IP PIRACY & DEVELOPING NATIONS: A RECIPE FOR TERRORISM FUNDING

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I. Introduction

When terrorists struck the United States on September 11, 2001, no one thought that intellectual property (IP) piracy funded the attack. Even with the 2014 Sony hack by North Korea, many people thought intellectual property (IP) piracy at that level was not possible. On the surface, intellectual property (IP) piracy and terrorism appear to be two distant topics. However, these topics are closely connected, as terrorist groups, especially those in developing nations, thrive on IP piracy allowing for the successful funding of terrorist opportunities. Terrorist groups gravitate towards IP piracy for funding because detection of IP piracy is easily evaded and developing nations do not thoroughly understand it. As a result, IP piracy presents a distinct global dilemma.

1 U.S. Att’y Gen. Michael Mukasey, Remarks Prepared for Delivery at the Tech Museum of Innovation in San Jose, CA (Mar. 28, 2008); GREGORY F. TREVERTON ET AL., RAND CORP., Film Piracy, Organized Crime, and Terrorism 30 (2009) ("The low barrier to entry and the promise of high profits at low risk are major reasons why film piracy is rampant across virtually the entire world, and particularly the developing world.").
3 This discussion focuses on the inequities that exist not only for developing nations and their citizens but for every nation and the companies and industries that wish to operate businesses and generate stable economies within those areas and around the world. Because of the deficient understanding of the concept of intellectual property, developing nations have been handicapped, whereas developed nations have established intellectual property limitations and rights. Arguably, solving the global terrorism issue (and IP infringement for that matter) may take developed nations and the IP
Criminal enforcement of IP laws is essential to protecting developing nations against becoming a haven for terrorism.\textsuperscript{4} Strictly instituting such laws would balance combatting terrorism with the need to freely share ideas in order to promote advances in science, technology, society and the global economy. This discussion examines the highly controversial connections between IP, developing nations and terrorism and explores the inequities that exist for developing nations that make them magnets for terrorism groups.

**II. History of IP Piracy**

**A. Early Societies\textsuperscript{5} Acceptance of Piracy**

For some time, society considered piracy and IP piracy different from one another and treated these acts as such. In fact, many civilizations did not view piracy as immoral or illegal.\textsuperscript{5} For example, in ancient Greek communities, people saw piracy as a legitimate means of survival and facilitating its economy.\textsuperscript{6} Piracy, as suggested in ancient Greek literature, was typically limited to necessities.\textsuperscript{7} However, ancient Roman and Chinese histories denote instances of pirates raiding ships, coastal towns and even kidnapping people to enslave, thus not limiting their theft to necessities and instead taking any goods or property with monetary value.\textsuperscript{8}

**B. Piracy Defined and Limited to the Seas**

Under international law principles, piracy constituted theft on the high seas and had a limited definition and application to the sea. Article 101 of the United Nations Convention on the Law of

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\textsuperscript{4} TREVON, supra note 1, at 146 (arguing that “[T]ruly deterrent criminal penalties, not the administrative sanctions that are the norm in many places, are thus imperative.”).


\textsuperscript{6} Piracy, ROYAL NAVAL MUSEUM LIBRARY (last visited Jan. 27, 2015).

\textsuperscript{7} Id.

\textsuperscript{8} METAPEDIA (last visited Feb. 1, 2015).
the Sea 1982\textsuperscript{9} defines piracy as:

(a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed: (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft; (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State; (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft; (c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).\textsuperscript{10}

In \textit{U.S. v. Smith},\textsuperscript{11} one of the first cases to address the definition of piracy, the court defined piracy as “robbery . . . upon the sea.”\textsuperscript{12} The Court emphasized that despite the lack of statutory interpretation on piracy, it does not preclude piracy as a crime under United States law as it is an offense against the universal law of society.\textsuperscript{13} This general understanding still holds true today.\textsuperscript{14}

This understanding was tested in \textit{U.S. v. Said},\textsuperscript{15} when Said and other Somali pirates fired at a U.S. naval ship in an unsuccessful attempt to take over the ship.\textsuperscript{16} Initially, Said won the criminal suit brought against him.\textsuperscript{17} In its analysis, the trial court refused to consider the current day

\textsuperscript{9} \textit{UNITED NATIONS CONVENTION ON THE LAW OF THE SEA}, \textit{art. 101} (1982).
\textsuperscript{10} The UN Convention on the Law of the Sea 1982's definition of piracy is almost identical to the definition of piracy under Article 15 of \textit{The Geneva High Seas Convention 1958}, which defines piracy as “(1) Any illegal acts of violence, detention or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed: (a) On the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft; (b) Against a ship, aircraft, persons or property in a place outside the jurisdiction of any State; (2) Any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft; (3) Any act of inciting or of intentionally facilitating an act described in subparagraph 1 or subparagraph 2 of this article.” \textit{GENEVA HIGH SEAS CONVENTION}, \textit{art. 15} (1958).
\textsuperscript{11} \textit{United States v. Smith}, 18 U.S. \textit{153, 162} (1820). This is one of the first cases on piracy. The court explained, “we shall find that they universally treat of piracy as an offense against the law of nations and that its true definition by that law is robbery upon the sea. And the general practice of all nations in punishing all persons, whether natives or foreigners, who have committed this offense against any persons whatsoever with whom they are in amity is a conclusive proof that the offense is supposed to depend not upon the particular provisions of any municipal code, but upon the law of nations, both for its definition and punishment.”
\textsuperscript{12} \textit{Id.}
\textsuperscript{13} \textit{Id.}
\textsuperscript{14} Statutory authority extends piracy to other areas, as similar common law theories have developed from this first universal criminal theory. History shows us this through the state laws on theft, larceny, robbery and burglary, and federal laws on bank robbery and burglary. These laws provide for serious penalties.
\textsuperscript{16} \textit{Id.} This attempt was severely unsuccessful as Somali pirates fired at a U.S. Naval ship, where the U.S. Naval ship fired back and instantly destroyed the vessel carrying the Somali pirates, killing one member of the Somali pirate crew. Said was not alone, as the charges of piracy fell upon the remaining pirates as well.
\textsuperscript{17} \textit{Id.}
interpretations of piracy.\textsuperscript{18} Instead, it ruled that the pirates could not possibly know any new definition of piracy and should have had “fair warning” of such.\textsuperscript{19} The court used \textit{U.S. v. Smith} as it's reasoning, implying any interpretation other than the court’s would be liberal and inconsistent.\textsuperscript{20} However, on appeal, the Fourth Circuit reversed, holding that piracy is still a universal crime that extends to many areas of society and is not exclusive to the seas, reversing the initial ruling.\textsuperscript{21}

\section*{C. The Expansion of Piracy}

It was not until theft permeated into other areas of society, in particular the counterfeiting of goods such as food, books, clothing and other novelty items, that IP issues became associated with “piracy.”\textsuperscript{22} To protect against this, many nations began marking products to identify their source, i.e., U.S.A. or other locations.\textsuperscript{23} Ancient Greeks and Romans were the first to recognize these issues and rights.\textsuperscript{24}

One of the first heavily documented accounts of IP piracy as a universal crime was IP infringement of British books and sheet music.\textsuperscript{25} In reaction, Britain created the Licensing Act of 1662 to establish a register of licensed books, along with the Statute of Anne in 1709 to protect against IP piracy.\textsuperscript{26} Over a century later, it would join the Berne Convention.\textsuperscript{27} Britain was quite successful in its efforts, yielding major victories in IP prosecutions and deterrence.\textsuperscript{28}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{18} Id.
\item \textsuperscript{19} Id. at 558.
\item \textsuperscript{20} See id. at 562-63.
\item \textsuperscript{21} Id.
\item \textsuperscript{22} The definition of counterfeit goods varies under trademark and copyright laws. Under trademark law, a counterfeit is defined as “a spurious mark which is identical to, or substantially indistinguishable from, a registered trademark.” 15 U.S.C. § 1127. Under copyright law, a counterfeit label means “an identifying label or container that appears to be genuine, but is not.” 18 U.S.C. § 2318.
\item \textsuperscript{23} See generally Andrea Anderson, \textit{COMBATING COUNTERFEITING: Simple Steps You Can Take Now to Protect Your Brand from Piracy}, HOLAND AND HART (discussing the development of trademark law, a method used to track whom and where the product is from by importing and exporting countries).
\item \textsuperscript{24} History of Copyright.
\item \textsuperscript{25} Adrian Johns, \textit{Piracy: The Intellectual Property Wars from Gutenberg to Gates}, PUBLISHERSWEELY.COM (last visited Jan. 26, 2015).
\item \textsuperscript{26} See \textit{id}, Copyright Timeline: A History of Copyright in the United States, ARL.ORG (last visited Jan. 26, 2015).
\item \textsuperscript{27} Id.
\item \textsuperscript{28} IP CRIME GROUP, INTELLECTUAL PROPERTY OFFICE, \textit{IP Crime: Annual Report 2012-2013} (July 29, 2013).
\end{enumerate}
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The United States was not always known to be protective of IP rights. In fact, the United States had an unsavory history of being a pirate nation as it initially failed to protect IP-holder rights. Even though IP rights are provided within the U.S. Constitution, the concept of IP was not fully understood by the United States at the time of the Constitution’s creation. The United States created its first copyright law in 1790, followed by the first trademark law in 1870. Many years later, the United States would also become a party to the Berne Convention.

D. Modern Day Piracy and Technological Influences

With technological advancements, pirates saw additional opportunities to steal. This trend has become problematic for many societies to resolve. These opportunities include copying and selling movies, music and other forms of media (also known as “bootleg” media). Sony Corp. of America v. Universal City Studios, Inc. case (also known as the Betamax case) set the stage for infringement issues in IP industry.

