may be skewed in favor of the premise that patent protection promotes economic development. This presumption may be incorporated into the structure of their predictive model: "What is interesting and significant is that the relationship between economic modernity and intellectual property protection is consistent across the middle of the spectrum; that is, the countries with the stronger patent
show that Thailand's patent protection lags behind its level of economic development; on the contrary, the model predicted level one for Thailand, precisely its observed level.\textsuperscript{188} Yet the USTR claims that Thailand's patent law lags far behind its level of economic development, and has consequently labeled Thailand one of the worst intellectual property offenders in the world.\textsuperscript{189}

Thailand's growing economy is fragile, and still dependent on trade with the United States.\textsuperscript{190} The United States is Thailand's largest trading partner, and U.S. merchandise exports to Thailand have increased by roughly 65\% from 1989 to 1991, making Thailand a major trading partner of the United States.\textsuperscript{191} For the United States to hinder Thailand's economic growth systems experienced more rapid development." \textit{Id} at 79. This statement and their conclusions about the reasons for the relationship reveals a possible inversion of cause and effect: one could argue that the economically modern countries began to adopt strong intellectual property laws once they had reached a certain level of development, diversity and structural stability; the combination of the strong base and the intellectual property incentives took the United States and other countries into the era of rapid innovation and mass consumerism. There seems to be no convincing evidence that Thailand has reached such a base. It should be up to the Thai people to decide when they are ready for stronger patent, copyright and trademark protection.

\textsuperscript{188} \textit{Id.} at 80–83. Level one means "[i]nadequate protection laws, no law prohibiting piracy."

\textsuperscript{189} For example, the President of the PMA recently commented that "Thailand is becoming increasingly isolated in the world community of nations, especially among the newly industrializing countries of north and southeast Asia." Pornpimol Kanchanalak, \textit{US to press new govt to amend patent law}, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992).


\textsuperscript{191} The 1990, 1991 and 1992 National Trade Estimates. These reports provide the following figures (in billions of U.S current dollars, rounded to one tenth of a billion):

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Trade Deficit with Thailand</th>
<th>U.S. Exports to Thailand (Merchandise)</th>
<th>Thai World Rank in U.S. Exports</th>
<th>Thai Exports to U.S. (Merchandise)</th>
<th>U.S. Direct Investment in Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>1.3</td>
<td>2.0</td>
<td>nil</td>
<td>3.2</td>
<td>1.1</td>
</tr>
<tr>
<td>1989</td>
<td>2.1</td>
<td>2.3</td>
<td>28th</td>
<td>4.4</td>
<td>1.3</td>
</tr>
<tr>
<td>1990</td>
<td>2.3</td>
<td>3.0</td>
<td>25th</td>
<td>5.3</td>
<td>1.5</td>
</tr>
<tr>
<td>1991</td>
<td>2.4</td>
<td>3.8</td>
<td>23rd</td>
<td>6.1</td>
<td>nil</td>
</tr>
</tbody>
</table>


In the past several years, the United States has ranked third in annual investment in Thailand, behind Japan and Taiwan. Janssen, \textit{A Slower But Surer Species of Asian Tiger}, Asian Business 72, 73 (June 1988), cited in Thomas N. O'Neill III, \textit{Intellectual Property Protection in Thailand: Asia's Young
in the name of improved trade would be harmful to U.S. long-term interests. The insistence of the PMA and others that the USTR initiate Section 301 trade sanctions despite the Thai government's efforts to accommodate U.S. demands betrays a fundamental misunderstanding of the level of Thailand's development.

B. Regulatory and Structural Considerations

As a nation becomes an industrial state, its government must evolve in order to meet new societal needs. Western countries themselves are still learning how to govern in many areas, particularly those of pollution control, health care, consumer protection and competition regulation, taxation, and resource use. It is unreasonable for the United States to demand that Thailand take one of the last steps toward industrialization—strict regulation in the area of patents—without first allowing it to learn how to govern as an industrialized society.

Contrary to the careful, measured, internally-directed development that would be most likely to yield a stable, healthy economy in Thailand, the United States would have Thailand immediately copy American laws that evolved over many years. These laws were developed by U.S. citizens in the context of the U.S. economy, to be administered by a government capable of regulating the economy. In short, they were appropriate for the United States at the time they were adopted, but, as the foregoing discussion shows,
Thailand is not ready for these laws, nor is it clear that the U.S. regulatory model would ever be appropriate.

Moreover, even if Thailand's economy were sufficiently healthy to support drug patent protection, other problems relating to the process of industrialization may have to be addressed before a sophisticated patent protection regime can be developed. For example, one Western news article reports that "Thailand will one day join the ranks of newly industrialized countries, but only when it closes the growing gap between the urban rich and the rural poor." Family planning and other population control programs may be necessary to help the Thai economy shift from a rural to an urban base. Since they have already undergone such a shift, developed countries, or other developing countries, may provide solutions that Thailand can implement. Implementation will require the support of the people, so the government will have to promote acceptance of the programs among the populace. None of this can be done immediately. This example illustrates how culture, the economy and governmental structure are crucial to a country's development choices. And its lessons apply to other areas of the Thai infrastructure as well, such as environmental protection.

Thailand will require national, harmonized regulation of competition and consumer transactions, local and foreign investment, labor and the other facets of an industrialized country. Most important in the pharmaceutical and

ew drug because its manufacturer either will not market it in the country (for, e.g., cost reasons) or who charges too high a price for it. Second, given the importance of the U.S. market to any trader of goods, it is unlikely that a person will not market a new product there. On the other hand, Thailand is a much smaller market, so the potential for a new product not being sold there for several years after introduction to the world market is quite high.

This point is especially important in light of the shift in North American attitudes of the past twenty years. Increasingly, North Americans (and citizens of all industrialized countries) are questioning the development ethos that has left us with environmental problems that we may not be able to resolve, an urban landscape that many find appalling, a considerable "underclass" of people dependent on state welfare programs for their survival, and numerous other problems. See, for example, H. Cleveland, We Changed Our Minds in the 1970s at 4, and D. Yankelovich and B. Lefkowitz, The Public Debate About Growth at 22-25, 31 and 45, both in H. Cleveland, ed, The Management of Sustainable Growth (Pergamon Press, 1981). It seems odd that, at a time when the industrialized nations are struggling to solve the problems they have wrought, they should be encouraging less developed countries to follow their path at all, much less at an accelerated pace.


