



Intellectual Property:

Making It Personal

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Citizens Against Government Waste

Citizens Against Government Waste (CAGW) is a private, nonprofit, nonpartisan organization dedicated to educating the American public about waste, mismanagement, and inefficiency in the federal government.

CAGW was founded in 1984 by J. Peter Grace and nationally-syndicated columnist Jack Anderson to build public support for implementation of the Grace Commission recommendations and other waste-cutting proposals. Since its inception, CAGW has been at the forefront of the fight for efficiency, economy, and accountability in government.

CAGW has more than one million members and supporters nationwide. Since 1986, CAGW and its members have helped save taxpayers more than \$1.3 trillion. CAGW publishes special reports, its official newspaper *Government WasteWatch*, and the monthly newsletter *WasteWatcher* to scrutinize government waste and educate citizens on what they can do to stop it. CAGW's publications and experts are featured regularly in television, radio, print, and Internet media.

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Introduction

Most Americans do not think much about how property rights affect them in their daily lives. If they consider the subject at all, they are likely to be more aware of the monetary value of private property than intellectual property (IP). People will protect their valuables at home and work by locking their doors and installing security systems, and they usually have a good idea of how much their business, home, car, and investments are worth.

But few people realize that nearly every product they use is the result of someone's idea, or IP; nor are they likely to know the value of IP to the economy. And it is even more unlikely that they understand the impact of IP theft on either the creative process or the tens of millions of ordinary Americans who participate in that process.

A Brief History of Intellectual Property Protection

During medieval times guilds, associations, or artisans were granted authority by the government to control the regulation and conduct of various industries.¹ In England, personal property and IP were traditionally viewed as distinct subjects with different origins. Personal or tangible property was viewed as “a creature of common law,” whereas copyrights and other IP were considered “largely a creature of statute.”²

The 1623 Statute of Monopolies provided for the exclusive control over an invention for a period of 14 years to the “true and first inventor.”³ The Statute of Anne in 1710 granted an initial 14-year protection period with a possible 14-year renewal for protection of IP rights.⁴

In the United States, following the Revolutionary War every state had its own patent law, and every state except Delaware had its own copyright law.⁵ The protection and promotion of IP was so important to the Founding Fathers that they included it in the General Welfare Clause, Article 1, Section 8 of the U.S. Constitution:

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.⁶

Unlike IP, personal property is protected under the Fourth and Fifth Amendments, not in the Constitution itself. During the First Congress, H.R. 43, the Copyright Act of 1790, was enacted and signed into law on May 31, 1790 by President George Washington. As one of the first laws enacted by Congress, the legislation provided copyright protection for books, maps, and charts and established both the U.S. Copyright Office and the U.S. Patent and Trademark Office (PTO). These agencies were tasked with cataloguing, analyzing, and protecting IP rights.

Musical compositions were not mentioned in the text of the act and would not be expressly covered by copyright until the Copyright Act of 1831. However, they were routinely registered under the 1790 Act and categorized as “books.”⁷

Unlike the PTO, there is no “Office of Personal Property” or a “Department of Personal Property.” In fact, Article 5 states that private property can be taken for public use with just compensation. Although the government can exercise eminent domain over private property under such circumstances, it has no similar right to take away IP.

The legal protection of IP has enormous value. It turns intangible assets into exclusive property that can be traded in the marketplace. A March 2012 report by the U.S. Department of Commerce Economics and Statistics Administration and the PTO found that direct employment

in the most IP-intensive industries in the U.S. accounted for 27.1 million jobs in 2010, and indirect activities associated with those industries provided an additional 12.9 million jobs for a total of 40 million jobs, or 27.7 percent of all jobs in the economy.⁸

In a comparative study on the value of IP, economists Kevin A. Hassett and Robert J. Shapiro estimated that “innovation in its various forms accounts for 30-40 percent of the gains in growth and productivity by the American economy during the 20th century.”⁹ The study further found that the value of IP in the U.S. was between \$5 trillion and \$5.5 trillion in 2005.¹⁰ By comparison, in 2010 that value had increased to between \$8.1 trillion and \$9.2 trillion, or the equivalent of 55–62.5 percent of U.S. GDP.¹¹

In 2010, the value of IP comprised approximately 80 percent of a company’s total assets based on the Standard & Poor’s 500 Index.¹² This compares to the 1975 value of intangible assets comprising only 17 percent as IP, with the remaining 83 percent found in physical and financial assets.¹³

Internationally, some governments have been developing policies that threaten IP. The creative process will suffer as a result of such policies, because individuals and companies will not be willing to spend as much time or money on new IP if they believe the fruits of their labor will be taken away without sufficient – or any – compensation.

In a 2007 CAGW report entitled “Property Rights in the 21st Century: Don’t Steal This Paper or My Ideas,” one of this report’s co-authors examined four “myths and reality” surrounding the definition and use of IP. These premises hold true today.

Four Intellectual Property Myths

1. Myth: The price of information and ideas should be zero because products should be priced at marginal cost.

Reality: Economists reject marginal cost pricing because such policies destroy investment.

2. Myth: Intellectual property rights result in information and ideas being “locked down” by their owners.

Reality: The creators of art, books, movies, and inventions want their creations to reach as many people as possible, so long as they are compensated.

3. Myth: Intellectual property rights are monopolies that give their owners too much economic power.

Reality: Patents or copyrights support competition by encouraging inventors and creators to enter new markets; IP gives its owners no more economic power than any other asset.

4. Myth: Intellectual property rights benefit big firms at the expense of “the little guy.”

Reality: Patents are often the best protection that a small inventor has against large firms; copyright benefits creative ventures of many sizes, from solo musicians to big studios.

Strong protection of IP provides real benefits. Consider the following American inventions and whether they would have come about in a climate of weak IP protection:

- The telegraph in 1835¹⁴
- The phonograph in 1877¹⁵
- The light bulb in 1880¹⁶
- Air conditioning in 1902¹⁷
- The television in 1927¹⁸
- The point contact transistor in 1947-1948¹⁹
- Marshmallow Peeps in 1952²⁰
- Magnetic tape cartridges in 1964²¹
- The cell phone in 1973²²
- The microprocessor in 1973²³

The value of these and future inventions relies on strong IP protection. This report will review copyright, trademark, and patent issues, as well as ongoing threats to IP protections from piracy, counterfeiting, and illegal sharing online.

Many individuals who buy a fake Gucci bag on the corner or illegally download a TV show, movie, or music, share the view of Hana Beshera, one of the founders of NinjaVideo, who served 16 months in prison for violating copyright laws. Even after she got out of jail, Beshera still believed that “the movie business is so large that skimming a little off the top doesn’t hurt anybody.”²⁴ IP theft is wrong at every level; its impact affects everyone associated with the creative process. Indeed, with more than 40 million Americans directly or indirectly working in an IP-related industry, one of the victims of IP theft might well be personally known to the perpetrator.

The importance of protecting IP rights cannot be overemphasized. The right to retain legal possession of, and benefit financially from, IP is constantly being threatened. The intent of this publication is to help educate the public about the value and importance of IP, the impact on individuals and the economy from the theft of IP, and how IP helps innovation flourish and economies around the world thrive.

Chapter 6 – Electronics, Software, and National Security: Pulling the Plug on Phony Parts

Consumers want the latest product, the coolest device, and the biggest screen at the lowest possible price. Sometimes their desire for these devices is so intense that fights break out in stores during the first day the product is available for sale. Others patiently wait until the frenzy dies down before they make the purchase.

There is another, less obvious category of “consumers”: individuals who obtain counterfeit versions of a hot new product before it is released for sale to the public.

In July 2014, during the buildup to the release of Apple’s iPhone 6 and 6 plus, several cloned or counterfeit versions became available through various websites.²⁶⁸ The fakes were based on speculation of what the newest iPhone would look like, and the purchasers typically were individuals who wanted to appear to have the latest tech device before the real deal was available.²⁶⁹ While the fake iPhone 6 looked like a genuine iPhone, the similarity stopped there. The cloned versions ran on different operating systems, including Android.²⁷⁰

While the release date of the two new phones was kept confidential by Apple, it turned out that the counterfeit phones were available two months before sales of the real phones began on September 19, 2014.²⁷¹ More than 10 million of those devices were sold during the first weekend they were available.²⁷²

Counterfeiters have targeted and manufactured other valuable products. On September 30, 2014, two men pleaded guilty to conspiracy to commit computer fraud and copyright infringement. One of the charges was manufacturing and selling a counterfeit Xbox One gaming system before it was officially released. Prosecutors alleged that the men stole more than \$100 million in IP and proprietary information relating to the Xbox One and the Xbox Live gaming systems. The men had obtained much of this information through a U.S. Army computer system, targeting Microsoft and several video game developers in order to illegally obtain gaming information and other IP and trade secrets.²⁷³

While the theft of software and electronics has clear financial consequences, the use of counterfeit products can also be deadly. In July 2013, a woman in China died when she answered a call using her iPhone 4. Her phone was connected to a third-party charger and she was electrocuted when the call came through.²⁷⁴ Even though Apple was not at fault, the company responded to the problem in August 2013 by offering a worldwide USB power adapter trade-in of third-party chargers that might not be “designed properly ... resulting in safety issues.”²⁷⁵

Unfortunately, that did not prevent the continued sale of counterfeit phone accessories. In June 2014, a woman died of electrocution in Sydney, Australia. She was found with burns on her chest and ears, wearing headphones while holding her laptop. Officials believe that her death was linked to an unbranded phone charger purchased at a phone accessories kiosk.²⁷⁶

Counterfeit cell phone chargers are not the only potentially lethal electronic products. As noted in chapter 1, on May 13, 2013, ABC 7 News in Chicago covered a raid on a Los Angeles store selling counterfeit goods.²⁷⁷ The news story included an interview with UL experts, who demonstrated the fire hazards of bogus extension cords. The experts said that counterfeit products could be in anything in homes from toasters to wall outlets, with the potential to cause damage or injury.²⁷⁸

There is nothing like a warm fire during the holiday season, but flames shouldn’t be shooting out from holiday decorations. According to the Home Safety Council, lights on Christmas trees account for an average of 240 fires each year.²⁷⁹ The fires can be caused by the

lights themselves or by fake extension cords, which can easily be overloaded. The Electrical Safety Foundation International found that 72 percent of individuals are likely to use at least one extension cord for their decorations, and 33 percent of those individuals are unlikely to check for a certification mark such as UL.²⁸⁰

In addition to consumers being duped by counterfeit electronics, fake parts have entered into the federal government's supply chain. In one of its earliest reports on this problem in October 1990, GAO found that nonconforming parts (including counterfeit parts), such as fasteners, pipe fittings, electrical equipment, and valves were being installed in nuclear power plants. GAO reported that "5 years after DOD had identified certain vendors as suspect, utilities installed steel from these companies in safety systems designed to prevent or mitigate an accident at a nuclear plant. NRC warned utilities about these vendors only after they were indicted for selling nonconforming products."²⁸¹

