

THE PATH OF INTERNET LAW: AN ANNOTATED GUIDE TO LEGAL LANDMARKS¹

MICHAEL L. RUSTAD² & DIANE D'ANGELO³

¹ We dedicate this article to Edward J. Bander, a Professor of Law Emeritus at Suffolk University Law School and our former law librarian. Professor Bander, who retired from Suffolk in 1990, is the author of seventeen books, beginning with MR. DOOLEY ON THE CHOICE OF LAW (1963), and most recently THE HIDDEN HISTORY OF ESSEX LAW SCHOOL (2010). In 2007, Professor Bander received a Lifetime Achievement Award from the Law Librarians of New England at the John Adams Courthouse in Boston. The award was presented at a dinner hosted by the Social Law Library. “The Social Law Library is one of Boston’s oldest civic and cultural organizations, pre-dating the Boston Athenaeum by three years, the Boston Public Library by forty-four years, the Museum of Fine Arts by sixty-six years, and the Boston Symphony Orchestra by eighty-seven years.” *History of the Social Law Library*, SOC. L. LIBR., <http://www.sociallaw.com/article.htm?cid=9975> (last visited Mar. 19, 2011). Oliver Wendell Holmes, Jr., as Chief Justice of the Massachusetts Supreme Judicial Court, was a frequent user of the Social Law Library. *Id.* Professor Bander, who was born in Roxbury and is a native Bostonian, created an exhibit of historic and legal events that occurred in close proximity to Suffolk University in 1978. He later wrote a walking tour guide to Boston legal landmarks that he called “The Path of the Law.” Oliver Wendell Holmes, Jr. delivered a speech he called “The Path of the Law” at the dedication of the new BU Law building, Isaac Rich Hall. *Law School in 1897 Timeline*, BOS. UNIV., <http://www.bu.edu/law/about/timeline.html> (last visited Jan. 15, 2011) [hereinafter TIMELINE] (*see also* Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457 (1897)). We are following Professor Bander’s example in borrowing from Holmes in our study of the Path of Internet Law. We appreciate the research assistance of Alex Chiulli, Jesse Gag, Jack Lindsay, Stephanie McVay, Brooke Perrone, and Nate Rice. Chrissy J. Knowles also provided editorial suggestions that improved this piece. Rick Buckingham, Reference/Electronic Services Librarian at Suffolk University Law School’s Moakley Law Library provided invaluable editing and technical support. We also thank the members of *Duke Law & Technology Review* for their editorial assistance with this piece.

² Michael L. Rustad, Ph.D, J.D. LL.M. is the Thomas F. Lambert Jr. Professor of Law and Co-Director of the Intellectual Property Law Program at Suffolk University Law School in Boston, Massachusetts. He has taught Internet Law in Suffolk’s IP Concentration since 1994.

³ Diane D’Angelo is a Reference Librarian at Suffolk University Law School’s Moakley Law Library in Boston, Massachusetts.

ABSTRACT

The evolution of the Internet has forever changed the legal landscape. The Internet is the world's largest marketplace, copy machine, and instrumentality for committing crimes, torts, and infringing intellectual property. Justice Holmes's classic essay on the path of the law drew upon six centuries of case reports and statutes. In less than twenty-five years, Internet law has created new legal dilemmas and challenges in accommodating new information technologies. Part I is a brief timeline of Internet case law and statutory developments for Internet-related intellectual property (IP) law. Part II describes some of the ways in which the Internet is redirecting the path of IP in a globalized information-based economy. Our broader point is that every branch of substantive and procedural law is adapting to the digital world. Part III is the functional equivalent of a GPS for locating the latest U.S. and foreign law resources to help lawyers, policymakers, academics and law students lost in cyberspace.

INTRODUCTION

¶1 At the official opening of the new building for Boston University Law School on January 8, 1897, Oliver Wendell Holmes, Jr. gave a talk entitled *The Path of the Law*.⁴ Holmes's magisterial survey of the common law drew upon a vast "body of reports, of treatises, and of statutes, in this country and in England, extending back for six hundred years."⁵ Justice Holmes's larger project was to write a general treatise on the common law drawn from a series of

⁴ Holmes wrote that:

[T]he means of the study are a body of reports, of treatises, and of statutes, in this country and in England, extending back for six hundred years, and now increasing annually by hundreds. In these sibylline leaves are gathered the scattered prophecies of the past upon the cases in which the axe will fall. These are what properly have been called the oracles of the law. Far the most important and pretty nearly the whole meaning of every new effort of legal thought is to make these prophecies more precise, and to generalize them into a thoroughly connected system.

Holmes, *supra* note 1. See also TIMELINE, *supra* note 1 ("Oliver Wendell Holmes delivers his speech, 'The Path of the Law,' at the dedication of the new BU Law building, Isaac Rich Hall.").

⁵ Holmes, *supra* note 1.

lectures he delivered at the Lowell Institute in Boston.⁶ Compared to the common law, cyberspace law is a rebellious teenager.⁷ In 1991, a court mentioned “Internet” for the first time in a judicial opinion.⁸ To borrow from Holmes: to understand cyberspace law, “we must know what it has been and what it tends to become.”⁹

¶2 This Article unfolds in three parts. Part I presents a brief timeline of Internet case law and statutory developments for Internet-related IP law. Part II highlights some of the ways in which the Internet is redirecting the path of IP in a globalized information-based economy. While this part of the article explores how the law of IP is responding to the Internet, our broader point is that every other branch of substantive and procedural law is being reshaped to fit within the digital world.¹⁰ During its formative period, the Internet has made it necessary to rework each branch of IP, and these changes are emblematic of a larger transformation of the law. Part III is an

⁶ OLIVER WENDELL HOLMES, JR., *THE COMMON LAW* iii (Boston, Little Brown, 1881), *available at* http://books.google.com/books?id=xXouAAAIAAJ&pg=PA1&lpg=PA1&dq=Holmes+In+order+to+know+what+it+is,+we+must+know+what+it+has+been,+and+what+it+tends+to+become.%E2%80%9D&source=bl&ots=8XgKSQQ0Tg&sig=5yGMAQuLUMyKlnxMJMXxbvZqKQ&hl=en&ei=DaMnTf2mH8SBLAfAme3wAQ&sa=X&oi=book_result&ct=result&resnum=2&ved=0CUBYQ6AEwAQ#v=onepage&q&f=false.

⁷ At the time Justice Holmes gave his “Path of the Law” talk, tort law was evolving in response to changes in transportation and communication technology:

Privacy-based torts, along with remedies for misuse of novel technologies such as “instantaneous photographs,” were being born. In the new millennium, American society is once again undergoing a technological conversion of great consequence. This time, America is evolving from a durable commodities-based economy to one based on the licensing of software, intellectual property, and other intangibles.

Michael L. Rustad & Thomas H. Koenig, *Rebooting Cybertort Law*, 80 WASH. L. REV. 335, 364 (2005).

⁸ *Id.*

⁹ HOLMES, *supra* note 6, at 1.

¹⁰ See Lawrence Lessig, *The Law of the Horse, What Cyberlaw Might Teach*, 113 HARV. L. REV. 501 (1999). We agree with Professor Lessig that the Internet provides a prism to understand the interconnections between law, markets, code, and cyberspace. See also PATRICIA L. BELLIA ET. AL., *CYBERLAW: PROBLEMS OF POLICY AND JURISPRUDENCE IN THE INFORMATION AGE* (3d ed. 2007) (contending that the Internet transforms basic assumptions about the nature of communication, knowledge, invention, information, sovereignty, identity, and community).

annotated guide to the best research resources, intended to assist academics, law students, attorneys, and policymakers in understanding the transformation of Internet law. Because Internet law will be less U.S.-centric in the future, we also review the best available resources for studying global Internet law. Predicting the future course of the path of Internet law is challenging, and this article provides a way to seek out information-age research resources and methods.

I. AN INTERNET LAW TECHNOLOGY TIMELINE

A. *The Birth of the Non-Commercial Internet*

^{¶3} The Internet is a network that connects millions of computers together around the world. In 1974, Vint Cerf and Bob Kahn designed the first “Transmission Control Program (TCP).”¹¹ The Transmission Control Protocol/Internet Protocol (TCP/IP) was the key to the Internet infrastructure. This protocol enabled computers to communicate with each other.¹² The Defense Advanced Research Projects Agency (DARPA) made the decision to support the conversion of TCP/IP to UNIX at the University of California, Berkeley in 1976.¹³ In addition, that year, Bill Gates and Paul Allen founded Microsoft.¹⁴ The first known spam message was transmitted in 1978.¹⁵ The first spam email message was a message from a Digital Equipment Corporation (DEC) marketing representative sent to every address on the Advanced Research Projects Agency Network (ARPANET).¹⁶ The first commercial spam message was not

¹¹ Vinton G. Cerf & Robert E. Kahn, *A Protocol for Packet Network Intercommunication*, 22 IEEE TRANS. ON COMMS. 1 (1974), available at <http://www.cs.princeton.edu/courses/archive/fall06/cos561/papers/cerf74.pdf>.

¹² *Id.*

¹³ *Federal Internet Law & Policy and Educational Project*, CYBERTELECOM, <http://www.cybertelexcom.org/notes/timeline.htm> (last visited Mar. 11, 2011) [hereinafter CYBERTELECOM].

¹⁴ *Id.*

¹⁵ *Id.* (“Possibly the first commercial spam message is sent on 1 May by a DEC marketer advertising an upcoming presentation of its new DECSYSTEM-20 computers.”).

¹⁶ The Internet was predated by the Advanced Research Projects Agency (ARPA) in the late 1960s. ARPANET was a computer network that connected the military, defense contractors, and universities conducting research. *What is the ARPAnet?*, THE HISTORY OF COMPUTERS AND THE INTERNET, <http://computerandweb.tripod.com/cihp/id7.html> (last visited Aug. 12, 2011);

delivered until 1994.¹⁷ From the late 1960s to 1981, the number of computers on the ARPANET expanded from only four to more than 200.¹⁸ The year 1984 marked the invention of domain names, and the number of hosts reached a benchmark of 1,000.¹⁹ Prodigy Communications Corporation, the first consumer-oriented Internet portal, was also founded in 1984.²⁰

¶4 America Online (AOL) launched its services for the Macintosh and Apple II in 1989.²¹ In 1990, the National Science Foundation (NSF) held a workshop on “The Commercialization of the Internet” at Harvard University. At this point in Internet history, few used email or bulletin boards, and the World Wide Web was not yet conceived.²² The Internet did not have a significant impact on the law prior to the mid-1990s because the Internet had yet to commercialize.²³ In the pre-World Wide Web period, domain names were not yet regarded as valuable pieces of cyberspace real estate, and there were no Internet jurisdictional disputes because there was no commercial activity permitted on the ARPANET, which was a tool exclusively used by university researchers and U.S. government officials.

Gordon v. Virtumundo, Inc., 575 F.3d 1040, 1045 n.1 (9th Cir. 2008) (stating that email spam “has its roots in a popular 1970 sketch by the British comedy troupe Monty Python’s Flying Circus, in which the word ‘spam’ is repeated to the point of absurdity.”).

