



Intellectual Property:

Making It Personal

By Thomas A. Schatz
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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 2 – The Dangers of Counterfeit Drugs

Every day, doctors and health professionals prescribe millions of medications to help individuals manage everything from the common cold to chronic conditions such as high blood pressure, cancer, and diabetes. If these prescriptions are filled through the patients' healthcare plans and purchased at local pharmacies such as Rite Aid and Walgreens or through pharmacy benefit managers such as CVS Caremark and Express Scripts, the drugs are presumed to be approved as safe and effective by the U.S. Food and Drug Administration (FDA).

As healthcare costs escalate, however, alternatives to these legitimate sources of pharmaceuticals are becoming more attractive. Taking advantage of this growing market, drug "resellers" from around the world have opened up shop online. Many of their customers are elderly, poor, or otherwise disadvantaged, who are trying to stretch their limited income and are usually relatively new online shoppers. For example, they may be inclined to trust a Canadian online pharmacy, but there is no way to determine the origin of the drugs being sold on that website.

The counterfeit drug industry generates approximately \$75 billion annually.⁴⁸ According to the National Association of Boards of Pharmacy (NABP), counterfeit drugs comprise 1 to 2 percent of all drugs purchased in North America. On July 17, 2012, CNN issued the results of a study detailing the rise of counterfeit drugs in the U.S.⁴⁹ According to the study, even if only .001 percent of the more than 4 billion prescriptions filled each year in the U.S. were compromised, that would mean 40,000 fake drugs were distributed in the pharmaceutical supply chain.⁵⁰ And even one brand of counterfeit drugs can be both deadly and costly: between 2007 and 2008, a counterfeit version of the blood thinning drug Heparin entered the market, leading to 149 deaths in the U.S.⁵¹ As a result of the distribution of the fake drug, 740 lawsuits were filed against Heparin's manufacturer, Baxter, which eventually sold the division that produced the medicine.⁵²

While the dangers of counterfeit drugs are well-documented, the reasons for manufacturing the fake pharmaceuticals are less obvious. Novartis Security Chief Andrew Jackson offered this "cost-benefit analysis" of why someone would make counterfeit drugs:

Pretend that you graduated from the 'University of Crime' and you are considering two career options. Which path would you follow? First, you can manufacture and sell cocaine, and if you get caught, you may spend 20 years or more in jail. Your second option is to manufacture and sell counterfeit pharmaceuticals. If you get caught, in many jurisdictions, you'll be sentenced to prison for two years and may be back on the street in six months.⁵³

The World Health Organization (WHO) first identified international sales of counterfeit medicines as a problem in 1985.⁵⁴ As consumers increasingly purchase products online, the problem has become even more difficult to control.

The Federal Food, Cosmetic and Drug Act provides the following definition of a counterfeit drug: "... a drug which, or the container or labeling of which, without authorization, bears the trademark, trade name, or other identifying mark, imprint, or device, or any likeness thereof, of a drug manufacturer, processor, packer, or distributor other than the person or persons who in fact manufactured, processed, packed, or distributed such drug and which thereby falsely purports or is represented to be the product of, or to have been packed or distributed by, such other drug manufacturer, processor, packer, or distributor."⁵⁵ The WHO identifies a counterfeit drug as "one which is deliberately and fraudulently mislabeled with respect to identity and/or source.

Counterfeiting can apply to both branded and generic products and 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.”⁵⁶

The WHO noted that the lack of a universal definition of a counterfeit drug makes it difficult to either consolidate information from various countries or determine the full extent of the problem around the world.⁵⁷

In the U.S., a counterfeit drug would likely be copying a drug that has been approved by the FDA, since neither a brand name nor a generic pharmaceutical can be sold unless the agency has found that it is safe and effective. In order to help consumers and healthcare professionals purchase and use medications safely, the FDA provides resources to help make everyone aware of the consequences of purchasing medicine from outside the U.S.⁵⁸

In fact, the FDA has stated, “In most circumstances, it is illegal for individuals to import drugs into the United States for personal use. This is because drugs from other countries that are available for purchase by individuals often have not been approved by FDA for use and sale in the United States.”⁵⁹ On June 7, 2001, FDA Senior Associate Commissioner for Policy, Planning, and Legislation William K. Hubbard testified that the importation of prescription drugs is a dangerous practice. He noted that such drugs could be contaminated, subpotent, or superpotent, all of which could cause harm to individuals.