GAO noted that six federal agencies were planning to create a system to exchange information relating to nonconforming products and develop a clearinghouse for sharing critical information relating to vendors of these goods. GAO recommended that the Office of Management and Budget (OMB) develop an action plan to implement the strategy developed by these six agencies, as well as a computerized tracking system that would provide federal agencies with access to the information.²⁸²

In January 2010, the Department of Commerce, one of the six agencies involved in the proposed information exchange, released a report on a study the agency conducted from 2005 to 2008 evaluating the prevalence of counterfeit electronics in the defense industrial base. The analysis found "that 39 percent of companies and organizations participating in the survey encountered counterfeit electronics during the four-year period. Moreover, information collected highlighted an increasing number of counterfeit incidents being detected, rising from 3,868 incidents in 2005 to 9,356 incidents in 2008."²⁸³

On June 24, 2011, GAO issued a report on the joint plan developed by the National Aeronautics and Space Administration and DOD to stop counterfeit parts from entering the supply chain for space and missile defense systems through a set of standards requiring contractors to prevent and detect counterfeit parts and materials. GAO noted that, despite these efforts, protecting the supply chain remains problematic due to "broader acquisition management problems, workforce gaps, diffuse leadership in the national security space community, the government's decreasing influence on the overall electronic parts market, and an increase in counterfeiting of electronic parts."²⁸⁴

On February 21, 2012, GAO released the results of a study it conducted focused solely on bogus parts entering the DOD supply chain. GAO created a fictitious company to request quotes from numerous vendors in an effort to purchase 16 parts in three categories: "1) authentic part numbers for obsolete and rare parts; 2) authentic part numbers with postproduction date codes (date code after the last date the part was manufactured; and, 3) bogus, or fictitious, part numbers that are not associated with any authentic parts."²⁸⁵ All 12 of the parts that GAO received under the first two criteria were suspect or counterfeit, even though the part numbers used in the request were authentic. The last four parts were ordered with invalid part numbers and were also counterfeit.²⁸⁶

On May 12, 2012, the Senate Armed Services Committee released a report on counterfeit electronic parts in the DOD supply chain. The committee found that China is the primary source for counterfeit goods, accounting for more than 80 percent of seizures in fiscal year 2011; other sources include India and Turkey.²⁸⁷

Some of the fake parts provided to DOD are made from electronic waste sent from the U.S. to other countries. The e-waste is disassembled by hand, washed in rivers, and dried on city sidewalks. The parts are then sanded down to remove part numbers, rebranded, and recoated to disguise their origins. The report stated: “Counterfeit electronic parts pose a significant risk to the performance of defense systems. Even if counterfeits made from previously used parts and salvaged from e-waste may initially perform, there is no way to predict how well they will perform, how long they will last, and the full impact of failure.”²⁸⁸

After the committee released its findings, Senator John McCain (R-Ariz.) said, “We can’t tolerate the risk of a ballistic missile interceptor failing to hit its target, a helicopter pilot unable to fire his missiles, or any other mission failure because of a counterfeit part.”²⁸⁹

One way to avoid purchasing counterfeit parts is to implement better methods of detection. For example, DOD is embedding plant DNA into microchips to confirm their authenticity.²⁹⁰ As required by the National Defense Authorization Act for Fiscal Year 2012, DOD has proposed new rules that would require all contractors to report to the DOD Office of Inspector General any suspected counterfeit or defective parts in the supply chain.²⁹¹

In addition to the fake parts at DOD, dangerous counterfeit products include “jet engines, bridge joints, and fasteners in areas of nuclear facilities responsible for preventing the meltdown of the reactor itself.”²⁹² In 2011, an automotive industry working group identified safety and liability exposure as a concern for companies that inadvertently install counterfeit parts purchased through legitimate commerce avenues. The group cited industry experts who said “the real problem ... is that the government does little to police the importation of counterfeit auto parts into this country.”²⁹³

On October 10, 2012, the National Highway Traffic Safety Administration (NHTSA) issued an advisory urging vehicle owners and auto repair shops to use only certified, original equipment replacement airbags for vehicle repairs. Although NHTSA had not identified any deaths or injuries caused by non-certified airbags, the agency’s test of counterfeit airbags found that they did not deploy properly or propelled metallic shrapnel into the passenger cabin upon deployment.²⁹⁴

The manufacture of counterfeit products can sometimes be traced to organized crime and other nefarious operations. In March 2009, law enforcement officers raided a home in Los Reyes, Michoacán, in Mexico. They found 50 machines used to copy CDs and make counterfeit software, including fake versions of Microsoft Office products and Xbox video games. It was believed that the individuals in the home were part of a counterfeit software ring being run by La Familia, a Mexican drug cartel and organized crime syndicate.²⁹⁵

Both businesses and individuals purchase software and electronics on thousands of websites, but more individuals than businesses buy games. It is a common misperception that, when a game is no longer available in stores, it is not illegal to copy and sell it online; however, copyright protection for works owned by corporations, including gaming software, lasts for 95 years from the year the work was first published.²⁹⁶ The Entertainment Software Association estimates that piracy costs the industry millions of dollars every year.²⁹⁷

Software counterfeiting has become so sophisticated that many businesses have difficulty determining whether the products they have purchased are genuine. A 2009 study conducted by IDC on behalf of Microsoft found that 37 percent of the midsize businesses surveyed were using some counterfeit software and had spent an average of \$10,222 on these purchases.²⁹⁸

When an individual or organization purchases software, the product comes with a specific number of licenses. For example, a small business may purchase a copy of Adobe Paint Shop Pro

to edit photos for use in generating buttons, T-shirt designs, advertising, and web designs. There are several individuals involved in each of these processes who use the software.

Because there are many users, the company must purchase multiple licenses to be in compliance with the end user agreement. This is a legal obligation of every purchaser regardless of its size, from the smallest business to the largest company and government agency. However, if an inventory of license use is not maintained and kept current, it is almost impossible to determine whether the organization has enough licenses or too many licenses and, therefore, whether it is in compliance with software licensing agreements.

The first President to understand that the overuse and underuse of software licenses could be a problem for federal agencies was Bill Clinton. On October 5, 1998, he issued Executive Order (EO) 13103, which included a requirement that agencies track their software assets as part of their responsibility to prevent and combat software piracy. Each federal agency was tasked with providing an inventory of existing software, determining which software they had the authorization to use, and creating and maintaining satisfactory recordkeeping systems.²⁹⁹

As one might unfortunately expect from the federal government, EO 13103 has not been followed all that well. On August 11, 2006, the Secretary of Veterans Affairs (VA) announced the award of a contract for 300,000 encryption software licenses to protect the information stored on the department's laptops and other computing devices, with installation expected to be completed four weeks later.³⁰⁰ Those expectations were never met.

On October 11, 2012, the VA Office of Inspector General (IG) issued its findings on the deployment of the encryption software licenses.³⁰¹ In addition to the original purchase of 300,000 encryption software licenses, the department purchased another 100,000 licenses in April 2011. The IG found that VA failed to use 335,000 of the 400,000 licenses purchased, totaling about \$5.1 million of the \$5.9 million spent. The non-deployment was a result of: 1) the agency failing to test the software for compatibility with existing systems prior to purchase; 2) an insufficient allocation of human resources to install the software; and, 3) insufficient monitoring of the project to ensure it was on track.³⁰²

The VA is, of course, not the only agency that can't keep track of its software. On June 25, 2013, the Treasury Inspector General for Tax Administration (TIGTA) released a report on software license management at the Internal Revenue Service (IRS). According to the report, the IRS spent \$235 million on software licenses in 2011 without an appropriate accounting of its existing software assets. For example, 21 of the 27 software products reviewed did not have unlimited software licenses and six had more than one license deployment record.³⁰³

The mishmash of software inventory records led to some licenses being either overused or underused, including eight software products that were not used in a cost-effective manner because the agency deployed significantly fewer licenses than it had purchased. For three software products, the IRS deployed more licenses than it had purchased.³⁰⁴

TIGTA recommended that the IRS implement a specialized software license tool designed to discover, track, and manage software license deployment and usage. Other recommendations included development of an inventory of software licensing data and maintenance of inventory with a special software license tool designed to discover, track, and manage software license deployment and usage.³⁰⁵

The IRS's response to TIGTA's recommendations was that no such system existed; therefore, the agency would have to create its own software inventory tool to manage software license deployment and usage.³⁰⁶ However, sophisticated software asset management tools exist in the private sector to perform the functions that TIGTA recommended to the IRS. A simple

online search reveals numerous companies offering these programs and services, including Aspera,³⁰⁷ BMS Software,³⁰⁸ Eracent,³⁰⁹ Flexera Software,³¹⁰ Microsoft,³¹¹ and Snow Software.³¹²

GAO has issued several reports regarding software asset management. In its September 23, 2014 report, GAO said, “effective management of software licenses can help organizations avoid purchasing too many licenses that result in unused software. In addition, effective management can help avoid purchasing too few licenses, which results in noncompliance with license terms and may cause the imposition of additional fees.”³¹³

Because EO 13103 and GAO’s recommendations have not been complied with, Congress has taken steps to require agencies to perform inventories of their software assets and implement software asset management processes. Provisions to improve the use and tracking of software licenses have been included in a bill intended to modernize information technology (IT) acquisition and management across the federal government, as well as in the FY 2014 and 2015 DOD authorization acts.

On February 25, 2013, the House of Representatives passed H.R. 1232, the Federal Information Technology Acquisition Reform Act (FITARA). The bill includes a provision that would require the OMB director to develop a plan for conducting a government-wide inventory of IT assets, including software assets, and calls for a review of all existing software licenses on an application-by-application basis, including duplicative, unused, overused, and underused licenses.³¹⁴ Similar language was included in the National Defense Authorization Act for Fiscal Year 2014, which required DOD to conduct an inventory of its software and other IT assets. The House-passed version of the National Defense Authorization Act for Fiscal Year 2015 (H.R. 4435) included an amendment that incorporated FITARA.³¹⁵ However, it is not clear if the final legislation will include such language because the Senate version of the bill did not contain all of FITARA.

The protection of software copyrights and licensing is critical to maintaining the integrity of digital commerce in the U.S. Federal agencies must appropriately deploy and use software assets through the use of existing software asset management tools in order to both be respectful of IP and help prevent piracy. Until this occurs across the federal government, millions of dollars will be wasted by purchasing either too many or not enough software licenses.

Both government agencies and private sector companies must be wary of counterfeit parts and help prevent them from entering the supply chain. Consumers should understand that giving off the appearance of having the newest device on the market can have both financial and physical consequences. These products provide a false sense of security, until that aura is broken by a frayed wire, a faulty airbag, or a bad component in a critical weapons system.