In Sony Corp. of America v. Universal City Studios, Inc., the media industry sued Sony to stop the sale of Sony’s video tape recording device (the “Betamax”). Many media companies argued that the sale and usage of such a device was inherently dangerous to the media industry’s economy, the nation and even copyright innovation and laws. The U.S. Supreme Court ruled five to four that...
Sony’s Betamax did not infringe upon copyright holders, as the Betamax’s non-commercial home recording technology allowed for fair usage and had “substantial non-infringing uses.” This was due in part to the free speech implications, as the public had a First Amendment right in using the technology. Fast forward decades later, arguments surrounding Betamax surfaced in *MGM v. Grokster*.

MGM argued that peer-to-peer sharing networks such as Grokster were inherently dangerous to IP, as such services created potential for piracy and safeguards were necessary within those networks to ensure that infringement would not occur. The U.S. Supreme Court found there was substantial evidence that Grokster could be liable for substantial copyright infringement via advertising and instructing users how to pirate media. Those instructions showed an affirmative intent that the product’s use was one of infringement and that the infringement was encouraged.

Subsequent to the *Grokster* ruling, peer-to-peer sharing networks became so popular that the majority of society became criminals by participating in copyright infringement. This calls into question the growing and changing societal demand and ideological composition and whether IP infringement wholly depends upon the demand and acceptance of the product.

### III. Linking IP Piracy and Terrorism

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40 *Id.* at 456.
41 *Id.* at 425.
44 See *Grokster*, 545 U.S. at 936.
45 *Id.* at 940.
46 It is important to note that this is a discussion on true and clear instances of IP piracy. Concepts and theories such as the “first sale doctrine” and the resale of legitimately purchased items is not addressed, as this has been determined to be legal under *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351 (2013). Further, terrorists and terrorist organizations are defined by domestic and international norms, principles and legal instruments including the designated list of terrorists and terrorist organizations that fall under the definition of terrorism provided by the UN Security Council, the U.S. State Department or any other appropriate authority.
Recently, North Korea used IP piracy to commit terrorism against Sony Studios vis a vis the United States.\(^49\) While minor at first glance, the act took a life of its own and got the attention of the U.S. government, Sony and the public.\(^50\) This hack was accomplished through North Korea’s expansive efforts in the area of IP.\(^51\) North Korea has devoted labor and intelligence to its IP efforts.\(^52\) In fact, it has done so that its GDP primarily consists of intellectual property, as it exports these products into the global markets, while collecting the proceeds of such and funneling it back into its economy.\(^53\)

In the past, terrorist organizations realized peer sharing and duplication technology as an opportunity to fund terrorist activities.\(^54\) Fortunately, the United States was one of the first countries to see the connection between IP piracy and terrorism activities.\(^55\) One of the first official acknowledgments of the link between IP piracy and terrorism occurred in a 2003 U.S. House Committee on Foreign Relations Hearing,\(^56\) where testimony revealed that domestic and international terrorist groups created IP piracy havens within developing nations that lacked appropriate oversight.\(^57\)

Later, in 2005, Dr. Moises Naim’s book, *Illicit: How Smugglers, Traffickers and Copycats Are Hijacking the Global Economy*,\(^58\) further asserted the connection between IP theft and terrorism along

\(^{50}\) Id.
\(^{51}\) United Nations Development Program, Human Development Reports. Recent reports show that North Korea has significant investments in intellectual property and has devoted much of the country's resource to intellectual property. This is not limited to patents in one particular area or patents alone.
\(^{52}\) Id. The potential correlation is clear. North Korea's GDP focus on IP far exceeds many other countries, especially developed countries. With massive IP influxes and increases, North Korea may be creating or generating advanced technologies for various purposes. It is known as a hostile country and has been frequently under scrutiny for its various human rights violations. With this reputation and current state of affairs, one could conclude that these IP influxes and efforts are not meant for a humanitarian purposes.
\(^{53}\) Id.
\(^{54}\) Id.
\(^{55}\) Id.
\(^{57}\) Id.
with other illegal activities.\textsuperscript{59} Dr. Naim found that many developing or poor nations lacked the resources and knowledge to effectively deter terrorist organizations.\textsuperscript{60} Further, those terrorist organizations provided financial incentives in these poor nations, making it difficult for IP enforcement.\textsuperscript{61} Dr. Naim was not alone in making this connection.\textsuperscript{62}

It was not until years after the London bombings that European authorities were able to make a connection between organized IP piracy and terrorism.\textsuperscript{63} Authorities identified Mohammad Sidique Khan, a bootleg CDs and DVDs dealer in South Africa, as one of the coordinators of the London bombings.\textsuperscript{64} Recently, U.S. Attorney General Eric Holder\textsuperscript{65} and, in previous years, U.S. Attorney General Mukasey,\textsuperscript{66} stated that terrorist groups are learning different ways to fund their activities and commit crimes using technology. As a result, the U.S. Department of Justice (DOJ) increased counter measures to track and monitor these illegal IP activities.\textsuperscript{67} This resulted in staffing trained IP attorneys and other professionals in the Computer Hacking/Intellectual Property (CHIP) Unit of the DOJ to work alongside the FBI and the Criminal Division’s Computer Crime and Intellectual Property Section (CCIPS),\textsuperscript{68} which has been largely successful in tracking and monitoring these illegal IP activities.\textsuperscript{69}

Through these efforts, the DOJ found that terrorist groups are using technology to commit

\textsuperscript{59} Id.
\textsuperscript{60} Id.
\textsuperscript{61} Id.
\textsuperscript{62} Id. The topic of IP piracy and its connection to terrorism began gaining ground in law enforcement agencies around the world.
\textsuperscript{63} Rachel Williams & Richard Norton-Taylor, 7/7 Bomb Attacks: Police and MI5 Cleared of Blame, THE GUARDIAN (May 19, 2008).
\textsuperscript{64} Id. The public raised many questions as to why these connections were not raised before the bombings. However, authorities were cleared of scrutiny and responsibility for many obvious and non-judgmental reasons including that there was a lack of resources (financial, linguistic, and intelligence operations) and a lack of cooperation between the agencies in sharing intelligence information.
\textsuperscript{65} U.S. Attorney General Eric Holder Speaks at the International Intellectual Property Summit (October 18, 2010).
\textsuperscript{66} Remarks Prepared for Delivery by Attorney General Michael B. Mukasey at the Tech Museum of Innovation (March 28, 2008).
\textsuperscript{67} With the enactment of the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (or PRO-IP Act), the DOJ was able to successfully enhance criminal IP offense penalties and their scope. United States Department of Justice PRO-IP Act First Annual Report 2008-2009, Submitted to the United States Congress on October 13, 2009.
\textsuperscript{68} Id.
\textsuperscript{69} Id.
various kinds of crimes traditionally associated with organized criminal organizations.\(^70\) This includes fraud, computer-related crimes, racketeering, and the creation of so-called “bootleg,” counterfeit, or illegal copies of movies, music and even software.\(^71\) Some activities also amount to stock manipulation.\(^72\)

IP infringement is difficult to restrain because first, it is not easily detectable and second, it is not readily understood.\(^73\) This lack of visibility and understanding is why terrorist groups go unseen, unnoticed and disconnected from the typical activities of a terrorist group.\(^74\) This also explains why many governments do not instantly catch onto these activities or identify key players.\(^75\) Moreover, IP piracy is easy, lucrative and convenient compared to traditional drug trafficking.\(^76\) IP pirates are benefited with an 80% and 94% profit margin with zero to little worry about manufacturing or distributing costs, plus the added benefit of low detection as opposed to traditional drug trafficking activities.\(^77\)

**A. Case Examples Linking Terrorist Groups & Organized Criminal Activities to IP Piracy**

Recent examples of terrorist groups like Hezbollah and Chechen rebels show that IP infringement is extending into organized criminal and terrorist activities.\(^78\) These examples have sparked some law enforcement agencies’ interests in revisiting past cases of terrorist attacks and

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\(^70\) U.S. Attorney General Eric Holder Speaks at the International Intellectual Property Summit, supra note 33.

\(^71\) Id.


\(^73\) Williams & Taylor, supra note 63.

\(^74\) Id.

\(^75\) Kavita Philip, supra note 43. Kavita Philip provides an interesting example involving a successful investigation and apprehension of an IP theft ring leading back to Pakistan-based Al Qaeda: “British detectives claim that Pakistani DVDs account for 40% of anti-piracy confiscations in the UK, and that profits from pirated versions of Love, Actually and Master and Commander funnel back to the coffers of Pakistan-based Al Qaeda operatives.”

\(^76\) Digital Citizens Alliance, Good Money, Gone Bad: Digital Thieves and the Hijacking of the Online Ad Business a Report on the Profitability of Ad-Supported Content Theft (2014).

\(^77\) Id.

investigating the connection even further than before.\textsuperscript{79} In fact, Interpol has been leading the way in this respect.\textsuperscript{80} Other agencies and international authorities found that Al Qaeda training materials suggested using counterfeit goods and materials to fund its cell activities.\textsuperscript{81} In other instances, supporters of these terrorist groups are using IP infringement\textsuperscript{82} and other fundraising modes to provide funding to these terrorist groups, as illustrated in the next section.