¹⁷ *Origin of the Term Spam to Mean Net Abuse*, BRAD TEMPLETON, <http://www.templetons.com/brad/spamterm.html> (last visited Oct. 5, 2011) (“In April of 1994, the term was not born, but it did jump a great deal in popularity when two lawyers from Phoenix named Canter and Siegel posted a message advertising their fairly useless services in an upcoming U.S. ‘green card’ lottery.”).

¹⁸ MICHAEL L. RUSTAD, *INTERNET LAW IN A NUTSHELL* 5 (2009).

¹⁹ Robert H. Zakon, *HOBBS’ INTERNET TIMELINE*, <http://www.zakon.org/robert/internet/timeline/#1980s> (last visited Aug. 13, 2011).

²⁰ CYBERTELECOM, *supra* note 13.

²¹ *Id.*

²² RUSTAD, *supra* note 18, at 2.

²³ Professor Rustad taught a seminar in Computer & Internet Law in 1994 and had a difficult time finding sufficient Internet-related cases and developments to assign for this two credit elective.

B. The Birth of the Commercialized World Wide Web

¶5 The Internet was conceived as an academic and military project, but emerged as a commercial enterprise in the mid-1990s with the development of the World Wide Web. The Internet has forever changed how the world does business. It is a reality, taken for granted, that companies market their products and services in a virtual space—twenty-four hours a day, seven days a week—targeting customers around the world. The birth of the commercialized World Wide Web was made possible by Tim Berners-Lee’s development of the first graphical user interface (GUI) browser in 1990, which he called the “Worldwide Web.”²⁴ The first web page was launched on August 6, 1991.²⁵ In 1991, the NSF assumed control of the systems of interconnected computers that evolved into the Internet.²⁶ The University of Minnesota created Gopher, the first user-friendly interface for the Internet that same year:

The demonstration system was called a gopher after the U of Minnesota mascot—the golden gopher. The gopher proved to be very prolific, and within a few years, there were over 10,000 gophers around the world. It takes no knowledge of UNIX or computer architecture to use. In a gopher system, you type or click on a number to select the menu selection you want.²⁷

¶6 Historians of the Internet will agree that the technology for a global system of interconnected computer networks reached its takeoff point in the 1990s. The NSF describes the 1990s as the decade when the world went online.²⁸ The cooperative effort and vision of creative minds in both the U.S. government and private corporations shaped the evolution of the Internet as a technology accessible to all Americans.

²⁴ Tim Berners-Lee, FREQUENTLY ASKED QUESTIONS, <http://www.w3.org/People/Berners-Lee/FAQ.html#browser> (last visited Jan. 6, 2011).

²⁵ RUSTAD, *supra* note, 18 at 3.

²⁶ CYBERTELECOM, *supra* note 13.

²⁷ *A Brief History of the Internet*, WALT HOWE, <http://www.walthowe.com/navnet/history.html> (last visited Jan. 14, 2011) [hereinafter HOWE].

²⁸ *NSF and the Birth of the Internet*, NATIONAL SCIENCE FOUNDATION, http://www.nsf.gov/news/special_reports/nsf-net/textonly/90s.jsp (last visited Jan. 7, 2011).

¶7 Netscape launched Mosaic, the earliest commercial browser, in 1993. In the year of Mosaic's release, the number of World Wide Web users skyrocketed with an astonishing "341,634% annual growth rate of service traffic."²⁹ The first banner ads appeared in 1994 for Zima, an alcoholic beverage.³⁰ That same year, the White House launched its website, and the word "spam" became part of the popular lexicon.³¹ In 1993, the NSF contracted with Network Solutions to give that registrar the exclusive rights to register and charge fees for domain names.³² In the early years of the Internet, registration of domain names was free of charge, but beginning in September 1995, NSF began to charge a \$50 annual fee for registrations.³³ As websites became commercialized, Internet users from around the world registered domain names. The increase in commercial activity was correlated with an increase in legal disputes.³⁴ The increased accessibility of the World Wide Web enabled millions of Americans to go online on a daily basis, transmitting emails, contributing to blogs, and instant messaging. The collaborative *zeitgeist* of the Internet enabled new communities of programmers to work together to produce innovative code and content.³⁵

²⁹ Zakon, *supra* note 19 ("1993: Mosaic takes the Internet by storm (22 Apr); WWW proliferates at a 341,634% annual growth rate of service traffic. Gopher's growth is 997%.")

³⁰ Ryan Singel, *This Day in Tech, October 27, 1994: Web Gives Birth to Banner Ads*, WIRED (Oct. 27, 2010), <http://www.wired.com/thisdayintech/2010/10/1027hotwired-banner-ads/>.

³¹ *Internet Timeline*, FACT MONSTER, <http://www.factmonster.com/ipka/A0193167.html> (last visited Jan. 13, 2011) [hereinafter *Internet Timeline*].

³² *A Brief History of NSF and the Internet*, NATIONAL SCIENCE FOUNDATION, http://www.nsf.gov/news/special_reports/cyber/internet.jsp (last visited Nov. 15, 2011).

³³ AMENDMENT 19 TO COOPERATIVE AGREEMENT BETWEEN NSI AND U.S. GOVERNMENT, ICANN (Nov. 8, 1999), <http://www.icann.org/en/nsi/coopagmt-amend19-04nov99.htm>.

³⁴ Internet-related cases and legislation evolved rapidly from the mid-1990s and continue to do so to this day. A LexisNexis search of federal and state case law uncovered 127 judicial opinions mentioning the Internet in the period between January 1, 1995 and January 1, 2007.

³⁵ See Jonathan Zittrain, *Law in A Networked World: Privacy 2.0+*, 2008 U. CHI LEGAL F. 65, 65 ("The [I]nternet is generative: it allows contributions from all corners This simple feature has allowed a blossoming of users."). See also

C. The Commercialized Internet

¶8 The commercialized Internet was jumpstarted by user-friendly web browsers such as Mosaic.³⁶ At that time, there were only 150 websites in the entire world.³⁷ In 1994, relatively few companies, law firms and professional associations had a homepage, let alone a cyberspace presence.³⁸ That same year, the first known domain name hijacking took place when a Sprint employee registered MCI.net.³⁹ By 1998, more than a quarter of all businesses with ten or more employees had an Internet presence.⁴⁰

¶9 In 1994, Pizza Hut became the first major company to take online orders.⁴¹ The “Good Times Virus” was released and is credited in being the first of many virus hoaxes.⁴² In 1994, AOL linked to the Internet for the first time.⁴³ Yahoo! was created in 1994, the same year that Amazon, the Earth’s largest bookstore, incorporated.⁴⁴ Amazon began as an online bookstore but now sells CDs, DVDs, and scores of other products. Microsoft released its Windows 95 operating system, incorporating Internet Explorer.⁴⁵ The first Internet gambling casinos were organized in 1995.⁴⁶ In 1996, AOL stock was publicly traded on the New York Stock Exchange for the first time.⁴⁷

¶10 The path of Internet law shifted dramatically when millions of ordinary Americans went online. Internet law disputes were relatively uncommon prior to the mid-1990s. From January 1, 1992 to January 1, 1995, the word “Internet” appeared in state and federal court

JONATHAN ZITTRAIN, *THE FUTURE OF THE INTERNET AND HOW TO STOP IT* ch.9 (2008), which formed the basis of that article.

³⁶ CYBERTELECOM, *supra* note 13 (1993: “Marc Andreessen’s Mosaic Browser released, alpha version while at National Center for SuperComputing Applications, Illinois.”).

³⁷ *Id.*

³⁸ RUSTAD, *supra* note 18, at 3.

³⁹ CYBERTELECOM, *supra* note 13.

⁴⁰ MICHAEL RUSTAD & CYRUS DAFTARY, *E-BUSINESS LEGAL HANDBOOK* §1-1 at 1–3 (2003).

⁴¹ CYBERTELECOM, *supra* note 13.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

opinions only seven times.⁴⁸ The year 1995 was a dramatic turning point for IP law in cyberspace. The commercialized Internet created new legal dilemmas, such as the conflict between domain names and trademarks, the enforceability of online contracts, and how to protect copyrights in the new digital marketplace. Courts began to resolve Internet-related jurisdictional disputes when business entities began selling products and services on the Internet.

D. Google-ization

¶11 Google evolved out of the efforts of Stanford computer science graduate students collaborating on a new search engine they called “BackRub.”⁴⁹ *PC Magazine* marveled at Google’s search engine that had a “knack for returning extremely relevant results.”⁵⁰ Google, which quickly became the most popular Internet search engine, did not open its first office until 1998.⁵¹ Google’s search engine provides links to websites in the order of “descending relevance to the user’s search terms based on its proprietary algorithms.”⁵²

¶12 In 2000, the Google Toolbar was released and Google’s new AdWords program had 350 customers. AdWords enabled keyword targeting and a feature that tracked its online performance.⁵³ Google Groups was launched in 2001, and that year, Google.com was available in 26 different languages.⁵⁴ Google was soon made available in the language of the Swedish chef from the Muppet Show on Sesame Street.⁵⁵ In 2002, Google launched Google News with

⁴⁸ Lexis/Nexis Search, LEXISNEXIS, <http://www.lexisnexis.com> (within “Federal and State Cases Combined Database,” (search completed on Aug. 8, 2011: Internet and date(geq (1/1/1992) and leq (1/1/1995)).

⁴⁹ *Company History*, GOOGLE, <http://www.google.com/intl/en/corporate/history.html> (last visited Mar. 7, 2011) [hereinafter Google Company History].

⁵⁰ *Id.*

⁵¹ *Internet Timeline*, *supra* note 31.

⁵² *Rescuecom Corp. v. Google, Inc.*, 562 F.3d 123, 125 (2d Cir. 2009).

⁵³ Google Company History, *supra* note 49.

⁵⁴ *Id.*

⁵⁵ *Id.* The Swedish Chef spoke in an incomprehensible language for his special cooking show on The Muppet Show. “Nearly all Swedish Chef sketches begin with him in a kitchen, waving some utensils while singing his signature song in his typical mock Swedish—a semi-comprehensible gibberish mimicking Swedish phonology and prosody. The song’s lyrics vary slightly from one episode to the next, but always end with “Börk, börk, börk!” as the Chef throws the utensils aside

4,000 news services.⁵⁶ The next year, Google developed Google Print—a service that later became Google Books.⁵⁷ In 1994, Google Local was formed, and became Google Maps the next year.⁵⁸ In 1995, Google’s index of websites reached the milestone of 8 billion sites, and Google Image indexed 1.1 billion images.⁵⁹ In December of 2010, Google released Google eBooks, its “digital bookselling platform.”⁶⁰ Most recently, in March 2011, Google launched “Think Quarterly,” a full-blown online magazine about the “world of data and its impact on business.”⁶¹

E. Walled Gardens, Social Networks & Other Developments

¶13 In the past fifteen years, the web has created new “walled gardens” such as “Google’s suite of integrated web-based services” and “Apple’s mobile devices” where users access the Internet through software apps rather than services such as AOL or Comcast.⁶² In 1998, a Northeastern University student named Shawn Fanning invented Napster, which enabled users to exchange music over the Internet.⁶³ Wikipedia was born in 2001, though a pundit stated, “[W]e’re not exactly sure, mostly because we checked that fact on Wikipedia.”⁶⁴ That same year, Apple iPods were sold for the first time, giving users the “ability to carry 1,000 songs” in their pockets.⁶⁵ In 2001, Google stored three billion documents on its computer servers.⁶⁶

with a clatter that seems to startle him.” *Swedish Chef*, WIKIPEDIA, http://en.wikipedia.org/wiki/Swedish_Chef (last visited Mar. 12, 2010).