Conclusion

IP rights have been paramount since the Republic was established. As James Madison noted in “Federalist Paper 43,” referring to the authority to promote science and the arts by providing exclusive rights to authors’ and inventors’ writings and discoveries (which became Article I, Section 8 of the Constitution):

The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged in Great Britain to be a right of common law. The right to useful inventions seems with equal reason to belong to inventors. The public good fully coincides in both cases with the claims of individuals. The States cannot separately make effectual provision for either of the cases, and most of them have anticipated the decision of this point by laws passed at the instance of Congress.³¹⁶

The Founding Fathers understood that by protecting the individual rights of artists, authors, entrepreneurs, innovators, and inventors, they were promoting the greater public welfare. These fundamental privileges remain essential to ensure that IP will continue to have a substantial, positive impact on everyone’s life.

Patent holders need strong enforcement of IP laws in the U.S. and by its trading partners. New initiatives to license underutilized patents will increase the availability of hundreds of inventions while reducing the amount of patent litigation. Consumers must have assurances that they are buying safe and effective products that will not cause them harm, and taxpayers need to know that the government is not using fake parts in its weapons systems.

However, there are headwinds to the protection of IP rights. The Internet has spawned a new wave of IP piracy that includes counterfeit drugs being sold on fake pharmaceutical websites and music and videos being illegally downloaded from file sharing or torrent sites. Stealing IP and distributing it without just compensation to its creator has a far-reaching negative impact on the next independent filmmaker, struggling garage band, or young author.

The theft of trademarks creates confusion for consumers who believe they are purchasing specific brand name goods, only to find that the items are mislabeled, counterfeit, or even deadly. Some governments have passed laws that essentially strip trademarks from certain goods, in order to support social goals or policies. Other governments enforce antitrust laws or weaken IP laws to allow their domestic businesses to make a profit from the ideas and sweat of others. If more countries develop policies that threaten IP, there will be less incentive to invest in technology, research, and development, and the global economy will suffer.

Despite these barriers to IP rights, there are many countries that understand and promote the importance of IP for economic growth. As Great Britain’s ITV Director of Policy and Regulatory Affairs Magnus Brooke said, “A strong IP regime is an engine of growth, NOT a barrier.”³¹⁷

Keeping this engine running smoothly, using the recommendations and concepts contained in this report and similar sources, will help the global economy continue to grow. In the U.S. alone, IP-related industries provide more than 40 million jobs³¹⁸ and account for between 55 and 62.6 percent of GDP.³¹⁹ Without the innovation propelled by IP, the global economy would be on a slow (or slower, in current circumstances) train going nowhere.

Everyone benefits from IP. If the Founding Fathers had not recognized its importance, the light bulb, the telephone, the cell phone, and the microchip might never have been invented. Strong IP protection is fundamental to keeping the engine of ingenuity on track for generations to come.



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Mr. Schatz is a nationally-recognized spokesperson on government waste and has been interviewed on hundreds of radio talk shows from coast to coast. He is a regularly featured guest on national television news programs and local news broadcasts. Mr. Schatz has testified numerous times on government waste issues before committees of the U.S. Senate and House of Representatives, as well as before state and local legislative and regulatory bodies.

During his 28 years with CAGW, Mr. Schatz has helped make CAGW a “leading government watchdog on fiscally conservative issues, like taxes and earmarks,” according to *National Journal*. CAGW was cited by *The Hill* for its leading role in successfully pushing for the congressional earmark moratorium, which was identified as one of the “top 10 lobbying victories in 2010.” *The Hill* has

named Mr. Schatz as a “top lobbyist” for five consecutive years, from 2010-2014.

His previous books include “End the Income Tax,” co-authored with Jack Anderson in 1997; and “Telecom Unplugged: Ushering in a New Digital Era,” co-authored with Deborah Collier in 2014.

Prior to joining CAGW in 1986, Mr. Schatz spent six years as legislative director for Congressman Hamilton Fish, Jr. and two years practicing law and lobbying.

Mr. Schatz holds a law degree from George Washington University and graduated With Honors from the State University of New York at Binghamton with a bachelor’s degree in political science. He is married to Leslee Behar and has two daughters, Samantha and Alexandra.



Deborah S. Collier is the technology and telecommunications policy director for Citizens Against Government Waste (CAGW). She specializes in information technology (IT) and telecommunications policy, including cloud computing, IT procurement, information security, data privacy, broadband spectrum allocations, network neutrality, cable industry issues, e-commerce, and emerging technologies.

Since joining CAGW in July 2011, Ms. Collier has authored numerous of educational issue briefs; articles and blogs on technology and telecommunications policy, including three reports relating to cloud computing; and a report on the development of government mobile apps. In 2014, Ms. Collier joined with CAGW President Tom Schatz in co-authoring “Telecom Unplugged: Ushering in a New Digital Era.” She

has been a guest on radio and television news programs to discuss Internet taxation and other technology related issues.

Prior to her work at CAGW, Ms. Collier spent 24 years on Capitol Hill working in IT and legislative arenas. She worked for Rep. Clarence Miller (R-Ohio) both as a caseworker and system administrator, and then joined the staff of Rep. Steve Buyer (R-Ind.) as the director of information technology. From 2005 to 2010, she served on the House Committee on Veterans’ Affairs as the Republican Legislative Director. Ms. Collier was a member of the House Systems Administrators Association from 1989 until 2005, and served as the organization’s president from 2002 to 2005.

Ms. Collier holds a Bachelor of Arts (AB) degree in History from Ohio University. She is married to Kimo Collier, and has a son, Christian.

Introduction

¹ “History and Sources of Intellectual Property Law,” National Paralegal College, National Juris University, 2006-2014,

http://nationalparalegal.edu/public_documents/courseware.asp_files/patents/IntroIP/History.asp.

² James V. DeLong, “Defending Intellectual Property,” in Adam Thierer and Wayne Crews (eds.), *Copy Fights*, Cato Institute, Washington, D.C. 2002, p. 21.

³ “History and Sources of Intellectual Property Law.”

⁴ Ibid.

⁵ Orin E. Laney, “Intellectual Property and the Rights of Creative Employees,” 1999,

<http://www.orinlaney.com/ipguideweb.html>.

⁶ *U.S. Constitution*, Article 1, Section 8.

⁷ William F. Patry, *Copyright Law and Practice*, The Bureau of National Affairs, Inc., 1994, 2000,

<http://digital-law-online.info/patry/patry5.html>.

⁸ “Intellectual Property and the U.S. Economy: Industries In Focus,” U.S. Department of Commerce Economic and Statistics Administration, U.S. Patent and Trademark Office, March 2012,

<http://www.esa.doc.gov/sites/default/files/reports/documents/ipandtheuseconomyindustriesinfocus.pdf>.

⁹ Kevin A. Hassett and Robert J. Shapiro, “What Ideas Are Worth: The Value Of Intellectual Capital And Intangible Assets In The American Economy,” Sonecon, November 4, 2011,

http://www.sonecon.com/docs/studies/Value_of_Intellectual_Capital_in_American_Economy.pdf.

¹⁰ Ibid.

¹¹ Ibid.

¹² “Intangible Asset Market Value,” Ocean Tomo Intellectual Capital Equity,

<http://www.oceantomo.com/productsandservices/investments/intangible-market-value>.

¹³ Ibid.

¹⁴ Samuel F. B. Morse, “Improvement in the Mode of Communicating Information by Signals by the Application of Electro-Magnetism,” U.S. Patent 1,647 (Filed April 7, 1838, issued June 20, 1840),

<http://pdfpiw.uspto.gov/.piw?docid=00001647&SectionNum=1&IDKey=9AEBD2B23335&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

¹⁵ Thomas A. Edison, “Phonograph or Speaking Machine,” U.S. Patent 200,521 (Filed December 24, 1877, issued February 19, 1878),

<http://pdfpiw.uspto.gov/.piw?Docid=00200521&idkey=NONE&homeurl=http%3A%252F%252Fpatft.uspto.gov%252Fnetahtml%252FPTO%252Fpatimg.htm>.

¹⁶ Thomas A. Edison, “Electric Lamp,” U.S. Patent 223,898 (Filed November 1, 1879, issued January 27, 1880),

<http://pdfpiw.uspto.gov/.piw?docid=00223898&SectionNum=1&IDKey=120EDB9888E8&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

¹⁷ W. H. Carrier, “Apparatus for Treating Air,” U.S. Patent 808,897 (Filed September 16, 1904, issued January 2, 1906),

<http://pdfpiw.uspto.gov/.piw?Docid=808897&idkey=NONE&homeurl=http%3A%252F%252Fpatft.uspto.gov%252Fnetahtml%252FPTO%252Fpatimg.htm>.

¹⁸ Philo Taylor Farnsworth, “Television System,” U.S. Patent 1,773,980 (Filed January 7, 1927, issued August 26, 1930),

<http://pdfpiw.uspto.gov/.piw?docid=01773980&SectionNum=1&IDKey=112E145D9051&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

¹⁹ John Bardeen and Walter H. Brattain, “Three-Electrode Circuit Element Utilizing Semiconductive Materials,” U.S. Patent 2,524,035 (Filed June 17, 1948, issued October 3, 1950),

<http://pdfpiw.uspto.gov/.piw?docid=02524035&SectionNum=1&IDKey=CAC7A0F27768&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

²⁰ Mary Bellis, “The History of Marshmallow Peeps,” Inventors.About.Com, viewed October 8, 2014, http://inventors.about.com/od/foodrelatedinventions/a/marshmallows_2.htm.

²¹ William P. Lear, “Magnetic Tape Cartridge,” U.S. Patent 3,350,025 (Filed August 31, 1964, issued October 31, 1967), <http://pdfpiw.uspto.gov/.piw?docid=03350025&SectionNum=1&IDKey=213694AED136&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

²² Martin Cooper, Richard W. Dronsuth, Albert J. Mikulski, Charles N. Lynk, Jr., James J. Mikulski, John F. Mitchell, Roy A. Richardson, and John H. Sangster, “Radio Telephone System,” U.S. Patent 3,906,166 (Filed October 17, 1973, issued September 16, 1975), <http://pdfpiw.uspto.gov/.piw?docid=03906166&SectionNum=1&IDKey=00F208E395BB&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

²³ Gary W. Boone, “Computing Systems CPU,” U.S. Patent 3,757,306 (Filed August 31, 1971, issued September 4, 1973), <http://pdfpiw.uspto.gov/.piw?docid=03757306&SectionNum=1&IDKey=D20337B029D2&HomeUrl=http://patft.uspto.gov/netahtml/PTO/patimg.htm>.

²⁴ Jenna Wortham, “The Unrepentant Bootlegger,” *The New York Times*, September 27, 2014, http://www.nytimes.com/2014/09/28/technology/the-unrepentant-bootlegger.html?_r=0.