Deforestation and overfishing are epidemic in Thailand. See D. Ward, A Fight for the forests, The Vancouver Sun F3 (Oct 4, 1990). In this article, Ward comments that, despite a growing environmental awareness in the country, the Thai government is still unable to protect the forests, even with measures as dramatic as a ban on commercial logging.
health care context is Thailand's need to further develop and coordinate health care services, from the level of the rural village to the urban centers. Availability and prices of drugs vary from region to region in Thailand; such disparity will be exacerbated if Thailand does not deal with these problems before it changes its patent laws, and before it's economy progresses further.\footnote{See, for example, Economic and Social Commission for Asia and the Pacific, \textit{Health \\ & Development in Asia and the Pacific: Two Studies} at 61–78, 89, 91 and 102 (ESCAP). See also Cilingiroglu at 50–51 and 105–06 (cited in note 179), on the coordination of technology transfer.}

As suggested above, the Thai government will have to learn how to develop its own regulatory structures itself from North America, Europe, South America, and the Asian countries, especially the four tigers. The experience of countries that have been industrialized for as long as a century will be valuable in avoiding unnecessary pitfalls and setbacks in reshaping the Thai government, but no foreign regulatory system can be imported whole. To do so would alienate the Thai people and make the new structure impotent.\footnote{See II.C. infra.} Instead, internal change is necessary at a more fundamental level, from which a new economy and structure can be built.\footnote{This does not mean that Thailand should try to transform itself into a Western country, but that, if the Thai government decides to maintain the country's present rate of development, it must restructure itself based on the lessons from the West in conjunction with characteristics unique to Thailand. See Gakunu, 19 Ga J Intl \\ & Comp L 358 at 364 (cited in note 179). See also Ken Scott, \textit{Review: Sulak Sivaraksa, A Socially Engaged Buddhism (Suksit Siam, 1988)}, 76 J Siam Soc 351 (1988). Scott comments that, while Sulak admits that, in Thailand, "economics and money have more power than religious norms now, and that Buddhism might be more suited to traditional agrarian Siam, . . . there is hope for a meaningful Buddhist re-engagement in public life."}

The U.S. strategy of forcing Thailand to adopt the intellectual property laws that the PMA wants, with a minor implementation period tacked on,\footnote{Michel M. Kostecki, \textit{Sharing Intellectual Property Between the Rich and the Poor}, 8 Eur Intell Prop Rev 271 at 273 (1991). This concession is the closest most commentators come to recognizing that there is far more to economic development than enacting the same legislation that the United States has.} will not produce the desired results. Legislation, without the institutions to adequately administer it and without the regulatory structure to handle the effects of the resulting change in the economy, will only delay Thailand's gradual development toward a society that is ready for such harbingers of industrialization as patented drugs. It is difficult to understand how spokespeople for the U.S. pharmaceutical manufacturers can dismiss such considerations as "the stalling tactics of pirates."\footnote{Bilzi, 19 Ga J Intl Comp L 343 at 347 (cited in note 22).} The PMA members seem to be unwilling to take into consideration how long it has taken the
industrialized countries to develop the systems that they insist Thailand adopt immediately.

C. Socio–Cultural Considerations

In order to successfully implement amendments to the Patent Act, the Thai government will need support from the public. Any government that appears to be knuckling under to foreign pressure is all too likely to lose credibility with its populace. This is especially true in Thailand.

It is sometimes observed that Thais do not appear to have great respect for written, formal law. One of the causes of this apparent disrespect may be that the law does not seem relevant to them, because the Thai people have for centuries regulated their conduct with traditional rules and dispute mechanisms, and because much of the Thai written law developed in the past century has been in response to pressure from the colonial powers, including England, France, and later, the United States. If Thais reject formal laws that do not coincide with their customary behavior, they are doubly unlikely to accept a law that they view as a capitulation to Western demands.

Observers in the news media have provided a good deal of evidence to support this position. The Montreal Gazette reported that Thai political activists opposed the patent law reforms, citing "the Philippines as an example of a country that gave in to U.S. demands on drug patents and now must pay higher prices for basic health care." The concept of a political activist in a country that typically is almost indifferent to the machinations of the government is indicative the strength of the sentiment among Thai people. Even officials in the Thai government resent the U.S. demands.

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202 A useful analysis of the link between Thailand's social and cultural character and its developmental path is found in Sippanondha Ketudat, The Middle Path for the Future of Thailand: Technology in Harmony with Culture and Environment (East–West Center, 1990).  
203 William J. Klausner, Reflections on Thai Culture 190 (The Siam Society, 2d ed 1983).  
206 Uwanno and Sathirathai, 4 Chula L Rev 40 at 48–49.  
208 The May 1992 demonstrations throughout the country may indicate that Thai culture is changing. The protests are not a response to capitulation to U.S. interests, but such violent activism among the Thais will make the USTR's mission much more difficult. The riots may indicate that the Thai
Chalaw Fuangaromya, the Director-General of Thailand's Department of Export Promotion, complained that Thailand "can't inflict any damage on the U.S. economy, but they can certainly inflict damage on us." Rather than passive indifference toward a proposed law that Thai people plan to ignore anyway, the intellectual property issues have become quite a source of contention in the country. There is no doubt that the government will have difficulty enforcing the patent amendments if it makes an effort to do so. Its difficulty enforcing the copyright legislation is indicative of the cultural barrier to intellectual property rights in Thailand.

Beyond enforcement, the intractability of the United States on the issue of patent protection has offended many Thais. U.S.–Thai relations, people are becoming more concerned about what the government does, and more critical of its actions. Such an attitude is new to Thais. See Ann Danaiya Usher, Bangkok showdown for democracy, The [Toronto] Globe & Mail A17 (May 21, 1992). It is not unreasonable to suggest that this activism has come about partly in response to the U.S. pressure of the past five years. Certainly, few political issues have raised such public outcry as the recent patent amendments. See note 128 and accompanying text.


210 The government itself has been placed at risk of a popular coup when it has given in to United States pressure in the past. In April of 1988, Prime Minister Prem Tinsulanonda had to dissolve "his cabinet after a dispute over proposed unpopular copyright legislation." O'Neill, 11 U Pa J Intl Bus L 603 at 606 n 34 (cited in note 11). See also Paul Handley, Wind from the South, Far Eastern Economic Review 22 (Aug 9, 1990); and Paul Handley, Deep Grievances, Far Eastern Economic Review 23 (Aug 9, 1990). See also note 128 and accompanying text.