⁵⁶ Google Company History, *supra* note 49.

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Jason Kincaid, *Google Acquires eBook Technologies*, TECHCRUNCH (Jan. 12, 2011), <http://techcrunch.com/2011/01/12/google-acquires-ebook-technologies/>.

⁶¹ Ben Parr, *Say Hello to Google’s Online Magazine*, CNNTECH (Mar. 24, 2011, 9:43 AM), <http://www.cnn.com/2011/TECH/web/03/24/google.magazine.mashable/index.html?hpt=T2>.

⁶² *The Web’s New Walls*, THE ECONOMIST, Sept. 4, 2010, at 11, available at <http://www.economist.com/node/16943579> [hereinafter *Web’s New Walls*].

⁶³ *Internet Timeline*, *supra* note 31.

⁶⁴ Nate Jones, *Milestones*, TIME MAG., Dec. 6, 2010, at 22, available at <http://www.time.com/time/magazine/article/0,9171,2033060,00.html>.

⁶⁵ *Id.*

⁶⁶ Google Company History, *supra* note 49.

¶14 MySpace went online as a social network site in 2003.⁶⁷ YouTube, a video-sharing service, was created in 2005 and allowed users to upload, share, and watch videos.⁶⁸ In addition to YouTube,⁶⁹ Facebook,⁷⁰ Twitter,⁷¹ Flickr,⁷² Second Life,⁷³ delicious,⁷⁴ and hundreds of other social media sites enabled persons of diverse interests to share their interests with others around the world.⁷⁵ Twitter, the “micro-blogging” network, founded in 2006, created a new IP issue about the copyrightability of tweets.⁷⁶ Tweets are limited to 140 characters, and it is an open question whether such short messages are protectable.⁷⁷ By 2009, Facebook built an online community of 350 million members around the world.⁷⁸ The number of Internet users in China grew from 22 million in 2000 to 420 million in 2010.⁷⁹

¶15 During the past two decades, the Internet evolved as a business tool. Internet law is also rapidly evolving as industry groups, governments, and international organizations formulate new standards, usages of trade, regulatory initiatives, statutes, and court decisions. The rapid evolution of the Internet has created a problem of “legal lag.” For instance, the law governing end user license agreements suffers legal lag where the law of contracts “is in the rear and limping a little.”⁸⁰ Copyright law, too, limps along, attempting to adjust to the Internet, through which peer-to-peer users can make

⁶⁷ *Web's New Walls*, *supra* note 62.

⁶⁸ *Internet Timeline*, *supra* note 31.

⁶⁹ <http://www.youtube.com/> (last visited Sept. 12, 2011).

⁷⁰ <http://www.facebook.com/> (last visited Sept. 12, 2011).

⁷¹ <http://twitter.com/> (last visited Sept. 12, 2011).

⁷² <http://www.flickr.com/> (last visited Sept. 12, 2011).

⁷³ <http://secondlife.com/> (last visited Sept. 12, 2011).

⁷⁴ <http://www.delicious.com/> (last visited Sept. 12, 2011).

⁷⁵ HOWE, *supra* note 27.

⁷⁶ Dom Sagolla, *How Twitter Was Born*, 140 CHARACTERS (Jan. 30, 2009), <http://www.140characters.com/2009/01/30/how-twitter-was-born/>.

⁷⁷ See, e.g., Mark Cuban, *Are Tweets Copyrightable?*, MARK CUBAN BLOG (Mar. 29, 2009), <http://blogmaverick.com/2009/03/29/are-tweets-copyrighted/>.

⁷⁸ Mark Zuckerberg, *An Open Letter From Facebook Founder Mark Zuckerberg*, THE FACEBOOK BLOG (Dec. 1, 2009, 9:23 PM), <http://blog.facebook.com/blog.php?post=190423927130&ref+mf>.

⁷⁹ Jones, *supra* note 64, at 22.

⁸⁰ *Mount Isa Mines Ltd. v. Pusey* (1970) 125 C.L.R. 383, 395 (Austl.) (Windeyer, J.) (“Law, marching with medicine but in the rear and limping a little . . .”).

perfect copies of copyrighted materials and distribute them at the click of a mouse.

¶16 In the new millennium, the software industry “has significantly outpaced that of the U.S. economy as a whole, thus helping to sustain the expansion of the overall economy.”⁸¹ Yet legislatures and courts have been sluggish in tailoring legal developments to this new technology.⁸² The next part of this Article provides a brief summary of how the Internet has transformed the law of intellectual property. To revive Oliver Wendell Holmes for the new millennium, we must study history in order to understand the path of Internet Law.

II. THE PATH OF INTERNET LAW: A BRIEF HISTORY OF LEGAL LAG

You’ve been given a great gift, George. A chance to see what the world would be like without you. One man’s life touches so many others, when he’s not there it leaves an awfully big hole. You see, George, you really have had a wonderful life.

– Clarence, George Bailey’s guardian angel in *It’s a Wonderful Life*.⁸³

¶17 The 1946 Frank Capra film, *It’s a Wonderful Life* stars Jimmy Stewart as George Bailey, a man contemplating suicide on Christmas Eve by leaping from a bridge into an icy river. At the last minute, an angel named Clarence asks him to review his life and consider how his hometown of Bedford Falls, New York would have developed if he had never been born:

⁸¹ SOFTWARE & INFORMATION INDUSTRY ASSOCIATION, SOFTWARE AND INFORMATION: DRIVING THE GLOBAL KNOWLEDGE ECONOMY 7 (2008), available at <http://www.siia.net/estore/globecon-08.pdf> (stating that the U.S. software and information industries “grew more than three times faster than the overall U.S. economy in 2005, with growth of 10.8 percent compared with 3.2 percent for U.S. Gross Domestic Product (GDP). And in 2004, these industries grew 11.1 percent compared with 3.9 percent for GDP.”).

⁸² This is part of a larger pattern of legal lag caused by the failure of contract law or the law of licensing to evolve to address the economic realities of software. See Michael L. Rustad & Maria Vittoria Onufrio, *The Exportability of the Principles of Software: Lost in Translation*, 2 HASTINGS SCI. & TECH. L.J. 25, 29 (2010) (“In the case of software law, there has been a forty-year ‘legal lag’ between the rises of software as a separate industry and the development of specialized contracting principles.”).

⁸³ *It’s a Wonderful Life*, HOMEVIDEOS.COM, <http://www.homevideos.com/revclas/83b.htm> (last visited Jan. 8, 2011) (quoting IT’S A WONDERFUL LIFE (RKO Pictures 1946)).

The bucolic small town is replaced by a smoky, nightclub-filled, boogie-woogie-driven haven for showgirls and gamblers, who spill raucously out into the crowded sidewalks on Christmas Eve. It's been renamed Pottersville, after the villainous Mr. Potter, Lionel Barrymore's scheming financier.⁸⁴

Consider how the world's legal institutions would be different if the Internet never existed. Courts and legislatures would not have forged new rules stretching the well-worn grooves of ancient doctrine to fit new Internet realities.⁸⁵ Consider how Facebook is shaping the law. Half of the 800 million Facebook users log onto this site daily.⁸⁶ Social Network, a 2010 Hollywood blockbuster, told the story of how Facebook was founded.⁸⁷ Much of the plot centered on a lawsuit arising from a dispute over whether Mark Zuckerberg, Facebook's founder and CEO, breached a contract with Harvard classmates and stole their idea to develop the wildly popular site.⁸⁸

¶18 From its inception, Facebook has been the venue for tort lawsuits between users. In an Arkansas case, classmates of a ninth grader "created a Facebook page called 'Every One [sic] That Hates Billy Wolfe.'"⁸⁹ The picture for this Facebook group depicted "Wolfe's face photo-shopped onto a figure in a green fairy costume with the word 'HOMOSEXUAL' written across it."⁹⁰ The ninth grader filed a sex discrimination case against the school district under Title IX.⁹¹ A jury held that the school district was not liable, and the

⁸⁴ Wendell Jameson, *Wonderful? Sorry George, It's a Pitiful, Dreadful Life*, N.Y. TIMES, Dec. 19, 2008, at C1, available at <http://www.nytimes.com/2008/12/19/movies/19wond.html>.

⁸⁵ Justice Holmes reminds us of the need to update the law to reflect new technologies and commercial realities:

It is revolting to have no better reason for a rule of law that so it was laid down in the time of Henry IV. It is still more revolting if the grounds upon which it was laid down have vanished long since, and the rule simply persists from blind imitation of the past.

Holmes, *supra* note 1, at 469.

⁸⁶ *Statistics*, FACEBOOK, <http://www.facebook.com/press/info.php?statistics> (last visited Oct. 9, 2011).

⁸⁷ THE SOCIAL NETWORK (Columbia Pictures 2010).

⁸⁸ Facebook, Inc. v. Pac. Nw. Software, Inc., 640 F.3d 1034 (9th Cir. 2011) (affirming lower court's enforcement of settlement agreement between founder of Facebook and plaintiffs charging him with misappropriation).

⁸⁹ Wolfe v. Fayetteville, Ark. Sch. Dist., No. 10-2570, 2011 U.S. App. LEXIS 16372, at *2 (8th Cir. Aug. 9, 2011).

⁹⁰ *Id.*

⁹¹ *Id.*

Eighth Circuit upheld this finding.⁹² School districts around the country are facing similar lawsuits based on students' Facebook postings.⁹³ The Third Circuit recently observed how Facebook and other "stream-of-consciousness communications" were reshaping the First Amendment.⁹⁴

A. How Personal Jurisdiction Has Adapted to the Internet

The Internet has no territorial boundaries. To paraphrase Gertrude Stein, as far as the Internet is concerned, not only is there perhaps 'no there,' the 'there' is everywhere there is Internet access.

– Judge Nancy Gertner⁹⁵

¶19 The Internet creates unique jurisdictional disputes because the technology respects no national borders. A large number of these disputes arose with the development of domain names.⁹⁶ For example, in *Panavision v. Toeppen*,⁹⁷ a California company specializing in film equipment filed suit against Dennis Toeppen. The court found Toeppen's domain name activities, described as domain name hijacking, to be sufficiently related to his website to support jurisdiction.