B. Kane and Wall’s Fuqra Case Study: A New Way in Looking at What Constitutes Terrorism and Terrorist Groups

The Kane and Wall’s Fuqra Case Study\textsuperscript{83} illustrates the vulnerabilities of detecting and identifying terrorist activities. These vulnerabilities include unique characteristics of terrorist groups that do not normally align with the characteristics of organized crime groups, which has been the prevailing view of terrorism groups.\textsuperscript{84} In fact, Kane and Wall suggest that the typical view of terrorist groups as organized crime groups is out-of-date and a different approach must be taken.\textsuperscript{85}

The new focus involves looking at the terrorist groups in a “hub and spoke”\textsuperscript{86} structure (similar to the conspiracy wheel theory),\textsuperscript{87} where a central person has the only understanding of the “big picture” or “spokes.”\textsuperscript{88} This would mean that members operate on limited knowledge, and that individual members know the information, purpose, or plans of other members of the groups nor

\textsuperscript{79} Id.
\textsuperscript{80} Id. In Interpol’s investigative and enforcement efforts, it seized counterfeit German brakes in 2004, which Interpol subsequently linked to the terrorist group, Hezbollah. In addition, Interpol found that Chechen rebels and paramilitary groups in Northern Ireland used IP piracy to fund terrorist activities.
\textsuperscript{81} Id.
\textsuperscript{82} Id. According to New York’s Police Commissioner, Raymond Kelly, the sale of pirated CDs were responsible for funding the 2004 Madrid train bombing.
\textsuperscript{83} John Kane & April Wall. Identifying the Links between White-Collar Crime and Terrorism for the Enhancement of Local and State Law Enforcement Investigation and Prosecution, National White Collar Crime Center (September 2004).
\textsuperscript{84} Id.
\textsuperscript{85} Id.
\textsuperscript{86} Id.
\textsuperscript{87} See generally 24-613 Moore’s Federal Practice -- Criminal Procedure § 613.04. See also United States v. Richards, 94 F. Supp. 2d 304, 307, 2000 U.S. Dist. LEXIS 5140, 2 (E.D.N.Y. 2000). This theory involves an individual or group committing separate illegal acts for a shared or common purpose.
\textsuperscript{88} Id.
the overarching goal of the group’s activities.\textsuperscript{89}

### New Focus on Identifying Terrorist Organizations and Activities: Traditional View of Terrorist Groups as Organized Crime Organizations Out of Date\textsuperscript{90}

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<th>Members operate on limited knowledge</th>
<th>Members are driven by their belief systems</th>
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<td>Money is not raised for the benefit of individual members; it is used to promote the group’s cause</td>
<td>Typically the assets of individual members are represented only by “the clothes on their back” and the “money in their pocket”</td>
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<td>Members rarely have criminal convictions (only civil offenses, if any violations); if crimes are committed, members are instructed to commit low profile crimes that do not raise red flags and are disconnected to the whole or overall mission or goal</td>
<td>Members make a concerted effort to “stay off the radar” and maintain the appearance of an average, law-abiding citizen</td>
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<td>One member often controls the group and keeps the organization together by establishing a certain lifestyle that fits the norms of the environment</td>
<td>The group, or a certain member of the group, creates and maintains records, which are often detailed and sometimes coded, documenting activities and long-range plans\textsuperscript{91}</td>
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It is important to note these factors could match many legitimate organizations, as the goal of a terrorist organization is to evade detection.\textsuperscript{92} In addition, terrorist groups are not limited to international terrorism ties, as the goal is usually to damage a certain segment of society, industry, group of people, or government.\textsuperscript{93} The groups use shell companies as fronts, which appear to give back, support or otherwise “do good deeds” in a community, thus gaining the public’s trust and additional funding.\textsuperscript{94} Most importantly, these community-oriented shell companies help ward off prying eyes into the entity’s true dealings.\textsuperscript{95}

Members of these groups are often instructed to keep a low profile and only commit low profile crimes, like white-collar crimes, that further the group’s goals or funding.\textsuperscript{96} White-collar crimes do not raise major red flags and are often off the law enforcement agency’s radar for terrorist

\textsuperscript{89} *Id.*  
\textsuperscript{90} John Kane & April Wall, supra note 83. Information taken and compiled from Kane & Wall’s Fuqra Case Study.  
\textsuperscript{91} *Id.*  
\textsuperscript{92} *Id.*  
\textsuperscript{93} *Id.* at 21.  
\textsuperscript{94} *Id.* at 22-24.  
\textsuperscript{95} *Id.*  
\textsuperscript{96} *Id.* at 23.
activity.\textsuperscript{97} Thus, connections, patterns and practices between the terrorist group and committed crimes often go unnoticed and undetected.\textsuperscript{98}

For a developing nation, it is a major challenge to identify, detect, track and stop terrorist groups. The case of Fuqra highlights this, as Fuqra recruited members from all walks of life and operated in and out of the United States while transferring funds to the terrorist group’s hub of operations in Pakistan.\textsuperscript{99} The developing nation served as an excellent base for illegal activities, such as IP piracy, due to its many vulnerabilities.\textsuperscript{100}

\textbf{IV. IP Piracy is Easy}

Due to the uniqueness of modern day technology, IP piracy rarely appears on the global radar for terrorism.\textsuperscript{101} The first material instance of IP piracy funding terrorism occurred in 1994 when the terrorist group, Hezbollah, used the illicit counterfeiting industry to fund its bombing of the Jewish Community Center (AMIA) in Buenos Aires.\textsuperscript{102}

Until then, historically and traditionally, governments viewed terrorist funding under a limited theory.\textsuperscript{103} Recent research, news and studies suggest that domestic and international terrorist groups are using a diversified funding approach, which includes IP infringement as a primary funding source.\textsuperscript{104}

So, why do terrorist groups target developing nations as safe havens? First, some developing

\textsuperscript{97} Id.
\textsuperscript{98} Id. (funding would be hard to trace because it appears either distant, small, unrelated, illogical or unreasonable, since the instructions to many members is to raise individual funds for the group to show loyalty and faithfulness to the group.)
\textsuperscript{99} Id. at 23.
\textsuperscript{100} Id.
\textsuperscript{101} James M. Cooper and Carlos Ruffinelli, A Development Model Meets Piracy in Paraguay, 43 Cal. W. Int'l L.J., 157, 175 (2012) (Argentina, Brazil and Paraguay seeing an influx of terrorist activities during that time; consequently, forcing the tri-state area to create immediate and effective solutions in combatting these terrorist threats to its regions).
\textsuperscript{102} Kavita Philip, supra note 43.
\textsuperscript{103} Id. Philip states “Media sociologist Nitin Govil argues that the relationship between intellectual property and terrorism has been naturalized by policy makers, international police, and popular culture since 9/11.”
nations may lack the resources to combat certain activities. Second, developing nations may also possess insufficient knowledge on intellectual property. Third, for many developing nations, there is a lack of participation in the universal organizations such as the United Nations. Lastly, the average developing nation may be in need of economic resources and stimulation. Collectively, these reasons amount to major vulnerabilities for developing nations.

A. A Developing Nation’s Seen and Unseen Vulnerabilities

Some developing nations are not taking the threat of IP crimes and terrorism funding very seriously. In effect, some nations barely enforce its own laws and fail to communicate with its entities and other neighboring countries, thus making those nations safe harbor for illegal activities.

Terrorist groups see certain developing nations with cheap labor and relaxed or non-existent laws as opportune areas where they can operate in secret to commit IP crimes that will eventually fund major and possibly global activities. The most common crimes involve duplicating and replicating movies, music or software and then selling those duplications or replications. These crimes are virtually traceless and are easily viewed as disconnected from the terrorist cell or organization, depending on the operation and management of certain illegal activities.

This is especially the case where there are relaxed international shipping and trade services regulation, since a clear international consensus on border security and inspection does not exist.
An IP pirate and terrorist cell could easily sneak pirated technology\textsuperscript{115} into a developing nation without much regulation or detection.\textsuperscript{116} Because these activities often occur behind closed doors or in secret, there is very little any nation can do in tracing and detecting such activities, especially taking action before or during infringement.\textsuperscript{117}

On the other hand, developing nations yearn for economic growth and stability.\textsuperscript{118} Developing nations have limited resources that prevent effective participation in the global economic sector.\textsuperscript{119} Thus, developing nations may see these illegal activities as serving as a form of economic stability and fluidity.\textsuperscript{120} Therefore, there may be little motivation to protect against IP infringement in a developing nation.\textsuperscript{121}

With the right terrorist organization’s front operations, the right words and the economic benefit that could come about, IP infringement in a developing nation could become a very real and viable option for terrorist organizations and developing nations.\textsuperscript{122} This is especially true if a developing nation could see itself protecting the infringer, and incidentally the accompanying terrorist group.\textsuperscript{123}

B. Insufficient Consumer Education and Awareness

Lack of consumer education and awareness about IP piracy helps facilitate terrorist funding.\textsuperscript{124} For instance, the average consumer buying a counterfeit product does not think twice about the origins of the product, the product’s authenticity or where the funds are going.\textsuperscript{125} While

\textsuperscript{115} \textit{Id.}
\textsuperscript{117} \textit{Id.}
\textsuperscript{118} \textit{Id.} at 205.
\textsuperscript{120} \textit{Id.} at 207.
\textsuperscript{121} \textit{Id.} at 20.
\textsuperscript{122} Peter K. Yu, Six Secret (and Now Open) Fears of ACTA, 64 SMU L. Rev. 975, 1054 (2010).
\textsuperscript{123} \textit{Id.} at 207-08.
\textsuperscript{124} See James M. Cooper & Carlos Ruffinelli, supra note 102, at 199.
\textsuperscript{125} \textit{Id.}
the government and companies provide warning labels, use brand names and trademarks, such precautions provide consumers with insufficient information and knowledge on the negative effects of IP piracy to make an informed decision about which product to buy. This lack of knowledge is not limited to a particular geographical region. This lack of knowledge spans across the globe, as many consumers do not understand the economics of doing business, especially the economics of IP.

C. Relaxed Oversight and Connectivity of International Systems and Enforcement

Global organizations and developed nations have developed laws that institute IP reform to protect against infringement, especially with patents and trademarks. However, these efforts have yet to bridge the gap between inconsistent laws and have failed to connect these systems in order for the world to know who holds the IP rights. In addition, a global procedure to help individuals detect or authenticate suspected counterfeit products is not in place.

