Explaining Different Enforcement Rates of Intellectual Property Protection in the United States, Taiwan, and the People's Republic of China

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In 1994, the international community began an effort to harmonize intellectual property regulations through the Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS), which requires member states to fulfill minimum requirements for intellectual property (IP) protection.[1] Since then, member states have achieved a limited uniformity in the regulation of IP rights. However, observations over the past ten years show that enforcement rates of IP rights still vary from country to country.

According to the Third Annual BSA & IDC Global Software Piracy Study*, the piracy rates in the United States, Taiwan, and the People's Republic of China were 21%, 43%, and 86%, respectively.[2] This Article will discuss the reasons for the vast differences in piracy rates among these three countries, and provide an explanation for variances in the levels of protection of IP rights.*

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1. World Trade Org., Overview of the TRIPS Agreement, http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm (last visited Oct. 22, 2007).

2. *See* BSA & IDC, THIRD ANNUAL BSA & IDC GLOBAL SOFTWARE PIRACY STUDY 4 (May 2006), *available at* http://www.bsa.org/globalstudy/upload/2005%20Piracy%20Study%20-%20Official%20Version.pdf [hereinafter BSA STUDY]. The BSA STUDY is not without its critics. It has been criticized as unscientific, and the results are believed by some to dramatically overstate the amount of piracy that actually takes place. *See, e.g.*, *BSA or Just BS?; Software Piracy: Dodgy Software Piracy Data*, THE ECONOMIST, May 21, 2005, at 78 ("The association's figures rely on sample data that may not be representative, assumptions about the average amount of software on PCs and, for some countries, guesses rather than hard data. Moreover, the figures are presented in an exaggerated way by the BSA and International Data Corporation (IDC), a research firm that conducts the study."). Rather than presenting the BSA STUDY as simple fact, this Article uses its results as a jumping off point for an analysis of factors affecting the levels of IP protection among the United States, China, and Taiwan. This Article does not take a position on whether the piracy levels in the BSA STUDY represent actual losses of revenue for software vendors.

I. INTRODUCTION

A. Purpose and Question

IP protection has long been an important issue in the international trade regime because effective IP protection allows investors to recoup

expenditures on research and development.[3] Systematic and continuous IP protection attracts more investment and stimulates economic development.[4] In order to continue investing in research and development for new technologies, IP owners need assurances that their valuable property will be secured by effective protection measures. However, due to the territorial limits of IP laws, efforts to enforce IP rights are made and reviewed on a country-by-country basis.[5]

The effectiveness of IP protection and the existence of adequate remedies for violations of IP rights are important issues for IP owners. Since 1994, members of TRIPS have worked to harmonize IP regulations, requiring each member state to fulfill a minimum requirement for the protection of IP rights. As a result, TRIPS member countries have achieved greater uniformity over the regulation of IP rights. However, observations over the past ten years show that the enforcement rate of IP rights still varies greatly from country to country.

According to the BSA Study, the piracy rates in the United States, Taiwan, and the People's Republic of China were 21%, 43%, and 86%, respectively.[6] This Article will attempt to provide reasons for the variances in the level of protection of IP rights in the United States, Taiwan, and the People's Republic of China despite the existence of well-defined and increasingly aligned IP protection regimes.

One of the more plausible explanations is the territorial limitation on each country's IP regime. There is no multinational enforcement body for IP rights, and violations are handled by the sovereign enforcement mechanisms of each country. Differing IP regulations and sanction levels may explain some of the variances in enforcement of IP rights. However, despite systematic efforts through international negotiation and amendments to local IP regulatory regimes in recent

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3. *See* World Trade Org., Understanding the WTO—Intellectual Property: Protection and Enforcement, http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm (last visited Oct. 22, 2007).

4. *Id.*

5. Domestic laws govern the enforcement of intellectual property rights. Territoriality must be reviewed and discussed separately for patent law, copyright law, and trademark law. For example, article 5(3) of the Berne Convention for the Protection of Literary and Artistic Works governs domestic copyright law. *See* PAUL GOLDSTEIN, INTERNATIONAL INTELLECTUAL PROPERTY LAW 55 (2001). In other words, the law of the country in which the protection is claimed governs exclusively the protection of copyright.

6. *See* BSA STUDY, *supra* note 2, at 4. The BSA STUDY's methodology and definition of "piracy rate" is as follows: (1) The difference between software applications installed (demand) and software applications legally shipped (supply) equals the estimate of software applications pirated, and (2) the piracy rate was defined as the amount of software pirated as a percentage of total software installed in each country. *Id.* at 18.

years, differences persist.[7] Thus, IP territoriality is not a complete explanation.

Another possible explanation for the variance in IP enforcement levels is differing cultural attitudes toward IP. Professor William Alford addressed this issue by proposing a cultural factor in ancient China, which could explain the high piracy rate in Chinese society.[8] However, the peoples of Taiwan and the People's Republic of China share similar attitudes toward piracy that are derived from ancient China, which undermines the theory that cultural attitudes toward IP are the sole or even primary cause of the high variance in IP enforcement rates.

This Article will examine the enforcement regimes of the United States, Taiwan, and the People's Republic of China by analyzing multiple factors that might affect IP protection levels and enforcement rates. These factors will be examined in the context of the enforcement regimes of each country leading to a determination as to which factor indeed most affects IP enforcement. To construct a consistent model that can explain IP protection levels, this Article will also draw conclusions regarding the importance of each factor. Furthermore, this Article will show how each factor affects enforcement rates by examining each country's IP regulatory framework in detail.

B. Framework

This Article will first examine the levels of IP protection in the United States, Taiwan, and the People's Republic of China. At first glance, IP protection rates seem to result directly from differing domestic IP regulations. If so, this problem could be theoretically resolved by unilaterally amending domestic IP regulations.[9] However, merely amending domestic IP regulations has not drastically improved enforcement rates in certain countries with high piracy rates. Therefore, we must look more closely at how IP regulations are put into practice in

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7. *Id.* at 10.

8. *See generally* WILLIAM P. ALFORD, TO STEAL A BOOK IS AN ELEGANT OFFENSE—INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION (1995). Professor Alford also recognizes the limitations of subjecting cultural factors to rigorous analysis. "The recognition that cultural factors . . . are by their very nature less conducive to 'hard' proof than their economic counterparts is no excuse for being conclusory. Just as economically deterministic analyses run the risk of being one dimensional, so do approaches rooted in portrayals of culture as essentially impervious to change. . . ." *Id.* at 6.

9. Both Taiwan and the People's Republic of China have made great efforts to amend and improve domestic IP regulations in the past ten years. Apparently, it has not effectively resolved the problem of low enforcement rates by merely changing intellectual property regulations. Therefore, it seems that these countries have to do something more than amend regulations to raise the enforcement rate. *See infra* Parts IV-V.

each country, and look beyond the literal regulatory texts to find a more satisfying rationale for the data.

Since the enforcement environment of IP protection is affected by multiple factors, this Article will determine how these factors affect the level of IP protection in each country. An analysis of these factors might provide a framework for domestic IP regulations that are enforced in a more smooth, efficient, and consistent manner, thus resulting in greater levels of IP protection.

C. Roadmap

Part I will briefly introduce the empirical statistics of different levels of IP protection among the United States, Taiwan, and the People's Republic of China. Part II will construct a model for IP protection and conduct an analysis of each factor affecting each country's IP regime. Using the model developed in Part II, Parts III, IV, and V of this Article will examine the IP protection regimes in the United States, Taiwan, and the People's Republic of China, respectively, and will describe the differences in enforcement rates among the three countries. Part VI will explain the variances in the level of IP protection in the United States, Taiwan, and the People's Republic of China and will weigh each of the factors affecting IP protection levels.

II. MODEL FOR ANALYSIS OF IP PROTECTION: FACTORS AFFECTING THE LEVEL OF ENFORCEMENT OF IP RIGHTS

A. Cultural Attitudes Toward IP

Professor William Alford addressed this factor in great detail in *To Steal a Book Is an Elegant Offense—Intellectual Property Law in Chinese Civilization*.[10] Professor Alford concluded that the ancient Chinese lacked an appreciation of the Western concept of IP rights.[11] As a result of this special cultural formation, Chinese people have a different appreciation for the importance of protecting IP rights.[12] Professor Alford's analysis of Chinese cultural attitudes toward IP can be summarized as follows:

(1) It is necessary to disseminate knowledge by copying others' creative works in a society where a majority of its members are illiterate.

(2) Imitation is not a bad way to disseminate knowledge.

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10. *See* ALFORD, *supra* note 8, at 9-30.
11. *Id.*
12. *Id.*

(3) It is a great honor if someone copies your idea or creative work. It shows recognition of your work and achievement.[13]

As a result of these cultural attitudes, counterfeit goods were not generally considered culturally objectionable in ancient China.[14] Because people in both the People's Republic of China and Taiwan have to a certain extent inherited ancient Chinese cultural attitudes and values, Professor Alford has successfully pointed out a few reasons why IP enforcement rates are relatively low in these two countries.[15]

B. Factors Correlating to Socioeconomic Development

Socioeconomic development might also seriously and extensively affect IP protection levels. This Article will examine the following additional factors correlating to socioeconomic development:

1. Price Differential Between Genuine and Counterfeit Goods

The price differential between genuine and counterfeit products may impact piracy rates.[16] More precisely, the price differential between genuine and counterfeit goods encourages society to purchase counterfeit goods due to relatively lower prices.

In developing countries such as the People's Republic of China, price differentials between genuine and counterfeit goods are much greater than differentials found in developed countries such as the United States. For example, assume that a pair of genuine NIKE Air Jordan

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13. *Id.*

14. *Id.*

15. In the 1980s, Taiwan was a major supplier of counterfeit products worldwide, at which time it garnered the infamous alias "Piracy Kingdom." *See* United States Trade Representative, Fact Sheet on AIT-CCNAA Understanding Regarding Intellectual Property Protection in Taiwan (June 5, 1992). Beginning 1989, the USTR has listed Taiwan as a country on the Priority Watch list for Special 301 treatment and only recently downgraded Taiwan to the Watch list. *See* USTR, SPECIAL 301 REPORT 43 (2006), *available at* http://www.ustr.gov/assets/Document_Library/Reports_Publications/2006/2006_Special_301_Review/asset_upload_file473_9336.pdf. Under Special 301, the "USTR must identify those countries that deny adequate and effective protection for IPR or deny fair and equitable market access for persons that rely on [IP] protection." *Id.* at 15. The USTR created both a "Priority Watch" list and a "Watch" list to focus bilateral pressure concerning "problem areas." *Id.*

16. Warner Brothers' decision to lower the price of a genuine movie DVD in order to reduce incentives for counterfeit DVD sales is evidence of this factor. *See* Agence France-Presse, *Warner Bros To Sell Bargain DVDs in China*, CHANNEL NEWSASIA, Mar. 11, 2005, http://www.channelnewsasia.com/stories/afp_asiapacific_business/view/136851/1/.html. The original price of a DVD is around $18 in the U.S. market. A counterfeit DVD costs $1 on the Chinese market. The new competing price for a DVD with simplified functions is between US$2.70 to $3.40. *Id.* This narrows the price difference between the genuine and the counterfeit DVD from $17 to around $2.

sport shoes cost $100 in the United States and in the People's Republic of China. In contrast, a pair of counterfeit shoes might cost less than $5 in the People's Republic of China, while counterfeit shoes might cost around $50 in the United States. The price differential would be $95 ($100-$5) in the People's Republic of China, while it is $50 ($100-$50) in the United States.

Chinese citizens might have a higher incentive to purchase a pair of counterfeit NIKE shoes because they stand to "economize" $95, provided that the quality of genuine and counterfeit products is substantially similar.[17] Contrarily, people in the United States might have less incentive to purchase counterfeit NIKE shoes because purchasing counterfeit shoes only "economizes" $50 dollars.

People in the United States might prefer to pay $50 to purchase a pair of genuine shoes with a less expensive brand name, which would guarantee both the quality and source of the product. Price differentials between genuine and counterfeit goods can affect people's purchasing decisions. If the price differential between a genuine and a counterfeit product is significant, it is possible that IP enforcement rates would be lower due to the strong demand for cheaper counterfeit products, thus inducing greedy manufacturers to infringe on the IP rights of others.[18]

The reasons for greater price differentials between genuine and counterfeit goods in developing countries and developed countries are complex. Labor, materials, and management costs, as well as other manufacturing costs, are cheaper in developing countries than they are in developed countries.[19] What is noteworthy is the interesting phenomenon that occurs when, due to large differentials, people from developed countries choose not to purchase counterfeit products in their home

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17. The quality of most counterfeit products is generally inferior to genuine ones. USTR, *supra* note 15, at 5. However, people still might prefer to purchase the counterfeits, because of the implied value of the "trademark," even though it is not genuine. They are able to mislead their friends into believing that they bought a genuine product at a cheaper price.