⁹² *Id.*

⁹³ *See, e.g.,* Sanches v. Carrollton-Farmers Branch Indep. Sch. Dist., No. 10-10325, 2011 U.S. App. LEXIS 14313 (5th Cir. July 13, 2011) (regarding a high school student was suspended from the cheerleading team for posting inappropriate Facebook pictures; the student then allegedly harassed another student that she believed turned her in to school authorities).

⁹⁴ Layshock v. Hermitage Sch. Dist., No. 07-4465, 2011 U.S. App. LEXIS 11994, at *42 (3d Cir. June 13, 2011) (Jordan, J., concurring) ("For better or worse, wireless [I]nternet access, smart phones, tablet computers, social networking services like Facebook, and stream-of-consciousness communications via Twitter give an omnipresence to speech that makes any effort to trace First Amendment boundaries along the physical boundaries a recipe for serious problems in our public schools.").

⁹⁵ Digital Equip. Corp. v. AltaVista Tech., Inc., 960 F. Supp. 456, 462 (D. Mass. 1997).

⁹⁶ *See, e.g.,* Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119 (W.D. Pa. 1997); Cybersell, Inc. v. Cybersell, Inc., 130 F.3d 414, 416 (9th Cir. 1997).

⁹⁷ 141 F.3d 1316 (9th Cir. 1997); *see also* uBid, Inc. v. GoDaddy Group, Inc., 623 F.3d 421 (7th Cir. 2010) (holding that out-of-state defendant's website was an insufficient basis for general jurisdiction).

¶20 In the field of civil procedure, courts have had little difficulty in stretching the due process model of jurisdiction to cyberspace.⁹⁸ The problem of adapting the American minimum contacts doctrine to cyberspace is that no other country follows a due process model for personal jurisdiction.⁹⁹ Internet-related jurisdiction disputes began as companies created and established corporate identities online. To date, there is no international convention that addresses Internet jurisdiction, the choice of law, or the enforcement of judgments. Courts are beginning to address whether the First Amendment shields pseudonymous file distribution on BitTorrent networks.¹⁰⁰ Civil procedure will continue to evolve to address the economic and technological realities of the Internet.¹⁰¹ New Internet cases and developments are being decided on a daily basis.

B. Changing Rules for Electronic Commerce

¶21 With the advent of the World Wide Web, commerce is now conducted over the Internet. Typically, website vendors require their customers to enter into mass-market license agreements called terms of service. Electronic commerce creates the need for new rules for validating online contracts or applying contract law to the Internet. The European Commission, the executive body of the European Union, has enacted a large number of Internet-specific directives to respond to the information-based economy.¹⁰²

¶22 In the United States, the Federal Trading Commission is the constable for cyberspace in filing suit against Internet wrongdoers for

⁹⁸ See, e.g., *Williams v. Adver. Sex*, No. 1:05CV51, 2007 WL 2570182, at *6 (N.D. W. Va. 2007) (applying purposeful availment test to cyberspace); see generally A. Benjamin Spencer, *Jurisdiction and the Internet: Returning to Traditional Principles to Analyze Network-Mediated Contacts*, 2006 U. ILL. L. REV. 71, 96.

⁹⁹ RUSTAD, *supra* note 18, at 82.

¹⁰⁰ See, e.g., *First Time Videos, LLC v. Does*, No. C 11-01675 LB, 2011 U.S. Dist. LEXIS 42376, at *7 (N.D. Cal. Apr. 14, 2011) (ruling that copyright owner of pornographic videos and photographs had good cause to unveil names and addresses of peer-to-peer users who distributed content without their permission).

¹⁰¹ See *id.* at *3 (ruling copyright owner had leave to “serve a Rule 45 third-party subpoena on each ISP” so it may obtain names and contact information of John Doe defendants and serve process).

¹⁰² In recent years, the Commission has approved Internet regulations such as the E-Commerce Directive, E-Signatures Directive, and the Copyright Directive addressing e-commerce. See generally RUSTAD, *supra* note 18, at 135–142.

unfair and deceptive practices.¹⁰³ The FTC administers many Internet-related laws governing consumer rights in e-commerce including the Children's Online Privacy Protection Act, the Safe Web Act, and the Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003.¹⁰⁴ The FTC has yet to formulate a compliance program addressing unfair and deceptive terms of service agreements governing social media and cloud computing.

C. Is Internet Law Like Horse Law?

¶23 Describing how the law is changed by the Internet is a fool's errand, like attempting to hold the ocean back with a broom. The Internet's blurring of national boundaries creates new legal dilemmas in every substantive and procedural branch of the law. Internet security, for example, is a completely new field created by necessity.

¶24 Courts have stretched the ancient tort of trespass to chattels to address the problem of unwanted spam.¹⁰⁵ *In Kremen v. Cohen*,¹⁰⁶ the Ninth Circuit held that a defendant converted a domain name. The Internet makes it easy to falsify return email addresses to defame individuals or to engage in trade libel.¹⁰⁷ Cybertort law is just beginning to evolve to address issues such as the recognition of the negligent enablement of cybercrime under tort law.¹⁰⁸ Cybertorts are still evolving to address whether employees have the right to notice of their employer's email or Internet monitoring.¹⁰⁹

¹⁰³ See, e.g., *FTC Settlement Requires Internet Marketer to Stop Selling Cosmetic Contact Lenses Without Prescriptions*, FEDERAL TRADE COMMISSION (July 20, 2011), <http://www.ftc.gov/opa/2011/07/jokeshop.shtm>.

¹⁰⁴ FEDERAL TRADE COMMISSION, <http://business.ftc.gov/legal-resources/5/33> (last visited Aug. 8, 2011).

¹⁰⁵ See, e.g., *AOL, Inc. v. LCGM, Inc.*, 46 F. Supp. 2d 444 (E.D. Va.1998).

¹⁰⁶ 337 F.3d 1024 (9th Cir. 2003) (ruling that the plaintiff had an action for conversion against the domain name registrar).

¹⁰⁷ An empirical study of cybertorts reveals that business torts such as trade secret misappropriation are evolving faster than tort remedies for consumers. See Michael L. Rustad, *Punitive Damages in Cyberspace: Where in the World is the Consumer?*, 7 CHAPMAN L. REV. 39 (2004) (concluding that most cybertorts vindicate the rights of businesses not consumers).

¹⁰⁸ Michael L. Rustad & Thomas H. Koenig, *The Tort of Negligent Enablement of Cybercrime*, 20 BERKELEY TECH. L.J. 1553, 1557–58 (2005).

¹⁰⁹ Michael L. Rustad & Sandra Paulsson, *Monitoring Employee E-mail and Internet Usage: Avoiding the Omniscient Electronic Sweatshop: Insights from Europe*, 7 U. PA. J. LAB. & EMP. L. 829, 829–30 (2005).

¶25 Courts and legislatures, often at the urging of industry groups, updated the law because of perceived necessities created by the Internet. The timeworn doctrines of the common law and statutes are continually being eroded, fractured, and shattered by the Internet's rapid evolution.¹¹⁰ Yet in 1996, Judge Frank Easterbrook, a federal appeals court judge speaking at a University of Chicago academic conference on cyberspace law, opined that devoting special courses to the Internet and cyberspace law made as little sense as specialized courses in the law of the horse.¹¹¹ Judge Easterbrook's argued the rise of the Internet did not require a basic reworking of the law.¹¹² At the time he gave this talk, the World Wide Web was "mutating faster than the virus in The Andromeda Strain."¹¹³

¶26 Lawrence Lessig's response to Judge Easterbrook was that Internet law represents an entirely new paradigm and way of thinking about intellectual property, privacy, and private regulation.¹¹⁴ Lessig explains how cyberspace raises new challenges in regulating pornography not found in the bricks-and-mortar world.¹¹⁵ He notes how difficult it is for websites to distinguish adults from children—not an issue outside of cyberspace.¹¹⁶ The Internet is a unique legal space because its "anonymity and multijurisdictionality . . . makes control by government in cyberspace impossible. The nature of the space makes behavior there *unregulable*."¹¹⁷

¶27 The next section will confirm that there has been a tremendous outpouring of Internet law decisions and statutory developments. The continual torrent of articles and developments makes it difficult for lawyers and legal academics to follow the path of Internet law without a roadmap of legal resources. Attempting to digest data on Internet law is like trying to take a drink from a fire hose with an open valve.

¹¹⁰ See generally Michael L. Rustad & Thomas H. Koenig, *Cybertorts and Legal Lag: An Empirical Analysis*, 13 S. CAL. INTERDISC. L.J. 77 (2004).

¹¹¹ Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, available at

<http://www.law.upenn.edu/fac/pwagner/law619/f2001/week15/easterbrook.pdf>.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ Lessig, *supra* note 10, at 505.

¹¹⁵ *Id.* at 504.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 505.

1. An Internet Law Timeline

¶28 The architecture of Internet law began to shape the path of the law in the early 1990s. The first court decision in which a court mentioned “the Internet” in an opinion was in 1991.¹¹⁸ That same year, a computer hacker was convicted for gaining unauthorized access to BellSouth’s 911 computer files and publishing this proprietary information in a hackers’ newsletter.¹¹⁹ The first case in which an online service provider was sued for Internet-related defamatory statements was decided in 1991. In *Cubby, Inc. v. CompuServe, Inc.*,¹²⁰ a federal district court held an online service provider was not liable for defamatory postings made by a subscriber because it was classified as a distributor rather than a publisher.¹²¹ This case is a landmark because it represents the first time a court stretched defamation law developed for printed copies to Internet publications.

¶29 In 1993, a Florida federal district court became the first to find a computer bulletin board liable for copyright and trademark infringement.¹²² The defendant displayed Playboy’s copyrighted photographs on its website without permission.¹²³ That same year, a court ruled that a software program made infringing copies on the computer’s random access memory (RAM) each time it was installed.¹²⁴ In 1995, Senator J. James Exon of Nebraska introduced the Communications Decency Act (CDA).¹²⁵ Publisher liability is a principle of the law of defamation where the publisher has the same liability has an original author. Section 230 of the CDA has evolved to address the immunities of service providers for every conceivable

¹¹⁸ *United States v. Morris*, 928 F.2d 504, 505 (2d Cir. 1991) (upholding the conviction of a computer science graduate student under the Computer Fraud and Abuse Act).

¹¹⁹ *United States v. Riggs*, 743 F. Supp. 556, 558–59 (N.D. Ill. 1990) (upholding a federal wire fraud indictment against computer hackers).

¹²⁰ 776 F. Supp. 135 (S.D.N.Y. 1991) (comparing the Internet Service Provider’s role to that of a newsstand or bookstore, finding that it was not a publisher for purposes of the law of defamation).

¹²¹ *Id.* at 137.

¹²² *Playboy Enters., Inc. v. Frena*, 839 F. Supp. 1552, 1562 (M.D. Fla. 1993).

¹²³ *Id.*

¹²⁴ *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 518 (9th Cir. 1993), *abrogated by eBay, Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

¹²⁵ Cass R. Sunstein, *Constitutional Caution*, 1996 U. CHI. LEGAL F. 361, 375 n. 16 (1996).

tort, far beyond publisher liability for defamation.¹²⁶ Since Congress enacted the CDA in 1996, federal courts have stretched Section 230's immunity for publisher liability to cover every conceivable tort.

