

CHAPTER 9

ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

This chapter will discuss the enforcement of IPRs, which is necessary basically because some people do not respect the rights of others. The reasons underlying such disrespect are many and varied, and range from greed, perceived necessity, lack of awareness, and ruthless criminal intent, all the way to innocent mistake. The scale of such disrespect also varies considerably, from copying a protected work in one's home to large-scale commercial criminal enterprises which produce hundreds of thousands of illegal copies. When illegal products take market share (or even kill a potential market), and when recouping an investment is prevented by intervening criminal activity, enforcement mechanisms are called into play to protect vital interests, not only of the players and entities mentioned, but also those of the public.

The essence of that classic maxim of common law, "a right without a remedy is no right at all," is equally applicable to the enforcement of IPRs. The carefully defined rights and interests which have been developed over time, which are reflected in various international treaties, conventions, and national laws, and which are granted or confirmed by the IP system, are completely negated if there is a failure in their enforcement. For it is when the necessity of enforcing one's rights is tested that the value of the rights is most clearly seen; the efficacy and long-term potential of the IPR system are most visibly displayed; and the friction caused by the intersection of theory, concept and intention, on the one hand, and reality, the marketplace and human considerations, on the other, tests the practical and ultimate values of the IPR system.

This chapter will also explore two egregious forms of IPR infringement, namely, counterfeiting and piracy,¹ as well as certain other timely and important issues, and in doing so, will seek to illuminate the seriousness of the problem. It will also seek to focus attention on the necessity for concerted action, enhanced public awareness, and galvanization of political will to eventually eradicate this problem and its negative effects on society.

MAGNITUDE OF THE PROBLEM

To get an accurate overview of the worldwide magnitude of the problem is difficult. Those who commit acts of counterfeiting and piracy generally do not file official reports on their sales. Seizures affect only a percentage of the overall market, and the extent of counterfeiting and piracy, including that which occurs in businesses, homes and in private situations, may never be known with certainty.

Notwithstanding the foregoing, intergovernmental organizations whose mandates touch on some aspect of counterfeiting and piracy and their effects, industry associations and nongovernmental organizations dealing with the subject have, based on facts and statistics within their respective purviews, estimated that the market in illegal, counterfeit products is between 5 percent and 7 percent of total world trade (see Table - 9.1). Job losses are estimated at 120,000 a year in the United States of America, and 100,000 a year in the EC, to give just two examples.

TABLE-9.1 ESTIMATED PROPORTION OF COUNTERFEIT AND PIRATED PRODUCTS

Organization	Estimate
World Customs Organization	Around 5% of all world trade
European Commission	Between 5% and 7% of world trade – representing EUR 200 to 300 billion a year in lost revenue
Organisation for Economic Co-operation and Development	More than 5% of world trade

Source: <http://www.interpol.int>; Commission of the European Communities, "Green Paper: Combating Counterfeiting and Piracy in the Single Market" (Brussels, 1998): 2; see http://europa.eu.int/comm/internal_market/en/intprop/indprop/922.htm; OECD, ICC Counterfeiting Intelligence Bureau, "The Economic Impact of Counterfeiting" #DSTI/IND(97)6/REV1 (Paris, 1998): 5.

According to the information supplied by certain sectors which are known to particularly suffer from illegally copied products, counterfeiting and piracy correspond to the following percentages of legitimate trade in the European Single Market, which are relatively high:

TABLE-9.2 COUNTERFEITING/PIRACY IN THE EUROPEAN SINGLE MARKET

Sectors Concerned	Rate of Counterfeiting/Piracy
Data processing	39%
Audiovisual	16%
Textiles	10-16%
Music	10%
Vehicle spare parts	5-10%
Sport and leisure	5-7%

Source: http://europa.eu.int/comm/internal_market/en/intprop/indprop/counterf.htm#2

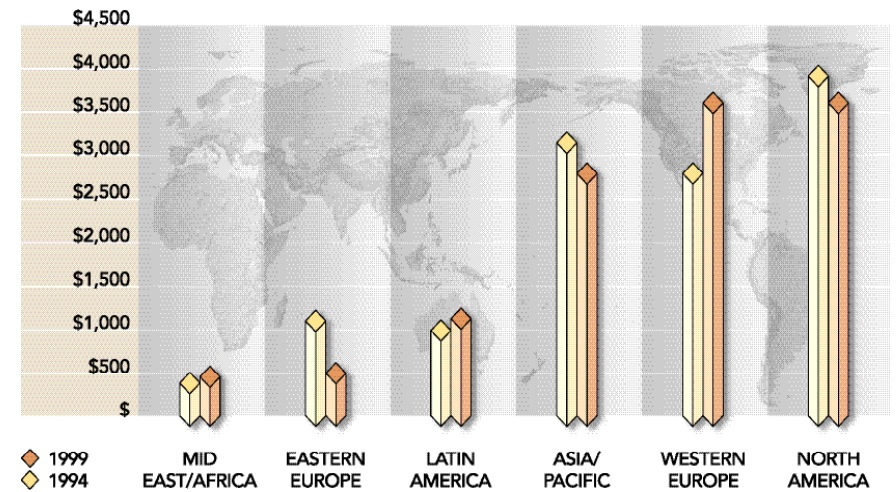
TYPICAL AFFECTED PRODUCTS

COMPUTER SOFTWARE

This is the most affected of all products and industries touched by counterfeiting and piracy. In their *Global Software Piracy Report*, the Business Software Alliance (BSA) and the Software & Information Industry Association (SIIA) report findings that are disheartening but also encouraging (see Chart - 9.3).² The global piracy rate for PC business software applications was an astounding 36 percent according to this study. However, it was 49 percent in 1994, a decline of 13 percentage points in five years.

Notwithstanding the percentages, the industry calculates that it lost US\$12 billion in 1999,³ a staggering amount, especially when one compares that number, for example, to the budget of the United Nations, which was US\$2.54 billion for the 2000-2001 biennium.⁴

CHART-9.3 SOFTWARE PIRACY LOSSES BY REGION (US\$BILLIONS)



Source: Business Software Alliance and Software & Information Industry Association, *Global Software Piracy Report (May 2000)*: 3.

Music

The music industry is also heavily affected, reflecting the underside of the digital revolution. Exact copies of music-bearing products are easier than ever to reproduce. In its *Music Piracy Report 2000*, IFPI reports that in 1999 the global pirated music market was estimated to have totaled 1.9 billion units. CD piracy increased to 500 million units, leaving music cassettes to account for 1.4 billion pirated units. The report notes that CD-recordable units made a significant impact.⁵

The cost of this piracy: an estimated US\$4.1 billion. It is slightly less than in 1998, reflecting lower prices for illegal recordings and lower sales of illegal music cassettes. The report does note that world capacity for optical disk manufacturing rose 28 percent in 1999, and increased more than 340 percent over the past five years. Internet piracy rose dramatically in 1999. While it is almost impossible to ascertain the exact number of illegal downloads via the Internet, Forrester Research estimated that there were more than one billion illegal downloads of music files in 1999.⁶ The

piracy of musical works over the Internet is a different topic, although closely related, to that of counterfeit CDs and music cassettes.