In October 2003, the FDA’s Counterfeit Drug Task Force recommended that the FDA, other government agencies, and the private sector take steps to minimize the risks to the public from counterfeit drugs and biologics.⁶⁰ The report noted that nearly 50 percent of the drugs in China were counterfeit; up to 40 percent of the drugs in Argentina, Columbia, and Mexico might be counterfeit; and about 10 percent of the drugs in Southeast Asia were counterfeit.⁶¹ The task force’s “multi-pronged” approach to combat counterfeit drugs includes using technology to authenticate all drug products; updating state licensing standards to improve the U.S. drug distribution system; creating a rapid alert and response system for counterfeit drugs; conducting public awareness and education campaigns; and, coordinating anti-counterfeiting efforts with foreign countries.

On August 19, 2014, the FDA updated its Import Alert on reimportation of all prescription drugs for human use, noting that the law prohibits the reimportation of a prescription drug unless it is being returned to its original manufacturer.⁶²

There are other exemptions for the ban on the importation of drugs: treatment of a serious condition for which effective treatment is not available in the U.S.; the drug is considered not to represent an unreasonable risk; or, the individual importing the drug verifies in writing that it is for his or her own personal use, and provides contact information for the doctor providing treatment or shows the product is for the continuation of treatment begun in a foreign country.⁶³ Should the importation of medication be allowed by the FDA, no more than a three-month supply may be imported into the U.S.⁶⁴

There is a good reason for the FDA’s concerns over the potential for imported or re-imported drugs to be counterfeit and cause harm. In June 2005, a joint effort by the Ontario Regional Coroner’s Office, Royal Canadian Mounted Police, and Health Canada found that a Canadian pharmacist licensed by the Ontario College of Pharmacists had distributed a counterfeit version of Norvasc, a well-known blood pressure medication, which turned out to be made from talcum powder.⁶⁵ Following this discovery, 11 reported deaths were examined to see if there was a link to the fake drugs. In four of those deaths, the coroner was unable to rule out the counterfeit medication as the cause of death.⁶⁶

This is not an isolated incident. A September 2013 NABP report found that up to 77 percent of Viagra purchased online could be fake, with potentially dangerous side effects.⁶⁷ The pills could contain unknown ingredients such as blue printer ink, speed or amphetamine, antibiotics, drywall or plaster, and other ingredients used to make the pill look and feel like the real deal.⁶⁸ Because counterfeit drugs are unregulated, the fake pills could also be superpotent, increasing the risk of a heart attack.⁶⁹ The NABP report found that only 257, or 3 percent of the 10,275 online prescription medication sites the organization reviewed could be considered legitimate, while the other 97 percent were operating illegally or not following U.S. pharmacy laws and standards.⁷⁰

While the impact of adulterated ingredients contained in fake pharmaceuticals is somewhat limited in the U.S. due to the relatively small percentage of sales of such drugs, elsewhere in the world counterfeit drugs have had devastating consequences. Every year, a reported 100,000 deaths occur in Africa that can be linked to the counterfeit drug trade. The International Policy Network estimates that 700,000 deaths a year globally are caused by counterfeit malaria and tuberculosis drugs.⁷¹

In addition to the problem of counterfeit and substandard drugs, some prominent U.S. trading partners have little or no regard for patent protection. The official policy in these countries permits domestic manufacturers to produce a pharmaceutical regardless of the existence of a patent for that drug. The government claims that it has a “moral obligation to make cheaper, generic drugs available to their populations,” which includes limiting or voiding patents.⁷²