2. *How the Internet Shaped IP Law*

¶30 What would be different about the trajectory of IP law if the Internet had never been created? In the fifteen years since Judge Easterbrook's talk on "The Law of the Horse," the Internet has recalibrated IP rights, as well as liabilities.¹²⁷ In less than two decades, the Internet has generated an exponential number of innovations, due in large part to collaborations such as that which led to the free and open software movement.¹²⁸ In this section, we examine how each branch of IP has accommodated the World Wide Web.

a. *Copyrights in Cyberspace*

¶31 What would be changed about copyright law if the Internet were no longer in the picture? Our laundry list would begin with the 1976 Copyright Act's amendments protecting digital technologies.¹²⁹ Internet-related copyright litigation over the ownership of user-generated content,¹³⁰ deep linking,¹³¹ liability for remote links,¹³²

¹²⁶ Rustad & Koenig, *supra* note 7, at 362 (arguing that § 230 of the CDA should be reformed to enable cybertorts to evolve).

¹²⁷ See generally RUSTAD, *supra* note 18 (discussing how diverse fields such as civil procedure, E-Commerce, Cybertorts, Consumer Law, Privacy, Cybercrimes, Data Security, Content Regulation, and IP Law have been reshaped by the Internet).

¹²⁸ See generally Zittrain, *supra* note 35; LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN THE CONNECTED WORLD* (2001).

¹²⁹ 17 U.S.C. §1201 (2006) (granting cause of action to copyright owners against defendant that circumvents technological measures that control access to works).

¹³⁰ See generally Mary W.S. Wong, 'Transformative' User-Generated Content in Copyright Law: *Infringing Derivative Works or Fair Use?*, 11 VAND. J. ENT. & TECH. L. 1075 (2009) (examining how user-generated content and user rights intersect with copyright law).

¹³¹ The copyright issues occur when the defendant copies URLs and engages in "deep hyper-linking to . . . interior web pages." Ticketmaster Corp. v. Tickets.com, 2003 U.S. Dist. LEXIS 6483, at *19 (C.D. Cal. Mar. 7, 2003); see Brian D. Wassom, *Copyright Implications of "Unconventional Linking" on the World Wide Web: Framing, Deep Linking and Inlining*, 49 CASE W. RES. L. REV. 181, 208 (1998).

framing,¹³³ peer-to-peer file sharing,¹³⁴ and the Digital Millennium Copyright Act's immunities and anticircumvention rules would have no place in the law.

[¶]¹³² Courts have stretched copyright law in a “series of cases and statutes that enshrine the idea of property interests in cyberspace.”¹³⁵ In 1996, more than one hundred countries entered into two treaties that were explicitly enacted to renovate copyright law for the Internet: the World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT).¹³⁶ These Internet-related treaties require signatories to provide meaningful remedies for copyright owners against those who circumvented or bypassed technical measures protecting copyrighted works.¹³⁷

¹³² See generally Allison Roarty, *Link Liability: The Argument for Inline Links and Frames as Infringements of the Copyright Display Right*, 68 *FORDHAM L. REV.* 1033 (1999) (discussing the intersection between copyright law and linking).

¹³³ “Framing refers to the process whereby one Web site can be visited while remaining in a previous Web site.” Eugene R. Quinn Jr., *Web Surfing 101: The Evolving Law of Hyperlinking*, 2 *BARRY L. REV.* 37, 46, 59 (2001) (describing how framing can raise issues of copyright protection).

¹³⁴ Joseph Storch & Heidi Wachs, *A Legal Matter: Peer-to-peer File Sharing, the Digital Millennium Copyright Act, and the Higher Education Opportunity Act: How Congress and the Entertainment Industry Missed an Opportunity to Stem Copyright Infringement*, 74 *ALB. L. REV.* 313 (2011).

¹³⁵ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 *CAL. L. REV.* 439, 443 (2003).

¹³⁶ WORLD INTELLECTUAL PROPERTY ORGANIZATION, *THE IMPACT OF THE INTERNET ON INTELLECTUAL PROPERTY LAW*, http://www.wipo.int/copyright/en/ecommerce/ip_survey/chap3.html (last visited Aug. 8, 2011).

¹³⁷ Congress enacted the Digital Millennium Copyright Act (DMCA), 17 U.S.C. § 1201 et seq. (2006) to fulfill its obligations under the 1996 WIPO Copyright treaties. See *Universal City Studios v. Corley*, 273 F.3d 429, 440 (2d Cir. 2001) (“The DMCA was enacted in 1998 to implement the World Intellectual Property Organization Copyright Treaty (‘WIPO Treaty’).”). The DMCA created both civil remedies, see 17 U.S.C. § 1203 (2006), and criminal sanctions against circumventing copyright protection or marketing anticircumvention devices. See 17 U.S.C. § 1204 (2006). The DMCA specifically authorizes a court to grant temporary and permanent injunctions on such terms as it deems reasonable to prevent or restrain a violation. See 17 U.S.C. § 1203(b)(1) (2006).

i. Shrinkwrap Licenses to Protect Copyrighted Software

¶33 The greatest story never told about Internet-related copyright developments is how information age companies use license agreements to protect intangible assets such as software and website content. The software industry invented the shrinkwrap license agreement, the earliest form of mass-market license, in the 1970s, and vendors began using this contracting form by the early 1980s.¹³⁸ The name shrinkwrap “evolved from the early practice of displaying the terms of the license through the plastic wrapping (shrinkwrap),”¹³⁹ and reflected a widespread practice of delivering software on a CD-ROM or physical media.¹⁴⁰ Software makers printed box-top licenses on the outside of the software CD packaging underneath cellophane shrinkwrap. Shrinkwrap refers to the preprinted standard-form license agreement that is contained in the package with the software.¹⁴¹

¶34 Software makers used shrinkwrap licenses in the early 1980s prior to the development of the World Wide Web. In the 1980s and early 1990s, there was a swirl of uncertainty over the enforceability of shrinkwrap license agreements. The first paragraph of a shrinkwrap agreement typically states that the opening of the package indicates acceptance of the license terms.¹⁴² Contractual formation was predicated upon the user cracking open the shrinkwrap plastic and using the software.¹⁴³ It is unclear what company first invented the shrinkwrap license agreement, and that “fact is lost in the arcane mists of computer history.”¹⁴⁴

¶35 Scholars agree that end user license agreements (EULAs) were common in software industry practice by the early 1980s, and

¹³⁸ Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1241 n.5 (1995).

¹³⁹ MICHAEL D. SCOTT, INTERNET AND TECHNOLOGY LAW DESK REFERENCE 888 (9th ed. 2009) (citing *Peerless Wall & Window Coverings Inc. v. Synchronics, Inc.*, 85 F. Supp. 2d 519, 524 (W.D. Pa. 2000)).

¹⁴⁰ See Michael L. Rustad, *Commercial Law Infrastructure For The Age of Information*, 16 J. MARSHALL J. COMPUTER & INFO. L. 255, 300 (1997) (noting that mass market licenses such as shrinkwrap are delivered to the user on a “take it or leave it” basis).

¹⁴¹ See *Synchronics*, 85 F. Supp. 2d at 524.

¹⁴² This example is drawn from *Morgan Labs., Inc. v. Micro Data Base Sys. Inc.*, No. C96-3998 THE, 1997 WL 258886 (N.D. Cal. Jan. 22, 1997).

¹⁴³ Lemley, *supra* note 138, at 1241–42.

¹⁴⁴ *Id.* at 1241 n.5 (describing shrinkwrap licenses as reverse unilateral contracts).

the software license agreement morphed into diverse forms over the past three decades.¹⁴⁵ In the early 1990s, software licensors did not know whether courts would enforce mass-market licenses such as the shrinkwrap agreement.¹⁴⁶

¶36 In the new millennium, the EULA is the primary tool the copyright industry uses for transferring information-based intellectual property that includes software, databases, and content. In the first case in which a shrinkwrap EULA was enforced, *ProCD v. Zeidenberg*,¹⁴⁷ the Seventh Circuit confirmed the validity of a shrinkwrap agreement. In *ProCD*, Matthew Zeidenberg purchased a copy of ProCD's Select Phone software consisting of more than 3,000 telephone directories.¹⁴⁸ Zeidenberg sold access to ProCD's software on the Internet.¹⁴⁹ The district court refused to enforce ProCD's license agreement because the license agreement was not printed on the outside of the box, but inside the package.¹⁵⁰ The lower court also ruled the license was preempted by the U.S. Copyright Act.¹⁵¹

¶37 Judge Frank Easterbrook, writing for the Seventh Circuit, ruled ProCD's license agreement was enforceable.¹⁵² The court reasoned that Zeidenberg accepted the terms of the license agreement "after having an opportunity to read the license at leisure."¹⁵³ Moreover, the court drew upon UCC Article 2's liberal formation rules and held that contracts could be formed in "any manner sufficient to show agreement."¹⁵⁴ This bellwether decision reflected a paradigm shift in favor of judicial enforcement of mass-market EULAs. Since *ProCD*, software makers have largely been successful

¹⁴⁵ See Michael J. Madison, *Reconstructing the Software License*, 35 LOY. U. CHI. L.J. 275, 316 (2003) ("As custom, therefore, software licensing has a historical pedigree that stretches to a maximum of thirty years. The structure and purpose of software 'licenses' that developed at that time . . . in fairness cannot be compared to contemporary licensing practice, which developers rely on to limit competition.").

¹⁴⁶ Rustad & Onufrio, *supra* note 82.

¹⁴⁷ 86 F.3d 1447 (7th Cir. 1996).

¹⁴⁸ *Id.* at 1449.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.* at 1451.

¹⁵³ *Id.* at 1452.

¹⁵⁴ *Id.*

in convincing U.S. courts to treat EULAs as enforceable contracts. Mark Lemley describes the “sea change” in the courts created by this influential case:

Electronic contracting has experienced a sea change in the last decade. Ten years ago, courts required affirmative evidence of agreement to form a contract. No court had enforced a “shrinkwrap” license, much less treated a unilateral statement of preferences as a binding agreement. Today, by contrast, more and more courts and commentators seem willing to accept the idea that if a business writes a document and calls it a contract, courts will enforce it as a contract even if no one agrees to it. Every court to consider the issue has found “clickwrap” licenses, in which an online user clicks “I agree” to standard-form terms, enforceable. A majority of courts in the last ten years have enforced shrinkwrap licenses, on the theory that people agree to the terms by using the software they have already purchased.¹⁵⁵

^{¶38} A year after *ProCD*, Judge Easterbrook coined the term “rolling contract,” extending the “pay now, terms later” EULA paradigm he formulated in *Hill v. Gateway 2000, Inc.*¹⁵⁶ Rich and Enza Hill responded to Gateway’s advertisement in *PC World Magazine* by telephone, ordering a personal computer through Gateway’s representative and paying for it by credit card. The computer arrived with a software license agreement packed in the box. Gateway included a “Standard Terms and Conditions Agreement,” which stated that it would govern unless the computer was returned within thirty days.¹⁵⁷ One of the one-sided terms and conditions of the standard form contract was a mandatory pre-dispute arbitration clause. The Hills kept the Gateway computer for longer than thirty days and therefore accepted the terms of the standard form.¹⁵⁸ The Seventh Circuit held that the Hills were bound by the shrinkwrap agreement, noting the “terms inside Gateway’s box stand or fall together.”¹⁵⁹ After these Easterbrook opinions, courts have generally validated Internet-related license agreements to protect copyrighted software.