FILMS

The counterfeiting and piracy of films and other audiovisual productions occur in two basic forms: illegal diversion of cable and satellite delivery, and physical copies, generally in the form of videocassettes. Focusing only on the sale of physical copies, the Motion Picture Association (MPA) estimates that worldwide video piracy costs American motion picture companies US\$2.5 billion a year in lost revenues. As one example of video piracy in action, in June 1996, a pirate video operation was dismantled in New York. It was an illegal business which sold more than 100,000 pirate videos a week, and grossed more than US\$500,000 a week.⁷

The OECD, in its report *Economic Impact of Counterfeiting*, estimates that the video piracy rate for some countries can reach almost 100 percent.⁸

LUXURY GOODS AND FASHION WEAR

This is an area where the public's (and often the government's) attitude that this is a very soft crime, not more than mere mischief, is both prevalent and detrimental to the enforcement of legitimate rights. Counterfeit copies of luxury goods, especially fashion wear, proliferate, most notably in Europe where the major manufacturers are located. One common technique in this area is to import the fake clothing or items from one country, and to manufacture or import the labels from another. The fake labels are attached in the country of intended sale, thus making it much more difficult to identify fake goods in transit while these goods are in sufficiently large quantities to justify governmental enforcement action. One major source of these fakes are legitimate sub-contractor manufacturers, facilities which are legitimately authorized to manufacture original items, but who manufacture far in excess of the ordered amount, and sell the overruns out the back door at greatly reduced prices. Overruns create a sort of gray market: they are items illegitimately manufactured by a

legitimate manufacturer, which are illegitimately sold or placed in the stream of commerce. Such overruns are essentially counterfeit goods which negatively affect the economy.⁹

SPORTSWEAR

The 1990s saw a huge upsurge in all things sports-related. Sports is big business, but so also is the sporty, healthy lifestyle, with a dramatic increase in spa and fitness facilities, and the proliferation of diets, healthy life books, and so forth. Counterfeit sports wear is facilitated by several factors. The biggest segment of the market for these items is the youth market, the segment most willing to buy, even search out, counterfeit goods with well-known brand names at lower prices. The market for these items is also easily reachable, since, to a large extent, it centers around major events, particularly sport and music events. Mobile vendors of counterfeit goods are present in numbers at these events, and evidence suggests that these vendors are internationally organized and funded. Because they generally carry small inventories to these events, governmental authorities are restrained from putting a heavier emphasis on, or using more resources against, them. Another factor which helps this area to prosper is that buyers mostly just want the brand name; counterfeiters can easily attach fake labels onto ordinary clothing, and thereby satisfy large numbers of the youth market.¹⁰

PERFUMES

Perfume products are generally sold in established retail outlets, which lend price stability and authenticity to the market. However, the industry is experiencing attacks from counterfeiters and estimates that its losses in this area are greater than 5 percent of its total turnover. A willing public will generally purchase counterfeit perfumes from smaller shops and street vendors at so-called bargain prices, where it is often claimed that the goods are stolen, but are the real thing.

Toys

The toy industry can be divided into traditional toys, and the rapidly growing electronic toy industry. Traditional toys are often copied, and

then sold under different names and trademarks, rendering infringement actions close to impossible. Electronic games are an ever more serious problem. Video games, such as those created for the handheld Nintendo best seller, the Gameboy™, are copied and sold in huge numbers. Nintendo estimates that its losses in the United States of America alone for 1996 were in excess of US\$800 million.¹¹

AIRCRAFT COMPONENTS

Despite the fact that the legitimate market for aircraft parts is a heavily regulated industry, counterfeit aircraft parts slip into the chain of supply and distribution and can result in death and injury. The origin of counterfeit aircraft parts, where it can be ascertained, indicates that, with respect to accidents in the United States of America caused by such parts, more reported incidents involved parts produced in the United States of America than in other areas of the world.¹² It is reported that the number of incidents of detection of unapproved parts has been positively affected by industry and government cooperation: 52 incidents in 1991; 262 in 1992; 411 in 1994; 317 in 1995; and 220 in 1996.¹³

AUTOMOBILE COMPONENTS

This is an emerging growth area for counterfeiters, who target short-duration products, such as standard parts which are or can be sold off the shelf, or which can be fitted to different makes and models of automobiles. Such parts are less likely to carry any security device or anti-counterfeiting technology. The industry estimates its losses from counterfeit parts to be US\$12 billion per year, with the vast majority of that taking place in Europe.¹⁴

PHARMACEUTICALS

Because of the dramatic effects which counterfeit pharmaceuticals can have on public health and safety, including the death of unsuspecting victims, this is an area which currently receives more attention than ever before. The problem of counterfeit drugs and medicines is most acute in certain developing countries, where there might not exist a regulatory infrastructure to prevent or curb the problem. According to a recent

OECD report on counterfeiting, the main factors underlying the problem of counterfeit pharmaceuticals in developing countries are: "weak drug regulatory control and enforcement; scarcity and/or erratic supply of basic medicines; uncontrolled distribution chains; large price differentials between genuine and counterfeit medicines; lack of effective IPR protection; lack of regard for quality assurance; and corruption of the health care system."¹⁵ It is estimated by the WHO that 6 percent of worldwide pharmaceutical sales are counterfeit, and that up to 70 percent of all medicine sold in some countries is counterfeit.¹⁶

WATCHES

It is estimated that 5 percent of global trade in watches is counterfeit. It is interesting to note that in some countries, such trade creates a barrier to the sale of legitimate products. The difficulties encountered by some governments in enforcing IPRs, and the public perception in some quarters that such counterfeiting is business as usual, all serve to hamper any efforts to beat back the illegal trade.¹⁷

WHY COUNTERFEITING AND PIRACY ARE INCREASING

Advances in new technologies, particularly digital and computer-related technologies, have produced marvelous new products and services which make our lives more pleasant and more interesting, and which empower the individual as never before. Cultural activities, such as music, film, literature and art, are enhanced on an almost daily basis. New medicines and vaccines, and new medical treatments, are reported so frequently that we start to take for granted the amazing power which exists to fight disease and sickness, prolong our lives, and reduce suffering in the world. Some of these technological advancements have not been used for the public good.

Manufacturing now accounts for more than 75 percent of total world exports.¹⁸ Manufacturing is a value-adding process. While manufacturers are constantly adding value to existing products, they are, at the same time, creating new products; and this creates market demand.