D. IP Piracy Is Not Easily Detectible

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126 Id.
127 Aggressive consumer education and awareness may be a start in dwarfing terrorist funding. This would make the consumer population aware that IP piracy is no longer a small and harmless operation copying DVDs or music but one funneling proceeds from counterfeit sales to terrorist groups that ultimately leads to terroristic activity in the consumer’s country.
128 When IP piracy occurs, this takes away from the economy, as jobs and revenue are lost, including import and export fees.
130 See id.
131 Id.
132 LSE: The Media Project (2013). While one can appreciate that the global community has awaken to the possibility there is a linkage between IP piracy and terrorism funding, the topic of IP piracy has been typically an area dedicated to academia. The academic perspective has been one of freedom of speech and how intellectual property protection laws create a chilling effect on creativity. The core problem with this academic perspective is that the perspective is not necessarily accurate and it diminishes the seriousness of IP piracy. The London School of Economics and Political Science: The Media Project illustrates this point. The study showed that piracy ironically does not cut away at the industry’s profit. This study further corroborates the school’s 2011 study. Essentially, the study results called for an increase in freedom of expression in media sharing. While the study balances the need for citizens’ freedom of expression and prosecution from sharing with others and the various businesses who promote innovation, this 2011 and recent study fall short in many ways. First, the study does not
IP piracy is not a traditional crime and it is often viewed as minor among the hierarchy of crimes. It is also not easily detectible, especially in developing nations. The methods used to perpetuate illicit activities are similar to those used for drug and human trafficking and as a result, the procedures in detecting and stopping the crimes can go only so far. The question becomes how can law enforcement agencies detect these activities, and more importantly, how they link these activities back to terrorist groups. This has not been an easy feat for many nations that are just catching on to this trend.

Detection is difficult because of the types of products involved and the consumer base. The counterfeit products are often small and deceitfully authentic, and furthermore, may not appear to be dangerous. Consumers often buy these counterfeit products, thus legitimizing both the products and the transactions. Hence, the only viable way to detect such illicit activity is to inspect goods for authenticity and local markets for counterfeit items.

E. The Connection between Organized Piracy, Terrorism and Ample Resources

Oftentimes, terrorist groups and criminal enterprises are alike, as both are resourceful and well organized to a degree that they exceed law enforcement in technological advancements and funding. This imbalance also creates a power struggle as some criminal enterprises employ tactics

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133 See James M. Cooper & Carlos Ruffinelli, supra note 102.
134 Id.
135 Id.
136 Id.
137 Zachary A. Pollinger, supra note 78.
138 See James M. Cooper and Carlos Ruffinelli, supra note 102.
139 Id.
140 Id.
141 Id.
142 Not too long ago, the definition of criminal enterprise was theoretically different. Yet, today, terrorist groups and criminal enterprises seemingly go hand in hand. The definitional approach of criminal enterprise used in this discussion is the FBI’s definition of a criminal enterprise and the federal definition as provided under the federal statutes such as the federal Racketeer Influenced and Corrupt Organizations (RICO) statute.
of violence, intimidation, fear and sabotage to ward off law enforcement agencies that are working to protect the public from such illegal activities.\textsuperscript{144} These agencies often have little or limited resource in fighting against crime, especially in developing nations.\textsuperscript{145}

While not deemed a terrorist group or connected to terrorist activity, a pirating group from Malaysia\textsuperscript{146} demonstrates this point. In 2002, a raid on a Malaysian street market turned into a riot, where a “vehicle driven by the pirates rammed the van transporting the Malaysian enforcement officials and MPA's anti-piracy investigators to the raid,”\textsuperscript{147} while another team of “bat wielding pirates attacked the enforcement team.”\textsuperscript{148} It was not until “the Malaysian enforcement officials fired their weapons into the air did the crowd disperse.”\textsuperscript{149}

Generally, a criminal organization’s resources are so deep that they allow the criminal organizations access to sophisticated tools and methods that most developing nations do not possess.\textsuperscript{150} Again, this is similar in nature to a terrorist group’s functionality.\textsuperscript{151} For instance, in another example not directly involving a terrorist group, in two raids in 1999, Macau Marine Police, in conjunction with Hong Kong Customs, caught two “submerged, un-powered, purpose-built submarines”\textsuperscript{152} attempting to evade detection of authorities. Once seized, authorities recovered approximately 174,000 pirate optical discs in one raid and 73,000 in the second.\textsuperscript{153}

This does not mean that indigenous methods are not used. In fact, indigenous methods are

\textsuperscript{144} See supra note 56.
\textsuperscript{145} Id.
\textsuperscript{146} Id.
\textsuperscript{147} Id.
\textsuperscript{148} Id.
\textsuperscript{149} Id.
\textsuperscript{150} Id.
\textsuperscript{151} Id.
\textsuperscript{152} Id.
\textsuperscript{153} Id. To evade authorities and detection, authorities found “these submarines were towed behind fishing boats and had ballast and compressed air tanks that enabled the sub to be raised and lowered. If enforcement officials intercepted the fishing vessel, the towline could be cut, the barge’s location marked with GPS positioning, and later recovered when the coast was clear.”
still used. The most recent examples involve various incidents in 2013. In one instance, there were over 16,000 fake designer handbags seized in Los Angeles. Customs and Border Protection units worked with local agencies to combat counterfeit goods trafficking, as Los Angeles (like other port cities) serves as a hub for many illegal traffickers.

F. IP Piracy Presents Incentives and Chance Opportunities

1. Lucrative Business for Developing Nations and Counterfeit Rings

In the developing world, resources are far and few, which means that some developing nations see illicit markets as a lucrative business. Countries like Paraguay often see counterfeit goods as a lucrative business even though they are members of several international and regional organizations in combatting IP piracy. Because the counterfeit industry is believed to yield an annual $500 billion, it accounts for at least 10% of the world’s trade. These numbers are very convincing and possibly disheartening for nations that are combatting IP piracy since fiscally an individual, entity or some other nation may incidentally benefit from this economy. In all reality, these funds are likely to fund terrorist groups or other illegal activities.

In recent years, places such as Paraguay and Vietnam have become useful to

154 Id. In 2002 in Russia, the International Federation of the Phonographic Industries, along with Polish Customs, seized a vehicle moving pirate CDs. After a vehicle inspection, the authorities found a compartment full of pirated media. Other instances included hidden areas within shipping containers with stacks of pirated DVDs encapsulated in bags of asphalt and within areas that appeared to be simply cardboard boxes.
155 David Wright & Brandon Baur, supra note 143.
156 Id.
157 See supra note 83.
158 James M. Cooper & Carlos Ruffinelli, supra note 102, at 203.
159 Int’l Anti-Counterfeiting Coalition, Submission of the International Anti-Counterfeiting Coalition to the United States Trade Representative Special 301 Recommendations (February 10, 2012).
160 Id.
162 Id. at 57. It is important to note that Paraguay is not a party to certain treaties pertaining to intellectual property such as the Madrid Protocol. This makes a difference in enforcement and transparency in the global fight against IP crimes and terrorism financing connected to IP crimes. The Madrid Protocol globalizes the trademark registration process, as only trademark applicants need to file one application in the member state (eliminating the task of applying in each member state in multiple languages).
163 Id. at 53-56. Vietnam is a party to several treaties pertaining to intellectual property including the Madrid Protocol.
counterfeiting rings.164 The main benefit is the case with which certain goods or machinery move into those regions and out to other regions as regulation and enforcement of international and domestic laws is misaligned and sometimes non-existent.165

2. Lenient Criminal and Civil Penalties

Terrorist groups are looking to illegal funding activities that do not provide the hefty prison sentences, yet yield the greatest profit for funding of terroristic activities.166 For example, terrorist groups are looking to activities outside of drug trafficking because of the toughened transportation regulations for the natural resources used to manufacture drugs and the heftier prison sentences.167 Terrorist groups have looked to sex trafficking due to the looser regulations and more lenient prison sentences. IP piracy is also an area where terrorist groups see a major opportunity and advantage. As stated before, many nations, developed or not, have lax rules and systems in place to counteract, detect or even enforce IP crimes.168 As a result, terrorist groups can easily and quickly manufacture a product several times over, then distribute and sell those counterfeit products to a broader base virtually without any detection or enforcement if caught.169

3. Related International Cooperation and Protocols

There are international protocols in place to ensure the proper enforcement of IP

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164 Id.
165 See James M. Cooper & Carlos Ruffinelli, supra note 102, at 205-07.
166 John Kane & April Wall, supra note 83, at 1. For example, illegal drugs arguably have been the main vehicle for many terrorist groups.
167 The U.S. and many other countries are slow to act on legislation that provides for stiff punishments for sex trafficking. In fact, in the U.S., many “pimps” and prostitutes often get out of jail within a matter of minutes or days. Further, U.S. prison sentences for these crimes are less than 3 years (some sentences with early release and supervised release), whereas some drug sentences can be a minimum mandatory sentence of 5 years or more (without parole). This is a major incentive for some terrorist groups to kidnap and sell men and women into the sex trade (domestically or internationally).
168 See James M. Cooper and Carlos Ruffinelli, supra note 102, at 205-07.
169 Intellectual Property Crimes: Are Proceeds From Counterfeited Goods Funding Terrorism? Hearing Before H. Comm. on Int'l Relations, 108 Cong. 15 (2003). This report details, among other things, the difficulties in combating the formats used in illegal intellectual property piracy. For example, for music and movie piracy, the disc format used in music piracy could vary. This is true from country to country. In the U.S. and parts of Europe, the popular disc format is CD-R. With CD formats being so easy for music pirates to manufacture and replicate, areas such as Hong Kong and Russia have seen an increase in manufacturing demands for specific disc format. This has created a call for legislative efforts to combat this increase in demand in manufacturing that facilitate illegal piracy.
infringement, but these protocols do very little if a developing nation is not equipped or not willing to enforce those protocols.\textsuperscript{170} For instance, both the General Agreement on Tariffs and Trade (GATT)\textsuperscript{171} and Trade Related Aspects of Intellectual Property Rights (TRIPS)\textsuperscript{172} treaties call for member states to institute laws to further the goal of international enforcement of intellectual property laws, but the treaties provide general terms and language as to the criminal penalties that could occur for an infringer who participates in IP piracy ‘on a commercial scale.’\textsuperscript{173} In addition, under GATT, there is a possibility for a developing nation to disrupt and intervene in the IP piracy market and set clear customs and border practices\textsuperscript{174} by GATT’s 10-day window of investigation, apprehension and possibly prosecution from the time of intercepting the counterfeit goods.\textsuperscript{175} During that 10-day window, the member state that intercepted the goods must determine if the goods are truly counterfeit.\textsuperscript{176} If not, the member state releases the goods.\textsuperscript{177}

As illustrated earlier,\textsuperscript{178} some developing nations may be lax in their efforts to combat IP piracy, as there is also a regional economic incentive to fuel this illicit activity.\textsuperscript{179} So for developing nations, it may seem more logical to overlook certain violations, and gain the monetary benefits instead of enforcing the international customary laws.