Chapter 1

²⁵ Ambassador Michael B. G. Froman, “2014 Special 301 Report,” Office of the United States Trade Representative, April 30, 2014, <http://www.ustr.gov/sites/default/files/USTR%202014%20Special%20301%20Report%20to%20Congress%20FINAL.pdf>.

²⁶ Ibid.

²⁷ Ibid.

²⁸ “2013 World Intellectual Property Indicators,” World Intellectual Property Organization, WIPO Economics & Statistics Series, December 9, 2013, http://www.wipo.int/export/sites/www/freepublications/en/intproperty/941/wipo_pub_941_2013.pdf.

²⁹ “ICE hosts intellectual property theft symposium at National IPR Center,” Immigration and Customs Enforcement, U.S. Department of Homeland Security, June 3, 2010, <https://ice.gov/news/releases/ice-hosts-intellectual-property-theft-symposium-national-ipr-center>.

³⁰ “IP Creates Jobs for America,” U.S. Chamber of Commerce, Global Intellectual Property Center, 2012, www.IPcreatesjobs.com.

³¹ “GIPC International IP Index,” U.S. Chamber of Commerce, Global Intellectual Property Center, January 29, 2014, <http://www.theglobalipcenter.com/gipcindex/>.

³² Ibid.

³³ Gardiner Harris, “India’s Efforts to Aid Poor Worry Drug Makers,” *The New York Times*, December 29, 2013, http://www.nytimes.com/2013/12/30/health/indias-efforts-to-aid-poor-worry-drugmakers.html?_r=2&.

³⁴ Sally Pipes, “India’s War on Intellectual Property Rights May Bring with it a Body Count,” *Forbes*, September 16, 2013, <http://www.forbes.com/sites/sallypipes/2013/09/16/indias-war-on-intellectual-property-rights-may-bring-with-it-a-body-count/>.

³⁵ Stephen Ezell and Robert Atkinson, “The Indian Economy at a Crossroads,” The Information Technology and Innovation Foundation, April 2014, pp. 18-20.

³⁶ Ibid., pp. 104-111.

³⁷ Stephen E. Siwek, “The True Cost of Sound Recording Piracy to the U.S. Economy,” Institute for Policy Innovation, IPI Center for Technology Freedom, Policy Report 188, August 2007, http://www.ipi.org/docLib/20120515_SoundRecordingPiracy.pdf.

³⁸ Dr. Stan J. Liebowitz, “The Measured Impact of Internet Piracy on the Sales and Revenues of Copyright Owners,” Center for the Analysis of Property Rights and Innovation, University of Texas at Dallas, October 1, 2012, p. 17.

³⁹ “To Catch a Fake,” A 20/20 Investigative Report, ABC News, June 13, 2014, <http://abc.go.com/shows/2020/listing/2014-06/13-2020-613-to-catch-a-fake>.

⁴⁰ Ibid.

⁴¹ “About Us,” National Intellectual Property Rights Coordination Center, <http://www.iprcenter.gov/about-us>.

⁴² “IPR Center, partners honored at 2014 Intellectual Property Champions Awards,” U.S. Immigration and Customs Enforcement, April 23, 2014, <http://www.ice.gov/news/releases/1404/140423washingtondc.htm>.

⁴³ “The Negative Consequences of International Intellectual Property Theft: Economic Harm, Threats to the Public Health and Safety, and Links to Organized Crime and Terrorist Organizations,” International Anti-Counterfeiting Coalition, January 2005, http://www.iacc.org/assets/iacc_whitepaper.pdf.

⁴⁴ “Cyber’s Most Wanted,” Federal Bureau of Investigation, May 20, 2014, <http://www.fbi.gov/wanted/cyber>.

⁴⁵ Spencer Ackerman and Jonathan Kaiman, “Chinese military officials charged with stealing US data as tensions escalate,” *The Guardian*, May 20, 2014, <http://www.theguardian.com/technology/2014/may/19/us-chinese-military-officials-cyber-espionage>.

⁴⁶ “Black Market for Counterfeit Goods Rakes in \$500 Billion Yearly,” ABC News “Nightline,” October 22, 2013, <http://news.yahoo.com/blogs/nightline-fix/black-market-counterfeit-goods-rakes-500-billion-yearly-140659855.html>.

⁴⁷ Yvonne P. Mazzulo, “How to spot counterfeit cosmetics,” *The Examiner*, October 22, 2013, <http://www.examiner.com/article/how-to-spot-counterfeit-cosmetics>.

Chapter 2

⁴⁸ Erwin A. Blackstone, Ph.D., Joseph P. Fuhr, Jr., Ph.D., and Steve Pociask, MA, “The Health and Economic Effects of Counterfeit Drugs,” *American Health & Drug Benefits*, June 2014, Vol. 7, No. 4 – Business, <http://www.ahdbonline.com/issues/2014/june-2014-vol-7-no-4/1756-the-health-and-economic-effects-of-counterfeit-drugs>.

⁴⁹ Roger Bate, “The Deadly World of Fake Medicine,” CNN, July 17, 2012, <http://www.cnn.com/2012/07/17/health/living-well/falsified-medicine-bate/>.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Paul Toscano, “The Dangerous World of Counterfeit Prescription Drugs,” *USA Today*, October 7, 2011, <http://usatoday30.usatoday.com/money/industries/health/drugs/story/2011-10-09/cnbc-drugs/50690880/1>.

⁵³ Ibid.

⁵⁴ “General Information on Counterfeit Medicines,” World Health Organization, <http://www.who.int/medicines/services/counterfeit/overview/en/>.

⁵⁵ “Federal Food, Drug, and Cosmetic Act (FD&C Act),” Regulatory Information, U.S. Food and Drug Administration, October 2014, <http://www.fda.gov/regulatoryinformation/legislation/federalfooddrugandcosmeticactfdact/fdactchaptersiandiishorttitleanddefinitions/ucm086297.htm>.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ “Educational Resources: Buying Medicine from Outside the United States,” U.S. Food and Drug Administration, July 14, 2014, <http://www.fda.gov/Drugs/ResourcesForYou/ucm078922.htm>.

⁵⁹ “Is It Legal for Me to Personally Import Drugs?” U.S. Food and Drug Administration, “About FDA,” July 14, 2014, <http://www.fda.gov/AboutFDA/Transparency/Basics/ucm194904.htm>.

-
- ⁶⁰ “Counterfeit Drug Task Force Report,” U.S. Food and Drug Administration, October 2003, <http://www.fda.gov/Drugs/DrugSafety/ucm174388.htm>.
- ⁶¹ Ibid.
- ⁶² “Reimportation of All Prescription Drugs for Human Use,” Import Alert 66-14, U.S. Food and Drug Administration, August 19, 2014, http://www.accessdata.fda.gov/cms_ia/importalert_177.html.
- ⁶³ Ibid.
- ⁶⁴ Ibid.
- ⁶⁵ “4 Deaths Tied to Counterfeit Drugs Dispensed at Ontario, Canada Pharmacy,” The Partnership for Safe Medicines, September 2005, <http://www.safemedicines.org/2005/09/4-deaths-tied-to-counterfeit-drugs-dispensed-at-ontario-canada-pharmacy.html>.
- ⁶⁶ “Chief Coroner Makes Recommendations Resulting from Investigation into 11 Hamilton Deaths,” Ministry of Community Safety and Correctional Services, January 9, 2006, <http://news.ontario.ca/archive/en/2006/01/09/Chief-Coroner-makes-recommendations-resulting-from-investigation-into-11-Hamilto.html>.
- ⁶⁷ Melanie Haiken, “Up To 77 Percent Of Viagra Bought Online May Be Fake, And Possibly Dangerous, Research Shows,” *Forbes*, September 12, 2013, <http://www.forbes.com/sites/melaniehaiken/2013/09/12/buying-viagra-online-its-very-likely-fake-and-possibly-dangerous-new-data-say/>.
- ⁶⁸ Ibid.
- ⁶⁹ Ibid.
- ⁷⁰ “Internet Drug Outlet Identification Program, Progress Report for State and Federal Regulators,” National Association of Boards of Pharmacy, July 2013, https://awarerx.s3.amazonaws.com/system/redactor_assets/documents/237/NABP_Internet_Drug_Outlet_Report_July2013.pdf.
- ⁷¹ Jocelyne Sambira, “Counterfeit Drugs Raise Africa’s Temperature,” *Africa Renewal*, May 2013, p. 5, <http://www.un.org/africarenewal/magazine/may-2013/counterfeit-drugs-raise-africa%E2%80%99s-temperature>.
- ⁷² Gardiner Harris, “Low-Cost Drugs in Poor Nations Get a Lift in Indian Court,” *The New York Times*, April 1, 2013, http://www.nytimes.com/2013/04/02/business/global/top-court-in-india-rejects-novartis-drug-patent.html?pagewanted=all&_r=2&.
- ⁷³ Ibid.
- ⁷⁴ Penelope Macrae, “Roche Drops India Patent for Breast-Cancer Drug,” Fox News, August 17, 2013, <http://www.foxnews.com/world/2013/08/17/roche-drops-india-patent-for-breast-cancer-drug/>.
- ⁷⁵ Harris, “Low-Cost Drugs in Poor Nations Get a Lift in Indian Court.”
- ⁷⁶ Marcia Crosse, Director, Health Care, Government Accountability Office, “Internet Pharmacies: Most Rogue Sites Operate from Abroad, and Many Sell Counterfeit Drugs,” Testimony before the House Energy and Commerce Subcommittee on Oversight and Investigations, February 27, 2014, <http://www.gao.gov/assets/670/661177.pdf>.
- ⁷⁷ Howard Sklamberg, Deputy Commissioner for Global Regulatory Operations and Policy, Food and Drug Administration, Department of Health and Human Services, “Counterfeit Drugs: Fighting Illegal Supply Chains,” Testimony before the House Energy and Commerce Subcommittee on Oversight and Investigations, February 27, 2014, <http://www.fda.gov/newsevents/testimony/ucm387449.htm>.
- ⁷⁸ Ibid.
- ⁷⁹ Ibid.
- ⁸⁰ Ibid.
- ⁸¹ “Guilty Pleas in Counterfeiting Cases,” Intellectual Property Spotlight, Office of the United States Intellectual Property Enforcement Coordinator, December-February 2014, http://www.whitehouse.gov/sites/default/files/omb/IPEC/spotlight/ipec_spotlight_dec_2013_feb_2014.pdf.
- ⁸² Ibid.

⁸³ “Orange County Man Charged with Selling Counterfeit Sexual Dysfunction Drugs over the Internet,” Immigration and Customs Enforcement News Releases, March 11, 2013, <http://www.ice.gov/news/releases/1303/130311santaana.htm>.

⁸⁴ Ibid.

⁸⁵ “To Catch a Fake,” 20/20.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Sklamberg, “Counterfeit Drugs: Fighting Illegal Supply Chains.”