By increasing market demand for their products so effectively, manufacturers are also, unintentionally, creating a market for counterfeit products, which are almost always lower in price. Manufacturers are thus victims of their own success. Price differences between various markets, which are often strategically segmented by manufacturers and distributors, are reflected in pricing policy, underscoring a significant gap in consumer purchasing power in different countries. This policy often drives people to produce and distribute counterfeit goods in their local market. As counterfeiting activities have become rampant, counterfeiters create distribution channels and establish an economic and even political presence in society. Some economies are supported by these activities which create local job opportunities.

Emerging markets are producing an increase in demand of startling proportions for well-known products, which legitimate manufacturers have been unable to completely satisfy. This extraordinary demand for goods and products has outstripped the abilities of the enforcement agencies to monitor and protect against counterfeit products.

Certain new technologies have allowed easier reproduction of IPR bearing products and goods and facilitated the reproduction of products in nearly every field where there are eager customers or market demand for the legitimate products. Cultural products, such as music, films, computer products, and literary products, are easily reproduced and foisted onto the public, facilitated in large part by new technologies.

International trade has increased substantially in the past few decades, for several reasons, including: standardized rules and remedies applicable to the multi-lateral trading system; increased telecommunications capacities; the rise of the Internet; and the effectiveness of manufacturers in branding their products, creating market demand, and producing products which are designed to satisfy that market demand. Increased worldwide demand for goods and products and a corresponding lack of proportional increase in worldwide enforcement mechanisms needed to support that demand and production, such as customs, police, and judiciary, allow for cracks and niches in the system. Counterfeiters are right there, ready to fill those cracks with counterfeit goods.

ORGANIZED CRIMINAL INVOLVEMENT

Because of high-profit potential and relatively low risk, organized criminal elements are deeply involved in counterfeiting and piracy. Profits from counterfeiting and piracy are often used to fund other criminal activities; and unfortunately, the criminal enforcement infrastructure, as well as the public, does not always view counterfeiting and piracy as the serious crimes that they are. The active involvement of organized crime in counterfeiting and piracy is a proven, irrefutable fact. International criminal organizations produce, distribute, sell, and traffic in counterfeit and pirated goods for several reasons: it is lucrative; it is often a low-risk activity; and it funds other activities where the risk, as well as the rewards, are much greater.

A disturbing attitude has existed in the public, and sometimes in the judiciary, and in law enforcement agencies, that counterfeiting and piracy are low-level mischief and of little consequence. The dedicated efforts of many organizations and governments have finally started to change this misperception. The results and consequences of the involvement of organized crime in counterfeiting and piracy can be quite serious. Organized crime is almost always involved in commercial-scale counterfeiting and piracy operations.¹⁹ The profits from such operations are then channeled into other criminal operations. It is a connection which is dangerous and, as discussed in the next section, leads to unwanted and serious short-term and long-term consequences.

ECONOMIC CONSEQUENCES

INTELLECTUAL PROPERTY RIGHT HOLDERS AND LEGITIMATE MANUFACTURERS

A more subtle, but no less worrisome, dimension is the effect of the economic consequence of counterfeiting and piracy upon society. Because counterfeiting and piracy are illegal, many of the normal elements associated with legitimate business are removed, and as a result, benefits are denied society at different levels. Initially, loss of direct sales revenues is

experienced by legitimate manufacturers. The size of such loss is monumental, often beyond our comprehension. Credible estimates of lost sales revenue by legitimate manufacturers are shown in Table - 9.4.

TABLE-9.4 LOST SALES REVENUES IN SELECTED SECTORS

Industry	Loss of Direct Sales
Pharmaceuticals	US\$12 billion in 1999
Music	US\$4.1 billion in 1999
Computer software	US\$59 billion over five years to 1999

Source: <http://www.interpol.int>; IFPI Piracy Report: 2; <http://www.bsa.org>.

Counterfeit goods are almost always inferior in quality to the originals. When the unsuspecting public discovers that, there is a loss of confidence in the system by which goods are manufactured and distributed, as well as a loss of goodwill toward the manufacturer. Enterprises lose future sales as a result. Prices paid for inferior quality counterfeit and pirated goods are often excessive or inflated in comparison to the quality.

NEGATIVE IMPACT ON LOCAL INDUSTRIES

Those countries in which counterfeiting and piracy take place suffer losses on several levels, both tangible and intangible. When it is shown by credible evidence that counterfeit and pirated goods are being manufactured in a country and there is little or no focused government effort to prevent such manufacturing from taking place, the harmful reputation which this creates discourages manufacturers of legitimate goods from establishing their facilities in those countries. Such decisions result in a loss of FDI, as well as the concomitant technology transfer and foreign know-how which normally accompany FDI. Loss of FDI also manifests itself in a loss of foreign income, which ultimately affects a country's balance of payments.

The cycle continues in ways which hurt not only foreign manufacturers but a country's local industry. Local creators, inventors, and SMEs, which might have focused their efforts and resources on the same products, are often discouraged by the certainty that their products will be illegally

copied and sold, thus precluding a return on investment and future growth, as well as the very spirit and energy which are an integral part of the creativity process towards a knowledge-based economy.

SOCIAL CONSEQUENCES

The social consequences of counterfeiting and piracy are felt most personally by those artists, creators, and entrepreneurs who compete directly against the illegal products. As an example, local musicians, music groups, record companies, and distributors cannot put out a record or CD; and their products (embodying local and national artists) are pushed out of the market by the counterfeit copies, which are sold at a lower price, and generally with none of the artwork, lyrics, or printed material which accompany legitimate copies, and certainly no guarantee as to quality. As this example of music shows, local creativity and culture are strangled by counterfeiting and piracy; the country and its citizens are the ultimate losers in this scenario, as inadequate respect for cultural works and heritage counters national efforts to promote indigenous culture and identity.