\textbf{V. Developing Nations are Convenient}

Trends and practices have shown that terrorist groups seek protection in low resourced and

\textsuperscript{170} See James M. Cooper & Carlos Ruffinelli, supra note 102, at 203-05.
\textsuperscript{171} GATT 1994, supra note 129.
\textsuperscript{172} See TRIPS, supra note 129.
\textsuperscript{173} Id.
\textsuperscript{174} See GATT, supra note 129.
\textsuperscript{175} Id.
\textsuperscript{176} WORLD TRADE ORGANIZATION TRIPS PART III.
\textsuperscript{177} Id.
\textsuperscript{178} See James M. Cooper & Carlos Ruffinelli, supra note 102.
\textsuperscript{179} The Federalist Society, Intellectual Property Rights in the Developing World, INTELL. PROP. PRAC. GRP. NEWSLETTER (July 1, 1997).
economically deprived areas of the world.\textsuperscript{180} Thus, developing nations are becoming havens as these nations lag behind in the global economic sector.

In a State Department’s \textit{Patterns of Global Terrorism} report, findings\textsuperscript{181} indicate that Argentina, Brazil, and Paraguay (a tri-border area) serve as a regional hub for terrorist organizational funding for groups such as Hezbollah and Hamas.\textsuperscript{182} This fundraising includes counterfeit American goods, including Microsoft software.\textsuperscript{183} There are numerous other examples of developing countries being used as terrorist hubs.\textsuperscript{184}

A RAND report\textsuperscript{185} also found that the same tri-border area was a haven for funding of Islamic terrorism outside of the Middle East. The report highlighted there was approximately $20 million was donated to Hezbollah on an annual basis from this the tri-border area resulting from illegal IP activities.\textsuperscript{186}

Another interesting example included a $2.5 million transfer from a DVD pirate Assad Ahmad Barakat to Hezbollah.\textsuperscript{187} Ironically, Barakat received a “thank you” note from the leader of Hezbollah.\textsuperscript{188} Not to anyone’s surprise, the United States designated Barakat as a “specially designated global terrorist” in 2004.\textsuperscript{189} While many individuals and countries may question the United State’s authority and reach relative to anti-terrorism efforts,\textsuperscript{190} this is one of many instances

\begin{thebibliography}{99}
\bibitem{180} \textit{UNITED NATIONS} (last visited Feb. 13, 2015); see also \textit{STRATEGY TO COMBAT TRANSNATIONAL ORGANIZED CRIME} (July 2011).
\bibitem{182} \textit{Id.}
\bibitem{183} \textit{Id.}
\bibitem{184} \textit{Id.}
\bibitem{185} Carl Matthies, Karla Cunningham, Jeremiah Goulka, Greg Ridgeway, and Anny Wong, \textit{Film Piracy: Organized Crime and Terrorism} (Study conducted by the RAND Center for Global Risk and Security and RAND Safety and Justice Program). In fact, the study highlighted how historically the Irish Republican Army (IRA) used intellectual property crimes, such as film piracy, to fund terrorist activities in attempting to drive the British from Northern Ireland; this ended in via a political agreement. But, arguably, the report states that the IRA continued to operate a criminal enterprise counterfeiting goods.
\bibitem{186} \textit{Id.}
\bibitem{187} \textit{Id.}
\bibitem{188} \textit{Id.}
\bibitem{189} \textit{Id.}
\bibitem{190} Pew Research Center, \textit{America’s Image in the World: Findings from the Pew Global Attitudes Project} (Mar. 14, 2007).
\end{thebibliography}
where the United States has been precise with their decisions and has possibly prevented the United States and its allies fromterroristic harm.\footnote{Assessing the Terrorist Threat in the Tri-Border Area of Brazil, Paraguay, and Argentina (Oct. 2013).}

There have been efforts made by Argentina, Brazil and Paraguay to try and remedy the situation.\footnote{See James M. Cooper & Carlos Ruffinelli, supra note 102.} In 2005, there was a venture between these countries, along with INTERPOL and the World Customs Organization to collaborate because of the increase of cross-border IP crimes.\footnote{McManis, supra note 116, at 1239–40.} Between 2006 and 2008, the operation was able to detect foreign nationals and terrorist groups involved in IP crimes and other illegal activities, as well as intercept and confiscate hundreds of millions in goods and funds.\footnote{Id. at 1240.} The operation also exposed the fact that Middle Eastern and Asian influences were dominating these Latin American regions in transnational organizational criminal enterprises, including pirated clothing, CD/DVD, computer equipment, luxury items, medicines and weapons.\footnote{Id.}

**VI. European Union (EU): Success Model in Combating IP Piracy and Strengthening IP Laws**

The European Union (EU) has developed a comprehensive system in patent registrations.\footnote{Giuseppe Scellato ET AL., Study on the Quality of the Patent System in Europe (March 2011).}

This unitary process involves registering a patent that will take effect in the various EU member states.\footnote{On 11 December 2012 the European Parliament voted positively in a first reading on the EU Council's compromise proposals for two draft EU regulations on a unitary patent for Europe . . . The draft regulations were accepted under the EU's legislative procedure of "enhanced co-operation." These regulations would apply from January 1, 2014 or the date of entry into this. The agreement makes for a smoother process as parties do not have to conduct parallel proceedings in national courts; instead, the parties have a simpler and quicker process in determining patent claims. It is interesting to note that Austria was the first country to ratify this agreement. European Patent Office: Unitary Patent. Outside of the EU member states, the reality is that an inventor or company that creates innovative products goes unprotected, as evidenced from the above example. In the above example, the U.S. patent registration does not protect a foreigner from gaining access to this U.S. patent and using it in another country. Consequently, the inventor, the}
claims and even in getting a head start on tracing terroristic funding activities because of infringement activities. Yet, the problem lies in the fact there is no unitary system for copyright registrations; this problem is not exclusive to the EU as other countries struggle with this same issue.

The North, Central and South American regions have yet to institute similar unitary systems (patent, trademark or otherwise). Arguably, similar consensus on a unitary registration system (or a comprehensive unitary IP registration and monitoring system) could simplify intellectual property infringement issues and provide some ability to trace and detect infringement and potential terroristic funding from such. A North American, South American and the Americas corroboration would have other positive and incidental benefits such as an increase in the regional economies, a decrease in illegal alien migration from the southern American regions into the U.S. and an increased sense of peace and security via regional anti-terrorism efforts, corroboration and sharing of information.

Despite this apprehension, very few nations and people can dispute the benefits of connective systems. In essence, there are more benefits than risks; with technology advances happening/occurring so rapidly, it is to a nation’s advantage to remain on top of intellectual property advancements, as a nation’s economy and world’s economy and health could be wholly dependent upon such. In the simplest terms, connective systems help to protect the IP industry and protect the economy at large. Yet, a connective system is one solution.

The next issue is enforcement. There is a need for creation of laws that bind nations to

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198 Id.
199 See Cooper & Ruffinelli, supra note 102.
200 Id.
201 The use of unified and connective IP registration systems from all participating countries in world organizations, such as the United Nations, would be effective. There have been efforts made to address this issue and idea. Nevertheless, the question is one of whether the efforts were sufficient and whether all nations would agree to such. Some nations were apprehensive of such systems that unified and connected its resources to others. This indicated to some nations there would be too much intrusive behavior and a loss of control over valuable rights of its entities and citizens.
202 See Cooper & Ruffinelli, supra note 102.
enforce customary international laws and to render judgments where they are globally enforceable.\textsuperscript{203} Ultimately, countries may see a greater benefit in these binding laws and connective systems in stimulating the economy and gaining cooperation from other countries.\textsuperscript{204}

VII. The Pros and Cons of IP Piracy's Impact

Besides the clear impact of terrorism funding from IP piracy, there are incentives for developing nations to combat IP piracy.\textsuperscript{205} The biggest benefits are economic stability and establishment as viable stakeholders signaling to the world it is committed to maintaining peace and providing economic stability and quality health, safety and welfare to its citizens.\textsuperscript{206}

A. Economic Considerations

1. Special 301 List & Impact for Noncompliance

One huge benefit from the IP piracy issue is that developed nations have taken steps in securing intellectual property protections while making trade agreements and prohibiting trade with certain nations that do not share this principle. One such effort was via the Special 301.\textsuperscript{207}

The U.S. amended the Trade Act of 1974 to create “Special 301” requiring the USTR to “identify foreign countries that deny adequate and effective protection of intellectual property rights or fair and equitable market access.”\textsuperscript{208} This primarily aims to help U.S. citizens and companies that

\textsuperscript{203} Ambassador Michael B.J. Froman, 2014 Special 301 Report
\textsuperscript{205} Id.
\textsuperscript{206} Arguments for and against intellectual property rights and protection in developing nations are possible. For the intellectual property rights advocate, he or she could argue that market share and power would be increased, stabilize economy via licensing regulations, authentic and quality products, IP enforcement, balance trade costs, lower exportation issues and costs, and other incidental benefits. On the flip side, a developing nation could strike down these arguments and realize that allowance of such IP rights would create monopolies, inconsistencies in IP enforcement (or misuse or abuse of such), and incidentally decrease its market share and power and increase costs for the developing nation. In any argument, the power lies with the nation and its willingness to protect said intellectual property rights.
\textsuperscript{207} See Arnold, supra note 204.
\textsuperscript{208} Id.
depend on IP protection. Correlations become evident that certain nations on the Special 301 list were vulnerable to terrorist group influence and takeover, which affects the U.S., other connected nations, and that nation’s economy and trade.