211 Thailand's copyright law, unlike its patent law, is not of itself considered unacceptable by the United States. The problem is primarily enforcement. Thai people ignore the law, officials feel no compunction to enforce it, and judges are reluctant to convict. Perhaps the greatest problem is the Thai court system, which makes conviction in a copyright case "virtually impossible," largely because the judges throw most cases out for lack of evidence that the complainant is protecting or using its copyright in Thailand. See Bush, Anand to discuss probe on copyright issue, Bangkok Post Weekly Rev 20 (Dec 20, 1991); USTR seeks reprisal comment on Thailand, Bangkok Post Weekly Rev (Nov 29, 1991); Pompimol Kanchanalak, New complaints keep Thais on list for US trade action, Bangkok Post Weekly Rev 11, col 5 (May 8, 1992). See also AmCham asks USTR to delay Sect 301 action, Bangkok Post Weekly Rev (Dec 27, 1991); Thai–US meeting fails to resolve copyright issue, Bangkok Post Weekly Rev 2 (July 5, 1991); Intellectual Property: Senators, Copyright Industries Criticize Thailand's Alleged Failure to Stop Piracy, 7 Intl Trade Rep 854 (June 13, 1990).

212 Signs that Thais have taken offense at the U.S. position can be seen in the rhetoric adopted by some Thai political figures and by opponents of the amendments to the Patent Act. See generally the references accompanying the section of this comment on U.S. Section 301 pressure on Thailand (II.C.3.b. supra). The anger of some Thais over the U.S. stance frequently translated into anger at Thai government officials who were handling the negotiations; those officials were often accused of being unaware of "how much ordinary villagers will be affected by" the amendments. Groups want public hearing on patents, Bangkok Post Weekly Rev (Dec 20, 1991). See also Minister puts job on line over US trade reprisals, Bangkok Post Weekly Rev 11 (Nov 29, 1991); United stance needed against US–minister, Bangkok Post Weekly Rev 13 (May 24, 1991), (indicating former Commerce Minister Amaret's frustration in trying to accommodate the U.S. demands while being called a traitor by some doctors, pharmacists and non–governmental organizations); and Ex–MPs call on US to delay Sect 301 sanctions Bangkok Post Weekly Rev 5 (May 10, 1991) (describing a student protest against capitulation to U.S. interests). The unrest in 1988 over the proposed amendments to the copyright bill (described at II.C.1. supra) likely fueled
diplomatic and private, have already been damaged in the process of negotiating for revision of the Thai Patent Act. Relations will only get worse if the USTR and the PMA continue to attempt to impose their will upon the Thai people. The climate for American investment in Thailand could well become gloomy over the next few years.

From a socio-cultural perspective, then, the United States has presented the Thai government with a "catch-22." The Thai government

13. See generally K.B. Richburg, *Trade issues put strain on U.S.-Thai relations*, Calgary Herald H12 (February 23, 1989). A specific example of harm to diplomatic relations is found in signs that Thailand is seeking to become less dependent on trade with the United States. See *US trade action prompts review of export policy*, Bangkok Post Weekly Rev 5 (May 10, 1991). During the negotiations with the United States, the Thai delegation displayed animosity toward the United States. At one point, "some Thai officials threatened that should the US list Thailand [as a priority foreign country under Section 301], all previous discussions, agreements and commitments would be 'off the table.'" See Pornpimol Kanchanalak, *US: Settlement key issue, not delegates*, Bangkok Post Weekly Rev 5 (June 28, 1991). See also Ratchaphol Laovanitch, *US pharmaceutical move upsets Thai Govt*, Bangkok Post 13 (February 2, 1991) (indicating that, despite the PMA petitions to have Thailand designated a priority foreign country, Thai officials never really expected the U.S. government to accept the petitions). The Thai Commerce Permanent Secretary at the time said that "it was not useful to pressure Thailand in this way because it might hamper trade relations between the two countries." *Id.*

This warning may prove true. Subsequent to the amendments to the Patent Act and the U.S. criticisms of them (Pornpimol Kanchanalak, *US to press new govt to amend patent law*, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992)), some Thai officials have hinted that they would consider repealing the Amity Treaty (Treaty of Amity and Economic Relations (May 29, 1966), United States–Thailand, 19 UST 5843, TIAS No 6540 ("Amity Treaty"). Peter Mytri Ungphakorn, *Saranrom Palace rethinks US–Thai relations*, Bangkok Post Weekly Rev 18 (Mar 20, 1992). This treaty provides preferential treatment to U.S. companies wishing to operate in Thailand. The article states that "the request to revise the treaty, which either party can terminate with one year's notice, is also apparently motivated by resentment of continual US trade pressure." It also points out that the Thai Foreign Ministry was pressuring the Ministry of Defense to loosen its ties with the United States, while Commerce Ministry officials, long bearing "the brunt of US pressure," were in turn pressuring the Foreign Ministry to restructure its ties with Washington; the Amity Treaty suggestion was one form of restructuring. See also Pornpimol Kanchanalak, *US to press new govt to amend patent law*, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992) ("[Prime Minister's Office Minister M.R. Kasem] said that Thailand will not retaliate but would have to reconsider her position vis-à-vis the U.S., which dealt much more leniently with China and India on the same issue [patent and copyright law]. [Kasem then warned that] Thailand also has ASEAN support."). An editorial in Asiaweek suggests that much of Southeast Asia is willing to resist further U.S. pressure. See *Editorial, No such thing as bilateral free trade*, Asiaweek 30 (Oct 30, 1992), reprinted in the Bangkok newspaper, The Nation A6 (Oct 30, 1992) ("Washington's bluster about free trade is a sideshow.")

14. Thus far, there is no sign of a change in U.S. investment in Thailand. See note 191. However, there are signs of growing hostility toward the United States among Thai officials. See notes 125, 231–333 and accompanying text. Exception is taken to U.S. paternalism: "Thai industry and consumer groups also resent the 'we know what's good for you' attitude of foreign critics." *Patent rights and wrongs*, Manager 29 (Sept 24, 1990).

15. The Thai government's predicament is apparent in many of the news reports. The government
faces only two courses of action: (1) accept the U.S. demands and further alienate your populace, thereby slowing down the process of developing the legal structures necessary to control the effects of industrialization, or (2) refuse to change the patent law and face the crippling sanctions that your biggest trading partner will visit upon you. Under such circumstances, there is no way Thailand can win.