Counterfeiting of medicines, and airplane and auto parts has a detrimental effect on the health and safety of the public.²⁰ The WHO estimates that approximately 6 percent of pharmaceutical sales worldwide are counterfeit. Developing countries account for the largest portion of such sales. According to some estimates, up to 70 percent of all medicine sold in some African countries is counterfeit.²¹

While counterfeit medicines are more of a problem in developing countries, their effects are universally felt by all. Counterfeit paracetamol syrup cost the lives of 109 children in Nigeria.²² In 1981, the pharmaceutical company Searle discovered that over one million counterfeit birth control pills had been distributed to unsuspecting women, resulting in unwanted pregnancies and irregular bleeding. The United States Food and Drug Administration recalled US\$7 million worth of intra-aortic pumps used during open-heart surgery after it discovered malfunctioning counterfeit parts in them. A counterfeit version of the antibiotic Ceclor™ caused children in seven states in the United States of America to suffer painful ear infections and possibly permanent ear damage. In Mexico,

a counterfeit version of the powerful skin medicine Retin-A contained only vitamin A cream.²³

With respect to counterfeit aviation and auto parts, several incidents have resulted in death. In 1989, a Norwegian airplane crashed, killing 55 persons. The cause was reported as substandard counterfeit bolts. In 1991, General Motors Corporation investigated an auto accident in which a mother and her child were killed. The results indicated that counterfeit brake parts had caused the accident; the counterfeit brake pads were made out of wood chips. A helicopter crash in 1987, which caused the death of a reporter, was caused by a counterfeit clutch; upon further investigation, it was learned that similar accidents had occurred, and that more than 600 helicopters, some sold to NATO, were equipped with the same counterfeit parts.²⁴ These examples highlight the fact that purchasers of counterfeit goods do not have the same benefits and protection that purchasers of authentic goods enjoy, including warranty protection and the advantages that derive from use of products that have had the benefit of regulatory review.

The lesson from just this aspect of counterfeiting is clear, and must be taken seriously: people can die when criminals foist counterfeit items, especially medicines, and auto and airplane parts on an unsuspecting public.

INTERNATIONAL LEGAL FRAMEWORK

Counterfeiting and piracy are most certainly current subjects of attention; however, they are not new subjects. In the 1800s, certain manufacturers of goods, particularly tools, cutlery, cotton thread and other commodities, noticed that their goods, and their marks were being copied in newly industrializing countries. Their complaints, which were similar to ones being leveled in the book publishing field by noted authors, led to the creation and adoption of international treaties to deal with the protection of IPRs. The Paris Convention for the Protection of Industrial Property was adopted in 1883, and the Berne Convention for the Protection of Literary and Artistic Works was adopted in 1886.

These two landmark international instruments established certain principles relating to counterfeit and pirated goods, which are deemed integral today in protecting IPRs and in creating orderly markets. The conventions provide that disputes between countries can be brought before the International Court of Justice (Paris Article 28 and Berne Article 33); no Member State has ever resorted to this remedy.

A solution to the problem through an international instrument was first taken up in the Uruguay Round and resulted in the TRIPS Agreement. Part III of the TRIPS Agreement specifies certain minimum standards for the enforcement of IPRs. All Members are obligated to implement these standards, which include General Obligations, Civil and Administrative Procedures and Remedies, Provisional Measures, Special Measures Related to Border Measures, and Criminal Procedures. These provisions establish procedures which, for the first time in an international instrument, require signatories to provide that IPR holders can effectively assert their rights, seize infringing goods, seek remedies against criminal enterprises and infringing goods, and seek the assistance of those agencies of government which have responsibilities in these matters, such as the courts, police, customs, and other administrative agencies.

On another level, when Members of WTO have disputes with other Members concerning, *inter alia*, the effective enforcement of IPRs, they are able to proceed in certain stages to bring their complaints through the Dispute Settlement Mechanism. These procedures are based upon mandatory jurisdiction in the WTO where there are sufficiently weighty remedies to ensure compliance, and in the event of proven noncompliance, to effect remedial compensation to the aggrieved Member. This is a noteworthy experiment in support of intellectual property, in support of the expansion of the multilateral trading system, and in support of creativity and innovation.

The rapid development of digital technology and global telecommunications capacities, while providing us with many benefits, has also produced a situation in which copyright and related rights works have been rendered vulnerable to on-line abuse and infringement. The world copyright community came together in December 1996, at a diplomatic conference hosted by WIPO, and in response to the growing threat of digital-

based infringements, adopted the WCT and WPPT. These treaties address substantive rights, but also, for the first time since 1971, upgrade and clarify international standards for the protection and enforcement of copyright. Most noteworthy is the refinement and clarification of the Right of Communication to the Public (which derives from the Berne Convention and includes making available works over the Internet), and the Obligations Concerning Technological Measures of Protection. These latter provisions are new tools, and in the countries which have implemented them in their national legislation, new legal actions are being taken and a new body of case law is growing up, which successfully take the enforcement fight into cyberspace.

POSSIBLE MEASURES

At the national level, a number of governments are reinforcing their legal framework and institutional arrangements to comply with the above-mentioned international treaties. Generally, enforcement of IPRs can take four basic forms:

- Administrative enforcement, such as seizure of infringing goods by a customs office;
- Criminal enforcement, in which the state, generally through the police, is the moving party in a criminal action against the infringer;
- Civil enforcement, in which the right holder, or someone in possession of valid rights, such as an assignee or licensee, takes prescribed legal action, such as in court by filing a civil action against an infringer, and perhaps seeking an injunction;
- Technological enforcement, in which producers of products and services employ technological means to protect IPRs against infringement (for example, encryption of digital copyright works).

These measures are limited to applicable laws (for example, in many countries, criminal enforcement is not applicable in the case of a patent infringement). Administrative measures and civil measures are linked in some countries. It is hard to determine the extent to which the state should use public resources to help enforce a private party's right. However, effective enforcement has become an international obligation under the TRIPS Agreement, as it is vital in promoting trade and fostering fair competition in market-oriented economies. Advantages and disadvantages are shown in Table - 9.5.

TABLE-9.5 COMPARISON OF VARIOUS ENFORCEMENT MEASURES

Measures	Moving Party	Relevant IPR	Advantages	Disadvantages	Emerging Trends
Administrative	Customs office	Mark, copyright	Relatively expeditious	Effective only in obvious cases	Regional cooperation on border control
Criminal	Police	Mark, copyright	Effective, relatively expeditious	Limited to serious cases	Increase of fines, more raids for educational effect
Civil	IPR holder	All IPRs	Reasonable remedies	Time-consuming and expensive	IPR special court, Alternative Dispute Resolution (ADR)
Technological	Producer of IPR works	Copyright, mark, patent	Practical, speedy	Vulnerable to hacking	Standardization efforts for water-marking

ADMINISTRATIVE ENFORCEMENT

Administrative enforcement of IPRs takes place in an administrative agency or body of government separate from the courts where civil or criminal enforcement is most visibly conducted. The most notable example of administrative enforcement is the customs authorities. Customs has a more visible and important role with respect to enforcing IPRs at the borders, as the TRIPS Agreement provides detailed provisions on customs procedures.