Perhaps the most frequent abuse of IP rights has occurred in India. Various branches of the government have sanctioned the following incursions on drug patents between 2012 and 2013:

- October 2012: India’s patent board revoked the patent for Pfizer’s cancer drug Sutent, even though 90 other countries had approved a patent for the drug.
- November 2012: The Delhi High Court ruled in favor of Cipla, a generic drug with the same active ingredients as a patented Roche cancer drug.
- April 2013: The Indian Supreme Court overruled the patent protecting a cancer treatment developed by Novartis in favor of the production of generic drugs using the same patented process.⁷³
- August 17, 2013: Roche announced it was dropping plans to patent its breast cancer-fighting drug, Herceptin, in India after a health ministry committee urged the government to issue a compulsory license to the company obligating them to allow an Indian generic drug manufacturer to make a less expensive version of the drug.⁷⁴

Other countries have also taken steps to restrict patent protection in order to produce cheaper generic drugs for domestic use. Argentina and the Philippines have enacted strict limits on patents, while “Brazil and Thailand have been issuing compulsory licenses for AIDS drugs for years under multilateral agreements that allow such actions on public health grounds.”⁷⁵ In order to help prevent more nations from voiding valid drug patents, the U.S. is continuing to seek greater patent protection in trade agreements. As a result of the laws and court decisions in these countries, the pharmaceutical industry is now fighting both official and illegal theft of IP.

On February 27, 2014, Government Accountability Office (GAO) Director of Health Care Marcia Crosse testified before the House Energy and Commerce Subcommittee on Oversight and Investigations that there are more than 36,000 rogue Internet pharmacies in operation, which violate a variety of federal laws.⁷⁶ According to Ms. Crosse, some of these websites seek to assure consumers that their drugs are safe because they are coming from a “Canadian” company.

However, there is no assurance that the website is physically located in Canada and even less assurance that the drugs are being sourced from that country rather than somewhere else around the world.

FDA Deputy Commissioner for Global Regulatory Operations and Policy Howard Sklamberg testified at the hearing about the agency's efforts to combat the counterfeit drug trade.⁷⁷ He said:

Those who manufacture and distribute counterfeit medical products not only defraud patients and consumers, they also prevent patients from getting the safe, effective drugs that can improve health, alleviate suffering, and possibly save their lives. They put people at risk of harm from drugs that may contain too much or too little active ingredient, the wrong active ingredient, or even toxic ingredients. But even a counterfeit drug with no active ingredient could prove harmful to patients who think they are taking a lifesaving or life-sustaining medication.⁷⁸

Mr. Sklamberg noted that these drugs could contain toxic ingredients or be “processed under poorly controlled and unsanitary conditions. Substandard drugs are also a major public health concern, especially regarding infectious disease drugs, such as anti-HIV and anti-malarial drugs.”⁷⁹ He said that nearly 40 percent of the drugs taken by Americans are made outside of the U.S., and “80 percent of manufacturing sites of active pharmaceutical ingredients (APIs) used in drugs manufactured in the United States are located outside our borders—in more than 150 countries, many with less-sophisticated manufacturing and regulatory systems than our own.”⁸⁰

While he assured the committee that U.S. laws and regulations have made the production of counterfeit drugs in the U.S. nearly obsolete, there are serious challenges to assuring the security of the complex global supply chain. To help protect that supply chain, the FDA uses its own law enforcement authority and partners with both domestic and international law enforcement agencies.

For example, in January 2014, following an investigation conducted by HSI and the FDA's Office of Criminal Investigations (OCI), a U.S. permanent resident living in Texas pleaded guilty to conspiring to import counterfeit and misbranded drugs, including 3,200 counterfeit Viagra and 4,000 counterfeit Cialis pills that were sent to the individual from China.⁸¹ The drugs looked authentic, but tests showed that the pills contained less than the required active ingredients.