¹⁵⁵ Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459, 459–60 (2006).

¹⁵⁶ 105 F.3d 1147 (7th Cir. 1997).

¹⁵⁷ *Id.* at 1148.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

ii. Clickwrap Agreements

¶39 The clickwrap license displays terms electronically, and the user manifests assent by clicking the acceptance button.¹⁶⁰ Software is typically transferred with EULAs, and the typical clickwrap or clickstream EULA will state: “By clicking the ‘accept’ button, you are consenting to be bound by and are becoming a party to this agreement. If you do not agree to all of the terms of this agreement, click the ‘do not accept’ button and the installation process will not continue.”¹⁶¹ Courts generally will enforce EULAs so long as the “terms are clear and acceptance is unambiguous, regardless of whether [the user] actually reads them.”¹⁶²

¹⁶⁰ *iLan Sys., Inc. v. Netscout Serv. Level Corp.*, 183 F. Supp. 2d 328, 329, 334 (D. Mass. 2002) (describing the ubiquity of EULAs where the user manifests assent by clicking “I Agree” and thereby creating an enforceable agreement to limit liability).

¹⁶¹ Courts have validated this method of entering into a license agreement so long as the user had adequate notice and an opportunity to manifest assent (or disapproval) of the terms. *See, e.g., id.* at 338 (ruling that user clicking “I agree” box is an appropriate way to form enforceable contract); *Forrest v. Verizon Commc’ns, Inc.*, 805 A.2d 1007, 1010–11 (D.C. Cir. 2002) (holding that clickwrap agreement was enforceable and that adequate notice was provided of clickwrap agreement terms where users had to click “Accept” to agree to the terms in order to subscribe); *Koresko v. RealNetworks, Inc.*, 291 F. Supp. 2d 1157, 1162–63 (E.D. Cal. 2003) (ruling that consumer that clicked box on the screen marked “I agree” on website manifested assent to the terms of a clickwrap agreement); *Stomp, Inc. v. NeatO, LLC*, 61 F. Supp. 2d 1074, 1081 (C.D. Cal. 1999) (upholding clickwrap where user assented to terms by clicking “accept” button).

¹⁶² “Clickwrap agreements allow users to manifest assent to contractual terms presented to the user before installation of computer software programs. Generally, as here, the user must indicate acceptance of the clickwrap agreement to proceed with the installation.” *RealPage, Inc. v. EPS, Inc.*, 560 F. Supp. 2d 539, 541 n.1 (E.D. Tex. 2007). Clickwrap evolved out of shrinkwrap agreements “which are generally license agreements placed inside the cellophane ‘shrinkwrap’ of computer software boxes that, by their terms, become effective once the ‘shrinkwrap’ is opened.” *Stomp, Inc.*, 61 F. Supp. 2d at 1080 n.11; *Burcham v. Expedia, Inc.*, 2009 U.S. Dist. LEXIS 17104 (E.D. Mo. Mar. 6, 2009) (upholding clickwrap agreement’s forum selection clause); *A.V. v. iParadigms, LLC*, 544 F. Supp. 2d 473, 480 (E.D. Va. 2008) (upholding clickwrap agreement where a student had to register for a term paper service by creating a profile on defendant’s website and clicking “I Agree” to the terms of the user agreement, which was displayed directly above the “I Agree” link that the student had to click), *rev’d on other grounds*, *A.V. v. iParadigms, LLC*, 562 F.3d 630 (4th Cir. 2009); *Adsit Co., Inc. v. Gustin*, 874 N.E.2d 1018, 1024 (Ind. Ct. App. 2007) (upholding Adsit’s policy containing a forum selection clause

iii. Browsewrap Licenses

¶40 The latest development in mass-market EULAs is the so-called browsewrap agreement. It typically states that Internet users may not use a website unless they agree to the site's terms of service. Mann and Siebeneicher explain that

the term in its purest form includes an interface that presents a link at the bottom of the page to the terms and conditions. It also includes more ambiguous situations, such as where there is a statement that the purchase is governed by terms that are linked to the page but requires no clicking of a radio button acknowledging the terms.¹⁶³

In the 21st century, the law of contracts is evolving to address social media and cloud computing. It is unclear what IP rights the users of Facebook, Twitter, and YouTube surrender, and how the law will evolve to address the unique qualities social media and Internet-related inventions.

iv. The Internet's Enablement of Copyright Infringement

¶41 The software publisher manufactures copies of its program for negligible marginal costs. The ease of copying or downloading is the principal difference between the licensing of software and the sale of durable goods. The ease of copying is software's best feature, as well as its Achilles' heel. Congress has responded to widespread copying by strengthening criminal penalties for copyright infringement. President William J. Clinton signed the No Electronic Theft Act of 1997 (NET), which fortified criminal penalties for Internet-related theft.¹⁶⁴ NET created a new crime of copyright infringement for which the prosecution needs no proof of the defendant's financial gain or motive. NET amended the U.S. Copyright Act to include piracy that caused commercial harm where there was no proof of the defendant's profit motive. NET was a legislative response to *United States v. LaMacchia*, where a criminal copyright indictment was

and choice of law clause where user was required to click on a button reading "I Accept" that was placed at the bottom of the webpage containing the policy).

¹⁶³ Ronald J. Mann & Travis Siebeneicher, *Just One Click: The Reality of Internet Retail Contracting*, 108 COLUM. L. REV. 984, 990 (2008).

¹⁶⁴ No Electronic Theft (NET) Act, Pub. L. 105-147, 111 Stat. 2678 (1997) (codified as amended at 18 U.S.C.A. § 2319 (2008)) (punishing Internet-related copyright piracy).

dismissed against a hacker because there was no proof that he financially gained from copying illegal content.¹⁶⁵

v. Peer-to-Peer Filing & Secondary Copyright Infringement

¶42 Peer-to-peer (P2P) sharing of video and music files is an Internet-related development that has reshaped the law of secondary copyright infringement. In *Metro-Goldwin-Mayer Studios, Inc. v. Grokster, Ltd.*,¹⁶⁶ the Supreme Court unanimously held that “one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement is liable for the resulting acts of infringement by third parties.”¹⁶⁷ The *Grokster* Court decided the case on an “intentional inducement” theory, declining to rule on the continuing vitality of the *Sony* test for contributory infringement.¹⁶⁸

¶43 A defendant is liable for contributory liability when they have “(1) knowledge of a third party’s infringing action activity and (2) includes, causes, or materially contribute to the infringing activity,”¹⁶⁹ and a showing that the third-party secondary infringer induced, caused, or materially contributed to the infringing activity.¹⁷⁰ The Court demonstrates in *Grokster* that it is receptive to imposing secondary liability on third parties that facilitate IP crimes or widespread infringement.

¶44 The Supreme Court found “[o]ne infringes contributorily by intentionally inducing or encouraging direct infringement”¹⁷¹ The Court based its inducement theory upon evidence the P2P networks intended and encouraged their products for file sharing, and

¹⁶⁵ 871 F. Supp. 535 (D. Mass. 1994).

¹⁶⁶ 545 U.S. 913 (U.S. 2005).

¹⁶⁷ *Id.* at 919.

¹⁶⁸ The *Sony* test determines “whether a company’s product is capable of substantial or commercially significant noninfringing uses.” *Id.* at 952 (citing *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984)). The Court reasoned that inducement requires an “unlawful purpose” that encourages infringement. *Grokster*, 545 U.S. at 938. The Court predicated active inducement upon proof that the defendant’s “statements and actions” promoted infringement. *Id.* at 935.

¹⁶⁹ *Perfect 10, Inc. v. Visa Int’l Ass’n*, 494 F.3d 788, 795 (9th Cir. 2007) (citing *Ellison v. Robertson*, 357 F.3d 1072, 1076 (9th Cir. 2004)).

¹⁷⁰ *See Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

¹⁷¹ *Grokster*, 545 U.S. at 930.

unanimously held “one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.”¹⁷² The “mere knowledge of infringing potential or actual infringing uses would not be enough here to subject [a defendant] to liability.”¹⁷³ The Court described how Grokster induced direct infringement in its advertising and business model, targeting millions of consumers. The Court noted that the “probable scope of copyright infringement [on the defendants’ file-sharing networks] is staggering.”¹⁷⁴

vi. Open Source & Internet-Related Software

¶45 The open source movement has also shaped and been shaped by Internet-related software developments. A growing number of Internet applications are powered by Free and Libre Open Source Software (FLOSS). The Firefox browser, for example, is built entirely upon open-source code.¹⁷⁵ FLOSS software is gaining new disciples in the business world because of its time-to-market advantage, reliability, and lower cost.¹⁷⁶ Apache License Version 2.0 grants the licensee a “perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and Derivative Works in Source or Object form.”¹⁷⁷ Judge Easterbrook described the history of Linux:

Linux is one of many modern derivatives of UNIX—which is not itself under the GPL. Thus Apple Computer, which uses the Berkeley Software Distribution variant of UNIX as the foundation for the Mac OS X operating system, is entitled to charge for its software. Linux,

¹⁷² *Id.* at 936–37.

¹⁷³ *Id.* at 937.

¹⁷⁴ *Id.* at 923.

¹⁷⁵ *See Our Mission*, MOZILLA, <http://www.mozilla.org/about/mission.html> (last visited Sept. 12, 2011) (explaining that Firefox browser was an open source project); MOZILLA FIREFOX WEB BROWSER, <http://www.mozilla.com/en-US/about/> (last visited Aug. 6, 2011).

¹⁷⁶ David Meyer, *Gartner: 85 Percent of Companies Using Open Source*, CNET.COM (Nov. 17, 2008), http://news.cnet.com/8301-1001_3-10098624-92.html.