⁹⁰ Lynn C. Klotz, Ph.D., “What Is The Real Drug Development Costs for Very Small Biotech Companies?” *Genetic Engineering Biotechnology News*, January 16, 2014, <http://www.genengnews.com/insight-and-intelligence/what-is-the-real-drug-development-cost-for-very-small-biotech-companies/77900012/>.

⁹¹ “Pharmaceutical Patents: The Value of Pharmaceutical Patents & Strong Intellectual Property Protection,” Pharmaceutical Research and Manufacturers of America, http://www.innovation.org/documents/File/Pharmaceutical_Patents.pdf.

⁹² Blackstone, Fuhr, and Pociask, “The Health and Economic Effects of Counterfeit Drugs.”

⁹³ Ibid.

Chapter 3

⁹⁴ Jorge Lopez, “Bootleg Movies Lands Augusta Man In Jail,” WRDW-TV, CBS Channel 12 News, August 8, 2014, <http://www.wrdw.com/home/headlines/Bootleg-movies-lands-Augusta-man-in-jail--270423901.html>.

⁹⁵ Nic Healey, “Game of Thrones finale piracy hits 2 petabytes in 12 hours,” *C/Net*, June 16, 2014, <http://www.cnet.com/news/game-of-thrones-finale-piracy-hits-2-petabytes-in-12-hours/>. According to Tru Optik, “Game of Thrones” has been subject to 289.9 million illegal downloads, more than any other television program; <http://truoptik.com/>. NB: A petabyte of data contains enough capacity to store 233,000 DVDs.

⁹⁶ “Buyers Bulletin: Tape Piracy...Everyone’s Problem,” A Public Collectors Reprint, 1974, www.publiccollectors.org/TapePiracy.html.

⁹⁷ Callie Taintor, “Chronology: Technology and the Music Industry,” PBS, “FrontLine,” May 27, 2004, <http://www.pbs.org/wgbh/pages/frontline/shows/music/inside/cron.html>.

⁹⁸ Don Cusic, Gregory K. Faulk, and Robert P. Lambert, “Technology and Music Piracy: Has the Recording Industry Lost Sales?” *Studies in Popular Culture*, 28.1, Popular/American Culture Association in the South, October 2005, <http://www.pcasacas.org/SiPC/28.1/Cusic.pdf>.

⁹⁹ “Napster Shut Down,” ABC News, July 27, 2000, <http://abcnews.go.com/Technology/story?id=119627>.

¹⁰⁰ <http://www.rhapsody.com/napster>.

¹⁰¹ Paul Gil, “Torrents 101: How Torrent Downloading Works: Part 1) An Overview of BitTorrent P2P File Sharing,” About.com, “Internet for Beginners,” April, 2014, <http://netforbeginners.about.com/od/peersharing/a/torrenthandbook.htm>.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ David Price, PhD., “Technical Report: An Estimate of Infringing Use of the Internet,” Envisional, January 2011, http://documents.envisional.com/docs/Envisional-Internet_Usage_Report-Summary.pdf.

¹⁰⁵ Angela Watercutter, “The Most Pirated Movies of 2013 – And Why Piracy Isn’t Hurting the Box Office,” *Wired*, January 2, 2014, <http://www.wired.com/2014/01/most-pirated-films-2013/>.

¹⁰⁶ Ibid.

-
- ¹⁰⁷ Kat Smith, "Chloe Moretz Tells Of Frustration With Film Piracy & No More 'Kick-Ass,'" *The Hollywood News*, August 25, 2014, <http://www.thehollywoodnews.com/2014/08/25/chloe-moretz-tells-of-frustration-with-film-piracy-no-more-kick-ass/>.
- ¹⁰⁸ Måns Svensson, Stefan Larsson, and Marcin de Kaminski, "Professionalization, Gender and Anonymity in the Global File Share Community," The University of Lund, March 2013, <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=3615165&fileId=3615249>.
- ¹⁰⁹ Ibid.
- ¹¹⁰ Steven Caldwell Brown, "What Makes People Pirate?" *TechCentral*, August 5, 2014, <http://www.techcentral.co.za/what-makes-people-pirate/50127/>.
- ¹¹¹ Chris Castle, "The MTP Interview: An Inconvenient Truth: Songwriters Guild President Rick Carnes talks about the effect of piracy on American songwriters," Music Technology Policy, March 10, 2012, <http://musictechpolicy.wordpress.com/2012/03/10/an-inconvenient-truth-songwriters-guild-president-rick-carnes-talks-about-the-effect-of-piracy-on-american-songwriters/>.
- ¹¹² David Lowery, "Letter to Emily White at NPR All Songs Considered," *The Trichordist*, June 18, 2012, <http://thetrichordist.com/2012/06/18/letter-to-emily-white-at-npr-all-songs-considered/>.
- ¹¹³ Michael Schlesinger, "Testimony before the 301 Committee, 2010 Special 301 Hearing," International Intellectual Property Alliance, March 2, 2011, <http://www.iipa.com/pdf/Special301RequesttoTestifyandStatement030211.pdf>.
- ¹¹⁴ Wortham, "The Unrepentant Bootlegger."
- ¹¹⁵ Liye Ma, Alan Montgomery, Param Vir Singh, and Michael D. Smith, "An Empirical Analysis of the Impact of Pre-Release Movie Piracy on Box-Office Revenue," Carnegie Mellon University, July 8, 2014, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1782924.
- ¹¹⁶ Nick Simmons, "Gene Simmons: 'Rock Is Finally Dead,'" *Esquire*, September 4, 2014, <http://www.esquire.com/blogs/culture/gene-simmons-future-of-rock>.
- ¹¹⁷ Ibid.
- ¹¹⁸ "United States Copyright Office: A Brief Introduction and History," Circular 1a, U.S. Copyright Office, Library of Congress, <http://copyright.gov/circs/circ1a.html>.
- ¹¹⁹ "Overview of the Copyright Office," United States Copyright Office, Library of Congress, <http://copyright.gov/about/>.
- ¹²⁰ "Copyright in General," United States Copyright Office, Library of Congress, <http://copyright.gov/help/faq/faq-general.html#register>.
- ¹²¹ "What Does Copyright Protect?" United States Copyright Office, Library of Congress, <http://copyright.gov/help/faq/faq-protect.html#website>.
- ¹²² Greg Sandoval, "Indie Filmmakers: Piracy and Google Threaten Us," *C/Net*, September 20, 2010, <http://www.cnet.com/news/indie-filmmakers-piracy-and-google-threaten-us/>.
- ¹²³ Laura Sydell, "Feeding Pirates: When Legit Companies Advertise on Shady Sites," National Public Radio, "All Tech Considered," July 1, 2010, <http://www.npr.org/blogs/alltechconsidered/2010/07/01/128255612/feeding-pirates-when-legit-companies-advertise-on-shady-sites>.
- ¹²⁴ Ibid.
- ¹²⁵ Laura Sydell, "Pirates Turn Deaf Ear to Independent Filmmaker," National Public Radio, "All Tech Considered," November 30, 2010, <http://www.npr.org/blogs/alltechconsidered/2010/12/01/131677403/pirates-turn-deaf-ear-to-independent-filmmaker>.
- ¹²⁶ Ibid.
- ¹²⁷ Ibid.
- ¹²⁸ John Biggs, "Meet Tom Lowe, The Filmmaker Who Talked Back to The Pirate Bay," *TechCrunch*, June 9, 2012, <http://techcrunch.com/2012/06/09/meet-the-filmmaker-who-talked-back-to-the-pirate-bay/>.
- ¹²⁹ Wortham, "The Unrepentant Bootlegger."
- ¹³⁰ Diana Lodderhose, "Movie Piracy: Threat to the Future of Films Intensifies," *The Guardian*, July 17, 2014, <http://www.theguardian.com/film/2014/jul/17/digital-piracy-film-online-counterfeit-dvds>.

-
- ¹³¹ Ibid.
- ¹³² Samuel Gibson, "Piracy Study Shows Illegal Downloaders More Likely to Pay for Films than Music," *The Guardian*, May 6, 2014, <http://www.theguardian.com/technology/2014/may/06/piracy-film-music-study-pay-illegal-download-damage>.
- ¹³³ Colin Dixon, "Are 4B illegal video downloads in 1H2014 really that bad?" *nScreenMedia*, August 25, 2014, <http://www.nscreenmedia.com/4b-illegal-video-downloads-1h2014-bad/>.
- ¹³⁴ Ibid.
- ¹³⁵ Karsten Strauss, "TV and Film Piracy: Threatening an Industry?" *Forbes*, March 6, 2013, <http://www.forbes.com/sites/karstenstrauss/2013/03/06/tv-and-film-piracy-threatening-an-industry/>.
- ¹³⁶ "Brubaker," IMDb.
- ¹³⁷ "Looking Back," *Lancaster Eagle-Gazette*, August 16, 2008, p. A-5, <http://pqasb.pqarchiver.com/lancastereaglegazette/doc/442544629.html?FMT=ABS&FMTS=ABS:FT&d ate=Aug+16%2C+2008&author=&pub=Lancaster+Eagle+-+Gazette&edition=&startpage=&desc=Looking+Back>.
- ¹³⁸ "In Production," The Ohio Film Office, July 14, 2014, <http://development.ohio.gov/FilmOffice/InProduction.html>.
- ¹³⁹ Adrian McDonald, "2013 Feature Film Production Report," Film L.A. Inc., 2014, <http://www.hollywoodreporter.com/sites/default/files/custom/Embeds/2013%20Feature%20Study%20Corrected%20no%20Watermark%5B2%5D.pdf>.
- ¹⁴⁰ Ibid.
- ¹⁴¹ Dorothy Pomerantz, "Cameras Rolling – Away From California: State Falls to Fourth in Film Production," *Forbes*, March 6, 2014, <http://www.forbes.com/sites/dorothypomerantz/2014/03/06/local-film-industry-in-deep-trouble-in-california/>.
- ¹⁴² "Film Industry Generates \$5.1 Billion In Economic Impact," State of Georgia Office of Communications, August 5, 2014, <http://www.georgia.org/newsroom/press-releases/film-industry-generates-5-1-billion-economic-impact/>.
- ¹⁴³ Dawn Prestwich, "Piracy Endangers TV Renewals and Jobs," (Guest Column), *Variety*, October 6, 2014, <http://variety.com/2014/tv/news/piracy-endangers-tv-renewals-and-jobs-says-killing-writer-guest-column-1201322657/>.
- ¹⁴⁴ Ibid.
- ¹⁴⁵ Ibid.
- ¹⁴⁶ John Biggs, "A Pirate's Life For Me: Police Bust Hungarian Movie Ring," *TechCrunch*, October 10, 2011, <http://techcrunch.com/2011/10/10/a-pirates-life-for-me-police-bust-hungarian-movie-ring/>.
- ¹⁴⁷ Francis D'Sa, "The Pirate Bay Doubles Traffic Despite Ban," *Deccan Chronicle*, July 20, 2014, <http://www.deccanchronicle.com/140720/technology-latest/article/pirate-bay-doubles-traffic-despite-ban>.
- ¹⁴⁸ "Learn About Copyright on YouTube, What Is Copyright," Google, July 23, 2014, <https://support.google.com/youtube/answer/2797466?hl=en>.
- ¹⁴⁹ Jack Marshall, "Ads Appear Before Unlicensed Content on YouTube, Too," *The Wall Street Journal*, May 8, 2014, <http://blogs.wsj.com/cmo/2014/05/08/ads-appear-before-unlicensed-content-on-youtube-too/?KEYWORDS=Video+Piracy>.
- ¹⁵⁰ "For Students Doing Reports," Recording Industry Association of America, August 14, 2014, <http://www.riaa.com/faq.php>.
- ¹⁵¹ Kate Greene, "Preventing Movie Piracy," *Technology Review*, Massachusetts Institute of Technology, July 5, 2006, <http://www.technologyreview.com/news/406063/preventing-movie-piracy/>.
- ¹⁵² Erich Schwartzel, "Spy Cameras, Secret Audio Help Fight Movie Piracy," *The Wall Street Journal*, August 12, 2013, <http://online.wsj.com/news/articles/SB10001424127887324769704579008640314353088>.
- ¹⁵³ Nick Bilton, "Internet Pirates Will Always Win," *The New York Times*, August 4, 2012, http://www.nytimes.com/2012/08/05/sunday-review/internet-pirates-will-always-win.html?_r=0.
- ¹⁵⁴ Wheretowatch.org.
- ¹⁵⁵ "Find Music," Music Matters, <http://whymusicmatters.com/find-music>.