18. For example, huge illegal profits might encourage people to traffic in counterfeit products. To illustrate this, the People's Republic of China and U.S. Immigration and Customs Enforcement recently announced the case of two U.S. citizens, Randolph Hobson Guthrie and Abram Cody Thrush, who allegedly sold counterfeit DVDs from the People's Republic of China to other foreign nations via the Internet. *See* Zou Huilin, *US Nationals Arrested for DVD Piracy*, CHINA DAILY, July 31, 2004, at 1, *available at* http://www.chinadaily.com.cn/english/doc/2004-07/31/content_353463.htm. They received prison sentences of one to three years. *Id.*

19. This also explains why an increasing number of manufacturers are moving their factories to developing countries, such as the People's Republic of China. *See* Andrew Fletcher, *Cost Drives Migration of Electronics Manufacturing*, ELECTRONICS DESIGN & STRATEGY NEWS, June 22, 2006, *available at* http://www.edn.com/article/CA6344029.html?industryid=47479.

countries but do actually prefer to purchase counterfeit products from developing countries.[20]

2. Income Levels

An individual's income level affects IP protection rates because different living standards change the value perception individuals have toward counterfeit products. People with higher income standards can more readily afford higher prices for genuine goods than those with lower income standards. This may explain why the piracy rate among those people with higher income levels is considerably lower than that of people at lower income levels.

In a developing country, where the population has lower income standards than developed nations, people prefer to purchase and use counterfeit products for several reasons:

(a) They cannot afford the high price of genuine goods. When they allocate their limited income, they might prefer to spend based upon necessity, rather than quality or brand name. In other words, they rely heavily upon cheaper products, even though they might be counterfeit.

(b) They do not care much about the quality of the products. As long as they pay less, they accept the lower quality associated with those products.

(c) They do not know or appreciate the intrinsic value of IP. For most, a cheap price is the most significant factor affecting purchasing decisions.

(d) In general, developing countries are largely IP consumers rather than IP producers. IP owners from developed countries tend to set higher prices for their products in order to recoup their research and development expenses. However, people in developing countries generally cannot afford these prices.

In other words, income levels change attitudes toward counterfeit products. As in the previous example, whereas a person from a developed country can afford $100 for genuine NIKE sport shoes. Someone from a developing country cannot afford to pay that much for a pair of shoes, because those shoes can represent one month's salary or

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20. For example, U.S. tourists may purchase counterfeit goods in Beijing or Hong Kong due to the perceived low price but are reluctant to purchase more expensive counterfeit goods in the United States. *See* Mike Hornbrook, *Piracy in China Isn't Just DVDs and Designer Knockoffs. It's Epidemic and It Can Be Deadly*, CBC NEWS, Apr. 10, 2006, http://www.cbc.ca/news/reportsfromabroad/hornbrook/20060410.html.

more.[21] However, purchasing a counterfeit pair of shoes, although illegal, enables the person from the developing country to carry on with his daily activities without suffering the unnecessary financial burdens caused by expensive shoes.

Due to high demand for counterfeit products, the enforcement rate in developing countries is far lower than that of the developed countries, despite efforts to improve enforcement or to amend IP regulations.

3. Market Freedom

The degree of market freedom in a country will change the attitudes of both consumers and manufacturers and will thus affect the level of IP protection. In an open market, consumers might prefer strict IP protection in order to encourage greater freedom of choice of available goods. The greater demand for IP products and services may be higher in a more open market and may increase the value of IP assets. In a more open market, local governments are also more willing to change lax IP regulations when faced with international pressure. Insufficient IP protection discourages the creation or importation of IP-related goods and services and results in fewer products for sale on the market.[22]

In addition, competition among products is fiercer and requires greater protection under IP laws. Although an open market can be construed as the result of a higher level of protection, it could still be a good indicator of the level of IP protection in a country.

Market freedom, along with income levels and the price differential between genuine and counterfeit products, are factors that affect IP protection in developing countries.

4. Awareness of IP Law

Awareness of IP law in less developed economies is not as extensive as it is in developed economies. The following issues contribute to an analysis of this factor.

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21. For example, the average annual salary for the People's Republic of China is from $801 to $1,440. *See Chinese Salary and Real Estate Survey Results*, ASIA PAC. MGMT. FORUM, Jan. 28, 1999, http://www.apmforum.com/news/apmn230.htm.

22. *See* KEITH E. MASKUS, INTELLECTUAL PROPERTY RIGHTS IN GLOBAL ECONOMICS 105-06 (2000), *available at* http://bookstore.petersoninstitute.org/book-store/99.html ("The effect on trade openness is intriguing, though difficult to interpret. It could be that citizens are willing to provide more protection in open economies, because [IP Rights] help preserve greater consumer choice. It could also be that a more open economy finds that trade interacts positively with innovative effort, raising the demand for intellectual property protection. . . . Finally, it may be that more open economies could be more susceptible to American pressure for reform.").

a. Awareness of IP Law Among the General Public

For consumers in a developing country, it is more important to economize by purchasing cheaper goods than to own expensive genuine products. Sometimes consumers make no effort to determine whether the product purchased is genuine or counterfeit because they are more concerned about economizing than recognizing the legality of the source of a product. Consumers may not be capable of distinguishing the sources of the products due to their limited knowledge of IP law. Price does not always distinguish the genuine from the counterfeit. Nevertheless, people in developing countries are often simply unaware of or insensitive to the consequences of using or purchasing infringing products.

In some cases, manufacturers and sellers of the infringing products take their own risks by intentionally committing infringement in order to earn greater profits from illegitimate products. In less developed economies, many manufacturers and sellers are unaware of the illegality of their conduct until they are caught and charged. Even if they know that infringement is illegal, they may still decide to disregard IP regulations.

b. Awareness of IP by Law Enforcement

The effectiveness of IP enforcement also depends highly upon awareness of IP by law enforcement, and is affected by the attitudes of government officials and judges.

In deciding whether to grant a patent owner's request for border control measures to prevent infringing goods from entering a country, customs officers may behave conservatively and request patent validity documentation and infringement evidence from the patent owner in order to avoid administrative liability for wrongful enforcement. Customs officials do not want to be accused of lacking the requisite technical background to make preliminary infringement determinations. However, requiring extensive documentary proof of the validity of a patent, and of the existence of infringement reduces the effectiveness of border measures and turns what should be routine administrative measures into lengthy pseudoformal judicial proceedings.

Some judges may decide not to expedite a complex patent infringement case to trial because of a lack of sufficient technical background and experience with such cases and a lack of sufficient

knowledge of IP law.[23] Therefore, such judges may be unwilling to try patent infringement cases and may stall the proceedings. This type of situation poses an obviously serious problem to the enforcement of a patent owner's legitimate rights.

Lack of awareness of IP law likely diminishes protection, because the average person is unaware that it is illegal to use counterfeit goods, and law enforcement cannot stop infringement in a timely manner. This helps explain why piracy rates are usually higher in developing economies, where the majority of the people lack awareness of IP law.[24]

If people do not have sufficient knowledge of IP rights, it is difficult to prohibit them from infringing IP rights. For example, in "a number of so-called socialist countries, the term of patents and the scope of patent rights were little more than symbolic" because citizens had little awareness of the basics tenets of patent law.[25]

5. Literacy Rates

The level of formal education in a population is an important factor in determining the level of IP protection for the following reasons:

(a) A lack of basic education could prevent someone from understanding the very concept of IP rights. Similarly, illiterate persons may not easily understand new regulations. Because IP rights are created by domestic regulations, the extent to which such regulations are enforced depends upon the extent to which the people have at least a minimal knowledge of the law and the ability to understand and follow those laws.

(b) In less developed economies, a lack of general education might reduce the effectiveness of judicial remedies for IP infringement and thus result in lower enforcement rates.

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23. In a patent infringement case, the defendant will typically assert the invalidity of the patent as the chief defense. In many jurisdictions, unlike in the United States, patent validity and patent infringement issues are decided in separate proceedings. MICHAEL H. JESTER, PATENT AND TRADEMARKS PLAIN & SIMPLE 118-20 (2004). Judges who lack knowledge of IP law may choose to stay the proceedings of the patent infringement case regardless of the credibility of the defendant's evidence of patent invalidity. In cases where the defendant's patent invalidity defense is without merit, the patent owner might suffer serious damage due to inefficient judicial remedies.

24. *See* BSA STUDY, *supra* note 2, at 11 (stressing the importance of increasing public education and awareness of IP laws).

25. *See* PAUL GOLDSTEIN, INTERNATIONAL INTELLECTUAL PROPERTY LAW 302 (2001); *see also* Joseph Straus, *Implications of the TRIPs Agreement in the Field of Patent Law, from GATT to TRIPs*, *in* THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS 160, 170-75 (1996).

(c) It is difficult for illiterate people to grasp the legal concepts behind IP rights. Illiterate people may require sufficient public education to understand the importance of protecting IP rights.

6. Development of a Legal Culture

Economic growth is a good stimulus for the development of a strong legal culture. A weak legal culture may lead to insufficient remedies for IP infringement and may result in a barrier to the enforcement of IP rights.

In countries where the rule of law is less developed, trust in judicial decisions is relatively low. Thus, people prefer not to resort to judicial proceedings to resolve their disputes. This attitude reduces the strength of IP protections because IP rights may appear to some to have been created artificially by new laws, rather than being grounded in longstanding cultural traditions. Some IP regulations seem designed to be most effectively enforced through judicial proceedings rather than through any inherent respect for legal principles.

Furthermore, in a less-developed legal environment, research into and development of IP legal theories will be comparatively less sophisticated than in a well-developed legal environment. Thus, there will be more defects and barriers to IP enforcement.

A weak legal environment for IP protection not only discourages people from investing in and creating new IP assets, but it also reduces the potential force of IP protection.

7. Political Freedom

Political freedom is a key factor that enables a developing country to develop economically. Increased political freedom can lead to less governmental interference in domestic economics, can reduce government complacency with and complicity toward the piracy industry, and may thus lead to greater respect for strong IP rights.

IP protection correlates highly with international trade issues.[26] The degree of political freedom in a society influences the exercise of market power. Increased political freedom strengthens investment in research and development into the production of IP assets. In a highly uncertain or unstable political system, businesses might choose not to invest as much in IP research and development out of fear of ineffective and inefficient enforcement, preferring to engage in less risky trade. A

26. MASKUS, *supra*, note 22, at 110-19.

commitment to long term political freedom and political reforms may help improve IP protection.

8. Rule of Law

Government efficiency, administrative effectiveness, and political transparency may also affect IP protection levels. From the point of view of the executive branch, governmental attitudes toward IP protection affect the protection levels. The extent of the impact of governmental attitudes toward IP can be measured by:

(a) The extent to which the executive branch works toward reducing barriers to IP enforcement;

(b) Whether the executive branch provides expedited and effective border measures free from corrupt bureaucracy;

(c) Whether the executive branch grants compulsory licenses liberally without imposing strict bureaucratic requirements; and

(d) Whether the executive branch proposes an IP protection policy in accordance with international standards.

The level of efficiency and transparency of IP enforcement measures can also be observed in judicial proceedings. Reluctance in the judicial branch to avoid resolving controversial and complex IP disputes can diminish IP protection levels. In jurisdictions where judges lack sufficient experience to properly try IP disputes, judges may legitimately prefer to defer entire proceedings to other authorities. Such judicial reluctance dampens the incentive for IP owners to seek judicial enforcement and thus diminishes IP protection levels.

In response to international pressure, governments in developing economies typically commit to improving protection measures by promising to amend IP regulations. However, if the legislative branch chooses not to cooperate, such promises are in vain. One example of evolving governmental attitudes toward IP in developing countries is a recent amendment to India's Patent Act, which requires generic drug manufacturers to pay license fees.[27] Without the cooperation of the legislative branch, commitments to IP reform cannot be achieved.