¹⁷⁷ *Open Source Initiative OSI – Apache License, Version 2.0: Licensing*, Apache License Version 2.0, OPEN SOURCE INITIATIVE (Jan. 2004), <http://www.opensource.org/licenses/apache2.0.php>.

initially the work of Linus Torvalds, is maintained by a large open-source community.¹⁷⁸

¶46 Copyright law is a principal tool for insuring that FLOSS remains free. The developers of Firefox distributed the code in a General Public License (GPL) agreement.¹⁷⁹ The result is the GPL is viral and “propagates from user to user and revision to revision: neither the original author, nor any creator of a revised or improved version, may charge for the software or allow any successor to charge.”¹⁸⁰ The federal appeals court in *Wallace* describes how open-source licensors employ copyright law virally to enable free distribution of source code in their agreements:

Copyright law, usually the basis of limiting reproduction in order to collect a fee, ensures that open-source software remains free: any attempt to sell a derivative work will violate the copyright laws, even if the improver has not accepted the GPL.¹⁸¹

¶47 Hundreds of thousands of Linux servers power Google’s infrastructure. “Most of the ‘killer apps’ of the Internet . . . run on Linux or FreeBSD.”¹⁸² These “copyleft licenses” are used to transfer many Internet-related software applications.¹⁸³

vii. The Rules for Internet Service Providers

¶48 The Internet has created an entirely new set of copyright rules for intermediaries such as service providers. In 1998, Congress enacted the Digital Millennium Copyright Act (DMCA) to fulfill its obligations under the WIPO Copyright Treaty of 1996.¹⁸⁴ The DMCA adapted copyright law to the Internet and followed Judge

¹⁷⁸ *Wallace v. IBM*, 467 F.3d 1104, 1106 (7th Cir. 2002).

¹⁷⁹ *License Block: MPL 1.1/GPL 2.0/LGPL 2.1*, MOZILLA, <http://www.mozilla.org/MPL/boilerplate-1.1/mpl-tri-license-txt> (last visited Aug. 5, 2011).

¹⁸⁰ *Wallace*, 467 F.3d at 1105.

¹⁸¹ *Id.* at 1105 n.1.

¹⁸² Tim O’Reilly, *Open Source Paradigm Shift* (June 2004), http://tim.oreilly.com/articles/paradigmshift_0504.html.

¹⁸³ The meaning of copyleft, as well as open source, is shifting as this method of software licensing gains speed. Words, as Justice Oliver Wendell Holmes reminds us, are not fixed. Justice Holmes noted, “a word is not a crystal, transparent and unchanged . . . but may vary greatly in color and content according to the circumstances and the time in which it is used.” *Town v. Eisner*, 245 U.S. 418, 425 (1918).

¹⁸⁴ *Davidson & Assocs. v. Jung*, 422 F.3d 630, 639 (8th Cir. 2005).

Easterbrook's advice by developing new property rights where there were none.¹⁸⁵ The anti-circumvention provisions of the DMCA prohibit circumvention of "technological protection measures" that "effectively control access" to copyrighted works.¹⁸⁶

¶49 The DMCA provided a "safe harbor" for Internet Service Providers (ISPs) for intermediate and temporary storage of digital copies and other housekeeping tasks during Internet transmissions of copyrighted data.¹⁸⁷ The Online Copyright Infringement Liability Limitation Act (OCILLA) created limitations on liability for network service providers who fulfill specific safe-harbor exemptions.¹⁸⁸ OCILLA developed a mechanism of takedown notices for infringing content on websites.¹⁸⁹ In response, the service provider must remove the infringing material from the provider's website.¹⁹⁰ The subscriber has the right to issue a counter-notice, which informs the service provider that the material was improperly removed from the website "as a result of a mistake or misidentification[.]"¹⁹¹

¶50 Upon receipt of the counter-notice, the service provider must replace the subscriber's material on the website.¹⁹² The OCILLA seeks to limit the liability of ISPs for copyright infringement by their subscribers. The notice, takedown, putback, and immunity sections of the DMCA are prime examples of how the Internet has reshaped copyright law.¹⁹³

¹⁸⁵ *Ellison v. Robertson*, 357 F.3d 1072, 1076 (9th Cir. 2004) (observing that the DMCA provided greater certainty for Internet service providers as their copyright infringement exposure).

¹⁸⁶ 17 U.S.C. § 1201(a)(1) (2006) ("No person shall circumvent a technical measure that effectively controls access to a work.").

¹⁸⁷ *See* 17 U.S.C. § 512 (2006).

¹⁸⁸ *See id.* at § 512(c).

¹⁸⁹ *See id.* at §§ 512(c)(1)(C), 512(c)(3).

¹⁹⁰ *See id.* at § 512(c)(1)(C).

¹⁹¹ *See id.* at § 512(g)(3)(C).

¹⁹² *See id.* at § 512(g)(2)(C).

¹⁹³ Jane C. Ginsburg, *Separating the Sony Sheep From the Grokster Goats: Reckoning the Future Business Plans of Copyright-Dependent Technology Entrepreneurs*, 50 ARIZ. L. REV. 577, 590 (2008) (noting how Internet service providers lobbied for immunity in dealing with third-party content on their websites).

b. Trademark in Cyberspace

¶51 It is now difficult to imagine the contours of trademark infringement without considering new methods of infringement enabled by bandwidth, browsers, and digital data. Domain name cyberpirates attempting to sell a domain name containing a corporation's famous trademark did not exist prior to the mid-1990s. Beginning in the mid-1990s, entrepreneurs registered thousands of domain names containing the trademarks of famous companies in the hopes of selling them back for a ransom price.¹⁹⁴ "Domain names such as sex.com were traded, hijacked, or even converted in a Wild West-style virtual land boom."¹⁹⁵ The invention of domain names created a new legal dilemma not addressed by the Lanham Act.¹⁹⁶

¶52 In the past two decades, trademark law has been reworked to address challenges posed by domain names and cybersquatting.¹⁹⁷ Without Internet websites, no court would need to decide issues such as whether a pop-up ad infringed a company's trademark or constituted an unfair business practice in cyberspace.¹⁹⁸ Congress enacted the Anticybersquatting Consumer Protection Act of 1999 to prohibit the bad-faith and abusive registration of distinctive marks as Internet domain names.¹⁹⁹ Congress amended the Lanham Act to deter the practice of selling (or ransoming) domain names.²⁰⁰ Congress gave trademark owners an *in rem* remedy to file

¹⁹⁴ RUSTAD, *supra* note 18, at 3.

¹⁹⁵ *Id.*

¹⁹⁶ "The Internet, however, also has brought numerous new ways of infringing intellectual property rights to the fore. For example, because no two people or businesses can have the same domain name, a new type of trademark infringement dubbed 'cybersquatting' has emerged." TERRENCE P. ROSS, INTELLECTUAL PROPERTY LAW: DAMAGES AND REMEDIES 6-6 (2000).

¹⁹⁷ MARK A. LEMLEY ET AL., SOFTWARE LAW AND INTERNET LAW 631 (3d ed. 2006) (noting that the practice of registering domain names that corresponded to the trademarks of companies began in the mid-1990s).

¹⁹⁸ *See, e.g.*, Gator.com Corp. v. L.L. Bean, Inc., 341 F.3d 1072 (2d Cir. 2003) (finding a basis for general jurisdiction over L.L. Bean in its targeting California consumers with its online marketing and sales).

¹⁹⁹ Anticybersquatting Consumer Protection Act (ACPA), Pub. L. No. 106-113, 113 Stat. 1501 (codified as amended at 15 U.S.C. §§ 1114, 1116, 1117, 1125, 1127, 1129 (1999)).

²⁰⁰ Sporty's Farm L.L.C. v. Sportsman's Market, Inc., 202 F.3d 489, 495 (2d Cir. 2000).

infringement claims where the domain name owner cannot be located.²⁰¹

¶53 Trademarks in cyberspace must meet the same standard of distinctiveness as must be met in the bricks-and-mortar world. Trademarks are classified by courts on a continuum of distinctiveness: (1) generic (not protectable), (2) descriptive (protectable only if the mark acquires secondary meaning), (3) suggestive, (4) arbitrary, or (5) fanciful (strong marks).²⁰² The Federal Circuit, for example, drew upon “extensive precedent” in ruling that merely combining “.com” and “advertising” does not result in a descriptive mark, but is generic.²⁰³

¶54 In *Playboy Enterprises v. Chuckleberry Publishing*, the defendant used the trade name in a 1979 magazine, titled “Playmen,” a name substantially similar to that of the plaintiff, and was enjoined from using the mark.²⁰⁴ Fifteen years later, the same defendant established a website for Playmen. The *Chuckleberry* court held that the injunction also applied in the latter case, even though the images were on a server connected to the Internet.²⁰⁵ By 1996, courts were finding a defendant’s registration of a domain name containing a federal trademark constituted infringement or dilution.²⁰⁶

i. Introduction to Domain Names

¶55 Each time an Internet user seeks access to a website, they “enter the domain-name combination that corresponds to the IP address and is routed to the host computer.”²⁰⁷ ICANN was “created in 1998, in response to a policy directive of the Department of

²⁰¹ See, e.g., *Fleetboston Fin. Corp. v. Fleetbostonfinancial.com*, 138 F. Supp. 2d 121 (D. Mass. 2001).

²⁰² Rustad & Koenig, *supra* note 7, at 336–37.

²⁰³ *Advertise.com, Inc. v. AOL Adver., Inc.*, 616 F.3d 974, 978–79 (9th Cir. 2010).

²⁰⁴ *Playboy Enters., Inc. v. Chuckleberry Publ’g, Inc.*, 39 U.S.P.Q.2d 1746, 1750 (S.D.N.Y. 1996).

²⁰⁵ *Id.*

²⁰⁶ See, e.g., *Intermatic v. Toeppen*, 947 F. Supp. 1227 (N.D. Ill. 1996) (finding trademark law applied to domain names); *Panavision Int’l L.P. v. Toeppen*, 945 F. Supp. 1296 (C.D. Cal. 1996) (holding trademark owner’s websites violated the federal antidilution statute as well as California law, and that his use of domain names constituted “commercial use”).

²⁰⁷ *Lockheed Martin Corp. v. Network Solutions, Inc.*, 194 F.3d 980, 982 (9th Cir. 1999) (describing how domain names work).

Commerce, to administer the domain name system on the Department's behalf."²⁰⁸ "Every end-user's computer that is connected to the Internet is assigned a unique Internet Protocol number ('IP address'), such as 123.456.78.90, that identifies its location (i.e., a particular computer-to-network connection) and serves as the routing address for email, pictures, requests to view a web page, and other data sent across the Internet from other end-users."²⁰⁹ The domain name is analogous to a telephone number or a mailing address.²¹⁰

ii. Trademark Owners vs. Domain Name Registrants

¶56 The development of domain names has been the most significant cyberspace-related trademark development. Courts resolved more than 20,000 disputes between trademark owners and domain names during the period 2000–2011.²¹¹ In the early to mid-1990s, entrepreneurs registered domain names containing trademarks of famous companies in order to sell them back for a huge profit. Companies operating web sites needed to consider how trademark law influenced their choice of a domain name, their development of online brands, and website "look and feel." The year 1994 marked a number of highly publicized lawsuits between trademark owners and domain name registrants. In 1994, a New York federal district court issued the first opinion that addressed the conflicting rights between a domain name registrant and a trademark owner: *MTV Networks v. Curry*.²¹² Adam Curry, who was a former MTV video host, registered the Internet domain name "mtv.com" and MTV filed suit for trademark infringement as well as other causes of action.²¹³ The

²⁰⁸ *Coal. for ICANN Transparency, Inc. v. VeriSign, Inc.*, 611 F.3d 495, 500 (9th Cir. 2010).