D. The U.S. Position and the Principle of Trade

Trade, it is suggested, is the exchange of one value for another. In the context of bilateral negotiations among nations, trade can include the elimination by nation A of barriers to entry into its market in exchange for a similar change in nation B's trade laws or practices, the elimination of A's trade barriers in exchange for the adoption by B of a law that benefits companies from A, or the creation in each country of laws that facilitate

has been forced to respond to the opposing demands of the United States and the Thai people. See notes 130–31. Some representative examples are found in Ex-MPs call on US to delay 301 sanctions, Bangkok Post Weekly Rev 5 (May 10, 1991); United stance needed against US—minister, Bangkok Post Weekly Rev 13 (May 24, 1991); Cabinet likely to decide on key drug patent issue, Bangkok Post Weekly Rev 13 (Sept 27 1991); Anti-Patents drive hot's up issue of "white paper," Bangkok Post Weekly Rev 13 (Nov 29, 1991), read in conjunction with Minister puts job on line over US trade reprisals, Bangkok Post Weekly Rev 11 (Nov 29, 1991); and for India, Intellectual Property: Indian Trade Minister Hopeful Talks With U.S. Will Lead To Removal From Special 301 List, 8 Intl Trade Rep 645 (May 1, 1991).

216 The point here is to distinguish trade from coercion. The United States is leaving Thailand this choice: surrender your public policy on drugs or lose considerable trade revenue. The United States is offering nothing positive; it is coercing.

217 The United States could certainly have offered to provide less restricted access for Thai companies to certain U.S. markets in exchange for protection of patents in Thailand. The United States has myriad trade barriers with which to bargain. Consider this statement of then–Deputy U.S. Trade Representative Alan Holmer to the Senate Committee on Finance:

I can imagine how I would feel if a foreign government official from Country–X came into our offices at the USTR, stuck a retaliation gun to our head, and said, "We're tired of the U.S. trade practices that we, unilaterally in Country–X, have decided are unfair. We want you to get rid of your steel quotas, your quotas on sugar and meat and dairy products and peanuts and cotton and sugar-containing products and machine tools, we want you to get rid of your Buy–America provisions and your agricultural export subsidies and your price support programs and your Superfund taxes and your custom user fees. We don't like the way you administer the dumping and countervailing duty law; we believe that is unjustifiable. You've got to change those practices. Get rid of Section 337, certainly get rid of your extraterritorial technology controls, get rid of the semiconductor third country anti-dumping agreement, do it all in 15 months . . .—do it in the glare of the public spotlight, and if you don't, on all of those things we are going to whack you.

Improving Enforcement of Trade Agreements: Hearing on S 490, S 539 and HR 3 Before the Senate
trade between the nations.\textsuperscript{218} It can also entail removal of subsidies and other supports that give one nation an advantage in the world market in the subsidized sector. The goal of such trades is to remove discriminatory policies that give one country an advantage over others that is not based on differences in resources, skill, or on other competitive superiority. One nation might benefit more than the other, but both benefit nevertheless.

Countries enter such negotiations willingly, in the expectation that their competitive industries will, as a result, expand their presence in the world marketplace. Frequently in developing—and even developed—countries, there may be "infant industries" that need continued protection before they reach a size that allows them to be competitive in their native country and beyond. These industries are often exempted from such trade-offs in the negotiation process.\textsuperscript{219}

The United States has not adopted this approach in its trade negotiations with Thailand. The USTR, acting on behalf of the PMA and other private sector interests, has effectively told Thailand to comply or suffer economic hardship.\textsuperscript{220} Thailand has not come willingly to the negotiations, ready to listen to the requests of the United States, ready to discuss ways of changing the laws of both countries, in intellectual property and in other areas.\textsuperscript{221} On the contrary, Thailand has been coerced into acquiescing to the United States' demand that it change its law immediately, regardless of popular resistance and regardless of the costs, not in exchange for U.S. concessions on a trade issue such as rice,\textsuperscript{222} but in return for the United

\textsuperscript{218} The Amity Treaty (cited in note 213) is an example of such an agreement.
\textsuperscript{219} Even radically pro–free trade economists concede that protectionism will assist in the growth of infant industries.
\textsuperscript{221} This point is supported in the sections which discuss Thailand's reluctance to amend its copyright law (II.C.1. supra), which resulted in revocation of some of its GSP benefits, and in its initial refusal to take the threat of Section 301 sanctions seriously (\textit{PM says Section 301 no longer a big threat} Bangkok Post Weekly Rev 3 (Aug 27, 1989)). Only after Thailand remained on the USTR's Special 301 priority watch list after the 150 day review period did the Thai government begin to respond to the unilateral U.S. pressure. \textit{Get–tough body being formed to monitor patents} Bangkok Post Weekly Rev 12 (July 20, 1990).
\textsuperscript{222} The contradiction in the U.S. position on drug patents in Thailand and its position on rice subsidies was outlined in a presentation by David Lyman, a partner at Tilleke & Gibbins in Bangkok, at the Third U.S.–Thailand Bilateral Trade Forum (San Francisco, April 1989):
States' promise not to use Section 301 against it. It is not simply a demand that the country open its markets to U.S. firms; it is a demand that Thailand surrender a measure of its autonomy.

E. The Effect of the U.S. Position on U.S. Interests

In demanding that Thailand protect drug patents, the PMA and the United States government must believe that they are acting in their best interests. But what will the United States gain, and at what cost? Even assuming the amended Thai Patent Act is enforced rigorously, the PMA's gains may turn out to be less than it expects, while the cost to U.S. business interests and other U.S. interests in Thailand could be great.

The PMA estimates that the potential sales of its members in Thailand are less than one half what they would be with full patent protection. One must be wary of the accuracy of these estimates, however, for two reasons. First, because the figures may not properly account for minimal sales due to the inaccessibility to most Thais of expensive, monopolized drugs. Second,

In simplest terms, the U.S. position on intellectual property rights is [that] they must have a solution on intellectual property rights now. On rice, they said let's wait until they get to GATT, so we can handle subsidies all at once. The Thai position is just the opposite. On intellectual property rights, let's wait for GATT so we can have it on a worldwide basis. But on rice, let's handle that one now. The real issue . . . is [that] the United States and Thailand are unable to get by that impasse in their negotiations that I've just described. Thailand . . . believes that when you reach that kind of situation you try to make a deal. You give here, you push there, you get this, you give up that. The United States is unable to do that. They cannot come up with a package deal. Now, the mechanics of why they cannot I do not fully understand. The feeling within the Administration and within the Congress is that each issue must be handled and won or lost on its own substantive merits. You cannot link one issue to another to make a deal.