9. IP Productivity Rates

IP protection levels can also be measured in relation to a country's rate of IP productivity. If foreign companies possess more IP assets than

27. *See* Donald G. McNeil Jr., *India Alters Law on Drug Patents*, N.Y. TIMES, Mar. 24, 2005, at A1.

domestic companies, local governments might choose not to provide effective protection to foreign companies in order to favor local industries. Local governments have more incentive to protect IP rights when more—and higher quality—IP assets are produced domestically. In countries where local industries have control over a portion of IP assets, local governments have an interest in protecting IP rights within their borders because such industries may attract greater foreign and domestic investment in research and development.

C. International Political Pressure

Taiwan and the People's Republic of China have both faced increasing pressure to provide more effective IP protection mechanisms in recent years, primarily from the U.S government and from the World Trade Organization (WTO). However, both countries differ in their approaches to and prioritization of IP protection.

For example, in the United States, the International Intellectual Property Alliance (IIPA) "works closely with the U.S. Trade Representative in the annual 'Special 301' reviews on whether acts, policies or practices of any foreign country deny adequate and effective protection of [IP] rights and fair and equitable market access for U.S. persons relying upon [IP] protection."[28] The United States Trade Representative (USTR) negotiates with countries regarding the status of IP protection policy based on recommendations in the IIPA's annual country reports.[29] Disputes regarding the nature and extent of IP protection are considered a trade issue by WTO members, and can be brought before the WTO's Dispute Settlement Body.[30] Under this mechanism, a country that violates another member's IP rights might be required to improve IP protection measures within a specified time period or face trade sanctions.[31]

III. IP PROTECTION IN THE UNITED STATES

A. Factor Analysis in the United States

Following the model constructed in Part II, three major factors affect IP protection levels in any given country. This section reviews

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28. *See* Int'l Intellectual Prop. Alliance, About the IIPA 1 (Sept. 2007), *available at* http://www.iipa.com/pdf/IIPAFactSheet092007.pdf.

29. *Id.*

30. *See* World Trade Org., Understanding the WTO: Settling Disputes, http://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm (last visited Oct. 22, 2007).

31. *Id.*

each factor in the United States in order to provide a basis for comparison with other IP regimes.

Historically, no special cultural concerns regarding IP protection like the traditional Chinese cultural attitudes described by Professor Alford are present in the United States. While the ancient Chinese regarded copying as a form of flattery, a different tradition developed in the United States, inherited largely from English common law. For example, U.S. patent law protections stem from a belief that rewarding individual inventors is the best way to encourage the development and dissemination of beneficial new technologies for the betterment of society.[32]

Since World War II, the United States has become one of the largest and most important markets in the world. Cost of living standards and manufacturing costs are relatively higher in the United States than in most developing countries. As a result, price differentials between genuine and counterfeit goods are far less than those in developing countries.

People with higher income levels can afford the high prices of genuine goods. Currently, the United States has the highest Gross Domestic Product (GDP) per capita and ranks among the richest countries in the world, which may contribute to lower piracy rates in the United States.[33]

Private individuals and businesses in the United States "enjoy greater flexibility than their counterparts in Western Europe and Japan in decisions to expand capital plant, to lay off surplus workers, and to develop new products."[34]

U.S. IP owners are the most aggressive enforcers of IP rights in the world. Knowledge of IP laws in the general public in the United States is relatively higher than in most countries in the world. Court decisions and other important information regarding IP protections are well discussed by and disseminated to U.S. IP stakeholders.

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32. The famous provision in Article I, Section 8, Clause 8, of the United States Constitution authorizes Congress "[t]o promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8; *see* ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 1-13 (3d ed. 2002).

33. The United States has the largest and most powerful economy in the world, with a per capita GDP of $42,000. *See* Central Intelligence Agency (CIA), The World Factbook—United States, https://www.cia.gov/cia/publications/factbook/geos/us.html (last visited Oct. 22, 2007).

34. *Id.*

Awareness of IP law on the part of law enforcement officials is relatively higher in the United States than in other countries.[35] Most IP litigation in the United States is subject to federal jurisdiction. A party dissatisfied with a court decision regarding patent infringement must appeal to the United States Court of Appeals for the Federal Circuit, which has exclusive original jurisdiction over patent appeals.[36]

The literacy rate in the United States is 99% as estimated in 2003, while the average literacy rate is 83% worldwide.[37]

The United States has developed its own common law system over the past two hundred years. The U.S. legal system possesses sufficient remedies against IP infringement and has even attracted foreign companies seeking its protections.[38]

The U.S. political system is considered one of the most free in the world. In its market-oriented economy, "private individuals and businesses make most of the decisions."[39] There is sufficient freedom to encourage investment in IP assets without undue governmental interference.

The United States is one of the most active IP producers in the world, and the executive branch has taken actions necessary to increase IP protection. The United States has also established important legal precedents regarding IP infringement cases, which provide a more predictable enforcement environment. The U.S. jury system might also be helpful in litigation of IP disputes. The United States Congress has actively and aggressively adopted various methods to enhance legal protections for IP rights.

According to the *Performance and Accountability Report for Fiscal Year 2005* released by the United States Patent and Trademark Office (USPTO), U.S. applicants filed 225,152 patent applications with the

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35. For example, many foreign companies prefer to litigate IP cases in the United States rather than in their home countries. *See, e.g.*, Creative Tech., Ltd. v. Aztech System Pte, Ltd., 61 F.3d 696 (9th Cir. 1995) (holding that it was not improper for a U.S. district court to dismiss a copyright dispute between two foreign companies litigating on grounds of forum non conveniens, even though the dispute involved infringement allegedly occurring solely within U.S. borders, because foreign courts could adequately adjudicate American copyright law disputes).

36. 35 U.S.C. § 1295(a) (2000).

37. "Literacy" is defined as the ability of a person aged fifteen years and older to read and write. *See* CIA, *supra* note 33.

38. *See* case cited *supra* note 35 and accompanying text.

39. *See* CIA, *supra* note 33.

USPTO in 2005.[40] The USPTO issued 85,238 patents to U.S. applicants in 2005.[41]

In comparison, according to the 2005 Annual Report released by the European Patent Office (EPO), 32,738 patent applications were filed with the EPO by U.S. applicants, which accounted for 25.44% of all patent applications filed with the EPO in 2005.[42] The EPO issued 13,007 patents to applicants from the United States, or 24.42% of all patents issued by the EPO in 2005.[43]

The United States is one of the most aggressive countries in pursuing IP protection around the world. With the authorization of Congress, the USTR regularly holds bilateral negotiations with foreign countries to discuss enforcement of IP rights in the target countries. Accordingly, the United States frequently pressures other countries to enforce U.S. IP interests.[44]

However, under the auspices of the WTO dispute settlement regime, other member countries seeking to improve U.S. enforcement of foreign IP rights have targeted the United States. The dispute over § 110(5) of the U.S. Copyright Act is a good example.[45] The European Community and its member states successfully lobbied the WTO to pressure the United States to amend its copyright laws regarding the broadcast of music by service and retail businesses that did not pay licensing fees to copyright owners.[46] Nonetheless, the United States still places more pressure on other countries to modify their IP policies than it receives, as is evidenced by the USTR's annual report.[47]

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40. UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO), PERFORMANCE AND ACCOUNTABILITY FOR FISCAL YEAR 2005, at 127 (2005), *available at* http://www.uspto.gov/web/offices/com/annual/2005/2005annualreport.pdf [hereinafter USPTO REPORT].

41. *Id.*

42. EUROPEAN PATENT OFFICE (EPO), ANNUAL REPORT 2005, at 77 (2005), *available at* http://documents.epo.org/projects/babylon/eponet.nsf/0/38f83172b8c41252c125726b004f6cc4/$FILE/Annual_Report_2005.pdf.

43. *Id.*

44. 19 U.S.C. § 2171 (2000).

45. WORLD TRADE ORG., REPORT OF THE PANEL, U.S. SECTION 110(5) OF THE U.S. COPYRIGHT ACT (June 15, 2000), *available at* http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds160_e.htm.

46. In conclusion, the WTO Panel decided that subparagraph (B) of section 110(5) of the U.S. Copyright Act did not meet the requirements of article 13 of the TRIPS Agreement and was thus inconsistent with articles 11*bis*(1)(iii) and 11(1)(ii) of the Berne Convention (1971) as incorporated into the TRIPS Agreement by article 9.1 of TRIPS. *Id.*

47. *See generally* USTR, *supra* note 15.

B. Current Enforcement Environment in the United States—The Patent Protection Example

The first patent law was introduced in the United States in 1790 and major patent law amendments were passed in 1836, 1861, 1952, 1994, and 1999.[48]

> Patents must by law be given "the attributes of personal property." The right to exclude others is the essence of the human right called "property." The right to exclude others from free use of an invention protected by a valid patent does not differ from the right to exclude others from free use of one's automobiles, crops, or other items of personal property.[49]

Although plaintiffs can receive compensation for past infringement of an invention, it is more important from a patent holder's point of view that the defendant stops infringing the patent.

35 U.S.C. § 283 provides the statutory authority for the grant of preliminary injunctions in patent suits.[50] "[T]he purpose of a preliminary injunction is to 'preserve that state of affairs existing immediately before the filing of the litigation.'"[51] If a preliminary injunction is not granted to enforce a valid patent, then the patentee only obtains money damages for infringement that occurs during the litigation, and "infringers . . . become compulsory licensees for as long as the litigation lasts."[52]

Judicial grant or denial of a preliminary injunction is within the discretion of the federal district courts, but such preliminary injunctions are extraordinary remedies and are granted only in rare circumstances.[53] A preliminary injunction may be granted only if all of the following four factors are present:

(a) There is a reasonable likelihood of success on the merits;

(b) The patent holder will suffer irreparable harm if preliminary relief is not granted;

(c) The balance of hardships tips in favor of the party seeking the injunction; and

(d) The impact of the injunction on the public sector does not outweigh the policy in favor of the injunction.[54]

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48. 9 DONALD S. CHISUM, CHISUM ON PATENTS apps. 9-25 (1997).

49. Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1158 n.5 (6th Cir. 1978) (quoting 35 U.S.C. § 261 (2000)).

50. GLENN W. RHODES, PATENT LAW HANDBOOK 265-66 (1999-2000).

51. Atlas Powder Co. v. Ireco Chems., 773 F.2d 1230, 1233 (Fed. Cir. 1985) (quoting Tanner Motor Livery, Ltd. v. Avis, Inc., 316 F.2d 804, 809 (9th Cir. 1963)).

52. MERGES & DUFFY, *supra* note 32, at 1040.

53. *Id.*

54. RHODES, *supra* note 50, at 266.

Before issuing a preliminary injunction, courts may also require plaintiffs to post security in the form of a bond.[55] The purpose of a bond is to gauge a plaintiff's willingness to pursue the litigation, and to ensure that the plaintiff will have the resources to pay the defendant's legal fees if the injunction is eventually found to be erroneous.[56]

Following a finding of infringement, a court "may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by the patent, on such terms as the court deems reasonable."[57] A permanent injunction frequently follows a trial and a decision on the merits for the patentee.[58] Plaintiffs might request a permanent injunction from the court in order to completely exclude a defendant's infringement.[59]

According to 35 U.S.C. § 284, a patentee is entitled to no less than a reasonable royalty on an infringer's sales in cases where the patent holder does not establish an entitlement to lost profits.[60] "The royalty may be based upon an established royalty, if there is one, or if not, upon the supposed result of hypothetical negotiations between the patentee and the infringer."[61] Reasonable royalties are calculated based upon the market conditions at the time infringement began.[62]

"To recover lost profits, the patentee must demonstrate that there was a reasonable probability that, 'but for' the infringement, the patentee would have made the infringer's sales. Lost profits must be established by evidence, and not based on speculation or optimism."[63]

According to 35 U.S.C. § 284(1), patentees are entitled to up to three times actual damages upon a finding of willful infringement.[64] According to 35 U.S.C. § 285, district courts may award reasonable attorneys' fees and costs to the prevailing party in "exceptional" cases.[65] This regulation is an exception to the American rule for awarding attorney's fees, which requires each party to pay its own.[66]

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55. *Id.*
56. MERGES & DUFFY, *supra* note 32, at 1042.
57. 35 U.S.C. § 283 (2000).
58. PAUL M. JANICKE, MODERN PATENT LITIGATION 11 (2d ed. 2006). *But see* eBay, Inc. v. MercExchange, L.L.C., 126 S. Ct. 1837, 1841 (2006) (holding that permanent injunctions are no longer automatic upon a finding of infringement but rather are subject to the equitable discretion of the district courts).
59. MARTIN J. ADELMAN ET AL., CASES AND MATERIALS ON PATENT LAW 1084 (2003).
60. 35 U.S.C. § 284.
61. RHODES, *supra* note 50, at 302-03.
62. *Id.* at 303.
63. *Id.* at 295.
64. 35 U.S.C. § 284(1).
65. *Id.* § 285.
66. *See American Rule*, BLACK'S LAW DICTIONARY 92 (8th ed. 2004).