For example, in 1999, 25 million counterfeit articles were seized at EU borders; by 2001, that number had risen to 95 million. To combat the increasing menace of counterfeiting and piracy, the EC is planning to enact enhanced legislation, starting with a plan for concerted action across a wide spectrum of agencies and branches of government, to be followed by a proposed new directive.²⁵ The situation in China is another example which deserves attention. In 1998, administrative authorities handled 28,952 cases of IPR violations and seized 400 million infringing items.²⁶ In January 2000, customs officials at Hong Kong SAR uncovered a criminal video disk production operation; two production lines were closed down, and 400,000 illegal disks were seized. In 1999, authorities at Hong Kong SAR seized 16 million illegal optical disks, and arrested 2,701 people for piracy offenses.²⁷ Large scale anti-piracy operations by the customs authorities at Hong Kong SAR, with creative names such as Thunderbolt and Terminator, have also been successful in seizing hundreds of thousands of CDs and illegal production equipment.²⁸

Due to the low policy priority given to IPR enforcement, customs offices in many countries have scarce resources to combat counterfeiting and piracy at the border. Seizures of counterfeit and pirated goods require close and expeditious cooperation from IPR holders and access to relevant information to identify the goods to seize. Databases of registered and well-known marks are particularly useful for officials of the custom office (see Box - 9.6).

BOX-9.6 DATABASES FOR ANTI-COUNTERFEITING

The Réseau Européen Anti-Contrefaçon (REACT) was formed in June 1997 by the Dutch and Belgian anti-counterfeiting associations. It is supported by the EC, and is gaining in resources and results. Among other activities, it operates a central database in support of law enforcement, investigations, and national associations fighting counterfeiting and piracy. In 2000, REACT assisted in 1,150 seizures of illegal goods, including 750,000 merchandise items, 120,000 perfumes, 460,000 textiles, and 185,000 watches. One seizure in December confiscated 1,000 kilograms of counterfeit medicines.

Source: <http://www.REACTEU.org>.

PARALLEL IMPORTS

In seizing infringing goods, it is difficult to distinguish between parallel imported goods and counterfeit goods – if a given country permits parallel importation. Parallel imports (also known as or referred to as gray market goods) involve cross-border trade in a product without the permission of the manufacturer or right holder. This type of trade generally occurs where there is a significant differential in price, quality, or availability of the subject product in the second country. Parallel import products are often distinguished from counterfeit or pirate goods, since they were legally manufactured and sold in the first country, and in some countries their importation is legal. From the viewpoint of IPR owners, parallel imports frustrate their efforts to effect the distribution of goods in order to serve territorial markets and promote competition, because distribution channels are believed to promote orderly and effective distribution of products, and restrictions on parallel importation promote and protect such channels. However, from the viewpoint of consumers and civil society, parallel imports promote more competition resulting in greater variety and choice of goods and lower prices as long as the goods are genuine.

Manufacturers and IPR holders enforce their rights in gray market situations through a variety of means, including: the establishment of protective national legislation (for example, as part of the IPR regime); regulatory

barriers, such as those relating to public health and safety; restrictive contracts with distributors and vendors; disclosure requirements; competition laws; and warranty and consumer rights issues.²⁹

The complexity and sensitivity of the issue can be seen quite clearly in how the negotiators of the TRIPS Agreement dealt with it. Article 6 (Exhaustion) of that Agreement states in part: "...nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights." In the Declaration on the TRIPS Agreement and public health that was adopted on November 14, 2001 at the WTO Ministerial Conference in Doha, it was stated that "the effect of the provisions in the TRIPS Agreement that are relevant to the exhaustion of intellectual property rights is to leave each member free to establish its own regime for such exhaustion without challenge, subject to the MFN and national treatment provisions of Articles 3 and 4." This means that, if the policy on parallel imports is decided by applying the theory of the exhaustion of IPRs, the issue of parallel imports in the WTO framework is exclusively an issue for national legislation (the issue is also dealt with in some regional trade agreements, such as with the EC and with the North American Free Trade Agreement). However, the policy on parallel imports is often determined by factors regarding trade, competition and economy rather than those relating to intellectual property. Theories of intellectual property, such as the exhaustion of IPRs or the first sale doctrine, alone are not likely to provide the best solution to this problem.³⁰

CRIMINAL ENFORCEMENT

There is fairly general agreement that the most effective methods and procedures in the fight against infringement of IPRs are those involving criminal enforcement. Criminal law imposes different standards for liability that are generally harder for the prosecution to meet than in civil cases, however, criminal penalties are more onerous. Large-scale, commercial counterfeiting and piracy operations have traditionally looked upon civil fines as merely the cost of doing business. However, when the threat, or especially the reality, of prison is introduced into the mix, real enforcement starts to take shape.

With the coming into force of the TRIPS Agreement, and with its applicability to a large number of developing countries on January 1, 2000, a legal framework, with very specific guidelines, provided both the structure and the incentive to make criminal enforcement more effective and more widespread. Many activities and initiatives are taking place at the national and regional levels, and, as will be seen by the examples hereafter, there is a changing, more positive attitude about dealing with these serious problems caused by counterfeiting and piracy.

The following examples, a few of many, give the flavor and texture of what has been developing in the expanding area of criminal enforcement of IPRs.

In Malaysia, the Business Software Alliance (BSA) has been assisting the government to fight large-scale software piracy. During the period of April to June 1999, 4,629 raids were conducted for the purpose of seizing illegal software products. Under the Malaysian Copyright Act, infringers can face not only stiff fines, but up to five years in prison.³¹

One thousand inspectors fanned out across China in December 2000, in search of counterfeit auto parts. They raided 248 retail outlets and uncovered over 30,000 counterfeit auto parts, including such potentially dangerous items as axles and brake parts.³³

In December 2000, officers from the Independent Commission Against Corruption of Hong Kong SAR seized 500 illegal stampers, the machines which make CDs. These machines, which had a value of US\$400 million, were being used to illegally manufacture CDs of films, music, computer software, and video game software.³²

In Singapore during 2000, coordinated efforts by the government and police resulted in 1,398 separate raids on illegal operations, 1,455 persons arrested, and 1,559,840 illegal articles seized and taken off the market. Those arrested included 180 members from seven separate criminal organizations.³⁴ In the Philippines, National Bureau of Investigation officers seized counterfeit Caterpillar™ truck parts.³⁵ Police in New Delhi, India, raided a small shop and seized over US\$1 million worth of illegal CDs of music and computer software; the owner of the shop faces up to three years in prison.³⁶

The above examples are presented because they indicate both the scope of the problem, and the type and strength of the response which is necessary to achieve positive results in this area. The following two examples are presented because each represents what might lie ahead in respect to newly evolving problems and solutions.

In the first case of its kind, Fakegifts.com used the Internet to sell counterfeit products. This site, based in South Carolina, the United States of America, offered replicas of such items as Cartier™ and Rolex™ watches, Montblanc™ pens, and well-known handbags and belts. Under US federal law, the two proprietors of the site face ten years in prison and a US\$2 million fine for each trademark infringement count.