The 2005 Special 301 Report underscored the importance in securing trade agreements and securing IP protections in certain nations, as the number of countries on this list was alarming. There were at least 52 countries listed. The good news is that, since 2005, the number of countries on the annual Report has decreased. The subsequent Reports have amounted to many countries making necessary efforts to curtail IP infringement--thus motivating some countries to gain removal from these lists--while other countries were added. Therefore, the U.S. efforts were successful in encouraging other nations to follow suit. The below chart illustrates this point.

Removal of many countries from this list occurs, as the goal is to strike a bilateral agreement between the U.S. and the targeted nation. If all efforts fail, the U.S.-imposed trade sanctions are against the targeted state. So, there is significant motivation and benefit for the targeted to create a bilateral agreement.

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209 Id.
210 Id.
211 Id.
212 Id.
214 Id.
215 Id.
216 Id.
217 Id.
220 Ukraine’s initial Priority Foreign Country status began in 2001. It held this status for the longest time, until 2005, when the U.S. removed its Priority Foreign Country status after satisfactorily meeting its obligations.
221 In 2013, Ukraine regained this status after seven years free of the Priority Foreign status. Recently, the U.S. found that Ukraine has persistently failed to meet its IP protection and enforcement obligations.
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other governing authorities, many nations began to see the importance of IP laws and their connection to economic stability.\textsuperscript{223}

a. Thailand

In 2005, Thailand was on the Special 301 list.\textsuperscript{224} Thailand was one of many countries categorized under this designation\textsuperscript{225} because it became a haven for IP piracy.\textsuperscript{226} Ultimately, Thailand agreed to enter into a U.S.-Thailand agreement to strengthen its IP laws, which ultimately benefited both countries.\textsuperscript{227}

Before such agreement took effect, at least 60% of counterfeit apparel seized by customs had originated in Thailand.\textsuperscript{228} Thailand then saw an opportunity to turn its image and laws around, especially under the threat of trade sanctions, further decreases in economic stability, and the lack of foreign investment prospects.\textsuperscript{229} When Thailand took the lead in reforming and enforcing their laws,

\textsuperscript{223} Felix Oberholzer-Gee and Koleman Strumpf, \textit{File Sharing and Copyright}, 10 \textit{INNOVATIVE POLICY AND THE ECONOMICS} (2010). Not everyone believes strict IP laws will help decrease illegal activity and create fair and equitable markets. In a 2010 study by Felix Oberholzer-Gee of Harvard University and Koleman Strumpf of University of Kansas, they found that weaker IP laws offer more opportunities for creativity, which has subsequently fueled the technological advancements and open and free marketplaces. The study also highlighted that strict IP laws have muted creative works, and that laws tied to economic protection of patented or copyrighted materials do not provide the appropriate incentive to creative professionals. See also Stan J. Liebowitz, \textit{How Reliable is the Oberholzer-Gee and Strumpf Paper on FileSharing? WORKING PAPER, SOCIAL SCIENCE RESEARCH NETWORK} (2007). Under fire over their past research on file sharing, Stan J. Liebowitz constructed several intelligent and logical arguments against why the Oberholzer-Gee and Strumpf’s paper on File Sharing is flawed. In several responses to the articles and studies of Oberholzer-Gee and Strumpf, Liebowitz argues that much of the Oberholzer-Gee and Strumpf’s study and data are not publicly available and not based on actual data, so it is not possible to study the empirical details of their results. Further, he goes on to state that O/S (Oberholzer-Gee and Strumpf) conducted additional tests (or quasi-experiments) to support their findings; yet, there is very little documentation to support the results in their findings. For instance, the O/S studies take one company’s economic woes and analyze nothing more. In addition, O/S does not account for the history of intellectual property and the many technological advancements that occurred far before the file-sharing boom. In fact, Liebowitz offers specific statistical data to support the history of intellectual property, technology and its impact on industries such as the entertainment industry. Liebowitz’s critiques of the O/S studies have been interesting to say the least and supported with sound logic and economic data and analysis. After a closer review of the O/S Studies, there are significant flaws that cannot be overlooked, which Liebowitz has thoughtfully highlighted in his critique. Despite this controversy, both the O/S 2010 study and Liebowitz’s responses show promise in awakening the legal and intellectual property communities in a discussion on open and free creative markets and IP protection. In the end, it comes back to the economics of the intellectual property community and how governments can further those economic interests for the well-being of the IP community and nation.

\textsuperscript{224} See Arnold, supra note 204, at 3.
\textsuperscript{225} Id.
\textsuperscript{226} Id.
\textsuperscript{227} Id.
\textsuperscript{228} Id.
\textsuperscript{229} Id.
other nations followed.  

b. China

Because of this 301 authority, the U.S. has been able to develop stronger ties with other nations. For instance, China has strengthened its IP laws with the U.S. over the years. In fact, for a company doing business in China, brand protection and IP protection are seemingly simultaneous with one another. This is not to say that China has not had piracy concerns.

Recently, China has reduced its use of pirated software and has obtained the proper licenses to utilize certain technologies. This was not because of the realization that pirated software (even though cheap and freely available on the black markets) was not reliable and often times facilitated other illegal activities. These efforts were reactive to the Supreme People’s Court of China’s judicial interpretation on Internet intermediaries, which went into effect on January 1, 2013. This judicial interpretation provided significant motivation for China to change its practices, as it makes anyone who facilitates online infringement jointly liable for such illegal activities.

B. Public Health & Safety Considerations

While this discussion focuses on IP piracy in the entertainment industries, IP piracy is not limited to film, music and clothing; the pharmaceutical industry falls victim to IP piracy, especially in developing nations, which is worth noting here. In fact, it is the “perfect crime” as the pharmaceutical industry, nations and the global community at large suffer from massive product

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230 It is important to highlight that most nations (developed or not) do not want to be restrained from trade and thought of as a terrorist-supporting nation. Therefore, there was definite incentive to conform to international and U.S. standards.

231 Hong Kong: Special 301 - Agreement With China Plus USTR Report For 1996.

232 Id.

233 See China Meeting Software Protection Obligation, XINHUA, (May 2, 2013); see also New Progress on China’s Software Legislation Intellectual Property Regime in China (June 3, 2013).

234 Id.


236 Re Internet Copyright Infringement Regulations, SUP. PEOPLE’S CT. GAZ., 2012.

loss, liability and life from counterfeit or knock-off drugs.239 Further, counterfeit pharmaceutical products frequently serve as a source of funding for terroristic activities beyond black market activities disconnected from terrorism.240

The World Health Organization (WHO)241 has been in the forefront regarding counterfeit medicines. There is no consensus among the various WHO member states on what constitutes counterfeit medicine. 242 Each member state’s definition varies drastically. Accordingly, the enforcement of laws and penalties for counterfeit medicines will naturally vary.243

Developing nations grapple with the delicate balance of providing adequate healthcare for its citizens and the demand for reasonably priced medicines.244 Simultaneously, developed nations face other issues, as many organized criminal organizations, patients, pharmacies and other medical professionals see opportunities to save money and provide adequate medicinal products but also an opportunity to make money. Essentially, counterfeit goods hinder economic growth, since taxes are not levied on such goods and they are also exempt from import and export duties. Furthermore, counterfeit goods do not comply with the basic health, product quality, performance and safety standards.245

This issue comes into play with the use of international laws that govern IP protection. Some

241 WHO.
242 WHO. Executive Board 124th Session Provisional Agenda Item 4.11 (December 18, 2008) Counterfeit medical products (Report by the Secretariat). “A counterfeit medicine is one which is deliberately and fraudulently mislabeled with respect to identity and/or source. Counterfeiting can apply to both branded and generic products and counterfeit products may include products with the correct ingredients or with the wrong ingredients, without active ingredients, with insufficient active ingredients or with fake packaging.”
243 WHO. WHO is aware of these consistencies and has over the years offered guidance and recommendations to member nations on a suggested definition and interpretation of counterfeit drugs. Nations such as the U.S., Kenya, Philippines, Pakistan, and Nigeria have varied interpretations, some having very detailed definitions and approaches in determining what products are counterfeit medicines.
244 Id. For a developing nation, political will and conflict could severely affect the quality of healthcare and services to its citizens.
theorists argue that laws, like TRIPS and GATT, hinder a developing nation’s right to health and drugs for its citizens, especially in countries where terminal illnesses are rampant. Despite exceptions or waivers given to developing nations, these standards ultimately favor trading partners.

The replication of counterfeit medicines and non-approved versions will inherently deceive consumers and provide these consumers with a lower quality and potentially dangerous mixture of medicines. If harm comes about, pharmaceutical companies face liability that they neither bargained for nor realized, even though the company took all necessary steps in protecting the public and meeting and maintaining proper standards. This is because many developing nations have little or no regulatory oversight in protecting the public from harm caused by counterfeit medicines. Ultimately, this results in negative brand reputation and association. Naturally, a developing nation may be less concerned with the fact that such IP piracy funds terrorist group


247 Understanding the WTO: The Organization, Members and Observers. For a nation to join the World Trade Organization (or WTO), there are certain minimum requirements of intellectual property laws as set forth under TRIPS. This involves establishment of standards that provide effective regimes for the patenting of microorganisms and some plant variety. These standards favor trading partners.

248 See Nelson, *supra note* 245, at 1069-70. While a developing nation may have economic incentive to create IP laws, this may mean there may be negative consequences relative to food, biodiversity, access to adequate healthcare, technology, medicines, and international relations. Many developing nations (especially with the reality that imports exceed exports in some regions) must consider whether certain mandates are truly beneficial to their nation and citizens. The transfer of technology may be a seemingly tricky area for international relations. Some nations have to determine whether certain technology transfers are the best and most feasible options. Essentially, the nation and company could be gaining yet losing. A developing nation must make certain concessions and laws that protect patentability of a product per agreements such as TRIPS and GATT. If this is not in effect, the developing nations faces a denial to access to drugs, technology and other healthcare.