35 U.S.C. § 287(a) requires patentees to provide notice to the public that a product is patented by marking the product with the word "patent" or the abbreviation "pat.," together with the patent number.[67]

> The marking statute helps to avoid innocent infringement, encourages patentees to give notice to the public that the article is patented, and aids the public in identifying whether the article is patented. In the event of a failure to mark, the patentee shall be barred from recovering damages for infringement.[68]

C. IP Protection in the United States: Current Enforcement Rates

According to the BSA Study, the rate of business software piracy in the United States was 21% in 2005, as compared with the worldwide average piracy rate of 35% that same year.[69] The North American region had the lowest piracy rate in the study.[70]

Although the current IP enforcement rate in the United States is generally good, several issues are still pending before the WTO panel. These issues involve specific IP policy concerns raised by other member states, but will not significantly alter U.S. IP protection mechanisms nor significantly diminish protection levels.[71]

IV. IP PROTECTION IN TAIWAN

A. IP Protection Analysis Model Applied to Taiwan

As suggested by Professor Alford, ancient Chinese cultural attitudes are not consistent with Western IP norms for the following reasons:

> First, imperial China did not develop a sustained indigenous counterpart to IP law, because of the character of Chinese political culture. Second, initial attempts to introduce European and American IP law to China at the turn of this century were unsuccessful because they failed to consider the relevance of such a model to China and instead presumed that foreign pressure would suffice to induce ready adoption of and widespread adherence to such laws. Third, in an unwitting reprise of the early twentieth century, current attempts to establish IP law, particularly on the Chinese mainland, have been deeply flawed in their failure to address the

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67. 35 U.S.C. § 287(a).
68. RHODES, *supra* note 50, at 295.
69. BSA STUDY, *supra* note 2, at 4.
70. *Id.* at 2.
71. *See, e.g.*, WTO, Dispute Settlement: U.S. Patents Code, http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds224_e.htm (last visited Nov. 14, 2007) (requesting that the United States explain how restrictions on assistance to small businesses under the Patents Code are consistent with TRIPS); WTO, *supra* note 45.

> difficulties of reconciling legal values, institutions, and forms generated in the West with the legacy of China's past and constraints imposed by its present circumstances.[72]

Because Taiwan shares many traditional cultural attitudes with the People's Republic of China, Professor Alford's arguments could explain why IP protection levels in Taiwan are far below those in the United States, even though the USTR has used Special 301 proceedings as a vehicle to apply pressure on Taiwan to enhance IP protections.[73]

As the standard of living in Taiwan has improved over the past ten years, manufacturing costs have soared. As a result, Taiwanese factories have migrated to the People's Republic of China.[74] As economic conditions have improved, the price differential between genuine and counterfeit goods has decreased in Taiwan.[75] However, the price differential between genuine and counterfeit goods remains greater in Taiwan than in the United States due to lower standards of living in Taiwan. This factor likely contributes to a higher piracy rate in Taiwan as compared with the United States.

The GDP in Taiwan is $23,400.[76] When compared to the United States per capita GDP of $37,800, this factor would predict a higher piracy rate in Taiwan.[77]

Compared with the free market policies of the United States, until recently Taiwan maintained a conservative approach to market openness in order to better protect domestic industries from foreign competition.[78] Taiwan's protectionist economic policies likely led to higher piracy rates because protectionism likely led to higher prices on foreign goods, making it more expensive to obtain genuine foreign goods, and increased the incentive for pirates to manufacture counterfeit goods.

Awareness of IP law among Taiwanese is increasing, but is still not widespread. Among the general public, Taiwanese government efforts to

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72. ALFORD, *supra* note 8, at 2.

73. In May, 1989, the USTR placed Taiwan on its "Priority Watch" list, but in 2005, the USTR upgraded Taiwan to the "Watch" list. *See* USTR, *supra* note 15, at 43.

74. *See* Bruce Einhorn et al., *Why Taiwan Matters*, BUSINESSWEEK, May 16, 2005, http://www.businessweek.com/magazine/content/05_20/b3933011.htm?chan=gb.

75. An interesting phenomenon is that many counterfeit goods formerly made in Taiwan now come from the People's Republic of China. USTR, *supra* note 15, at 20.

76. *See* CIA, The World Factbook—Report on Taiwan, https://www.cia.gov/cia/publications/factbook/geos/tw.html (last visited Oct. 22, 2007).

77. CIA, *supra* note 33.

78. *See* WTO, WORKING PARTY ON THE ACCESSION OF CHINESE TAIPEI, DRAFT REPORT § VI (Mar. 13, 1998), *available at* http://docsonline.wto.org/GEN_highLightParent.asp?qu=&doc=D%3A%2FDDFDOCUMENTS%2FT%2FWT%2FACCSPEC%2FTPKM2%2EDOC%2EHTM.

propagate the importance of IP protection has made a difference in respect for IP rights and in public awareness of IP. The Taiwanese government has created more IP courses in schools and universities and has established specialized IP authorities such as the Intellectual Property Office, which was created in 1998.[79] However, when compared to the awareness of IP in the United States, awareness of IP law among Taiwanese still lags behind that of Americans, which could explain a more tolerant attitude toward IP infringement in Taiwan.

Awareness of IP law among law enforcement officials in Taiwan has recently been enhanced by reforms to IP enforcement mechanisms. Previously, the Taiwanese government established specialized IP tribunals and assigned legal experts to handle IP infringement disputes. More recently, the government proposed an even more specialized Intellectual Property Court with IP specialist judges.[80] The Organic Act of the Intellectual Property Court of Taiwan was passed in September 2007, and is scheduled to begin hearing cases in the July of 2008.[81]

In comparison to the U.S. court system, the Taiwanese approach to IP litigation appears less sophisticated. In Taiwan, most judges lack technical backgrounds, and Taiwanese Civil Procedure lacks a discovery procedure comparable to the U.S. approach.[82] Taiwanese judges also prefer to rely upon outside experts when deliberating technology infringement disputes.

Although judges in the United States face similar difficulties handling complex technical disputes, U.S. judges possess the advantage of strong civil procedure laws that permit them to manage the trial process with greater confidence. In Taiwan, most judges prefer not to get involved in controversial technical debates and prefer instead to seek the opinion of outside experts, upon whom the judges completely rely. This somewhat reduces the predictability of Taiwanese court decisions and reduces confidence in the judicial system.[83]

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79. *See* Taiwan Intellectual Prop. Office, Ministry of Econ. Affairs, Republic of China, http://www.tipo.gov.tw/eng/about/introduction.pdf (last visited Oct. 22, 2007).

80. *See* Dan Nystedt, *Taiwan Gets Serious About Intellectual Property*, PCWORLD, Mar. 6, 2007, http://www.pcworld.com/article/id,129642c,legalissues/article.html.

81. *See* The Judicial Yuan of the Republic of China, Patent Administrative Litigation Council Established by the Judicial Yuan, http://jirs.judicial.gov.tw/GNNWS/engcontent.asp?id=8922&MuchInfo=1 (last visited Nov. 10. 2007).

82. *See generally* World Servs. Group, Civil Dispute Resolution in Taiwan (Oct. 12, 2007), http://www.worldservicesgroup.com/publications.asp?action=article&artid=2118 (detailing differences between U.S. and Taiwanese civil procedure law).

83. *See* Rong-Jer Lai, *A Comparative Analysis of Patent Disputes*, at i (2007).

The literacy rate in Taiwan is 96.1%.[84] Compared with the 99% literacy rate in the United States, the slightly lower literacy rate may also contribute to higher piracy rates in Taiwan.

People in Taiwan are learning to trust the authority and the fairness of the judicial system. This is a long-term process, however, and has been going on now for only a couple of decades in Taiwan. A national survey has shown that judicial independence and public trust in the judicial system have been increasing gradually.[85]

When the ruling Nationalist Party (KMT) lost power to the Democratic Progressive Party in 2000, political freedom in Taiwan entered a new era and the end of one-party rule.[86] As a result, there is less government interference with the national economy, and the Taiwanese economy has become more market-oriented. However, political reforms require time to implement, and change cannot be achieved overnight. Taiwanese piracy rates likely remain higher than in the United States in part due to the inherently slow nature of political reform.

The Taiwanese government has tried to improve the IP enforcement environment in response to pressure from the USTR. However, these efforts are not directly effective, because most actions relate to reforming the judicial process, which is supposed to be free from interference from the executive branch under the principle of checks and balances. Under the principle of separation of powers, the executive branch must respect the independence of the judicial branch and design its policies accordingly. The most effective actions taken by the executive branch focus on administrative matters. For example, in response to pressure from the U.S. government and as a result of lobbying on the part of the U.S. pharmaceutical industry, the Department of Health of the Executive Yuan proposed an amendment to ensure data exclusivity protection for

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84. CIA, *supra* note 76.

85. *See* Taiwanese National Judicial Satisfaction Survey 3, http://www.judicial.gov.tw/juds/2_p9307.pdf (last visited Nov. 14, 2007) (document in Chinese) (showing that the percentage of people who trust the judicial system increased from 20.9% to 40.7% during the 2001-2004 time period).

86. *See* Taiwan Gov't Info. Office, Republic of China, Questions & Answers About the Republic of China (Taiwan), http://www.gio.gov.tw/taiwan-website/5-gp/q&a/page_03.htm (last visited Oct. 22, 2007).

new drug approvals.[87] The legislative branch passed the amendment on May 5, 2005.[88]

The Taiwanese government also proposed establishing a new Intellectual Property Court in response to the USTR's demands for increased protection of U.S. IP interests.[89] The new court will handle all IP infringement disputes.[90] The Intellectual Property Court is intended to address the lack of motivation on the part of Taiwanese judges to try IP cases due to inexperience. However, the new court will not improve IP protections in Taiwan immediately because time is needed to form a consensus among all IP stakeholders and to establish judicial precedent in IP cases.

Due to disagreement among Taiwanese political parties, the legislative branch has not been as aggressive in amending Taiwanese IP law. Evolution of respect for the rule of law with regard to IP in Taiwan necessarily lags behind the United States, and as a result, protection for IP rights is weaker there.

According to the *Performance and Accountability Report for Fiscal Year 2005*, Taiwanese applicants filed 16,865 patent applications with the USPTO in 2005.[91] The USPTO issued 6,311 patents to Taiwanese applicants in 2005.[92] Such numbers are far below the 225,152 applications filed by American applicants and the 85,238 patents granted to such applicants.[93]

From another perspective, according to the *2005 Annual Report* released by the EPO, Taiwanese applicants filed 679 patent applications in 2005, which accounted for 0.53% of all patent applications filed with the EPO in 2005.[94] The EPO issued 133 patents to Taiwanese applicants, which comprised 0.25% of all patents issued by the EPO in 2005.[95] Such numbers are far fewer than the 32,738 applications filed by U.S. applicants and the 13,007 patents granted to such applicants.[96] When

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87. *See* The Am. Inst. in Taiwan, Taiwan's Data Exclusivity Protection for Pharmaceutical Products, http://commercecan.ic.gc.ca/scdt/bizmap/interface2.nsf/vDownload/ISA_2048/$file/X_6162457.DOC (last visited Oct. 22, 2007) (stating that the new law brings Taiwan into line with article 39.3 of TRIPS and prevents governments and other third parties from making use of the data submitted during the drug approval process).

88. *Id.*

89. *See* Nystedt, *supra* note 80.

90. *See id.*

91. *See* USPTO REPORT, *supra* note 40, at 199.

92. *Id.*

93. *Id.* at 127.

94. EPO, *supra* note 42, at 79.

95. *Id.*

96. *Id.* at 83.

judged by the raw number of patents received by or applied for by both countries, Taiwan lags behind the United States.