Because of the growing complexity of IPR legislation, as well as the specificity of knowledge required to properly understand and execute the laws, Thailand established a Central Intellectual Property and International Trade Court in 1997. With respect to its IPR functions, the Thai IP Court has exclusive jurisdiction in both civil and criminal matters concerning the enforcement of IPRs. This novel, commendable approach seeks to ensure that its assigned judges possess and build up specialization of knowledge in IP legislation and practices, while at the same time, the Court stresses user-friendly, cost-effective, and expeditious procedures, including emphasis on the use of arbitration and more effective pre-trial conference procedures.³⁷ While such specialized courts are not necessarily the best solution for every jurisdiction and legal system, they provide an interesting model that many countries may find useful.

CIVIL ENFORCEMENT

The TRIPS Agreement³⁸ requests Member States to provide the legal infrastructure and mechanisms necessary for IPR holders to vindicate their rights, to stop infringements at the outset, to gather necessary evidence, and to seek appropriate and effective remedies relative to the particular situation, including *ex parte* injunctions, seizures, destruction of infringing goods and damages, which could include the cost of suit and attorney's fees.

Civil enforcement can be an effective tool against counterfeiters, although criminal enforcement is the preferred course against such abusers of the IP system. However, civil litigation in IP infringement cases has markedly increased with substantial damages being awarded in many cases (see Box - 9.7).

BOX-9.7 TOP PATENT VERDICTS IN THE UNITED STATES COURT OF APPEALS OF THE FEDERAL CIRCUIT

Polaroid vs. Eastman Kodak	US\$873 million
Smith International vs. Hughes Tools	US\$204 million
Pfizer vs. International Rectifier	US\$ 55 million
Shiley, Inc. vs. Bentley Laboratories	US\$ 44 million

Source: WIPO, document WIPO/IP/MNL/00/7(b): 6.

Enforcement of patent rights varies in complexity, duration, and cost, for instance:

- In Australia, about 20 to 40 patent infringement cases are initiated each year, but only about 10 percent of them actually proceed to trial, which typically takes place one to two years after filing suit. However, the cost attendant on patent litigation can be in the range of US\$53,410 to US\$267,050,³⁹ which can include attorney's fees.
- In the Republic of Korea, patent infringement actions can take as little as three to four months, and judgment can include attorney's fees and costs.
- In Germany, patent infringement actions are more costly because lawyer's fees are regulated by the state, and lawyers are not allowed to charge less than a specified minimum. A full infringement action there typically takes 12 to 18 months.
- In Mexico, a typical patent infringement action takes about three years, and the cost is generally in the range of US\$50,000 to US\$100,000.⁴⁰

Due to the technical complexities involved in patent infringement cases and in an attempt to provide uniform interpretation of patent claims, some countries have established special arrangements in the court system so as to consolidate patent cases. For example, in 1982 the United States Court of Appeals for the Federal Circuit was established with the mandate to hear appeals on patent cases decided by the various United States district courts in order to bring about more consistency.

An effective judicial system to resolve the claims of IP right holders is a necessary element of any IP system. If a judicial system is relatively weaker than that of other countries, the right holder starts international forum shopping, which will undermine the home country's IP policy.

CONFLICTS AND CHOICE OF LAWS

Because of the expansion of global activities which are involved with IPRs, an area which requires increased attention, from the perspective of international harmonization, is the body of disparate laws and legislation known as private international law. This body of law comes into play when civil litigation involves parties or fora in more than one country. With globalization of business and expanding technological development and telecommunications capacities, noticeably more international litigation is being pursued.

Litigants and their lawyers find that the laws of all countries are not the same; moreover, the laws differ so much in some cases as to affect the outcome of litigation matters, depending in which country's courts the plaintiff decides to initiate the litigation. Because of this disparity in applicable laws, efforts are underway to further and more satisfactorily develop principles of applicable law, so that the application of law in enforcement contexts will be fair and predictable. Issues such as jurisdiction, damages, and choice of applicable laws are at the heart of such initiatives.

As an example regarding jurisdiction, it is interesting to see how the computer software firm Novell recently sued its distributor and contracting party in the Republic of Korea, Myung Je, for copyright and trademark infringement. The district court hearing the case was in Utah, United States of America, although all of the illegal activity occurred in the Republic of

Korea. Novell's in-house anti-piracy group had investigated over 2,400 cases of software piracy in 1999.⁴¹

At present, no international agreement exists on international jurisdictional questions. Of special mention in this regard is the initiative underway to negotiate and ultimately adopt the Hague Convention on Jurisdiction and Foreign Judgments in Civil and Commercial Matters.⁴² At present, this initiative is not concluded, as many issues remain; however, it is safe to say that the lack of international rules could have negative effects on global economic activities, particularly in e-commerce with respect to digital works protected by intellectual property.

BOX-9.8 "LOVE IS A WONDERFUL THING"

On January 22, 2001, the largest verdict ever, concerning a single musical composition was finalized in a music infringement case in the United States of America. The popular singer Michael Bolton was sued on account of his hugely popular musical composition "Love Is A Wonderful Thing," for allegedly infringing a musical composition written by the 1960s musical group the Isley Brothers; both songs had the same title. Bolton's song was popular in 1991; the Isley Brothers' song was a hit in 1966. The jury at the district court level, in 1994, decided that there had been infringement. The United States Supreme Court affirmed the award of the lower court, in spite of the absence of proven direct access, which was implied due to the widespread playing on the radio of the Isley Brothers' hit: US\$5.4 million in monetary damages, 66 percent of all future royalties from the single, and 28 percent of royalties from the album on which the single appeared.

Source: <http://www.law.com>

ALTERNATIVE DISPUTE RESOLUTION (ADR)

Another modality for administrative enforcement of IPRs is seen in the rapidly growing and quite promising area of ADR and, in particular, arbitration. A less expensive, more expeditious, and less resource-intensive method of resolving disputes, ADR is surfacing in many different fora as a very viable alternative to civil litigation.

ADR procedures can be either mandatory or optional, and their results can be either binding, as typically in arbitration, or nonbinding, as in mediation.

One example of ADR specifically tied to domain names (and their overlapping into the area of marks and especially well-known trademarks) is the WIPO Arbitration and Mediation Center's involvement in domain name disputes. As one of four current providers of dispute resolution services under the scheme established by the Internet Corporation for Assigned Names and Numbers (ICANN), which has become the overarching administrative body for the Internet, WIPO has received the largest percentage of domain name cases filed, more than 60 percent.

The use of ADR offers many advantages to the problems, backlog, delays, and costs associated with civil litigation. It is generally operated by an agency or body other than the authority which operates the civil courts. As a growth area, it offers unique benefits in enforcing IPRs, and it will certainly loom large in the future of global businesses and their evolving use of IPRs. With its Rules for Arbitration, for Expedited Arbitration and for Mediation and its Recommended Contract Clauses, which are tailored to the specific characteristics of intellectual property disputes, and its extensive database of specialized arbitrators and mediators from a multitude of jurisdictions, the WIPO Arbitration and Mediation Center is poised to play an effective role in this regard.