223 The crucial difference between this viewpoint and that of the supporters of the U.S. position is that the latter group seems to consider the lack of patent protection to be an unfair trade barrier put up by Thailand. If that were the case, it would not be unreasonable for the United States to threaten to put up corresponding barriers unless the Thai barrier was removed. The lack of patent protection is not a discriminatory barrier that gives an unfair advantage to Thai companies.


225 See Pornpimol Kanchanalak, US to press new Govt to amend patent law, Bangkok Post Weekly Rev 4 col 2 (Mar 27, 1992). PMA President Gerold Mossinghoff claims that PMA member companies had sales totaling $12 million (306 million baht) in 1991. The PMA estimates the revenue lost due to "patent piracy" at $19 million (484.5 million baht). The latter figure is presumably the estimate for 1991.
the estimates do not seem to allow for the set-up costs of the new manufacturing and research facilities that the U.S. firms ostensibly will build in Thailand. Even if the industry figures are accurate, the benefit to the big drug firms may not be significant. For example, as one commentator notes, "Pfizer International Corporation has stated that it earned $2.2 million in 1984 on twelve of the U.S.-patented products it sells in Thailand, while copies of the same products earned other companies $4.2 million in the same period." Yet in 1990 alone, Pfizer's drug "Procardia," with a patent expiring in 1991, had world wholesale revenue of $727 million. A potential increase in gross sales—for twelve patented drugs—of two to four million dollars is not a staggering figure when one considers the worldwide volume of trade in patented drugs. Regardless of their size, these potential financial gains should be considered in light of two factors: whether they are a gain that could be obtained in the long term without resorting to unilateral pressure, and whether they justify the immediate harm that trade sanctions could wreak on Thailand's economy and on U.S.–Thai relations.

Thailand is changing, economically and socially. Even supporters of the U.S. position acknowledge that the changes demanded by the USTR are likely to evolve naturally. As Thailand develops, it will cease to be a pirating capital, just as Japan, and Taiwan and Hong Kong had their turns at pirating and then moved on in the late 1960s and 1970s. Consequently, the United States may be forcing a natural development to happen unnaturally fast. In addition to the potential economic and structural consequences for Thailand mentioned above, the U.S. tactics present other, more direct dangers to the United States. The strain on U.S.–Thai relations is likely to make future trade negotiations, private and diplomatic, difficult. Thai officials,

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227 O'Reilly, 124 Fortune 48 at 50 (cited in note 23).
228 This, without more, is no argument against obtaining several million dollars more in revenue each year. The potential gains from obtaining patent protection in Thailand, however, should be put into perspective before they are compared to their potential costs.
229 For a discussion of natural progress toward copyright protection in Asia, see Altbach, Economic Progress Brings Copyright to Asia, Far Eastern Economic Review 62, 63 (Mar 3, 1988) and Altbach, Toward a Worldwide Copyright Era, Publisher's Weekly 44 (Dec 11, 1987).
230 P. Gorton, Bangkok has become the fake--Gucci, phoney--Rolex capital of the world, The Montreal Gazette B4 (May 21, 1989). Japan did not recognize product patents until 1975 (OECD, The Pharmaceutical Industry at 39 (cited in note 23)); today it is one of the strongest supporters of U.S. intellectual property efforts. If allowed to progress without intervention Thailand could become such an ally, but the current U.S. pressure can only create tension between the two nations.
231 With the emergence of the ASEAN Free Trade Area (see ASEAN crawls into free trade today, The [Toronto] Globe & Mail B13 (Jan 1, 1993); and Pearl Imada, Manual Montes and Seiji Naya, A Free Trade Area: Implications for ASEAN (Institute of Southeast Asian Studies, 1991)), Thailand may soon be
under domestic pressure not to appear as puppets of the United States, may begin to resist U.S. demands. Thailand could well counter-retaliate against Section 301 action. Facing unreasonable demands with even more unreasonable time constraints designed to force it to take action it considers unnecessary and even harmful to Thailand's interests, the Thai government may place real trade barriers in the path of U.S. exports and investment. In view of the extreme tactics the United States has chosen, one wonders whether the United States is really weighing the long-term benefits against the long-term costs of forcing Thailand to change its formal patent law.

F. Moral Claims to Intellectual Property Protection

Thailand has "inadequate" protection; its laws foster "imitators" who "pirate" Western ideas, thus depriving the "owners" of "intellectual property rights" of those "rights" and thereby "distorting and restricting" international trade; thus have the supporters of the PMA characterized the state of patent law in Thailand.

Such language seeks to place the supporters of the U.S. position on the moral high ground, assuming a basis for patent law in moral concepts of property. There is no such high ground, however; the patent law of the United States is based much more on public policy than on a moral concept of property. There are many concepts of intellectual property in the world; backed up by five other Asian nations in its dealings with the United States. If so, the United States will have considerable difficulty obtaining compliance with its demands in ASEAN. Sentiment against the U.S. bilateral stance is strong in Southeast Asia. See, for example, Editorial, No such thing as bilateral free trade, Asiaweek 30 (Oct 30, 1992), reprinted in the Bangkok newspaper, The Nation A6 (30 Oct 1992).

232 See McMillan, Strategic Bargaining and Section 301 at 211–14 (cited in note 220) for a game-theoretic discussion of the effect of Section 301 on negotiating efficiency.

233 See note 215. Thailand has considered revoking the Thailand–United States Amity Treaty in response to the U.S. pressure. Additionally, consider this comment by an analyst at the Thai Farmers Bank: "the potential GSP suspension, however, might result in a negative impact on US exports in return. Take the textile sector, the US might suspend the GSP on Thai exports, if considering the high value of Thai exports in the sector. But the US government has to think about US cotton imports in Thailand as well." US to hold off on trade action, The Nation A1 (Oct 11, 1992).

234 These phrases appear throughout the literature on intellectual property and international trade. Bilzi, 19 Ga J Intl & Comp L 343 (cited in note 22); Richardson, 19 Ga J Intl & Comp L 352 (cited in note 33); and Panel Two: General Discussion, 19 Ga J Intl & Comp L 366 (1989), use some of the most provocative language in describing the intellectual property law of developing countries. See also Deborah Mall, The Inclusion of a Trade Related Intellectual Property Code Under the General Agreement on Tariffs and Trade (GATT), 30 Santa Clara L Rev 265 (1990).