The Taiwanese government is greatly concerned by the attitude and responses of the U.S. government because of the great political and economic influence the United States. Taiwan needs the friendship and support of the United States in order to maintain its self-governing position. Therefore, the Taiwanese government tends to respond quickly to any U.S. requests. For example, the Taiwanese government paid close attention to the opinion released by the IIPA on its piracy country report, and when the IIPA recommended that Taiwan be upgraded from "Priority Watch" list to "Watch List" in 2005, Taiwanese IP officers greeted the news with appreciation, and expressed confidence that Taiwan will be completely removed from the Special 301 list.[97]

B. Current Enforcement Environment in Taiwan: The Patent Protection Example

Patent law was first introduced in Taiwan on January 1, 1949, after the Nationalist government retreated from Mainland China to Taiwan.[98] The Patent Law was revised in 1950, 1959, 1979, 1986, 1994, and finally in 1997 in order to bring Taiwanese patent law into accordance with Taiwan's planned accession to the WTO in 2002.[99] The Patent Laws were again amended in 2001, and 2003.[100]

Article 84 of Taiwanese Patent Law provides: "In the event of infringement on an invention patent, the patentee may claim for damages and demand the removal of the infringement and the prevention of any threat of infringement."[101] Possible patent infringement enforcement actions include preliminary injunctive relief, provisional attachment, permanent injunctions, and damages awards.

Preliminary injunctive relief occurs both before bringing suit and during court proceedings.[102] According to articles 532 and 538 of the Taiwan Code of Civil Procedure, before a civil proceeding or before the conclusion of a civil proceeding, a patent owner may file an application

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97. *See* Invest in Taiwan, Department of Investment Services, USTR Removes Taiwan from Special 301 Priority Watch List (Feb. 18, 2005), http://investintaiwan.nat.gov.tw/en/news/200502/2005021801.html.html.

98. HUBERT HSU, INTELLECTUAL PROPERTY LAW IN TAIWAN-PATENT 22-23 (2003).

99. *Id.*

100. *Id.*

101. PATENT LAW art. 84, Faigui Huibian, *available at* http://www.tipo.gov.tw/eng/laws/patlaw-e.asp (last visited Nov. 19, 2007).

102. HSU, *supra* note 98, at 77-85.

for preliminary injunctive relief with the district court, provided that the following requirements are met:

(a) the patent claims must be published;

(b) the patent owner must provide a sample of the infringing product;

(c) the patent owner must conduct an analysis comparing the patent claims with the elements of the sample infringing product;

(d) the patent owner must provide evidence showing that the defendant manufactured the sample product;

(e) the patent owner must provide an explanation of the dispute upon which the applicant may bring a formal suit in the near future;

(f) the patent owner must provide an explanation of the necessity for a temporary injunction; and

(g) the patent owner must demonstrate a willingness to provide a bond to secure possible losses by the defendant should the patent owner lose the suit.

In addition to preliminary injunctive relief, a patent owner may petition for provisional attachment against the alleged infringer's property, as set out below, to serve as the whole or a part of the compensation for the damages that may be awarded by judgment:

(a) general property according to article 522 of the Code of Civil Procedure; and

(b) tools and materials used in an act of infringement or the article produced by such an act of infringement according to article 86 of the Patent Law.[103]

According to article 17 of the Trade Act, importing products that infringe upon the IP rights of another is prohibited.[104] Accordingly, Taiwanese Customs may exercise its power to prohibit importation of infringing products upon receipt of detailed and sufficient information from a patent owner.[105] However, border measures against patent

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103. Article 86 of Taiwanese Patent Law states: "Any article used in an act of patent infringement or produced by such an act may, upon the application of the injured party to the court, be provisionally seized to serve as the whole or a part of compensation for the damages as may be awarded by judgment." PATENT LAW art. 86, Faigui Huibian.

104. TRADE ACT art. 17, Faigui Huibian.

105. *See* Directorate General of Customs (Taiwan), Briefing on the Implementation of Border Measures on IPR, Ministry of Finance, http://eweb.customs.gov.tw/ct.asp?xItem=15217&CtNode=6499 (last visited Oct. 22, 2007) ("For . . . patent-infringing cases, if sufficient information, such as importing/exporting date, destined port, name of the means of transport, voyage/flight number, import/export declaration number, etc, is provided by the owners of patents, the Customs will enforce the verdict or order given by the judicial authorities thoroughly.").

infringement are less effective, because, in practice, such measures are merely executions of a court order rather than independent administrative enforcement. Customs officials do not have the discretion to make determinations of patent infringement on their own.

According to article 85 of Taiwanese Patent Law, there are two approaches to calculating damages in a patent suit.[106] First, article 216 of the Civil Code limits compensation to the patent owner's actual losses.[107] In the event that the patent owner cannot prove actual losses, the patent owner can recover as the amount of the damages the balance derived by subtracting the profit earned through the practice of the patent after the existence of infringement from the profit normally expected through the practice of the same patent. Second, a patent owner may calculate damages based upon the profit earned by the infringer as a result of the infringing act. In the second approach, the patent owner may claim the profit earned by the infringer's counterfeiting act. In case the infringer cannot prove necessary expenses, the entire income derived from the sale of the infringing articles shall be deemed the infringer's profit. However,

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106. Article 85 of the Taiwanese Patent Law states:

> To claim damages in accordance with the preceding Article, any of the following options may be adopted for calculating of the amount of damages:
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> 1. To claim in accordance with Article 216 of the Civil Code. A patentee may, however, take the balance derived by subtracting the profit earned through the practice of his/her patent after the existence of infringement from the profit normally expected through the practice of the same patent as the amount of the damages, provided that no proving method can be presented to justify the damages;
> 2. To claim based on the profit earned by the infringer as a result of his/her infringement act. The entire income derived from the sale of the infringing articles shall be deemed the infringer's profit, provided that the infringer is unable to produce proof to justify his/her costs or necessary expenses.
>
> In addition to the provisions set forth in the preceding Paragraph, the patentee may claim separately for damages at a reasonable amount in case the business reputation of the patentee has been downgraded or injured as a result of the infringement.
>
> Subject to the provisions of the preceding two Paragraphs, if the infringement is found to be an intentional act, the court may, after considering the details of the infringement, decide the compensation in an amount higher than the amount of damages estimated, but not more than triple damages.

PATENT LAW art. 85, Faigui Huibian.

107. Article 216 of the Taiwanese Civil Code states:

> Unless otherwise provided by the act or by the contract, the compensation shall be limited to the injury actually suffered and the interests which have been lost. Interests, which could have been normally expected are deemed to be the interests, which have been lost, according to the ordinary course of things, the decided projects, equipment, or other particular circumstances.

CODE CIVIL art. 216, Faigui Huibian.

courts seldom take the infringer's entire income derived from an infringement act even though the infringer fails or refuses to prove the necessary expenses. Like the U.S. Patent Act, if infringement of a Taiwanese patent is deemed willful, the court may impose punitive damages of no more than triple the actual damages.

Pursuant to paragraph 1 of article 84 of Taiwanese Patent Law, the patent owner may request the following permanent injunctions:

(a) Removal of the infringement; and
(b) Prevention of any threat of infringement.

C. IP Protection in Taiwan: Current IP Enforcement Rates

Based upon the *BSA Study*, the piracy rate of business software in Taiwan was 43% in 2005.[108] Despite improvement in IP enforcement, the piracy problem is still more serious in Taiwan than in the United States, with piracy rates of 23% in the United States and 43% in Taiwan.[109]

D. Causative Factors Affecting Higher IP Protection Levels in the United States Than in Taiwan

IP protection levels tend to rise with improved economic conditions. The piracy rate in Taiwan has decreased with economic development, but is still greater than U.S. piracy levels. The Taiwanese government now has a greater strategic interest in protecting IP rights due to economic gains over the last several decades, and an increasing rate of domestically produced IP assets, but Taiwanese IP productivity still trails U.S. levels, when comparing the total number of patents applied for in the United States and Europe by Taiwanese and American nationals respectively. Increased democratic freedoms and greater political transparency may also help secure domestic research and development and may increase respect for IP rights in Taiwan. Political reform in Taiwan is an ongoing process.

Increased public education may generate a consensus on respect for IP rights in Taiwanese society. Proper training of law enforcement officials may also facilitate increased respect for IP rights. Taiwan continues to improve overall literacy, but it should also focus on improving public awareness of IP law. As suggested by Professor Alford, inherited ancient Chinese cultural attitudes toward IP may also help

108. BSA STUDY, *supra* note 2, at 12.
109. *Id.* at 12-13.

explain differences in IP protection levels in the United States and Taiwan.

Since the creation of the WTO, Taiwan has faced tremendous international political pressure to improve respect for IP rights, primarily from the United States. In the past, the United States used strategic leverage in the region, as well as pressure in the form of economic sanctions, to demand that Taiwan improve IP protection levels. As a result of such pressure, and due to the multiple amendments to Taiwanese IP law, IP protection levels in Taiwan improved significantly in recent years, as the *BSA Study*'s enforcement rate figures show. Taiwan is sensitive to these international challenges and pressures because of its isolated international status and urgent need for international support in this regard. Taiwan's policy makers typically comply with international requests to improve respect for IP rights, and respond to them positively. Although the United States also faces international pressure to enhance certain IP policies, the United States seems to be in a stronger position to resist such pressure.

E. Structural Barriers to IP Enforcement in Taiwanese Patent Infringement Cases

Under the current Taiwanese legal system, separate courts handle patent infringement and patent validity issues. Patent infringement disputes are tried in the Civil Court, and patent validity issues are tried in the Administrative Court. This is different from U.S. civil court proceedings, which try both patent infringement and patent validity in the same court. Single jurisdiction and dual jurisdiction systems have positive and negative attributes. In single jurisdiction systems, trials are often faster and the possibility of inconsistencies in the judgments of two independent courts is eliminated.[110] However, in favor of a dual jurisdiction system is the example of Taiwan's Administrative Court, which is equipped with professional judges who specialize in trying patent validity cases and possess the expertise to review the complete patent prosecution history. The accuracy and reliability of the

110. In a dual jurisdiction system, in cases where patent invalidity has been raised as a defense by the alleged infringer, the court that determines the patent infringement issue must stay its decision until the patent validity decision is made by another court. This unavoidably prolongs the length of the trial. *See* PATENT LAW art. 90, Faigui Huibian. For example, the court handling the patent infringement issue tries a case based upon a presumption of patent validity and renders its judgment in favor of the plaintiff-patentee. However, the court handling the patent validity issue revokes the patent, because the subject patent lacks patentability. The different view of patent validity of these two courts might make parties take more time to try such a case or reclaim their rights.

Administrative Court protects the best interests of patentees who deserve patent protection, and balances the interests of patent applicants and the general public.

One undesirable flaw in the dual jurisdiction system is that alleged patent infringers typically claim that the patent in question is invalid. Since patent validity is required in order to claim patent infringement, article 90 of the Taiwanese Patent Law stipulates that the civil court "may" suspend the trial process until the Administrative Court decides the patent validity issue.[111] Article 90 does not require the civil court to stay the infringement proceeding, only that it "may" do so. However, in practice, most civil court judges choose to stay patent infringement cases until the Administrative Court decides the patent validity issue. Article 90 of the Patent Law is effectively a "must stay" provision rather than the intended "may". As a result, an increasing number of defendants merely file cancellation actions against the subject patent to obtain stays in patent infringement suits. Judges tend to respond to patent validity challenges by granting stays in controversial patent infringement suits. The following factors shape Taiwanese judicial attitudes toward handling patent suits:

(a) Heavy case loads;[112]

(b) Insufficient knowledge regarding patent infringement cases and patent validity;[113] and

(c) Reluctance to get involved in patent infringement cases subject to commercial competition.[114]

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111. *See id.* art. 90, para. 1, Faigui Huibian ("For any civil proceedings pending in a court in connection with an invention patent, the court may suspend the trial process until a decision on the patent application, invalidation, or revocation action related thereto has become irrevocable.").

112. Under the current system, a method for evaluating judicial efficiency and performance is to analyze the number of cases that remain undecided by judges during specified time periods. Judges prefer to close simple cases as soon as possible and tend to avoid deciding complex cases such as patent infringement cases. Cases that are stayed are exempted from inclusion in this formula. As a consequence, judges may prefer to stay complex cases when carrying a heavy caseload. *See* IMPLEMENTATION RULES REGARDING TRIAL PERIOD FOR EACH INSTANCE OF THE COURT art. 10, Faigui Huibian.

113. Judges may lack sufficient technical backgrounds and may not possess enough confidence to decide patent infringement cases. Most judges in Taiwan try to avoid complex patent disputes because they fear that their decisions will be misinterpreted or overturned. *See* Tai E Int'l Patent & Law Office, Doctrine of Equivalents in Taiwan, http://www.taie.com.tw/English/Publication.asp?ID=941&page=1 (last visited Oct. 22, 2007).