TECHNOLOGICAL ENFORCEMENT

After sustaining years of financial losses as well as the loss of the goodwill of their customers, businesses have made great efforts to create and deploy technological measures to protect their products from counterfeiters and pirates, and in many cases, to protect the public from dangerous copies. Technological enforcement is a fast-changing dimension in the world of enforcement. It is expected to be used as a practical and effective measure, particularly in the context of e-commerce. Indeed, the

WIPO Internet Treaties, the WCT and WPPT, for the first time oblige Contracting Parties to provide legal protection and effective remedies against the circumvention of effective technological measures that are used by the right holder.

This area is fast changing because, as the saying goes, "What one man can create, another can copy." This applies not only to the products themselves, but also to the technological means of protection. Conceptually, technological measures must be designed to shift the balance of risk to the counterfeiter; the probabilities are thus higher that he or she will get caught, pay a large fine, and perhaps go to prison.⁴³ This concept permeates the design and deployment of technological measures.

In order for technological measures to be successful in their assigned roles, they must be sensitive to cost, which is ultimately passed on to the consumer. If the price of the technology protecting the product doubles its cost, it will be unuseable; likewise, if the technological measures disrupt normal distribution of the product or are unfriendly to the consumer, for example, impeding or even preventing use of the product. Because of these various and necessary considerations, business has understood that only through a combination of different technological measures, can products be protected, and counterfeiters be defeated.

There are basically four different types of technological measures by which businesses attempt to protect their products and enforce their intellectual property and other rights: optical technology, biotechnology, chemical technology, and electronic technology. A brief description of the optical and electronic measures is given below.

Optical technological measures, which are visual in nature and make use of light in various ways, have become quite popular with manufacturers. The most prevalent of those technologies is the hologram, a two or three-dimensional device which reflects an image, or images, and which is sometimes accompanied by movement reflected in the image(s). The main reason holograms have become the most used optical technology is that they are the most difficult, costly, and technically challenging to copy.

Electronic measures include the following: (1) The magnetic strip – like the ones protecting credit and bank cards, they store large amounts of information in coded form, which can be read with an appropriate scanner. (2) The smart card – a plastic card which incorporates a computer chip which stores and, upon proper access, gives large amounts of information. This is expensive but effective and will surely be one avenue for future enforcement. (3) Electronic encryption, which scrambles the electronic signal, making it unreadable by normal means such as computers, CD players, VCRs, and DVD players. The makers of the goods and legitimate purchasers are the only ones who legitimately have possession of the key necessary to unlock the encryption.⁴⁴

ORGANIZATIONS AND INITIATIVES

The issue of the enforcement of IPRs cuts across many segments and layers of society; it affects them all in varying degrees and in different ways. Counterfeiting and piracy constitute the bulk of the problem. Because of the various effects on society, there are numerous organizations involved in this issue, and several noteworthy initiatives. They include the World Customs Organization (WCO)⁴⁵ and INTERPOL.⁴⁶

Nongovernmental organizations (NGOs) are most often industry or trade associations formed to further the goals and objectives of a particular industry. They serve important and vital functions, including conducting research and gathering statistics, formulating policy, voicing that policy at meetings and in relevant fora, and keeping their members informed and up to date on developments with cutting edge information. They include the International Chamber of Commerce (ICC), International Federation of the Phonographic Industry (IFPI), the Motion Picture Association (MPA), Business Software Alliance (BSA), and the International Anti-Counterfeiting Coalition (IACC).

INITIATIVES FOR INTERNATIONAL COOPERATION

Several international initiatives are currently in operation. The EC has been quite active in the fight against counterfeiting and piracy, and its efforts are noteworthy. There are several specific reasons underlying these efforts, such as the comprehensive aim of enhancing the Single Market in its performance and global standing; the introduction of the Euro single currency and the positive effects that can bring; and the fact that many of the categories of counterfeit items are either in large part produced or sold in the EC, for instance, high fashion and luxury goods, and optical disks embodying music, computer software, and films.

In 1986, the EC took action against counterfeit goods by enacting Regulation 3842/86. That regulation was amended in large part by Regulation 3295/94, which was itself amended by Regulation 241/1999. The Regulation seeks “to halt the relentless growth in international trade in counterfeit goods;” it lays down measures to prohibit release for free circulation, export, re-export or entry of counterfeit and pirated goods; it strengthens the powers of the customs authorities; and it deals with the thorny issue of parallel imports without the right holder’s consent.

In 1998, the EC prepared and released for comments its green paper, *Combating Counterfeiting and Piracy in the Single Market*. This extensive paper examined the problems associated with counterfeiting and piracy, starting with the widest possible common sense approach; the scope of the paper covers “all products, processes and services which are the subject-matter or result of infringement of an intellectual property right... of a copyright or neighboring right... or of the *sui generis* right of the maker of a database.” The EC subsequently published a report on the responses received to the green paper, a document rich in comments, and information, which will serve to justify concerted, focused efforts to deal with these problems.⁴⁷

TOWARDS THE CREATION OF AN INTELLECTUAL PROPERTY CULTURE

Among several factors explaining the declining rate of piracy are the following:

- software companies have established more of a global as well as local presence thus making it easier to purchase the legal item, and there is greater public awareness about the illegalities of pirate software;
- increased cooperation between industry and government in the period since 1994;
- criminal penalties have been enacted in many jurisdictions and enforced in some instances.⁴⁸

Whether, and to what extent, society realizes the full value of IPRs in the new economy and in modern society irrefutably impacts on economic, social, and cultural development. In addition to political will and the implementation of national legislation compliant with all the relevant treaties of IPR enforcement, government leaders may wish to consider the importance of fostering an IP culture (see Box - 9.9).

Appreciating the value of IPRs and the potential positive impact they can have on society, will raise awareness in all persons involved or touched by the process. In the IP culture, government officials and agencies act to increase value and raise standards of living by advocating an increased use of IPRs. The private sector, from multinational corporations down to SMEs, recognizes the value of IPRs in knowledge-based industries and economies. The public understands the benefits of purchasing legitimate goods and services, thereby boosting local industries and economies, increasing the tax base, and teaching children the value of the rule of law. The absence of an IP culture gives rise to a stagnant, receding economy, a lack of creativity and inventiveness, and a business climate bereft of FDI, consistency, or reliability.

An IP culture creates an environment in which the need to actually enforce IPRs is reduced or eliminated, an environment in which the focus is creativity and inventiveness; perfection of products and services; building and increasing market share, consumer confidence, and brand equity; and the proliferation of goods and services to all citizens.