In a second case, an investigation by the FBI and the Sacramento County Sheriff's Hi-Tech Crimes Task Force led to a California resident pleading guilty to conspiracy to traffic in counterfeit pharmaceuticals.⁸² The defendant offered drugs for sale online using Craigslist and PennySaver, along with text message blasts.

In March 2013, a Yorba Linda, California man was arrested by HSI and subsequently charged with eight counts of selling counterfeit sexual dysfunction medicine on Craigslist.⁸³ He advertised Cialis, Viagra, and Levitra for sale without a prescription from \$6 to \$10 each, claiming that the drugs were “real.” However, a chemical analysis of some of the seized tablets showed they contained active ingredients that were different than the ones used in genuine versions of the pills.⁸⁴

In an investigative piece on ABC's “20/20” aired on June 13, 2014, reporters followed federal, state, and local law enforcement officials as they arrested several individuals selling counterfeit products, including Viagra.⁸⁵ Tests showed that the pills contained only talcum powder and road paint. The drugs had no medical value, but the seller had on hand \$4,200 at the time of

his arrest. According to the report, most of the counterfeit drugs found by law enforcement officials come from China, Latin America, and India, and are sold from people's homes, cars, and online.⁸⁶

The "20/20" report showed how OCI had uncovered foreign, unapproved, and counterfeit versions of the cancer treatment drug Avastin being sold in the U.S., leading to the conviction of the Turkish nationals whose company supplied the drugs along with Canadian and American wholesalers and middlemen.⁸⁷ OCI has also arrested a number of health providers who purchased unapproved foreign cancer drugs at a discount yet billed government health insurance programs at the full price, including a California oncologist who purchased more than \$3.4 million in foreign unapproved cancer drugs; a physician in Tennessee who purchased more than \$3 million in foreign unapproved medications; seven Ohio physicians who purchased and administered more than \$2.6 million in unapproved cancer medications; and, a Texas oncologist who administered more than \$1 million in unapproved drugs.⁸⁸

Mr. Sklamberg also detailed the circuitous money trail involving a counterfeit drug website. Billing itself as the "Pharmacy You Can Trust," the website was hosted in New York, but sold drugs that were manufactured in clandestine laboratories in China and shipped to U.S.-based confederates known as "drop shippers." They, in turn, sent packages to customers from a U.S. address, giving the appearance that the drugs were dispensed from a U.S. pharmacy. The OCI investigation showed that the payments were processed by a credit card processor in the Netherlands, after which the funds were transferred to Cyprus, then to Hong Kong, and finally to Israel. According to the OCI, from 2005 to 2007, the website operators processed more than \$1.8 million in sales from 12,000 orders from their yacht, which was docked in Tel Aviv.⁸⁹

The cost to bring a new drug to market can range from \$242 million to \$1.8 billion, depending on the size of the drug manufacturer and the number of similar products being developed at the same time.⁹⁰ Among these financial costs are the lengthy process required to perform the appropriate research, including product testing, as well as the time and financial burden in applying for a patent and obtaining FDA approval for the use and marketing of any new medication. This time-consuming process can take between 10 and 15 years before a drug is ready for the market.⁹¹

The pharmaceutical and biopharmaceutical industries spend an average of 15 to 17 percent of their revenues in research and development.⁹² Comparing the amount of time, energy, and associated costs invested by pharmaceutical companies to bring a new drug to the market against the counterfeit drug industry, which can garner approximately \$75 billion in sales worldwide,⁹³ drug piracy has a substantial impact on healthcare innovation.

It is clear that protecting Americans from counterfeit drugs is a priority for law enforcement officials. Many of the fake or counterfeit pharmaceuticals are processed in questionable facilities and contain chemicals that may cause more harm than the disease they are supposed to prevent or help manage. In addition to continued law enforcement efforts, the incidence of counterfeit drugs entering the market can also be reduced by educating consumers, physicians, and pharmacists about how to identify counterfeit or fake drugs as well as their health hazards. Pharmaceuticals should always be used to enrich, rather than endanger, people's lives.

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

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