114. Most patent infringement cases end in settlement rather than judgment. If the two parties decide in secret to settle the case, judicial effort to decide the case on the merits would be vain. Some judges prefer not to serve as a pawn in what is sometimes largely a business dispute played out in court. Finally, patent infringement damage claims are usually very large, and judges are reluctant to get involved for fear of making costly errors.

Legal strategies employed by alleged infringers and conservative judicial attitudes make the judicial process less favorable to patent rights in Taiwan.

Differences between the legal structures of the U.S. and Taiwanese IP protection systems are not the only issues affecting IP enforcement rates. Other factors play a role as well, including Taiwanese cultural acceptance of piracy, insufficient knowledge and experience with IP on the part of law enforcement officials and judges, a relatively young legal tradition surrounding IP, and a nascent respect in a young democracy for the rule of law.

Civil procedure law in patent infringement litigation disinclines patentees from attempting to enforce their rights in Taiwan. For example, under the current Taiwanese Code of Civil Procedure, plaintiffs must submit a filing fee amounting to approximately 1% of claimed damages. Although the losing party is obliged in the end to pay such expenses, the filing fee is a deterrent to filing a patent infringement suit because the very large damages typical in modern patent infringement cases make filing fees unreasonably high and accurate damage estimates are difficult to make before trial.

Attorney's fees in Taiwan are like the U.S. legal system, where both parties must pay their own attorney's fees. There is no rule in Taiwan dictating that the loser must pay the victor's attorney's fees. Attorneys' fees typically account for a large portion of all damage awards in patent infringement litigation, and plaintiffs may be hesitant to initiate legal action against an infringer for fear that if they lose the suit, they will have to pay the filing fees as well as the plaintiff's attorney's fees. In cases lasting several years, plaintiffs may end up paying more in attorneys' fees than expected damages.

Although the above examples pertain to civil procedure law applicable to all types of civil litigation in Taiwan, they represent broad attitudes toward enforcement of legitimate rights in Taiwan that make litigation a less preferable dispute resolution method for IP rights holders. Due to the characteristics of patent litigation, such as excessive damages estimates and lengthy trials, Taiwanese civil procedure law tends to discourage patent litigation.

Unlike civil procedure law in the United States, Taiwanese law does not permit pretrial discovery. Restrictive discovery is only permitted during trial in patent litigation in Taiwan, which makes patent enforcement extremely difficult in Taiwan.

According to the general Taiwanese civil procedure rules, plaintiffs bear the burden of proof in infringement cases. Under patent litigation

practice, plaintiffs must at a minimum, submit the following evidence when bringing a patent infringement case: (1) a valid patent; (2) a sample of the infringing product; (3) evidence showing the defendant manufactured the sample product; (4) a comparison of the patent claims and the elements of the sample product; and (5) a calculation of actual damages.

Pursuant to the patent validity presumption principle, a patent is presumed valid as long as the patent office has not yet made a decision contrary to its previous patent grant. Therefore, patent validity is not difficult to prove.

Obtaining a sample of an infringing product is usually very easy, however, obtaining a sample when the infringing product is a rare, expensive manufacturing machine is more difficult. In these latter cases, inflexible judges and restrictive discovery procedures put plaintiffs in an unfavorable position in Taiwan.

Infringement is the most important and most difficult element for the plaintiff to prove. Under current practice, patent owners may retain an independent patent infringement assessment institute to make an assessment report regarding the alleged infringement.[115] However, such assessments are strongly influenced by the patent owner, because it tends to be a proceeding outside the auspices of the courtroom. As a result, the accused infringer almost always challenges assessment opinions at trial. What is worse, when the plaintiff cannot obtain a sample of the infringing product, the assessment is usually conducted by comparing the infringing product's specifications with the patented product's specifications, which is currently an invalid assessment method under Taiwanese Patent Law.[116]

Plaintiffs must pay filing fees for patent litigation based upon the amount of the damages sought.[117] However, precise damages are very difficult to estimate without pre-trial discovery. In fact, most plaintiffs possess little information regarding the amount of an infringer's sales and necessary costs. As a consequence, plaintiffs always have to guess at damages before trial.

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115. Currently, Taiwan Judicial Yuan publishes a list of assigned patent infringement assessment institutes pursuant to the Patent Law. There are fifty-six institutes in total. *See* Taiwan Intellectual Prop. Office, Patent Q&A 25, http://www.tipo.gov.tw/eng/about/publications/Patent%20Q%20&%20A.pdf (last visited Nov. 19, 2007).

116. Under current Taiwanese Patent Law, infringement assessments must be conducted by comparing each element of the actual infringing product with the patent claims.

117. As an alternative, the plaintiff can state a certain portion of the actual damages and supplement the rest before the end of the oral argument hearing in the first instance. *See* CODE OF CIVIL PROCEDURE art. 244, Faigui Huibian.

Trials do not resolve this problem, because limited discovery rules do not permit a plaintiff to obtain an infringer's books and records. Judges sometimes do not allow access to the defendant's financial records out of fear that such information may contain trade secrets. In fact, plaintiffs with baseless infringement claim sometimes use discovery as a means of gaining access to trade secrets.

Generally speaking, a preliminary injunction against patent infringement provides an effective vehicle to stop damages caused by the infringement from increasing. However, current preliminary injunction procedures in Taiwan are not well developed and usually generate more disputes.

Pursuant to the Taiwanese Code of Civil Procedure, there is no need to prove infringement by a preponderance of the evidence to obtain a preliminary injunction. An explanation of the validity of the patent, together with presentation of sufficient evidence of infringement might be sufficient to obtain a preliminary injunction. In practice, judges simply review formalities rather than the substance of the independent assessment reports. Because courts in Taiwan do not require the same degree of proof for preliminary injunctions as required by U.S. courts, some patentees easily obtain a preliminary injunction within one week by merely submitting an assessment report and paying the required security bond. To avoid similar situations, judges in one region of Taiwan who had more experience in patent cases began denying petitions for preliminary injunctions in order to avoid becoming mere pawns in competition between companies.[118] Because judges have discretion in preliminary injunction cases, the attitude against preliminary injunctions prevents patentees who really need protection from successfully obtaining injunctive relief.

Differing attitudes among judges in different regions induces "forum shopping" among patentees. For example, in the Hsin-Chu District Court, in several cases in which preliminary injunctions were sought, the plaintiffs are still waiting for a ruling on the petition more than a year later.[119]

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118. In some cases, patentees obtain preliminary injunctions merely for the purpose of forcing competitors to negotiate or to interfere with their business. Hau-Ting Feng, *Comparative Study on the Preliminary Injunction Between United States of America and Taiwan-Focus on Patent Infringement Cases*, 2 NAT. CHENGCHI UNIV. INTELL. PROP. REV. 1 (2004).

119. Hsin-Chu is an important region for technology companies in Taiwan, where several hundred hi-tech manufacturers have established operations. *See* Hsin-Chu Sci. Park, Profile, http://eweb.sipa.gov.tw/en/dispatch.jsp?disp_to=10 (last visited Oct. 22, 2007). It has been called the "Silicon Valley" of Taiwan. As a consequence, the Hsin-Chu District Court receives a large portion of all patent cases filed by foreign patentees against Taiwanese manufacturers.

V. INTELLECTUAL PROPERTY PROTECTION IN THE PEOPLE'S REPUBLIC OF CHINA

A. Factor Analysis in the People's Republic of China

As established in the model constructed in Part II, there are three major factors that affect the treatment of IP rights in a country: cultural attitudes, socioeconomic development, and international political pressure. First, as suggested by the Professor William Alford in his book *To Steal a Book Is an Elegant Offense—Intellectual Property Law in Chinese Civilization*, ancient Chinese cultural attitudes are not consistent with modern IP protection for the reasons stated in the discussion of Taiwan in Part IV.

However, in regard to the first factor, and assuming that the two countries possess similar cultural attitudes toward IP rights, one would expect to find similar rates of piracy in the People's Republic of China and Taiwan.

Despite relatively rapid economic development over the past few decades, the price differential between genuine and counterfeit goods in the People's Republic of China is still quite large. The large number of visitors to the People's Republic of China, who come for the purpose of purchasing counterfeit products, is evidence of this phenomenon. Interestingly, most of these visitors do not purchase counterfeit products in their home countries.

However, when compared with Taiwan, the price differential between authentic goods and counterfeit goods in the People's Republic of China is higher because the level of economic development in the People's Republic of China still lags behind Taiwan. This factor may contribute to a lower piracy rate in Taiwan than in the People's Republic of China.

In 2003, the per capita GDP in the People's Republic of China was $5,000.[120] When compared with Taiwan's per capita GDP of $23,400, this factor would also tend to predict higher piracy rates in the People's Republic of China than in Taiwan.[121]

Compared with market freedoms in Taiwan and the United States, the People's Republic of China still exhibits a conservative attitude toward opening its economic markets because it is still transitioning from a Soviet-style, centrally planned economy to a more market-oriented

120. *See* CIA, The World Factbook—China, https://www.cia.gov/cia/publications/factbook/geos/ch.html (last visited Oct. 22, 2007).

121. *See* CIA, *supra* note 76.

system.[122] This transition will not be completed in the near future if the political system does not undergo a tremendous change. This factor would predict lower piracy rates in Taiwan than in the People's Republic of China.

Currently, awareness of IP law in the People's Republic of China is not widespread, as consumers care more about the price of goods than they do about their origin.[123] For the general public, the People's Republic of China has not taken positive action actually to change people's purchasing habits. Rather, most government efforts are geared toward assuaging the concerns of foreign governments. For example, the government of the People's Republic of China recently ordered the destruction of the notorious "Counterfeit Street" in Beijing, home to a marketplace of counterfeit goods. The official reason given for its destruction was to protect IP rights, but the real reason was simply to please foreign governments and to save face during the 2008 Summer Olympic Games. As demonstrated by the tolerant attitude among the Chinese toward IP infringement and the widespread purchase of counterfeit products in the People's Republic of China, awareness of IP law is not as widespread as among Taiwanese.

Due to the large number of law enforcement officials in the People's Republic of China, the level of awareness of IP law varies from region to region. Some local administrative law enforcement officials lack even the most basic knowledge of IP concepts, and protection of IP at the local level is therefore less effective. Although there has been a rapid increase in the number of judges within the past two decades, the quality of the jurists has not improved correspondingly, because some have been directly appointed by the Communist Party and are not required to have a law degree or even a legal background. As a result, those judges are unable to properly adjudicate IP cases.

In comparison with Taiwan, the quality of judicial decisions in the People's Republic of China with respect to IP infringement is less sophisticated. Many judges in the People's Republic of China lack the

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122. *See* World Trade Org., Working Party on the Accession of China (Oct. 1, 2001) http://docsonline.wto.org/GEN_highLightParent.asp?qu=&doc=D%3A%2FDDFDOCUMENTS%2FT%2FWT%2FACC%2FCHN49%2EDOC%2EHTM.

123. *See* Hamideh Ramjerdi & Anthony D'Amato, *The Intellectual Property Rights Laws of the People's Republic of China*, 21 N.C.J. INT'L L. & COM. REG. 169 (1995) ("Intellectual property rights are unclear concepts in China. Because of Communism's rejection of individual property ownership and the newness of intellectual property rights in China's legal system, intellectual property has a precarious place in China's legal scheme. Also, because of China's size and isolation, many people do not understand intellectual property, much less the laws protecting it.").

requisite technical and legal background to handle IP cases. Therefore, the quality of judgments is far behind expectation. This greatly reduces the predictability of court decisions and the reliability of the judicial system in the People's Republic of China.

In 2002, the literacy rate in the People's Republic of China was 90.9%.[124] When compared with the 96.1% literacy rate in Taiwan, this factor predicts a higher piracy rate in the People's Republic of China than in Taiwan.

Citizens in the People's Republic of China tend not to trust the authority and fairness of the judicial system and they prefer to trust the Communist Party authority. The legal environment is far less developed than in Taiwan.

Due to the one-party dictatorship of the Communist Party in the People's Republic of China since 1949, political freedom in the People's Republic of China is extremely limited. Despite increased overtures to the international community, the central government continues to interfere with most economic activity in the People's Republic of China. If a lack of market freedom contributes to increased piracy, as predicted by the model established in Part II, the piracy rate in the People's Republic of China should be higher than in Taiwan.