-
- ¹⁵⁶ No Electronic Theft (NET) Act, Public Law 105-147, 105th Congress, 111 STAT. 2678, Enacted December 16, 1997, <http://www.gpo.gov/fdsys/pkg/PLAW-105publ147/pdf/PLAW-105publ147.pdf>.
- ¹⁵⁷ Digital Millennium Copyright Act, Public Law 105-304, 105th Congress, 112 STAT. 2860, Enacted October 28, 1998, <http://www.gpo.gov/fdsys/pkg/PLAW-105publ304/pdf/PLAW-105publ304.pdf>.
- ¹⁵⁸ “Digital Piracy in the 21st Century,” *Bill of Rights in Action*, Winter 2008 (Volume 23, No. 4), Constitutional Rights Foundation, <http://www.crf-usa.org/bill-of-rights-in-action/bria-23-4-b-digital-piracy-in-the-21st-century>.
- ¹⁵⁹ Bruce Boyden, “The Failure of the DMCA Notice and Takedown System: A Twentieth Century Solution to a Twenty-First Century Problem,” Center for the Protection of Intellectual Property, George Mason University School of Law, December 2013, <http://cpip.gmu.edu/wp-content/uploads/2013/08/Bruce-Boyden-The-Failure-of-the-DMCA-Notice-and-Takedown-System1.pdf>.
- ¹⁶⁰ Cary Sherman, “Google’s 100 Million Notices,” *The Hill*, January 13, 2014, <http://thehill.com/blogs/ballot-box/195107-googles-100-million-notices>.
- ¹⁶¹ Maria Schneider, “Section 512 of Title 17,” Testimony before the House Judiciary Subcommittee on Courts, Intellectual Property and the Internet, March 13, 2014, http://judiciary.house.gov/_cache/files/7aa84910-171e-4f3e-82fc-b2cef9a43c3e/031314-testimony---schneider.pdf.
- ¹⁶² Ibid.
- ¹⁶³ “HSI Fresno seizes nearly \$1 million worth of bootleg movies and music in probe targeting counterfeiting,” U.S. Immigration and Naturalization Service, April 26, 2012, <http://www.ice.gov/news/releases/1204/120426fresno.htm>.
- ¹⁶⁴ Ibid.
- ¹⁶⁵ Paul Williams, “Music Licensing Under Title 17 – Part Two,” Testimony before the House Judiciary Subcommittee on Courts, Intellectual Property and the Internet, June 25, 2014, http://judiciary.house.gov/_cache/files/5b77d14c-1ea5-491a-a508-5167e5d3d95c/062514-music-license-pt-2-testimony-ascap.pdf.
- ¹⁶⁶ Ibid.
- ¹⁶⁷ Daniel Castro, “Targeting Websites Dedicated to Stealing American Intellectual Property,” Testimony before the Senate Judiciary Committee, February 12, 2011, <http://www.itif.org/files/2011-coica-testimony.pdf>.

Chapter 4

- ¹⁶⁸ “History of Bottling,” The Coca-Cola Company, <http://www.coca-colacompany.com/our-company/history-of-bottling>.
- ¹⁶⁹ Ibid.
- ¹⁷⁰ “Trademarks,” U.S. Patent and Trademark Office, <http://www.uspto.gov/inventors/trademarks.jsp>.
- ¹⁷¹ Ibid.
- ¹⁷² Cristina Lourosa-Ricardo, “The Latest in Counterfeit Goods,” *The Wall Street Journal*, December 4, 2011, <http://online.wsj.com/news/articles/SB10001424052970204012004577070190846665320>.
- ¹⁷³ Ibid.
- ¹⁷⁴ Kirstan Conley, “Cops Bust Largest Fake Beauty Supplies Ring in U.S.,” *New York Post*, March 7, 2014, <http://nypost.com/2014/03/07/pair-accused-of-stocking-stores-with-bogus-beauty-products/>.
- ¹⁷⁵ Ibid.
- ¹⁷⁶ Elizabeth Gasiorowski Denis, “Crackdown on Counterfeiting,” International Organization for Standardization, January 8, 2014, http://www.iso.org/iso/home/news_index/news_archive/news.htm?refid=Ref1809.
- ¹⁷⁷ Coral Garnick, “Counterfeit Seahawks merchandise can be hard to tackle,” *The Seattle Times*, August 20, 2014, http://seattletimes.com/html/sports/2024355360_seahawksscamsxml.html.
- ¹⁷⁸ Ibid.
- ¹⁷⁹ Ibid.

¹⁸⁰ “Protecting Your Trademark: Enhancing Your Rights Through Federal Registration,” U.S. Patent and Trademark Office, Printed 2014, <http://www.uspto.gov/trademarks/basic/BasicFacts.pdf>.

¹⁸¹ Ibid.

¹⁸² Dave Smith, “4 Tips For Protecting Your Trademark,” *Inc.*, June 2011, <http://www.inc.com/guides/201106/4-tips-for-protecting-your-trademark.html>.

¹⁸³ Jason Gillikin, “How Can a Business Protect Their Brand & Trademark from The Internet?” *Houston Chronicle*, Viewed October 8, 2014, <http://smallbusiness.chron.com/can-businesses-protect-brand-trademark-internet-2254.html>.

¹⁸⁴ Darren Dahl, “Small-Business Guide: Intellectual Property,” *The New York Times*, August 6, 2009, http://www.nytimes.com/2009/08/06/business/smallbusiness/06guide.html?_r=0&adxnnl=1&pagewanted=print&adxnnl=1409152996-ARNhziOoft1jKdgdLISpQ.

¹⁸⁵ Tiffany Bozic, “Crazy Blatant,” Tumblr, January 13, 2014, <http://tiffanybozic.tumblr.com/post/7322230661/crazy-blatant-this-lame-clothing-company-romwe>.

¹⁸⁶ Ibid.

¹⁸⁷ Authors’ note: Comments found on Tidebuy.com for a dress attributed on the site to be designed by Liz Fields, using a photograph from her business website. Screenshots of these pages were provided by Liz Fields to CAGW on September 16, 2014. In addition, screenshots provided by Liz Fields of a Google search on the term “Liz Fields bridesmaids discount” posted the discount purchase price for one of her designs at \$254.00. According to Fields, the actual wholesale price of this gown is \$489.00, and the manufacturer’s retail price is \$1,079.

¹⁸⁸ Liz Fields, “Commentary: Knockoffs Hurt Firms, Workers and Customers,” *Courier-Post*, Cherry Hill, New Jersey, March 28, 2014, <http://www.courierpostonline.com/story/opinion/columnists/2014/03/29/commentary-knockoffs-hurt-firms-workers-and-customers/6963183/>.

¹⁸⁹ “Tobacco Smoking (NDSHS 2013 Key Findings),” Australian Institute of Health and Welfare, 2013, <http://www.aihw.gov.au/alcohol-and-other-drugs/ndshs/2013/tobacco/>.

¹⁹⁰ Ibid.

¹⁹¹ Harriet Alexander, “Plunge in Smoking Attributed to Plain Packaging,” *The Sydney Morning Herald*, July 17, 2014, <http://www.smh.com.au/federal-politics/political-news/plunge-in-smoking-attributed-to-plain-packaging-20140716-ztqht.html>.

¹⁹² Lauren Wilson, “More Australian Teenagers Are Choosing not to Drink and Smoke, According To A Major New Report,” News Corp Australian Network, July 17, 2014, <http://www.news.com.au/national/more-australian-teenagers-are-choosing-not-to-drink-and-smoke-according-to-a-major-new-report/story-fncynjr2-1226991404242>.

¹⁹³ Chris Vindurampulle, “Plain Packaging for Alcohol May Happen Sooner Than You Think,” Association of Corporate Counsel, August 5, 2014, <http://www.lexology.com/library/detail.aspx?g=d1b40902-3996-4360-8654-af2e3ca0b1ad>.

¹⁹⁴ Isaac Davison, “Tobacco Firms Warn MPs Over Plain Packaging,” *The New Zealand Herald*, May 15, 2014, http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11254992.

¹⁹⁵ Stephanie March, “India Urged to Follow Australian Lead on Cigarette Plain-Packaging,” ABC News Australia, October 29, 2013, <http://www.abc.net.au/news/2013-10-28/an-india-urged-to-follow-australian-lead-on-plain-packaging-for/5049380>.

¹⁹⁶ “France Moves Towards Cigarette Plain Packaging,” *World Intellectual Property Review*, February 7, 2014, <http://www.worldipreview.com/news/france-moves-towards-cigarette-plain-packaging-6867>.

¹⁹⁷ Wendell Roelf, “South Africa plans plain cigarette packaging by 2014: minister,” Reuters, July 24, 2014, <http://www.reuters.com/article/2014/07/24/us-safrica-tobacco-idUSKBN0FT1QI20140724>.

¹⁹⁸ Paul Burstow, MP (Lib Dem), Kevin Barron, MP (Lab), Bob Blackman, MP (Con), All Party Parliamentary Group on Smoking and Health, London, SW1, “The Government Should not Delay on Introducing Plain Packaging,” *The Telegraph*, Letter to the Editor, August 8, 2014, <http://www.telegraph.co.uk/comment/letters/11019990/The-Government-should-not-delay-on-introducing-plain-packaging.html>.