235 It is in the area of copyright law that the moral argument is, perhaps, strongest, as suggested by the longer period of protection usually afforded to copyrighted works (in Canada, the United States and most Western countries the copyright lasts the author's lifetime plus fifty years (17 USC § 302 (1992);
none is universal. Each country must base its law on its own conditions, and as these conditions change, so must the law. When, during a panel discussion, a supporter of the PMA stated that "[w]hat are generally accepted as violations of intellectual property laws should not continue," another speaker responded that "the question is, [w]hose intellectual property law [are we] talking about? The United States has intellectual property laws that protect certain knowledge and products such as pharmaceuticals. Another country might consider that pharmaceutical technology is knowledge that belongs to society in general."

With evocative language, many commentators imply that intellectual property protection is an unqualified, immutable moral right, fundamental to any modern society. To do so obscures the origin of the patent system in

Copyright Act, RSC 1985, ch C-42, § 6) and by the universality of enforcement of copyright—unlike a patent, one need not register a work in order to obtain copyright; the right is automatic on the completion of a work, and is enforceable in all countries party to the Berne Convention (17 USC § 104(b) (1992); Copyright Act, RSC 1985, ch C-45, § 5).

There are two types of rights in copyright. Parties to the Berne Convention (including Thailand) protect them both. There are economic rights (exclusivity of use, sale, etc.: 17 USC § 106) and there are moral rights. Moral rights can vary somewhat, but in the United States they mean the right of the author to claim or disclaim authorship of the work, and to prevent distortion, mutilation or modification, or the deliberate or negligent destruction of the work (17 USC § 106A (1992); Copyright Act, RSC 1985, ch C-45, §§ 28.1 and 28.2). However, the United States has only protected moral rights since December 1, 1990, when Congress passed 17 USC § 106A. This legislation was necessary, because the United States had become a party to the Berne Convention on March 1, 1989 (see note 236 infra). The failure to protect moral rights does not, it is true, necessarily vitiate a moral basis for the economic rights the United States has long protected. But it does undermine somewhat the claim of the supporters of the U.S. position that intellectual property is and should be a moral imperative.

This self-interested approach to intellectual property law and international agreements is precisely the one historically adopted by the United States. Thus the United States was once famous for its violations of copyrights (see note 194), and thus the United States refused to sign the Berne Convention for more than a century, maintaining that certain of its provisions did not suit the U.S. economy or structure. In 1988, the United States did consent to join the Convention (effective May 1, 1989), apparently in order not to appear hypocritical in demanding that all countries adhere to one international set of minimum standards. U.S. Joins Berne Convention, IP Asia 15 (Nov 25, 1988); Inglis, The United States Legislates Its Way Into Berne, 1989 Suffolk Transnatl L J 282 (1989). The appearance of hypocrisy is not so easily dismissed, however. Consider this statement made by Bilzi, 19 Ga J Intl & Comp L 343 at 349 (cited in note 22): "the Berne Convention is a good model for the fundamental principles of copyright, while the Paris Convention is not a good model for patents [therefore, we need a GATT agreement more stringent than the Paris Convention]." The United States was an original signatory to the latter convention, but not to the former "good model," because this model did not suit U.S. interests. Also consider the following statements by Kirk, 50 Albany L Rev 601 at 605–06 (cited in note 162): "Harmonization is a give and take proposition, and we are going to try to argue and defend those areas of our law that, although different, we believe are best for the United States.... Assuming that it [a GATT agreement or new Paris Convention] can be negotiated in a way that we believe is in our best interest, we would adhere to it. The real question is: how can we get the other countries, whose standards are much too low, to adhere?"

Western countries. The goal of a patent system is to stimulate creativity—the inventor's right of exclusive use or sale is incentive to invent, while the state initially gains the benefit of the invention's use plus the knowledge made public when the patent is published\textsuperscript{238} and later gains the free use of the new process or product, since "the owner is required to hand it over to the public after a very limited period of ownership."\textsuperscript{239} The patent is intended, first and foremost, to encourage inventors to invent; it is not intended to be treated itself as property.\textsuperscript{240} The patent law issues being debated in Western nations indicate that patent protection is not deemed to be a fundamental right in Western society: issues such as how to minimize abuses of the monopoly it creates\textsuperscript{241} while improving its ability to accomplish its goal;\textsuperscript{242} whether certain commodities or processes should be given different treatment\textsuperscript{243}—for

\begin{itemize}
  \item \textsuperscript{238} Patent protection is a special protection offered to the inventor in exchange for full disclosure of the invention. The alternative for the inventor is to keep all of this information secret, in which case there is an unlimited exclusivity of use, unless another person makes the same discovery or learns of the information in a legitimate manner. In the United States, such information is protected by the common law on trade secrets. \textit{See} American Legal Institute, 4 Restatement of the Law of Torts § 757 (ALI Publishers, 1939). For the law in England and the Commonwealth, see Hammond, \textit{The Origins of the Equitable Duty of Confidence}, 8 Anglo-Am L Rev 71 (1979).
  \item \textsuperscript{239} Howard G. Fox, \textit{The Canadian Law and Practice Relating to Letters Patent for Inventions} 1 (Carswell, 1969).
  \item \textsuperscript{240} Property in ideas is protected by the law as long as the holder of the idea does not divulge it to the public. Conversely, to obtain a patent, one must disclose the idea to the public; that is how society benefits. Patent law has been described as a social contract between the inventor and the state. The inventor reveals all the details of the discovery or invention; in exchange, the state grants the inventor the exclusive right to that invention for a limited period. This rationale is clearly stated in Uphoff, \textit{Intellectual Property and U.S. Relations} at 5 (cited in note 1). In light of this concept, it is interesting to consider the following passage from R. Michael Gadbo, \textit{Intellectual Property and International Trade: Merger of Marriage of Convenience?} 22 Vand J Transnatl L 223, 224 (1989): "For most developing and many developed countries, intellectual property is seen less as a body of fundamental rights than as a subset of their general economic policies, to be managed for their contribution to economic growth and industrial development." This view would seem to embody the philosophy underlying patent protection in the United States.
  \item \textsuperscript{241} Efforts to limit potential abuses have been part of patent regimes since they were first developed. \textit{See} Fox at 540 (cited in note 239). He points out that one of the most important limits on the right are a requirement that the patent holder "work" the invention in the country.
  \item \textsuperscript{242} Shepherd points out that "the patent system is capricious because it confers large rewards that may bear no systematic relation to efficient incentives. By permitting monopoly in return for uncertain social benefits, the system may be socially costly." Shepherd, \textit{The Economics of Industrial Organization} at 162 (cited in note 170). No country has an ideal, efficient patent system, but Western nations have made the policy decision that a period of exclusivity of up to twenty years is, overall, worth the cost of a monopoly. That decision does not preclude further thinking about how to improve the system, however.
  \item \textsuperscript{243} The former Federal Republic of Germany did not provide patents for food, chemical and pharmaceutical products until 1968. Japan did not do so until 1987. Pharmaceutical products were not patentable until 1992. Patentees in Japan, Spain and Switzerland have no exclusive right of importation, a right that West Germany did not grant until 1978. \textit{See} Dhanjee and Boisson de Chazournes, 24:5 J World Trade 5 at 8 (cited in note 168).
\end{itemize}
example, pharmaceuticals; and the underlying debate about the very nature and origin of patent protection.