The Constitution of the People's Republic of China states that the Communist Party must lead the people, and this means that all political power is centralized under the Communist Party. In other words, all government branches must comply with the instructions and policy dictated by the Communist Party. This special design decreases transparency within the executive branch, because its power comes from the Communist Party and not the people. In all positions of the executive branch, Communist Party officials instruct and monitor government functionaries. As a result, one would not expect that IP protection could occur without the consent of the Communist Party. Currently, the Communist Party resists providing increased protection to foreign IP owners and stands behind its negotiating representatives, which makes it difficult for foreign countries to enforce their IP rights in the People's Republic of China. Similarly, the judicial branch largely serves the Communist Party, which appoints most of the judges and associated staff.

The legislative branch of the People's Republic of China usually rubberstamps the laws approved by the Communist Party, unlike Parliament in Great Britain and the United States Congress, whose

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124. *See* CIA, *supra* note 120.

members are elected directly via a democratic process and which perform independently from the executive branch.

In summary, the rule of law in the People's Republic of China is less developed than in democratic countries with transparent judicial processes. Accordingly, the rule of law factor in the People's Republic of China dictates lower levels of IP protection.

According to the *Performance and Accountability Report for Fiscal Year 2005*, applicants from the People's Republic of China filed 3,266 patent applications with the USPTO, and 1,210 patents were issued.[125] These numbers are far fewer than the 13,129 applications filed by Taiwanese applicants and the 7,376 patents granted to Taiwanese applicants in 2005.

According to the 2005 Annual Report released by the EPO, 578 patent applications were filed with the EPO by People's Republic of China applicants in 2005, which accounted for 0.45% of all patent applications filed with the EPO that year.[126] The EPO issued only 89 patents to People's Republic of China applicants, which accounted for 0.16% of all patents issued EPO in 2005.[127] Such numbers are substantially less than the 679 applications filed by Taiwanese applicants and the 133 patents granted to Taiwanese applicants.

The People's Republic of China government has faced pressure from the United States regarding IP protection since 1996, when the USTR first placed the People's Republic of China on the Special 301 "Priority Watch" list. In order to comply with membership in the World Trade Organization, and in order to attract foreign investment, the People's Republic of China is appropriately concerned with the attitude and responses of the U.S. government regarding IP rights, as well as that of other European governments.

B. Current Enforcement Environment in the People's Republic of China—The Patent Protection Example

During the period from 1949 to 1978, there was no patent law in the People's Republic of China. Instead, IP activity was encouraged by a reward system.[128] The system served the purpose of implementing the transition of patents from private ownership to full national control. Since 1979, however, the open door policy for economic growth has

125. *See* USPTO REPORT, *supra* note 40, at 126.

126. EPO, *supra* note 42, at 78-79.

127. *Id.*

128. *See* DELI YANG & DEANE YANG, INTELLECTUAL PROPERTY AND DOING BUSINESS IN CHINA 21 (2003).

initiated the formation of an IP system in the People's Republic of China.[129] In June 1980, the People's Republic of China became a member of the World Intellectual Property Organization.[130] The first patent law of the People's Republic of China was not promulgated until March 12, 1984, and went into force on April 1, 1985.[131] The Chinese Patent Law was first revised on September 4, 1992, and again on August 25, 2000 (effective July 1, 2001).[132]

To comply with TRIPS, the latest amendment extends the term of a patent to twenty years from the date of filing. Chemical and pharmaceutical products, as well as food, beverages, and flavorings, are all now patentable in the People's Republic of China.[133]

Due to the special political-economic system in the People's Republic of China, protection of IP rights can be pursued via two independent approaches, an administrative track and a judicial track.[134]

The first and most prevalent approach to patent enforcement in the People's Republic of China is the administrative track. When facing an infringement, an IP proprietor may file a complaint with the administrative authority for patent affairs of the local government.[135] The

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129. *Id.* at 36.

130. *See* J. Michael Warner & Han Xiaoqing, *The Chinese System of Administrative Protection for Pharmaceuticals*, 31 J. MARSHALL L. REV. 1165, 1167 (1998).

131. *See* IP ASIA PATENT YEARBOOK (2001).

132. *Id.*

133. Int'l Trade Admin., U.S. Dept. of Commerce, Protecting Your Intellectual Property Rights in China: A Practical Guide for U.S. Companies, http://www.mac.doc.gov/China/Docs/BusinessGuides/IntellectualPropertyRights.htm (last visited Oct. 22, 2007).

134. The economy in the People's Republic of China is a mix of free-market and central-command economic policies. *See* Don Lee, *A World Unravels: China's Strategy Gives It the Edge in the Battle of Two Sock Capitals*, L.A. TIMES, Apr. 1, 2005, at A1. However, fifty-six years of one party rule by the Chinese Communist Party makes it more of a central-command economy. Economic policies made by the central government frequently and directly interfere with the operation of private enterprises.

135. Article 57 of the Patent Law of the People's Republic of China states:

> Where a dispute arises as a result of the exploitation of a patent without the authorization of the patentee, that is, the infringement of the patent right of the patentee, it shall be settled through consultation by the parties. Where the parties are not willing to consult with each other or where the consultation fails, the patentee or any interested party may institute legal proceedings in the people's court, or request the administrative authority for patent affairs to handle the matter. When the administrative authority for patent affairs handling the matter considers that the infringement is established, it may order the infringer to stop the infringing act immediately. If the infringer is not satisfied with the order, he may, within 15 days from the date of receipt of the notification of the order, institute legal proceedings in the people's court in accordance with the Administrative Procedure Law of the People's Republic of China. If, within the said time limit, such proceedings are not instituted and the order is not complied with, the administrative authority for patent affairs may approach the people's court for compulsory execution. The said authority handling the

administrative authority for patent affairs may take the following actions at the request of the IP owners: (1) when the administrative authority for patent affairs considers infringement to have been established, it can order the infringer to stop infringing immediately; (2) if the infringer does not comply with the IP owner's wishes in a timely manner and does not comply with the administrative order, the administrative authority for patent affairs may approach the people's court for compulsory execution of the administrative order; (3) at the request of the parties, the administrative authority handling the matter may mediate the amount of compensation for patent infringement damages.

The administrative track is independent of the judicial track, which means that any party dissatisfied with the decision of the administrative authority may be able to take legal action through the judicial track by instituting a suit with the people's court of the People's Republic of China. In addition, incidents of piracy and counterfeiting might cover multiple regions of the People's Republic of China. In that case, a patent owner may file his request with the administrative authority for patent affairs, either where the infringing party is located or where the infringement took place.[136]

In case of a conflict between two administrative authorities, because of, for example, piracy or counterfeiting occurring in separate regions, the administrative authority for patent affairs that first accepts the request has exclusive jurisdiction.[137] Furthermore, the supervisor of the administrative authority for patent affairs may designate which

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> matter may, upon the request of the parties, mediate in the amount of compensation for the damage caused by the infringement of the patent right. If the mediation fails, the parties may institute legal proceedings in the people's court in accordance with the Civil Procedure Law of the People's Republic of China.

PATENT LAW art. 57 (P.R.C.).

136. Paragraph 1 of article 81 of the Implementing Regulations of the Patent Law of the People's Republic of China states: "Where any party concerned requests handling or mediation of a patent dispute, it shall fall under the jurisdiction of the administrative authority for patent affairs where the requested party has his location or where the act of infringement has taken place." THE IMPLEMENTING REGULATIONS OF PATENT LAW art. 81, ¶ 1 (P.R.C.).

137. Paragraph 2 of article 81 of the Implementing Regulations of the Patent Law of the People's Republic of China states:

> Where two or more administrative authorities for patent affairs all have jurisdiction over a patent dispute, any party concerned may file his or its request with one of them to handle or mediate the matter. Where requests are filed with two or more administrative authorities for patent affairs, the administrative authority for patent affairs that first accepts the request shall have jurisdiction.

THE IMPLEMENTING REGULATIONS OF PATENT LAW art. 81, ¶ 2 (P.R.C.).

administrative authority may exercise jurisdiction over a case where the jurisdiction is disputed.[138]

Patent owners in the People's Republic of China may also seek remedies through the judicial system.[139] Since 1993, the People's Republic of China has maintained Intellectual Property Tribunals in the Intermediate People's Courts and Higher People's Courts throughout the country. The total volume of civil IP lawsuits in China is considerably less than the number of administrative lawsuits. Though small companies may prefer to pursue the administrative route, it is expected that the number of IP litigation cases will not be significant.

Preliminary injunctive relief in patent infringement cases in the People's Republic of China is governed by article 61 of Chinese Patent Law.[140] In order to receive preliminary injunctive relief, the patentee must show (1) that the defendant has been infringing the patent or will soon infringe and (2) that the infringement is likely to cause irreparable harm to the patentee.

The amendment is undoubtedly a significant advancement in the legislation, because it represents the first time that a Chinese law provides for a civil procedure resembling the preliminary injunction familiar to Western jurisprudence, and is also obviously beneficial to the enforcement of patent rights.[141]

Article 60 of the Amended Patent Law of the People's Republic of China now provides for the calculation of damages for patent

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138. Paragraph 3 of article 81 of the Implementing Regulations of the Patent Law of the People's Republic of China states:

> Where administrative authorities for patent affairs have a dispute over their jurisdiction, the administrative authority for patent affairs of their common higher level people's government shall designate the administrative authority for patent affairs to exercise the jurisdiction; if there is no such administrative authority for patent affairs of their common higher level people's government, the Patent Administration Department under the State Council shall designate the administrative authority for patent affairs to exercise the jurisdiction.

Id. art. 81, ¶ 3.

139. PATENT LAW art. 57 (P.R.C.).

140. Article 61 of the People's Republic of China Patent Law states:

> Where any patentee or interested party has evidence to prove that another person is infringing or will soon infringe its or his patent right and that if such infringing act is not checked or prevented from occurring in time, it is likely to cause irreparable harm to it or him, it or he may, before any legal proceedings are instituted, request the people's court to adopt measures for ordering the suspension of relevant acts and the preservation of property.

Id. art. 61.

141. Jiwen Chen, *Better Patent Law for International Commitment—The Amendment of Chinese Patent Law*, 2 RICH. J. GLOBAL L. & BUS. 61, 63 (2001).

infringement based on the losses suffered by the patentee, upon the profits earned by the infringer, or, in a case where it is difficult to determine either of the above, the amount may be assessed by reference to the appropriate multiple of the amount of the licensing royalties.[142] Based on the above provisions, the patent owner may seek remedies for the infringement through the administrative track by requesting a cease and desist of the infringement, comparable to a permanent injunction in the judicial track, and appropriate damages, comparable to a damages claim in the judicial track, during the mediation. Because of the perceived efficiencies of the administrative track, patent owners might consider this approach preferable to the judicial track, provided it is feasible.[143]

Generally speaking, a patent owner in the People's Republic of China might prefer to pursue administrative enforcement for the following reasons: (1) it may be faster and more efficient; (2) it may prevent undesirable adverse publicity and a loss of face during time-consuming and costly court proceedings; and (3) foreigners seeking to enforce a patent must have legal documents notarized in their home country and then certified by the People's Republic of China Embassy or Consulate, making the judicial track more complicated.[144]

However, administrative officials for patent affairs only occasionally award damages because most cases are not settled through mediation.[145] In such cases, patent owners face more difficulty obtaining monetary damages through the administrative track because damages are more frequently obtained through the judicial track. In addition, in a case where a party is dissatisfied with the infringement decision of the administrative authority for patent affairs, he may institute a suit in the people's court in the judicial track within fifteen days of receipt of the decision. This lessens the effectiveness and certainty of the administra-

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142. *See* Louis S. Sorell, *A Comparative Analysis of Selected Aspects of Patent Law in China and the United States*, 11 PAC. RIM L. & POL'Y 319, 335-36 (2002). Article 60 of the Patent Law of People's Republic of China states:

> The amount of compensation for the damage caused by the infringement of the patent right shall be assessed on the basis of the losses suffered by the patentee or the profits which the infringer has earned through the infringement. If it is difficult to determine the losses which the patentee has suffered or the profits which the infringer has earned, the amount may be assessed by reference to the appropriate multiple of the amount of the exploitation fee of that patent under contractual license.

PATENT LAW art. 60 (P.R.C.).