249 See Nelson, *supra note* 245, at 1069-71. Pharmaceutical companies in the U.S., seeking FDA approval, must follow the necessary safeguards and standards and obtain FDA approval; outside of international protocols required of signatories to treaties, many developing nations do not have a similar FDA agency or component to regulate certain products put into the stream of commerce. Therefore, if counterfeit goods of a U.S. patented medicine are circulated within a developing nation and there are no international protocols mandated or enforced, the U.S. patent holder or owner, usually the pharmaceutical company, is left with little remedy against those who pirated the medicines; but, the patent holder or owner is left with numerous liability from the harm caused by IP piracy of pharmaceutical goods. This is primarily because a U.S. patent is not necessarily enforceable or applicable in other nations. Outside of the nation’s border, intellectual property protection is either non-existent or weak.
activity elsewhere and more concerned with its citizens’ health and safety.\textsuperscript{250}

\textbf{VIII. International Efforts to Curtail IP Piracy}

There is optimism for developing nations in curtailing intellectual property infringement. Even though meaningful law enforcement requires significant resources, developing nations who join into global organizations will find themselves with firm regulatory options and support from an interconnected system of member states.\textsuperscript{251} This section highlights the existing laws that are helpful to a nation seeking to reconcile the struggle with IP piracy and terrorism.

\textbf{A. Berne Convention}

The Berne Convention\textsuperscript{252} is a treaty administered by the World Intellectual Property Organization.\textsuperscript{253} The intent is to recognize the IP rights of nationals in member states.\textsuperscript{254} This treaty obligates member states to treat copyright authors and owners of member states equally with their own nationals.\textsuperscript{255} The treaty also establishes minimum standards for copyright protection among member states, allowing authors and copyright holders similar protections under the law.\textsuperscript{256}

\textbf{B. Universal Copyright Convention}

Not every state agreed with the conditions of the Berne Convention. Therefore, states in

\textsuperscript{250} Anup Shah, Pharmaceutical Corporations and Medical Research. The change in population could trigger IP piracy demand. With these realities in mind, a developing nation must consider what is ultimately feasible and wise to do, as some developing nations are more apt to be concerned with maintaining natural resources than joining the global market to advance technology and other modern day processes. Moreover, if a developing nation does experience negative consequences and must adhere to customary international laws that do not favor the developing nation, then this is further incentive to change direction and support black market or illegal activities.

\textsuperscript{251} \textit{id.} Because most member states have made substantial efforts in regulation and enforcement of IP laws in its territories, this makes it easier for many developing nations in following suit and instituting help from others, as there are exceptions provided to developing nations who cannot meet these IP and regulatory demands and numerous other international laws that help in a nation’s effort to curtail IP piracy.


\textsuperscript{253} \textit{id.}

\textsuperscript{254} \textit{id.}

\textsuperscript{255} \textit{id.}

\textsuperscript{256} \textit{id.} However, this treaty did not come without conflict. Many countries did not agree in joining into this treaty due to the treaty’s impact or favoring of certain countries. Further, not all provisions were agreeable to many countries as major modifications would be necessary.
disagreement with the Berne Convention created an alternative. The Universal Copyright Convention.\textsuperscript{257} Ironically, Berne Convention states later became parties to this treaty.\textsuperscript{258}

\textbf{C. General Agreement on Tariffs and Trade (GATT)}

The General Agreement on Tariffs and Trade (GATT) \textsuperscript{259} is a multilateral agreement regulating trade among member states.\textsuperscript{260} Per the agreement, the purpose is to reduce tariffs and eliminate preferences.\textsuperscript{261} The agreement included nine rounds of talks\textsuperscript{262} in negotiating and resolving trade issues and international trade disputes.\textsuperscript{263} One of those rounds was intellectual property.\textsuperscript{264}

A nation receives many advantages when joining GATT. One advantage to this agreement is the promotion of public health and safety regulations.\textsuperscript{265} Another advantage is the dispute resolution process relative to conflicts.\textsuperscript{266} Finally, the treaty provides for criminal penalties against infringers who participate in a commercial sale.\textsuperscript{267} These advantages are definitely beneficial to a developing nation struggling with public health and safety issues and conflicts within its borders.\textsuperscript{268}

\textbf{D. Trade-Related Aspects of Intellectual Property Rights (TRIPS)}

\textsuperscript{258} There were noticeable differences in the two treaties. These differences were resolved via making the Berne Convention the prevailing authority for any state in conflict with both treaties. The major advantage was authors and copyright holders could find protection of their copyrights in non-Berne Convention states.
\textsuperscript{259} See \textit{GATT 1994, supra} note 129.
\textsuperscript{260} Id.
\textsuperscript{261} Id.
\textsuperscript{262} This agreement later saw inclusion of areas such as intellectual property that went unaddressed in the initial agreement.
\textsuperscript{265} See Final Act, supra note 262.
\textsuperscript{266} Id.
\textsuperscript{267} Id.
\textsuperscript{268} See id. (GATT falls short in providing criminal penalties against infringers or member states that do not necessarily follow GATT standards and processes).
Established relative to the Uruguay Round\textsuperscript{269} from GATT, Trade-Related Aspects of Intellectual Property Rights (TRIPS)\textsuperscript{270} goes a step further than GATT, as TRIPS focuses on many forms of intellectual property including trademarks, paintings, inventions, books, patents, medicines, and films.\textsuperscript{271} Principally, TRIPS resolved the gaps in international enforcement as well as the establishment of minimum standards, and how to reconcile the conflicts in the IP industry among member states.\textsuperscript{272}

E. Agreement on Trade Related Investment Measures (TRIMS)

The Agreement on Trade Related Investment Measures (TRIMS)\textsuperscript{273} may be the most beneficial for member states because this agreement eliminated the local policy preference in foreign trade.\textsuperscript{274} Before this agreement, there were numerous restrictions placed on international entities in local content, employment practices, export practices, foreign exchange, among other considerations.\textsuperscript{275} This agreement makes it easier for international entities to operate globally in foreign markets.\textsuperscript{276}

F. Anti-Counterfeiting Trade Agreement (ACTA)\textsuperscript{277}

The Anti-Counterfeiting Trade Agreement (ACTA) is a recent treaty created in 2011 that established international legal framework for intellectual property infringement.\textsuperscript{278} The agreement is

\textsuperscript{269} Id.
\textsuperscript{270} See TRIPS Agreement, supra note 129.
\textsuperscript{271} Id.
\textsuperscript{272} See generally THE DOHA DECLARATION ON THE TRIPS AGREEMENT AND PUBLIC HEALTH (last visited Sept. 22, 2014). With the help of the Doha Declaration, the TRIPS agreement proved to be successful for many developing nations and pharmaceutical companies in simultaneously addressing public health and IP issues. For instance, TRIPS addressed principles of national treatment, transfer of technology, balanced protection, most favored nations and other related concepts, which was a well-needed discussion for developing nations and pharmaceutical companies.
\textsuperscript{274} Id.
\textsuperscript{275} Id.
\textsuperscript{276} Id.
\textsuperscript{277} Office of the United States Trade Representative, Executive Office of the President (last visited Sept. 22, 2014).
\textsuperscript{278} Id.
not the usual agreement.\textsuperscript{279} What makes this treaty different is multifold. First, this treaty focuses on the usual products connected to IP infringement as this treaty extends to IP infringement on the Internet. In addition, this treaty is not under an international body as is the case for many treaties, thus creating a separate entity outside the typically international bodies that traditionally governed international IP issues.

\textbf{G. Madrid Protocol}

The Madrid Protocol\textsuperscript{280} allows for an international registration of trademarks.\textsuperscript{281} The trademark applicant need only file one application in a member state and the registration is generally accepted in other member states.\textsuperscript{282} Each member state will analyze the application and make a determination of approval or denial.\textsuperscript{283} If approved, the lifespan of the trademark is typically 10 years plus one renewal.\textsuperscript{284}

Clearly, this process is much easier and cheaper than filing in each member state,\textsuperscript{285} however, it is not without issue. Some nations have much looser rules than the U.S. and other developed nations, forcing the trademark applicant either to file an international trademark application under domestic law via the Madrid Protocol or to file directly with each nation in question.\textsuperscript{286}

\textbf{IX. Recommendations}

\textsuperscript{279} Daniel Castro, \textit{ACTA Critics Oppose Strict IP Enforcement, Not Just Text of Agreement} (July 6, 2010). It is important to note there are critiques on this recent treaty as many critics feel the treaty is susceptible to corporate influence and has limited or no oversight by publicly accountable international organization.


\textsuperscript{281} Id.

\textsuperscript{282} Id.

\textsuperscript{283} Id.

\textsuperscript{284} Id.

\textsuperscript{285} Id.

\textsuperscript{286} Id. The disadvantages to the Madrid Protocol are: (1) filing purpose only; (2) time limitations; (3) the rights or license are not easily transferable; (4) territorial limitations as it is applicable to parties to the Madrid Protocol; and (5) once the basic application is cancelled or time expires, the international registration may be lost and/or may need to be converted to another type of application. \textit{See} Nicholas Wells, \textit{Eight Reasons Not to Use the Madrid Protocol for Trademark Protection in the United States}, (Feb. 6, 2013).
The field of intellectual property and international relations is a complex industry with limited understanding as to how each field serves as a playground for terrorism funding.\textsuperscript{287} Particularly, developing nations have the biggest vulnerability because of the obvious disadvantages faced by many developing nations.\textsuperscript{288} The biggest piece to this complex puzzle is the transparency of laws and enforcement of same, connecting the developing nations to the global IP industry while leveraging against becoming a potential haven for terrorism funding.

The first option is to tap into existing laws on customary international trade. For instance, the various international agreements and practices noted above would be a great start. In conjunction with these laws, there is an opportunity in creating a global consensus on intellectual property piracy and in combatting the same.