¹⁹⁹ Davison, “Tobacco Firms Warn MPs Over Plain Packaging.”

²⁰⁰ Andre Walker, “Watch: Australian Plain Packaging Leads to Explosion in Fake Cigarette Sales,” Breitbart - London, July 24, 2014, <http://www.breitbart.com/Breitbart-London/2014/07/24/Australian-Plain-Packaging-Leads-To-Explosion-In-Fake-Cigarettes>.

²⁰¹ Guy Bentley, “Mars Lawyers Slam Tobacco Plain Packaging,” *City A.M.*, July 24, 2014, <http://www.cityam.com/1406214295/mars-lawyers-slam-tobacco-plain-packaging>.

²⁰² Annie-Rose Harrison-Dunn, “Plain Packaging Pay Out To Mars Would ‘Certainly Not Be Trivial’, says Institute of Economic Affairs,” *Confectionery News*, July 30, 2014, <http://www.confectionerynews.com/Regulation-Safety/Mars-complaint-over-tobacco-plain-packaging-uneearthed>.

²⁰³ Tatiana Schlossberg, “Wine Dealer Sentenced to 10 Years for Defrauding Clients,” *The New York Times*, August 7, 2014, http://www.nytimes.com/2014/08/08/nyregion/wine-dealer-sentenced-to-10-years-for-defrauding-clients.html?_r=2.

²⁰⁴ Ben Goldstein, “The Man Who Duped Millionaires Into Paying Big Bucks For Fake Wine,” National Public Radio, December 13, 2013, <http://www.npr.org/blogs/thesalt/2013/12/18/255241685/the-man-who-duped-millionaires-into-paying-big-bucks-for-fake-wine>.

Chapter 5

²⁰⁵ “Alexander Graham Bell: Telephone Inventor,” Lemelson Center for the Study of Invention and Innovation, Smithsonian National Museum of American History, http://invention.smithsonian.org/centerpieces/iap/inventors_bel.html.

²⁰⁶ Henry M. Paynter, “The First Patent,” https://www.me.utexas.edu/~longoria/paynter/hmp/The_First_Patent.html.

²⁰⁷ “Patents by Country, State and Year,” U.S. Patent and Trademark Office (PTO), December, 2013, www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_all.htm.

²⁰⁸ “U.S. Patent Statistics Chart, Calendar Years 1963 – 2013,” U.S. Patent and Trademark Office, Patent Technology Monitoring Team (PTMT), August 15, 2014, http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm.

²⁰⁹ “General Information Concerning Patents,” U.S. Patent and Trademark Office, November 2011, http://www.uspto.gov/patents/resources/general_info_concerning_patents.jsp#heading-24.

²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Elizabeth Kim, “Priceline founder looks to innovate licensing,” *Stamford Advocate*, August 18, 2014, p. 1, <http://www.stamfordadvocate.com/default/article/Priceline-founder-looks-to-innovate-patent-5692277.php>.

²¹³ Marshall Phelps and David Kline, “Building a white-hat brand in the patent industry,” *Intellectual Asset Management Magazine*, Issue 67, September/October 2014, p. 43, <http://www.iam-magazine.com/Magazine/Issue/67>.

²¹⁴ B. Zorina Khan, Ph.D., “Trolls and Other Patent Inventions: Economic History and the Patent Controversy in the Twenty-First Century,” Bowdoin College, Brunswick, Maine, and National Bureau of Economic Research, September 2013, p. 9, <http://cpip.gmu.edu/wp-content/uploads/2013/09/Khan-Zorina-Patent-Controversy-in-the-21st-Century.pdf>.

²¹⁵ Tom Habert, “Qualcomm Takes on the World,” *Electronics 360*, February 11, 2013, <http://electronics360.globalspec.com/article/8/qualcomm-takes-on-the-world>, and <http://investor.qualcomm.com/results.cfm?Quarter=&Year=2014>.

²¹⁶ “Earnings Release FY 14, Q4,” Investor Relations, Microsoft, <http://www.microsoft.com/Investor/EarningsAndFinancials/Earnings/SegmentResults/S1/FY14/Q4/Performance.aspx>.

²¹⁷ “Ownership/Assignability of Patents and Applications,” PTO, <http://www.uspto.gov/web/offices/pac/mpep/s301.html>.

-
- ²¹⁸ “Organizations for Inventors,” PTO, *inventorseye*, vol. 2, issue 6, December 2011, <http://www.uspto.gov/inventors/independent/eye/201112/orgs.jsp>.
- ²¹⁹ Neil Kane, “Patents for Sale: How to Separate the Valuable from the Worthless,” *Forbes*, May 22, 2014, <http://www.forbes.com/sites/neilkane/2014/05/22/a-modest-proposal-for-licensing-patents/>.
- ²²⁰ Ibid.
- ²²¹ Walter D. Valdivia, “University Start-ups: Critical for Improving Technology Transfer,” The Brookings Institution, November 20, 2013, p. 9, <http://www.brookings.edu/research/papers/2013/11/university-start-ups-technology-transfer-valdivia>.
- ²²² Ibid., p. 6.
- ²²³ Richard Perez-Pena, “Patenting Their Discoveries Does Not Pay Off for Most Universities, a Study Says,” *The New York Times*, November 20, 2013, http://www.nytimes.com/2013/11/21/education/patenting-their-discoveries-does-not-pay-off-for-most-universities-a-study-says.html?_r=0.
- ²²⁴ Valdivia, pp. 15-17.
- ²²⁵ “Overview, How PatentBooks Work,” PatentBooks, <http://patentbooksinc.com/evaluation-criteria/>.
- ²²⁶ Ibid.
- ²²⁷ Ibid.
- ²²⁸ “FAQ’s,” PatentBooks, <http://patentbooksinc.com/faq/>.
- ²²⁹ Gene Quinn, “A Conversation with Priceline.com Founder Jay Walker,” *IP Watchdog*, July 13, 2014, <http://www.ipwatchdog.com/2014/07/13/conversation-with-priceline-com-founder-jay-walker/id=50338/>.
- ²³⁰ Patent Properties, Media Center, <http://www.patentproperties.com/mediacenter.html>.
- ²³¹ “Introducing the United States Patent Utility,” Patent Properties, <http://www.patentproperties.com/patentinnovations.html>.
- ²³² Ibid.
- ²³³ Kim, p. 1.
- ²³⁴ Ibid.
- ²³⁵ Ibid.
- ²³⁶ “Geoffrey Barker, co-founder and COO, RPX Corp.” *Smart Business*, July 1, 2012, <http://www.sbsonline.com/article/geoffrey-barker-co-founder-and-coo-rpx-corp/>.
- ²³⁷ Ibid.
- ²³⁸ “Reducing Patent Risk,” RPX Corporation, <http://www.rpxcorp.com/rpx-services/>.
- ²³⁹ “Defensive Patent Acquisitions,” RPX Corporation, <http://www.rpxcorp.com/rpx-services/rpx-defensive-patent-acquisitions/>.
- ²⁴⁰ Stuart Newman, “Avoiding Litigation Thanks to Article One and RPX Corp,” *Forbes*, October 24, 2012, <http://www.forbes.com/sites/mergermarket/2012/10/24/avoiding-litigation-thanks-to-article-one-partners-and-rpx-corp/>.
- ²⁴¹ “Reducing Patent Risk,” RPX Corporation.
- ²⁴² “Welcome to RPX Insurance Services,” RPX Corporation, <http://rpxcorp.com/insurance>.
- ²⁴³ “FTC Seeks to Examine Patent Assertion Entities and Their Impact on Innovation, Competition,” Federal Trade Commission, September 27, 2013, <http://www.ftc.gov/news-events/press-releases/2013/09/ftc-seeks-examine-patent-assertion-entities-their-impact>.
- ²⁴⁴ Ibid.
- ²⁴⁵ Melissa Lipman, “FTC Patent Troll Study to Disappoint Some, Wright Says,” *Law360*, September 4, 2014, <http://www.law360.com/articles/573222/ftc-patent-troll-study-to-disappoint-some-wright-says>.
- ²⁴⁶ Ibid.
- ²⁴⁷ “Intellectual Property: Assessing Factors That Affect Patent Infringement Litigation Could Help Improve Patent Quality,” U.S. Government Accountability Office, GAO-13-465, August 22, 2013, <http://www.gao.gov/assets/660/657103.pdf>.
- ²⁴⁸ Ibid.
- ²⁴⁹ Ibid.
- ²⁵⁰ Khan, p. 13.

²⁵¹ Ibid., pp. 13-14.

²⁵² Ibid., p. 14.

²⁵³ Ibid.

²⁵⁴ Maureen K. Ohlhausen, Commissioner, “Antitrust Enforcement in China – What Next?” Second Annual GCR Live Conference, September 16, 2014, p. 9, <http://www.ftc.gov/public-statements/2014/09/antitrust-enforcement-china-what-next-second-annual-gcr-live-conference>.

²⁵⁵ Ibid., p. 12.

²⁵⁶ Ibid.

²⁵⁷ Joshua D. Wright, Commissioner, “Does the FTC Have a New IP Agenda?” Remarks at the 2014 Milton Handler Lecture, “Antitrust in the 21st Century,” p. 8, <http://www.ftc.gov/public-statements/2014/03/does-ftc-have-new-ip-agenda-remarks-2014-milton-handler-lecture-antitrust>.

²⁵⁸ “Competing Interests in China’s Competition Law Enforcement: China’s Anti-Monopoly Law Application and the Role of Industrial Policy,” U.S. Chamber of Commerce, September, 2014, p. 77, <https://www.uschamber.com/report/competing-interests-chinas-competition-law-enforcement-chinas-anti-monopoly-law-application>.

²⁵⁹ Wright, p. 15.

²⁶⁰ H. Report #112-98, to accompany H.R. 1249, America Invents Act, reported on June 1, 2012, p. 40, <https://beta.congress.gov/112/crpt/hrpt98/CRPT-112hrpt98-pt1.pdf>.

²⁶¹ Ibid.

²⁶² Deborah L. Lu, Smitha B. Uthaman, Ph.D., Thomas J. Kowalski, “Summary of the America Invents Act,” *National Law Review*, April 12, 2012, <http://www.natlawreview.com/article/summary-america-invents-act>.

²⁶³ H. Report #113-279, to accompany H.R. 3309, Innovation Act, reported on December 2, 2013, p. 16, <https://beta.congress.gov/113/crpt/hrpt279/CRPT-113hrpt279.pdf>.

²⁶⁴ Khan, p. 1.

²⁶⁵ “Disruptor 50,” 2013 List, CNBC, <http://www.cnbc.com/id/100739744>.

²⁶⁶ “2014 CNBC’s Disruptor 50,” CNBC, <http://www.cnbc.com/id/101734664>.