143. Liu Xiaohai, *IP Infringement Disputes and Administrative Enforcement*, *in* CHINA PATENT & TRADEMARKS 3 (1999).

144. THOMAS PATTLOCH, INTELLECTUAL PROPERTY LAW IN ASIA—CHINA 73 (2003).

145. *Id.* at 74.

tive track and, thus, makes it less favorable than it was originally designed and anticipated by some commentators in the People's Republic of China.[146]

C. Explanation for the People's Republic of China's Low IP Enforcement Rate in Comparison to Taiwan

Based upon the BSA Study, the piracy rate of business software in the People's Republic of China was 86% in 2005, which means that it was among the countries providing the least protection for IP rights in the world.[147] The piracy problem in the People's Republic of China is far more serious than in Taiwan. Professor William Alford posited that ancient Chinese cultural attitudes toward IP are the root cause for lower levels of IP protection in Chinese society. However, his assertion does not fully explain why there is such a variance between the level of IP protection in Taiwan and the People's Republic of China, countries that are supposed to share and have inherited the same Chinese cultural attitudes. Interestingly, the People's Republic of China experienced a ten-year "Cultural Revolution" that destroyed many of the traditional values inherited from ancient China. If the cultural factor is as important as Alford theorizes, the level of IP protection in the People's Republic of China should arguably be higher than in Taiwan (or at least comparable), because citizens in the People's Republic of China arguably inherited fewer ancient Chinese cultural attitudes than the Taiwanese people. However, the reality is just the opposite. Alford's culture factor is arguably less important than the other two factors, because it not only fails to explain the variance in the level of IP protection between the People's Republic of China and Taiwan, but also fails to explain why, even after the People's Republic of China's Cultural Revolution, the level of IP protection in the People's Republic of China is still far lower than in Taiwan.[148]

The People's Republic of China has faced tremendous international political pressure from the United States and the WTO to improve the protection of IP rights. In order to maintain foreign investment, the government of the People's Republic of China decided to negotiate and adopt policies to satisfy foreign governments, in spite of some reluctance on its part. Although the People's Republic of China has amended its IP

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146. *See, e.g.*, Chen, *supra* note 141, at 7; PATTLOCH, *supra* note 144, at 74; Liu, *supra* note 143, at 17.

147. *See* BSA STUDY, *supra* note 2, at 12.

148. Of course, the Cultural Revolution may not have been as thorough in eradicating traditional Chinese attitudes as one might assume.

laws several times in order to comply with TRIPS, the level of IP protection in the People's Republic of China does not appear to have improved as much as one would expect. Compared with the improvement of IP protection in Taiwan under similar international political pressure, China has had less significant improvement, which suggests that the international political pressure factor carries less weight than the economic development factor.

IP protection levels generally increase with increased economic development. Because the economy in the People's Republic of China is still developing, its people may have stronger incentives to infringe IP rights than people in Taiwan. There is still much room for the People's Republic of China to improve its IP protection mechanisms.

Industries in the People's Republic of China still rely heavily on imported IP assets to produce competitive goods for sale on the world market. Thus, the government of the People's Republic of China does not have an incentive to provide stronger IP enforcement mechanisms because domestic industries do not produce substantial IP assets requiring such protection.

A lack of respect for the rule of law engendered by the special political system in the People's Republic of China correlates highly with slow economic development and low IP productivity levels. Because of insufficient political transparency, IP protection is fairly unpredictable and the production of IP assets is discouraged. Finally, there is an urgent need to improve the general public's awareness of IP law in the People's Republic of China.

D. In Practice, Current Enforcement Environment Barriers Which Were Affected by the Factors—Local Legal System Analysis

The judicial system in the People's Republic of China has been restored since 1979, but there are still many deficiencies.[149] For example, there are an insufficient number of judges in the People's Republic of China. Judges are elected or appointed by the people's Congress both at national and local levels. Potential difficulties with the judicial system emanate from its lack of independence, the lack of professionalism among judges, and the lack of adequate discovery procedures. Additionally, Chinese judges who possess limited technical abilities apply legal standards in an inconsistent manner and their decisions lack

149. *See* Timothy J. Malloy, Christopher V. Carani & Yufeng Ma, McAndrews Held & Malloy, What Every U.S. Corporation Should Know About China's Patent Protection and Enforcement 36, http://www.mhmlaw.com/article/china_patent_protection.pdf (last visited Oct. 22, 2007).

transparency. Finally, even when a patentee obtains a favorable judgment, enforcement of the judgment is often elusive.

Due to the complex technical and legal issues accompanying patent infringement, the administrative enforcement approach in the People's Republic of China does not work well for the enforcement of patent rights. According to the statistics released by Chinese authorities, 9,271 IP infringement cases adopted the judicial enforcement approach in 2003, while 62,019 cases adopted the administrative enforcement approach that same year.[150] These figures show that litigants involved in general IP infringement disputes opted for the administrative enforcement approach nearly seven times as often as the judicial enforcement approach. However, when dealing with patent infringement disputes, 7,208 cases adopted the judicial enforcement approach during the period from 2000 through 2003, while only 4,873 cases adopted the administrative approach during that same period. These figures show that patent owners do not prefer the administrative enforcement approach. The most significant problems with patent enforcement in the People's Republic of China are (1) insufficient qualified enforcers in the administrative authorities for patent affairs, (2) no effective penalty against repeat infringers, and (3) potential conflict with the judicial enforcement approach.

Additionally, damage awards in patent infringement cases are typically too low and are based upon (1) either the patentee's lost profits or the infringer's gained profits, (2) a multiple of a reasonable royalty in the event that the patentee's loss or the infringer's profits are too difficult to determine, and (3) statutory damages up to RMB 500,000.[151]

Possible discrimination against foreign IP owners exists in the current enforcement environment, due in large part to (1) local protectionism, (2) government self-interest not to provide convenient enforcement for foreign IP owners, (3) uncertainty in applying new IP laws, and (4) general ignorance of IP laws.[152]

A close examination of the IP regime in the People's Republic of China has demonstrated that several factors mentioned in the model constructed in Part II have contributed to low IP protections. First, there is the inheritance of traditional cultural attitudes toward IP. Second, Chinese citizens, both in the general public and in law enforcement, lack strong awareness of IP laws. Third, the People's Republic of China does not have a long legal tradition formed along Western lines, and has only

150. Malloy, Carani & Ma, *supra* note 149, at 31.
151. PATENT LAW art. 60 (P.R.C.).
152. Malloy, Carani & Ma, *supra* note 149, at 13.

recently begun to respond to international political pressure to reform. Fourth, the People's Republic of China imports far more IP than it produces. Fifth, there is insufficient respect for the rule of law in China. Finally, insufficient market and political freedoms contribute to a greater incentive to both create and consume counterfeit goods.

E. Relative Influence of the Factors

The cultural factor posited by Professor Alford is the least important among all the factors in the analysis of the levels of IP protection between Taiwan and the People's Republic of China. People in Taiwan and in the People's Republic of China are supposed to share a common cultural tradition, which includes a common language, the Confucian philosophy, common family values, and similar attitudes toward legal regulations. As suggested by Professor William Alford, the ancient Chinese lacked the concept of IP protection due to the general attitude of tolerance arising out of the Chinese cultural values.[153] If Chinese cultural attitudes are the primary reason for the low level of IP protection in Chinese society, it cannot explain why the level of IP protection in Taiwan is so much higher.[154] Similarly, it does not explain why the level of IP protection in Taiwan has improved tremendously in recent years.[155]

The Chinese cultural tradition evolved in quite different ways in Taiwan and in the People's Republic of China, and the conclusion that people in the People's Republic of China and Taiwan share the same cultural values is somewhat inaccurate. Although it is true that both peoples share similar cultural origins, the two peoples' cultural activities and attitudes have evolved somewhat differently due to divergent political traditions and different rates of economic growth. In Taiwan, people are proud of preserving their traditional cultural heritage. For example, Confucian philosophy remains strong in Taiwan, and it is quite true that the Taiwanese believe that the dissimilation of knowledge by copying or imitation should be tolerated. This is a major reason why the piracy rate in Taiwan was so high in the 1980s, and why Taiwan was labeled the "Pirate Kingdom" at that time. The People's Republic of China has a very unique authoritarian one-party political system. Although the Chinese people inherited much of the cultural background as the

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153. ALFORD, *supra* note 8, at 16-17.

154. BSA STUDY, *supra* note 2.

155. *See* INT'L PLANNING & RESEARCH CORP., EIGHTH ANNUAL BUSINESS SOFTWARE ALLIANCE GLOBAL PIRACY STUDY 6 (2003), *available at* http://www.caast.org/resources/2003_global_study.pdf. From 1994 to 2002, the piracy rate in Taiwan lowered from 72% to 43%, while the piracy rate in the People's Republic of China decreased from 97% to 92%. *Id.*

Taiwanese, their cultural attitudes changed a lot from the traditional ancient Chinese. Due to the effects of the Cultural Revolution, many ancient Chinese traditions were lost. Thus, if the cultural hypothesis proposed by Alford is properly considered, the level of IP protections in the People's Republic of China should be higher than in Taiwan. Paradoxically, just the opposite is true. Cultural attitudes evolve with economic growth. Many old ideas and values may be abandoned if they are out of date or no longer relevant. Therefore, the culture factor is not definitive.

International political pressure seems to be more important than cultural attitudes in establishing respect for IP rights, but it is still not as important as the factors correlating to economic development. For example, because of the increasing tendency toward internationalization of IP regimes and the globalization of the world economy, it is essential for a country to fulfill its international obligations in order to get along with other countries. International pressure is an efficient way to drive a country to improve its level of IP protection. Under the WTO regime, each member country must follow TRIPS regulations, which stipulate a minimum requirement for IP protection for all members. Any violation of this international obligation can be brought to the WTO dispute settlement panel, which can impose trade sanctions if the violating member does not rectify its behavior. Other international political pressure, such as a trade investigation called for by the United States, might also force a specific country to improve its level of IP protection in order to continue receiving the benefits derived from trading with the United States. Therefore, international pressure appears to be more significant in improving IP protections than cultural considerations.

But even international pressure is not as influential as the factors correlating to socioeconomic development. First, a comparison of the improvement of IP protection in Taiwan and the People's Republic of China shows quite different results under similar international pressure. In Taiwan, the improvement has been significant; while in the People's Republic of China, improvement has been somewhat sluggish despite aggressive international pressure. If international pressure is the most important factor in analyzing IP protection levels, it does not adequately explain the huge gap between the levels of IP protection in Taiwan and the People's Republic of China. Socioeconomic factors must have more influence than international pressure or cultural values. Research shows that, despite the high pressure imposed by other industrialized countries, reduction of IP infringement in the People's Republic of China is still not significant. A reasonable expectation from the analysis is that significant

improvement in IP protection in the People's Republic of China will not occur until the socioeconomic situation in that country improves.[156] For many reasons, a country might resist international pressures to improve by using other leverage. For example, when the United States faces accusations from the European Union regarding its fair use of foreign copyrighted materials by small businesses, the United States resists the WTO dispute panel's decision simply by ignoring it.[157] Similarly, the government of the People's Republic of China is powerful enough both geopolitically and economically that it could leverage a promise to open its market to direct foreign investment in exchange for a more lenient transition period to higher IP protection standards. Thus, the international pressure factor is important but not decisive.

VI. CONCLUSIONS

The reasons for the different enforcement rates of IP among countries are varied and complicated. This Article attempts to explain IP enforcement variances among Taiwan, the People's Republic of China, and the United States by analyzing factors that impact IP protection. The analysis resulting from the model constructed in Part II, as applied in Parts III, IV, and V leads to the following conclusions. First, the level of IP protection is affected by multiple factors, most significantly, cultural attitudes, economic development, and international political pressure. Second, the cultural factor cannot fully explain why there is a difference between the level of IP protection in Taiwan and the People's Republic of China, and, thus, it is the least important of the three factors. Third, international political pressure can only provide a limited explanation for the variances in IP protection. Indeed, international pressure fails to explain fully why such a huge gap exists in the level of IP protection between Taiwan and the People's Republic of China despite the fact that both regimes face similarly huge pressures from the international community. Thus, this factor is not decisive. Finally, the sub-factors correlating and contributing to socioeconomic development constitute

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> GDP itself is not a determinant of IPRs reform, as opposed to per capita income and economic development. Because US trade authorities are concerned with the strength of IPRs protection in large but poor economies, such as India and China, they have mounted considerable pressure for change. This finding suggests that, despite such pressure, effective patent rights may remain limited until incomes grow well beyond current levels. In other words, the higher standards required by TRIPS may well command limited enforcement attention in many nations.

MASKUS, *supra* note 22, at 107.

157. *See* WTO, *supra* note 45.

the most decisive factors in determining the level of IP protection in any country. This not only explains why the level of IP protection in Taiwan is lower than that in the United States, but it also explains why the level of IP protection in Taiwan is higher than that in the People's Republic of China, despite sharing similar cultural attitudes and facing similar international political pressure.