BOX-9.9 INTELLECTUAL PROPERTY POLICIES OF SINGAPORE

Singapore recognizes the importance of intellectual property as a national resource and in attracting foreign investment in its development as a knowledge-based economy. To develop intellectual property as a strategic and competitive resource, the country adopts an essentially pro-active IPR policy for the development of high value-added and creative-content industries. In November 2000, the Ministry of Law announced that the Intellectual Property Office of Singapore (IPOS) would be converted into an autonomous statutory board charged, *inter alia*, with administering the IP system in Singapore. One of the recent IPOS initiatives is the provision of IP information via the recently launched SurfIP (<http://www.surfip.com>), a one-stop IP portal for searches across multiple patent databases in various jurisdictions as well as the provision of other technical and business resources.

On the IPR enforcement front, the agency primarily responsible for domestic enforcement is the Intellectual Property Rights Branch, a specialized Crime Division of the Criminal Investigation Department, while border enforcement is assured by the Customs and Excise Department. In the field of education, Singapore has public education campaigns led by IPOS and the National Science & Technology Board aimed at promoting greater public awareness of IP rights.

Source: Dr. Ng Siew Kuan, National University of Singapore.

For true economic, social, and cultural development to occur, intellectual property must play a crucial role; for IPRs to play that crucial role, they must be enforced throughout society. To effect the maximum enforcement of IPRs, an IP culture must be harnessed. Enforcement is a multi-layered concept. It cannot be approached only through the police, customs, and courts. Without political will, the appropriate legislative framework, and an IP culture, there can be no enforcement, and ultimately, the country and its economy will suffer.

- 1 *The terms “counterfeiting” and “piracy” are defined and used differently in different contexts. Generally speaking, “counterfeiting” is associated with the intentional infringement of trademarks, and “piracy” with the intentional infringement of copyright and related rights. However, each of these terms can be defined to include other types of IP. Regardless of these variations in definition and usage, it is fair to say that counterfeiting and piracy involve an indisputable taking of the intellectual property of another without authorization. It is this clear disregard for the rights of others that makes them egregious.*
- 2 <http://www.bsa.org>
- 3 *Business Software Alliance and Software & Information Industry Association, 1999 Global Software Piracy Report (May 2000): 2.*
- 4 *United Nations Association Staff, Basic Facts About the United Nations (New York: United Nations Publications, 1998).*
- 5 *International Federation of the Phonographic Industry, Music Piracy Report 2000, (London, June 2000): 2.*
- 6 *Ibid.*
- 7 <http://www.mpaa.org>
- 8 *Organisation for Economic Co-operation and Development, Economic Impact of Counterfeiting, (Paris, 1998): 12.*
- 9 *Ibid., 13.*
- 10 *Ibid., 14.*
- 11 *Ibid., 15.*
- 12 *Ibid., 16.*
- 13 *Ibid., 16.*
- 14 *Ibid., 17.*
- 15 *Ibid., 18.*
- 16 *Ibid., 18.*
- 17 *Ibid., 9.*
- 18 *Ibid., 27.*

- 19 See for example, <http://www.cybercrime.gov>. Some examples follow. A raid in Los Angeles, California, netted US\$10.5 million in counterfeit software and holograms, and included guns, TNT, and plastic explosives. A member of the BTK gang, convicted for murder in New York, testified that extortion and murder were sales tools used to sell the gang's counterfeit Rolex and Cartier watches; and that the gang earned up to US\$13 million from its counterfeiting activities, which it used to fund its other operations. A raid in New Jersey seized US\$400,000 of counterfeit Louis Vuitton and Chanel handbags, which were found to contain heroin stitched inside. Paramilitary groups in Northern Ireland funded their operations through the sale of counterfeit items, including: perfumes, veterinary products, video films, video games, software, and pharmaceuticals. (See <http://www.iacc.org>).
- 20 The WHO defines counterfeit medicine as "one which is deliberately and fraudulently mislabeled with respect to identity and/or source. Counterfeiting can apply to both branded and generic products and may include products with the correct ingredients, wrong ingredients, without active ingredients, with insufficient quantity or active ingredients, or with fake packaging."
- 21 <http://www.interpol.int>
- 22 *Ibid.*
- 23 <http://www.iacc.org>
- 24 *Ibid.*
- 25 <http://proquest.umi.com>
- 26 WIPO document, WIPO/IPR/KUL/00/3: 4.
- 27 *IP Asia* (February 2000): 4.
- 28 WIPO document, WIPO/IP/HKG/98/4(c): 2.
- 29 <http://www.cptech.org>
- 30 IPRs are territorial in nature. National protection is extended to foreigners or enhanced according to various international treaties and conventions. But certain rules and customs dictate just how those national rights will be enforced in a foreign jurisdiction. One important rule affecting such rights is the first sale doctrine, which states that when an object or item embodying IPRs is legally manufactured and sold, the right holder's ability to control the disposition of that item is terminated. This concept is also embodied in the exhaustion of rights rule, which can vary as to its national, regional or international scope. When you legitimately buy a book or a car or a camera, you can re-sell it, rent it, or lease it, without a problem in the country in which you purchased it.
- 31 <http://malaysia.cnet.com>
- 32 <http://proquest.umi.com>
- 33 *Ibid.*
- 34 Source: Singapore Police Force, Films and Publication Depot., and Customs and Excise Department, February 1, 2001.
- 35 <http://proquest.umi.com>
- 36 *IP Asia*, February 2000, 10.
- 37 WIPO document WIPO/USPTO/IP/CEI/00/5(A), September 2000.
- 38 TRIPS Agreement, Articles 41 to 50.
- 39 <http://www.cnn.com/business/currencies>
- 40 <http://www.ladas.com>
- 41 <http://proquest.uni.com>

- 42 *WIPO organized a World Forum on Private International Law and Intellectual Property in January 2001 to discuss a number of outstanding questions including the international jurisdiction of IP cases, choice of applicable IP laws, and the recognition of foreign decisions on IP infringement. Discussion papers are available at <http://www.wipo.int>.*
- 43 *Economic Impact of Counterfeiting: 32.*
- 44 *Ibid., 34.*
- 45 *The WCO is based in Brussels, Belgium. Established in 1952 as the Customs Cooperation Council, it changed its name in 1994 to World Customs Organization to reflect its worldwide role as the exclusive intergovernmental organization with competence in customs matters. As this is written, there are 151 member governments. WCO hosts a joint Customs/Business IPR Committee, in which business members work directly with governments to enhance enforcement of IPRs and the fight against counterfeiting and piracy.*
- 46 *Interpol was set up to globally enhance and facilitate cross-border criminal police co-operation. It is an international organization with 179 member countries. See more at www.interpol.int.*
- 47 *<http://www.europa.eu.int>*
- 48 *1999 Global Software Piracy Report, 1-2. See <http://www.bsa.org>.*