Patent law, then, is not as clear-cut a moral issue as many commentators suggest. The United States' patent system developed in the context of its own economic and social conditions; so, too, should the Thai system. Thus the position of the PMA and others who decry the injustice of the Thai patent system is untenable.

G. Liberalization vs. Protectionism

The PMA has begun to suffer a decline in profits in part due to increasingly restrictive legislation being passed by U.S. legislators who are displeased with the side effect of a monopoly on the marketing of a new drug: high prices. Congressional activism on this domestic issue parallels an increasing concern about competition from foreign companies in the traditional pharmaceuticals markets as well as, more recently, Thai markets. Such concerns are reasonable, but they do not justify the unfair structure of

244 John W. Rogers III, The Revised Canadian Patent Act, the Free Trade Agreement, and Pharmaceutical Patents: An Overview of Pharmaceutical Compulsory Licensing in Canada, 10 Eur Intell Prop Rev 351, 351 (1990). Canada has long wrestled with the difficulties in granting a monopoly in the use or sale of a new drug. Article concluded that the compulsory licensing provisions in place at the time were inadequate in ensuring both the availability of drugs at a low price and a fair reward to the inventor. It recommended that patents for drugs be abolished. Today Canada seems to have relented to U.S. pressure by agreeing to replace its ten-year patent term and provisional compulsory licensing scheme with full patent protection for drugs, but it remains to be seen whether the Canadian government will lift the restrictions it adopted in 1987, the year it first provided any patent protection for drugs. These restrictions include a requirement that drug manufacturers spend a certain percentage of revenue on research and development, and a Board to review prices. See note 26 and Rod Mickleburgh, Generic drugs in danger, group says, The [Toronto] Globe & Mail A2 (Dec 19, 1991). The United States, too, may see some form of drug price controls in the near future. See notes 23, 25 and 27.

245 See the following three articles in Wroe Anderson, Vern Terpsta and Stanley J. Shapiro, eds, Patents and Progress: The Sources and Impact of Advancing Technology (Richard D. Irwin, 1965). The first, George E. Frost, Patent Rights and the Stimulation of Technical Change, at 61, emphasizes that society grants the exclusivity to the inventor for the benefit of society. The second article describes the policy behind patents in the United States as being the same as the British policy—patents are issued "for the good of the realm." Emilio Q. Daddario, Legislative Problems in the Field of Patents and Patent Policy at 87. W. Halder Fisher, in A Note on the Meaning of Patents 99 at 100 states that "the whole purpose of a patent was, is and must be to convey to a subject (i.e., a private party) a restricted version of a right already possessed by the sovereign (government)." In the United States, "Constitutional Convention realized the need for fostering inventiveness for the economic well-being of the future nation and decided that Congress should have the power and the duty to promote the progress of science and the arts by securing to inventors and authors exclusive (for a period) rights to their own works." Id at 101. All of the authors refer to the U.S. Constitution: "The Congress shall have the power to promote the progress of science and useful arts, by securing for a limited time to authors and inventors the exclusive right to their respective writings and discoveries." US Const., Art I, § 8, cl 8.

246 See O'Reilly, 124 Fortune 48 (cited in note 23).
Section 337 or the coercive use of Section 301. Although both of these international trade mechanisms have been promoted as tools for the liberalization of world trade,\textsuperscript{247} they function more like protective devices for the promotion of U.S. industries over foreign.\textsuperscript{248}

While Section 301 can conceivably be used to retaliate against countries that discriminate against the United States, and thus is not as clearly protectionist as, say, import tariffs or quotas designed to protect U.S. industries against unsubsidized foreign competitors, it is not in fact being used for that purpose, since Thailand has not discriminated against the United States with regard to pharmaceutical patents. Thai Patent Act affords \textit{no} drug manufacturer patent protection, whether U.S., British, French, or Thai. Thailand's lack of patent protection may allow Thai firms to copy drugs patented in other countries, but it does not prevent brand-name or generic U.S. firms from entering the Thai market and competing with Thai companies; thus the omission is not even an "infant industry" shield. It simply does not grant those firms a monopoly in Thailand. Yet the United States has brought its demands into the Uruguay Round of the GATT, claiming that Thailand treats U.S. drug companies unfairly and is distorting trade with its backward laws.\textsuperscript{249}

Nor should drug exports from Thailand to the United States that infringe U.S. patents be used as a pretext to threaten Thailand with Section 301. The PMA and ITC have proper recourse in U.S. courts. Such infringements can also be handled by means of a Section 337 hearing; this should not be conducted with rules that would reduce the hearing to an ex parte injunction by the Commissioner on behalf of the complainant drug


\textsuperscript{249} Compare the supposed inequity of § 9 of Thailand's Patent Act with U.S. initiatives like the Farm Bill of 1985, which was intended to expand "U.S. agricultural exports, including rice, on the world market through increased competitiveness brought about by price subsidization." \textit{Thailand copes with effects of U.S. Farm Act}, \textit{5 Thailand Foreign Affairs Newsletter} 1 (1986). Because rice is Thailand's "foremost economic crop," the Farm Bill was a considerable blow for Thailand's rice export industry. \textit{Id}. The Newsletter also states that "[t]he U.S. action in massively subsidizing its rice exports not only contradicts the purpose and objective of GATT, but contradicts the oft repeated U.S. ideal of free and fair trade practice." \textit{Id} at 2. Thailand has considerable protective devices of its own (see C. Goldstein, \textit{Out of Service}, \textit{Far Eastern Economic Review} 58 (Aug 16, 1990)), but it did not have rice subsidies in 1986, and the U.S. description of its patent law as discriminatory and distorting is inaccurate.
company, however.