\textbf{A. Cost-Benefit Analysis}

It is important to note there has not been a true and extensive cost-benefit analysis on the economic impact of IP piracy and its connection to terrorism. This is partly because the exact revenue from the illicit IP piracy funds is illusive; governments normally cannot trace the funds of IP pirate activities. The government's first sight of the funds only occurs after the capture of pirated goods.\textsuperscript{289}

A recommendation is to conduct an extensive cost-benefit analysis\textsuperscript{290} in each area of IP piracy, including the entertainment and pharmaceutical industries. This would be countered and analyzed with the potential revenue or funds generated from seizures and the possibilities that arise when terrorist groups use this funding. Unmistakably, the costs and benefits weigh in favor of

\textsuperscript{287} \textit{Supra} notes 63, 40-41 and accompanying text.
\textsuperscript{288} \textit{Supra} notes 56-57 and accompanying text.
\textsuperscript{289} \textit{Supra} note 102 and accompanying text.
\textsuperscript{290} A cost-benefit analysis would analyze: employing a team of customs and border agents, court personnel, other law enforcement agents and government enforcement attorneys, technological inclusions, the companies and industries impacted, counterfeit goods and products, the funds lost or diverted from the IP holder and any revenue or funds obtained from such seizures, and the various tax revenue, employment, safety, and trade issues that arise from the counterfeit goods.
enforcing IP laws.

The counterfeit industry yields billions of dollars on an annual basis in the United States.\textsuperscript{291} A nation’s minimal effort in enforcing domestic and international IP laws can create a huge financial benefit an individual and create a financial risk for the terrorist groups and criminal syndicates that depend on the illicit activities for funding.\textsuperscript{292} In reality, any efforts in stopping such illegal activities will inevitably either stop, disrupt or slow down terrorist activities.

This leads us to transparency in trade and IP laws, and strict enforcement of IP laws. If each member state would enforce international laws and enforce domestic laws, then many terrorist organizations would have a difficult time funding terrorism. This consistency, transparency and enforcement could help shed light on terrorism funding, as many enforcement activities can document illegal IP activities, identify the key players and actors, and assist in tracking fund recipients.

Alternatively, global organizations could advocate for centralized enforcement services that allow for a main intellectual property registry or database connected to all member states. This centralized registry would not be limited to patents and trademarks but would also include copyrights, which would provide intellectual property holders, their governments and member states a “one-stop shop” for intellectual property registrations and enforcement in all member states and beyond. Additionally, this alternative would provide real-time data on IP infringement activities, the groups involved and their funding sources and capabilities.\textsuperscript{293} A centralized IP enforcement system could also result in stiffer criminal penalties for infringers.

\textsuperscript{291} Supra note 102 and accompanying text.

\textsuperscript{292} See Good Money, Gone Bad, supra note 76.

\textsuperscript{293} This alternative would be different from the Madrid Protocol’s system since it would house all IP applications and licenses with internal mechanisms in tracking and monitoring IP infringement activities and enforcement activities. Ultimately, this makes it easier for world organizations such as the UN and other entities in ensuring the enforcement of mandates within the treaties and in providing an added benefit to the groups involved by dwarfing terrorism and monitoring terrorist activities. The Madrid Protocol’s system primarily registers a trademark with member states and nothing more.
While consumer demand for pirated goods fuels IP infringement, many consumers are unaware that their funds used to purchase counterfeit goods either online or on the streets are eventually forwarded to terrorist groups and their syndicates in supporting terrorist activities.\textsuperscript{294} Without this consumer demand, there may be little incentive to commit IP piracy thereby decrease the revenue that fuels terrorist activities.\textsuperscript{295} As such, an additional component should include a global consumer educational campaigns and public announcements informing the public of the risks of purchasing counterfeit goods and the connections to terrorism.

\textbf{B. Taking a Page from U.S. Laws and Efforts}

There are existing U.S. laws that allow valid American trademark holders to keep out goods where importation of which would violate his or her exclusive right to use the mark in the U.S.\textsuperscript{296} The U.S. and legitimate IP holders have actively pursued terrorist groups and IP infringers under criminal and civil RICO statutes. Other nations could take a page from U.S. laws and practices\textsuperscript{297} to mirror these laws in their nations.

Implementation of specialized forensic accounting tools for online transactions would be effective. Terrorist organizations need the ability to transfer funds or items of value in order to fund their activities. With the enforcement and regulation of anti-terrorism laws and mechanisms within those laws, companies providing online monetary transfer services can help in detecting suspicious

\begin{footnotesize}
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\item \textsuperscript{294} See James M. Cooper & Carlos Ruffinelli, supra note 102, at 199.
\item \textsuperscript{295} Clearly, this would be an unpopular idea, as it would criminalize consumer usage. However, there is a possibility to create narrowly tailored criminal enforcement measures where the average consumer avoids criminal liability, shifting criminal liability to the major suppliers and manufacturers of these illicit and illegal goods.
\item \textsuperscript{296} See 19 U.S.C. \textsection 1526, 1337 (1930). This is especially true relative to gray (or grey) markets, where the use of legitimate products via legal channels occur yet for an unintended purpose frustrates or diminishes the rights of the manufacturer; See also Hope Hamilton & Ronald Dove, Combat Grey Market Goods in the US (Nov. 2012).
\item \textsuperscript{297} In the U.S., there are additional controls for the trademark or trade name owner via 19 C.F.R. \textsection 133.23.
\item \textsuperscript{298} U.S. Customs and Border Protection units use specialized technology in scanning packages imported into the U.S. that may appear to house illegal goods. See Fiscal Year 2011 Budget in Brief, dhs.gov, 11, 56 (2011). This also requires cooperation of the IP holders in using their IP rights in order to enforce criminal IP laws. \textit{Id.}
\end{itemize}
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financial transactions.\textsuperscript{298} Goods and services would be easier to track back to their originating
terrorist organizations.\textsuperscript{299}

The U.S. excelled in this arena since the September 11, 2001 attacks. The infamous and
recently highly debated Patriot Act has helped in retrieving and tracking suspicious financial
activities in and out of the U.S.\textsuperscript{300} While the U.S. has not won unanimous support over its legalized
spying laws many people do not dispute the value of tracking and apprehending these funds that will
be used for terrorist activities against the U.S., its citizens and possibly other nations.\textsuperscript{301}

\textbf{C. Internal Technological Mechanisms to Prevent or Disrupt Use of IP-Protected Materials}

There is a strong likelihood that technological mechanisms within the protected products
and materials could slow down and eliminate certain IP privacy altogether. This would create
“hiccups” for the IP industry but major losses and difficulties for IP pirates, thieves and eventual
terrorist groups that use IP theft as a source for funding. An example would be technological
limitations placed upon CDs, DVDs, MP3s and other files available for download online. These
limitations would make it either difficult or impossible in the replication or duplication of any
materials not directly authorized. Even if the replication or duplication were to be successful, this
limitation could cause a replication or duplication to be distorted and useless.

The same is possible with the use of specialized technology to manufacture the product.
Exclusive or specialized technology can create manufacturing limitations and additional obstacles for

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\textsuperscript{298} Even though there is doubt over the level of governmental involvement in the private sector, companies could serve as collaborators with government agencies as it would serve both the corporate’s interest and public’s interests in not becoming a tool used in terrorism.
\textsuperscript{299} Currently, U.S. Customs and Borders professionals are utilizing specialized technology to detect certain suspicious packaging. However, for a developing nation, the problem may lie in not only having access to said technology (and therefore the use of the technology), but training, effective leadership, pay, language barriers and the understanding of culture and other laws. Terrorist organizations often work upon the vulnerabilities and lack of knowledge of a society. The weaknesses of a nation’s customs and border unit could serve as a tool to advance the terrorist organization’s own agenda.
\textsuperscript{300} \textit{The USA PATRIOT Act: Preserving Life and Liberty, JUSTICE.GOV} (last visited Sept. 16, 2014).
\end{flushleft}
IP thieves who use generic machinery to copy the products. If this specialized technology is used in the manufacturing process, IP theft rings would be forced to obtain the specialized machinery, which creates another trail of detection and suspicion. With international laws and customs regulations, technological mechanisms could track and monitor the specialized machinery, eventually disabling and even interrupting illegal operation and production.

D. International Collaboration of All Nations and IP Holders Connected

The solution may lie in international collaboration of developed and developing nations\(^\text{302}\) (and possibly the intellectual property holder). However, there is a danger in having the intellectual property holder involved too extensively in the process.\(^\text{303}\) The concern is that the holder could assert unchecked and unregulated power that shifts the balance of authority from the governmental agencies enforcing the laws and punishing the infringers to the holder who has substantial resource to change policy, practice and create monopolies. While this may not be a popular idea among IP rights advocates and holders, it does create an opportunity for governmental-private entity partnership in combating terrorism and protecting IP rights and the brands that accompany them, which ultimately directly affects the economy. Fundamentally, the government and private entity would need each other in protecting their interests.\(^\text{304}\)

\(^{302}\) See Intellectual Property Crimes: Are Proceeds From Counterfeited Goods Funding Terrorism?, supra note 56. From the report, prepared statements and witness testimony highlight several examples of international collaboration between agencies such as the FBI, U.S. Customs, and other governmental agencies such as Interpol, Hong Kong Customs, Thailand, and Malaysian authorities. This shows promise in the collaboration of developed and developing nations in fighting against illegal piracy that could undoubtedly lead back to terrorist groups and organizations and contribute to societal and economic disruption in regions around the world (depending on the terrorist group’s target and goal).

\(^{303}\) Monica Horten, A COPYRIGHT MASQUERADE: HOW COPYRIGHT LOBBYING THREATENS ONLINE FREEDOMS (2013).

\(^{304}\) A private entity diligently protecting its IP and brand can only get so far without the government’s assistance. Additionally, the overall private entity’s financial future and the quality of the IP wholly depend upon the government’s efforts in combating terrorist activities and IP piracy that fund those activities.