²⁶⁷ Mark Twain, *A Connecticut Yankee in King Arthur’s Court*, Charles L. Webster & Company, New York, 1889, p. 107, <http://www.gutenberg.org/files/86/86-h/86-h.htm>.

Chapter 6

²⁶⁸ Lily Kuo, “Chinese Counterfeiters Are Selling the iPhone 6 Before it Has Even Been Released,” MSN News, June 13, 2014, <http://news.msn.com/science-technology/chinese-counterfeiters-are-selling-the-iphone-6-before-it-has-even-been-released-1>.

²⁶⁹ Ibid.

²⁷⁰ Thomas Halleck, “Chinese iPhone 6 Clones Feature 4.7-Inch Display, Run Android,” *International Business Times*, July 18, 2014, <http://www.ibtimes.com/chinese-iphone-6-clones-feature-47-inch-display-run-android-1632606>.

²⁷¹ Daisuke Wakabayashi and Wayne Ma, “Apple Sells Over 10 Million New iPhones in First Weekend,” *The Wall Street Journal*, September 22, 2014, http://online.wsj.com/articles/apple-sells-10-million-new-iphones-on-first-weekend-1411389254?mod=dist_smartbrief.

²⁷² Ibid.

²⁷³ Associated Press, “Feds Say Hackers Targeted Microsoft, Game Makers,” *The News Tribune*, September 30, 2014, <http://www.thenewstribune.com/2014/09/30/3407324/feds-say-hackers-targeted-microsoft.html?sp=99/296/358/>.

²⁷⁴ Josh Lowensohn, “iPhone-related Death in China Could Be Linked to Fake Charger,” *CNet*, July 18, 2013, <http://www.cnet.com/news/iphone-related-death-in-china-could-be-linked-to-fake-charger/>.

²⁷⁵ Angela Moscaritolo, “Apple Offering USB Charger Trade-in Deal Following Electrocution Death,” *PC Magazine*, August 6, 2013, <http://www.pcmag.com/article2/0,2817,2422748,00.asp>.

²⁷⁶ Ibid.

-
- ²⁷⁷ Chuck Goudie, “I-Team: Uncovering the Dangers of Fake Electronics,” ABC 7 News, Chicago, Illinois, May 14, 2013, <http://abc7chicago.com/archive/9101300/>.
- ²⁷⁸ Ibid.
- ²⁷⁹ Anjali Athavaley, “Beware Unsafe Holiday Lights,” *The Wall Street Journal*, December 17, 2009, <http://online.wsj.com/articles/SB10001424052748704541004574600132801477824>.
- ²⁸⁰ Mark Huffman, “Some Holiday Lights Bear Bogus UL Label,” *Consumer Affairs*, December 21, 2010, <http://www.consumeraffairs.com/news04/2010/12/some-holiday-lights-bear-bogus-ul-label.html>.
- ²⁸¹ “Nuclear Safety and Health: Counterfeit and Substandard Products Are a Governmentwide Concern,” U.S. General Accounting Office, GAO/RCED-91-6, October 16, 1990, <http://www.gao.gov/assets/150/149878.pdf>.
- ²⁸² Ibid.
- ²⁸³ “Defense Industrial Base Assessment: Counterfeit Electronics,” U.S. Department of Commerce, Bureau of Industry and Security, Office of Technology Evaluation, January 2010, p. i-ii, http://www.bis.doc.gov/index.php/forms-documents/doc_view/37-defense-industrial-base-assessment-of-counterfeit-electronics-2010.
- ²⁸⁴ “Space and Missile Defense Acquisitions: Periodic Assessment Needed to Correct Parts Quality Problems in Major Programs,” U.S. Government Accountability Office, GAO-11-404, June 24, 2014, <http://www.gao.gov/assets/330/320127.pdf>.
- ²⁸⁵ “DOD Supply Chain: Suspect Counterfeit Electronic Parts Can Be Found on Internet Purchasing Platforms,” U.S. Government Accountability Office, GAO-12-375, February 2012, <http://gao.gov/assets/590/588736.pdf>.
- ²⁸⁶ Ibid.
- ²⁸⁷ “Inquiry into Counterfeit Electronic Parts in the Department of Defense Supply Chain,” Senate Committee on Armed Services, May 21, 2012, <http://www.levin.senate.gov/download/?id=24b3f08d-02a3-42d0-bc75-5f673f3a8c93>.
- ²⁸⁸ Ibid., p. 6.
- ²⁸⁹ Paul Courson, “Report: Bogus U.S. Military Parts Traced to China,” CNN, November 7, 2011, <http://www.cnn.com/2011/11/07/us/u-s-military-bogus-parts/>.
- ²⁹⁰ Kevin McCaney, “New Technology Looks Deep to Identify Counterfeit Microchips,” *Defense Systems*, October 2, 2014, <http://defensesystems.com/articles/2014/10/02/asom-counterfeit-microchip-detection.aspx>.
- ²⁹¹ Dean P. Vanek and Steven D. Tibbs, “Feature Comment: Proposed FAR Rule Looks To Expand Reporting Of Nonconforming Items,” *The Government Contractor*, Information and Analysis on Legal Aspects of Procurement, West, Vol. 56, No. 25, July 9, 2014, http://www.gclgroup.net/uploads/3/1/4/3154926/proposed_far_rule_looks_to_expand_reporting_of_nonconforming_items-56_gc_215_july_9_2014.pdf.
- ²⁹² Kevin Lewis, “The Fake And The Fatal: The Consequences Of Counterfeits,” *The Park Place Economist*, Illinois Wesleyan University, Volume XVII, April 2009, p. 49, <https://www.iwu.edu/economics/PPE17/lewis.pdf>.
- ²⁹³ Natalie Blazer, “Counterfeit Auto Parts Expose Manufacturers to Liability,” *Product Liability Monitor*, October 11, 2011, <http://product-liability.weil.com/uncategorized/counterfeit-auto-parts-expose-manufacturers-to-liability/>.
- ²⁹⁴ Lynda Tran, “Safety Advisory: NHTSA Alerting Consumers to Dangers of Counterfeit Air Bags,” National Highway Traffic Safety Administration, October 10, 2012, <http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/Safety+Advisory:+NHTSA+Alerting+Consumers+to+Dangers+of+Counterfeit+Air+Bags>.
- ²⁹⁵ Ashlee Vance, “Chasing Pirates: Inside Microsoft’s War Room,” *The New York Times*, November 6, 2010, http://www.nytimes.com/2010/11/07/technology/07piracy.html?pagewanted=all&_r=0.
- ²⁹⁶ “How Long Does Copyright Protection Last?” U.S. Copyright Office, Library of Congress, 2014, <http://copyright.gov/help/faq/faq-duration.html#duration>.

-
- ²⁹⁷ “Content Protection,” Entertainment Software Association, 2014, <http://www.theesa.com/policy/antipiracy.asp>.
- ²⁹⁸ “The Surprising Risks of Counterfeit Software in Business,” White Paper, Microsoft Corporation, 2009, <http://www.microsoft.com/en-us/piracy/knowthefacts/counterfeit.aspx>.
- ²⁹⁹ “Executive Order 13103 – Computer Software Piracy,” September 30, 1998, Presidential Documents, *Federal Register*, Vol. 63, No. 192, Monday, October 5, 1998, p. 53273, <https://www.federalregister.gov/articles/1998/10/05/98-26799/computer-software-piracy>.
- ³⁰⁰ “VA Secretary Unveils Data Security Encryption Program,” U.S. Department of Veterans Affairs, Office of Public and Intergovernmental Affairs, August 14, 2006, <http://www1.va.gov/opa/pressrel/pressrelease.cfm?id=1169>.
- ³⁰¹ “Review of Alleged Incomplete Installation of Encryption Software Licenses,” U.S. Department of Veterans Affairs, Office of Inspector General, 12-01903-04, October 11, 2012, <http://www.va.gov/oig/pubs/VAOIG-12-01903-04.pdf>.
- ³⁰² Ibid.
- ³⁰³ “Desktop and Laptop Software License Management Is Not Being Adequately Performed,” Treasury Inspector General for Tax Administration, Reference Number: 2013-20-025, June 25, 2013, <http://www.treasury.gov/tigta/auditreports/2013reports/201320025fr.html>.
- ³⁰⁴ Ibid.
- ³⁰⁵ Ibid.
- ³⁰⁶ “Management’s Response to the Draft Report,” Department of the Treasury, Internal Revenue Service, May 20, 2013, <http://www.treasury.gov/tigta/auditreports/2013reports/201320025fr.html#mgtrasp>.
- ³⁰⁷ “SmartTrack: Software License Optimization from the Desktop to the Data Center,” Aspera, <http://aspera.com/en/tool/smarttrack/>.
- ³⁰⁸ “IT Asset Management Software,” BMC Software, <http://www.bmc.com/it-solutions/asset-management.html>.
- ³⁰⁹ “Automated Software Reconciliation,” Eracent, http://www.eracent.com/index.php?option=com_content&view=article&id=53.
- ³¹⁰ “Software License Optimization,” Flexera Software, <http://www.flexerasoftware.com/enterprise/products/software-license-management/>.
- ³¹¹ “SAM Case Studies: Success Stories,” Microsoft Corporation, Software Asset Management, <http://www.microsoft.com/sam/en/us/casestudies.aspx>.
- ³¹² “Software Asset Management,” Snow Software, <http://www.snowsoftware.com/int>.
- ³¹³ “Federal Software Licenses: Most Agencies Have Reported Planned Actions to Address Our Prior Recommendations on Software License Management,” U.S. Government Accountability Office, GAO-14-834R, September 23, 2014, <http://www.gao.gov/products/GAO-14-835R>.
- ³¹⁴ H.R. 1232, Federal Information Technology Acquisition Reform Act, 113th Congress, <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:h.r.01232>.
- ³¹⁵ H.R. 4435, Buck McKeon National Defense Authorization Act for Fiscal Year 2015, (Placed on Senate Calendar, June 5, 2014), <http://thomas.loc.gov/cgi-bin/query/D?c113:4:/temp/~c113luwL11>.

Conclusion

- ³¹⁶ Alexander Hamilton, James Madison, John Jay, *The Federalist Papers*, Clinton Rossiter (ed.), p. 268, New American Library, New York, New York, April 2003.
- ³¹⁷ Magnus Brooke, ITV Director of Policy and Regulatory Affairs, in response to the Hargreaves Review of 2011, Speech before the UK Culture, Media and Sport Committee’s Eighth Evidence Session, ICOMP, March 12, 2013, <http://www.i-comp.org/blog/2013/a-strong-ip-regime-is-an-engine-of-growth-not-a-barrier-says-uk-broadcaster/>.
- ³¹⁸ “Intellectual Property and the U.S. Economy: Industries In Focus,” U.S. Department of Commerce Economic and Statistics Administration.

³¹⁹ Hassett and Shapiro, “What Ideas Are Worth: The Value Of Intellectual Capital And Intangible Assets In The American Economy.”



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