The United States government has managed to avoid the protectionist label by turning attention to the lack of patent protection in Thailand and other developing countries, charging that "inadequate" intellectual property protection is a protectionist trade distortion.\(^\text{250}\) Rather than appear as the neighborhood bully, forcing less economically powerful countries to adopt laws favorable to its interests,\(^\text{251}\) the United States has sought to characterize those countries as trade offenders to be dealt with in the GATT negotiations. The United States has conducted itself in GATT, however, in the same manner as in its bilateral dealings with Thailand and other countries. While the United States has made legitimate trade concessions in the GATT, many of its demands are based on the same strategy the United States has employed in its bilateral talks with Thailand--agree to what we want and we will amend Section 337 and won't use Section 301; fail to do so, and Section 301 will be applied.

IV. CONCLUSION

The tactics the United States chose in negotiating patent protection for pharmaceuticals in Thailand are inappropriate and potentially damaging to U.S. interests. Declining profits and the threat of price controls in the United

\(^{250}\) It is somewhat unclear what is meant by "trade distortion." In Thailand's case, it is clear that the lack of patent protection is not discriminatory--no one, regardless of country of origin, can obtain a patent for a drug there. Nor is it a barrier--U.S. drug manufacturers can export their products to Thailand just as any other country. What they can't do is prevent anyone else from selling the same type of drug in Thailand. This may be distortive in the way that differing antitrust laws between trading countries can be distortive, which is why bilateral arrangements and free trade agreements like the North American Free Trade Agreement often provide for the coordination of such regulatory activity and for harmonization of the law. See the North American Free Trade Agreement (NAFTA), part 5, ch 15, art 1501; and George N. Addy, *International Coordination of Competition Policies* (Paper delivered to the HWWA-Institut fur Wirtschaftsforschung-Hamburg, Hamburg, October 9–11, 1991) (Bureau of Competition Policy, Canada, 1991). Free trade agreements also often include provisions on intellectual property law; in the NAFTA, see part 6. That does not make them an obvious subject of the GATT, however; unless, that is, every aspect of national economic regulation among GATT member nations should be under the GATT. Nor does it justify unilateral trade sanctions designed to coerce other nations into adopting the same patent laws as the United States.

\(^{251}\) The United States has not succeeded in eluding this label within Southeast Asia. See Editorial, *No such thing as bilateral free trade*, Asiaweek 30 (Oct 30, 1992) (noting that "Washington's bluster about free trade is a sideshow. Its sudden enthusiasm for 'bilateral free trade'—just when GATT is stirring again—is as much evidence as any trader needs that what it really wants is 'managed trade'. If it's bilateral, it can't be free, and Asians should have nothing to do with it."). This editorial, issuing from Hong Kong, suggests that the United States has done significant harm to its image as the champion of free trade and free trade discussions. See also *Free trade's fading champion*, The Economist 65 (Apr 11, 1992).
States have prompted members of the PMA to pressure the United States government to push for patent protection for drugs in Thailand and other developing countries. The United States government has adopted the PMA's position on patents, streamlined Section 337, strengthened Section 301 and used the threat of unilateral sanctions under the GSP or Section 301 to coerce the Thai government into amending the Patent Act to provide patent protection for drugs, despite strong opposition in Thailand to the amendments. The PMA, moreover, seems confident in its position, and with its political clout the process of pressuring Thailand is likely to continue, particularly given the PMA's disapproval of the GATT agreement.252

There are several reasons why the U.S. position and tactics are unreasonable. Thailand is not yet ready for drug patents; in any event, it should be Thailand's decision when the country will be ready to protect new drugs. The United States' coercive tactics in its bilateral negotiations violate the principle of trade, because coercion is not an exchange. Moreover, the United States' labeling of Thailand a violator of international standards of moral propriety is unfounded. The U.S. position, far from being one of trade liberalization, is actually a product of protectionist sentiment in the U.S. Congress.

In positing that the U.S. tactics in bilateral and multilateral trade negotiations are misguided and will damage both U.S. and Thai long-term interests, it is my hope to bring attention to the dangers in such strong-arm tactics and persuade the commentators and United States government to approach the matter of developing patent laws in Thailand with greater sensitivity and foresight. Regrettably, the United States government position seems to be that the benefits from its tactics will far outweigh any harm. While predictions in that regard are necessarily speculative, this analysis indicates that the long-term consequences of such tactics may well be a deterioration of amicable diplomatic relations between the two countries, with Thailand trying to strengthen its ties with other nations in order to rely less on trade with the United States. Further, as the ASEAN Free Trade Area develops (AFTA) and grows stronger, the United States may be facing an antagonistic trading bloc in South East Asia, one that is reluctant to enter into trade negotiations with the country that they view as a bully.

Given its success with Section 301 and its other unilateral trade sanctions, the United States government and special interests are likely to

continue to use them to gain an advantage in the turbulent international trade climate. Although a GATT intellectual property treaty, and therefore any international treaty, seems in jeopardy at the time of this writing,\textsuperscript{253} one can still argue that problems arising in connection with the trade–related aspects of intellectual property rights and the developing countries should be resolved through WIPO and a new set of Conventions. A multilateral treaty designed to take effect in progressive stages, as increases in the level of development and preparedness of the country warrant, would be a more appropriate and, in the long run, effective means of achieving the desired results. Each country could sign the next stage when it felt ready, via a special world intellectual property tribunal overseen by WIPO.\textsuperscript{254}

Meanwhile, GATT should remain the appropriate forum for intellectual property issues to the extent that a country's intellectual property laws genuinely discriminate against foreign nationals. GATT guidelines outlining potentially distorting effects of intellectual property protection would help countries avoid TRIPs\textsuperscript{255} pitfalls. Finally, true bilateral negotiations would allow countries to work out specific intellectual property problems or disputes. Unfortunately, such proposals as this have, for the most part, been rejected by the United States, the European Community and Japan. The climate of world trade has become confrontational in the past decade.

There is more than one way to look at the issue of drug patents. A fair, reasoned debate about this and other intellectual property issues is what is needed—dialogue, not demands; negotiation, not extortion. One can only hope that such debate has not become obsolete in the context of intellectual property protection and international trade.

\textsuperscript{253} Id.

\textsuperscript{254} Some commentators have argued that economic development occurs in stages. At early stages, copying of inventions and ideas is necessary to foster development. The more advanced the economy becomes, the less copying is required. \textit{See Caplan, Counterfeiting Asians Under Siege}, Asian Bus 16, 17 (May 1988). The stages of a treaty could follow the five levels of protection defined in Rapp and Rozek, 24:5 J World Trade 75 (cited in note 169).

\textsuperscript{255} "Trade–related aspects of intellectual property rights."