²⁰⁹ *Id.* at 409.

²¹⁰ *Id.* at 410.

²¹¹ Christopher Gibson, *The UDRP and Compagnie Gervais Danone v Sequential Inc.* (Jan. 7, 2011), <http://itunes.apple.com/us/podcast/the-udrp-compagnie-gervais/id388454392?i=90264362>.

²¹² *See generally* 867 F. Supp. 202 (S.D.N.Y. 1994).

²¹³ "MTVN brought this action on several grounds, including trademark claims based on Curry's use of registered MTV marks and breach of Curry's employment contracts. Curry has counterclaimed for breach of oral contract, fraud/negligent misrepresentation, and unfair competition." *Id.* at 204.

parties entered into a settlement in which Curry agreed to transfer ownership of the domain name to MTV.²¹⁴

¶57 In the mid-1990s, trademark owners were uncertain as to whether a cybersquatter's incorporation of their trademarks domain names fell under "commercial use" for purposes of the Lanham Act. In 1996, the Ninth Circuit became the first federal appellate court to treat cybersquatting as "commercial use" in *Panavision International, L.P. v. Toeppen*.²¹⁵ Panavision charged Dennis Toeppen with cyberpiracy by registering domain names containing valuable trademarks.²¹⁶ When Panavision's attorney sent a letter to Toeppen ordering him to stop using the domain name, Toeppen offered to "settle the matter" if Panavision would pay him \$13,000 in exchange for the domain name.²¹⁷ Panavision filed an action for dilution under federal and state law, and the district court granted summary judgment in its favor on all claims.²¹⁸ In his appeal, Toeppen argued his registration of the domain name containing Panavision's trademark did not constitute commercial use.²¹⁹ The Second Circuit held Toeppen made commercial use of Panavision's mark in "his attempt to sell the trademarks themselves."²²⁰ The court affirmed the lower court, concluding Toeppen diluted Panavision's trademarks within the meaning of the Federal Trademark Dilution Act, as well as under California state law.²²¹

¶58 The most recent phenomenon of cyber-related trademark disputes, similar to the domain name cyber-piracy of the 1990s, is the trend of individuals reserving the usernames of famous companies

²¹⁴ "The . . . domain name was originally taken by MTV VJ Adam Curry. Although MTV originally showed little interest in the domain name or the Internet, when Adam Curry left MTV the company wanted to control the domain name. After a federal court action was brought, the dispute settled" Daniel A. Tysver, *Domain Name Disputes*, WELCOME TO BITLAW, <http://www.bitlaw.com/internet/domain.html#disputes> (last visited Sept. 12, 2011); Joan Meadows, *Trademark Protection for Trademarks Used as Internet Domain Names*, 65 U. CIN. L. REV. 1323, 1337 (1997) (noting the "parties settled out of court in March 1995, with MTV receiving ownership of the domain name as part of the settlement").

²¹⁵ 141 F.3d 1316 (9th Cir. 1998).

²¹⁶ *Id.* at 1318.

²¹⁷ *Id.* at 1319.

²¹⁸ *Id.*

²¹⁹ *Id.* at 1324.

²²⁰ *Id.* at 1325.

²²¹ *Id.*

with trademark protection on popular social networking sites, particularly Twitter.²²² For companies depending on social networking in order to effectively market and promote their brands, this is a big problem. Only seven of the top hundred global brands actually have their respective registered Twitter usernames (i.e. Pepsi).²²³ “Twittersquatters” are the latest evolutionary stage in cybersquatting and Internet-related trademark infringement.²²⁴

iii. Metatags

¶59 Trademark claims are actionable through the federal Lanham Act.²²⁵ In 1995, President Clinton signed the Federal Trademark Dilution Act, which amended the Lanham Act to protect the owners of famous trademarks from blurring or tarnishment.²²⁶ A court in August 1997 dealt with the conflict between trademarks and metatags in *Playboy Enterprises, Inc. v. Calvin Designer Label*.²²⁷ The *Calvin Designer* court mentioned the term “metatags” for the first time and enjoined the defendant from incorporating Playboy’s trademarks in its metatags, domain names, or other web content.²²⁸

¶60 In 1998, a court ruled for the first time that merely linking to a third party’s website with infringing content could not constitute trademark infringement.²²⁹ That same year, the United States Department of Commerce entered into an agreement with ICANN to replace Network Solutions Inc. in administering the domain name registration system.²³⁰ The *Bernstein v. J.C. Penney, Inc.* court ruled

²²² See Mike Masnick, *Twitter Squatters Take Over Where Domain Squatters Left Off: Resolution Policy Needed?*, TECHDIRT (Jan. 9, 2009, 6:30 PM), <http://www.techdirt.com/articles/20090109/1548133348.shtml>.

²²³ See *Pepsi*, TWITTER, <http://www.twitter.com/pepsi> (last visited Nov. 7, 2011) (Pepsi’s authentic Twitter account); see also Erik J. Heels, *How to Twittersquat the Top 100 Brands*, ERIK J. HEELS (Jan. 8, 2009), <http://erikjheels.com/?p=1298>.

²²⁴ Heels, *supra* note 223.

²²⁵ Trademark Act of 1946 (Lanham Act), Pub. L. No. 79-489, 60 Stat. 427 (1946).

²²⁶ Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, 109 Stat. 985 (1995).

²²⁷ 985 F. Supp. 1218 (N.D. Cal. 1997).

²²⁸ *Id.*

²²⁹ *Bernstein v. J.C. Penney, Inc.*, 50 U.S.P.Q.2d 1063, 1063–64 (C.D. Cal. 1998).

²³⁰ See Letter from Peter Dengate Thrush, Chairman of ICANN Bd. of Dirs., to Fiona M. Alexander, Assoc. Adm’r, NTIA, U.S. Dep’t of Commerce (June 8,

that a defendant merely linking to infringing material on a third party's website could not be liable for trademark infringement.²³¹

¶61 In 1999, the Ninth Circuit decided *Brookfield Communications, Inc. v. West Coast Entertainment Corp.*²³² The Ninth Circuit decided that a company that had used the term "movie buff" in certain slogans since the late 1980s could not also use that term in its domain name, or in metatags on its website, because that use was likely to infringe upon another's registered trademark.²³³ This was the first case to rule a defendant's use of metatags "to divert consumers to a competitor's website is itself a wrong in need of a remedy, and adopted the initial interest confusion doctrine from the offline world."²³⁴ A federal court ruled Playboy Enterprises had no action for trademark infringement against an Internet search engine for arranging combinations of advertising to appear on the results screen when an Internet user employed the words "playboy" or "playmate" as search terms.²³⁵ In another 1999 case, a federal appeals court ruled that the defendant's registration of "avery.com" and "dennison.com" for use in email addresses for persons with those surnames did not violate the Federal Trademark Dilution Act of 1995 because the trademark Avery/Dennison was distinctive, but not famous.²³⁶

¶62 The year 1999 also marked the release of the World Intellectual Property (WIPO) Internet Domain Name Process,²³⁷

2009), available at <http://www.icann.org/en/correspondence/dengate-to-alexander-08jun09-en.pdf> (stating, "On December 24, 1998, USC [and the government] entered into a transition agreement with the Internet Corporation for Assigned Names and Numbers (ICANN) under which ICANN secured directly from USC, all necessary resources, including key personnel, intellectual property, and computer facility access critical to the continued performance of the IANA functions.").

²³¹ See *Bernstein*, 50 U.S.P.Q.2d at 1063–64.

²³² 174 F.3d 1036 (9th Cir. 1999).

²³³ *Id.* at 1061–65.

²³⁴ Jonathan J. Darrow & Gerald R. Ferrera, *The Search Engine Advertising Market: Lucrative Space or Trademark Liability?*, 17 TEX. INTELL. PROP. L.J. 223, 253 (2009).

²³⁵ *Playboy Enters., Inc. v. Netscape Commc'ns Corp.*, 55 F. Supp. 2d 1070 (C.D. Cal. 1999).

²³⁶ *Avery Dennison Corp. v. Sumpton*, 189 F.3d 868 (9th Cir. 1999).

²³⁷ Christopher Gibson, now a Suffolk University Law Professor and Associate Dean, was the architect of the UDRP procedures for resolving conflicts between domain names and trademarks.

which it titled the Uniform Dispute Resolution Procedure (UDRP).²³⁸ The first WIPO UDRP proceeding was initiated in 2000 when the World Wrestling Federation (WWF) submitted an electronic complaint to the World Intellectual Property Organization's Arbitration and Mediation Center in order to gain control over the domain name www.worldwrestlingfederation.com.²³⁹ The WIPO Panel ruled that the registrant of this domain name acted in bad faith when it offered to sell the domain name to third parties for a significant profit.²⁴⁰ The Panel decided the contested domain name was identical or confusingly similar to the trademark and service mark in which the WWF had rights.²⁴¹ The WIPO panel transferred www.worldwrestlingfederation.com to the WWF, ruling that the respondent had no legitimate rights in the domain name.²⁴²

²³⁸ Press Release, World Intellectual Property Organization (WIPO), Record Number of UDRP Cybersquatting Cases in 2008, WIPO Proposes Paperless UDRP (Mar. 16, 2009), http://www.wipo.int/pressroom/en/articles/2009/article_0005.html (noting that the WIPO Uniform Dispute Resolution Procedure (UDRP) was launched in December of 1999).

²³⁹ "The first test of ICANN's UDRP came the day after it became effective. . . . The dispute arose when Mr. Borsman registered the domain name 'worldwrestling federation.com' for Sixty dollars (US \$60) and then offered to sell it to the WWF three days later for one thousand dollars (US \$1000)." Wayne Brooks, *Wrestling Over the World Wide Web: ICANN's Uniform Dispute Resolution Policy for Domain Name Disputes*, 22 HAMLINE J. PUB. L. & POL'Y 297, 320 (2001) (internal footnote omitted).

²⁴⁰ "On January 14, 2000, the first decision under the UDRP was issued from WIPO . . . [and] the one member panel (a Southern California lawyer) found that Bosman had registered the domain name in bad faith, . . . and ruled in favor of the WWF. The first round had been won by UDRP." *Id.* at 321-22 (internal footnote omitted).

²⁴¹ "On January 14, 2000, the first decision under the UDRP was issued from WIPO . . . [and] the one member panel (a Southern California lawyer) found that Bosman had registered the domain name in bad faith, . . . and ruled in favor of the WWF. The first round had been won by UDRP." *Id.* at 321-22 (internal footnote omitted).

²⁴² *World Wrestling Fed'n Entm't Inc. v. Bosnian*, No. D99-0001 (WIPO Arb. & Med. Ctr. Jan. 14, 2000). Ironically, the World Wrestling Federation later lost the rights to use the initials "WWF" as a result of a trademark battle with the World Wildlife Federation. See Gwendolyn Mariano, *Wrestling Loses WWF to Wildlife*, CNET NEWS (Feb. 28, 2002, 1:10 PM), <http://news.cnet.com/2100-1023-848026.html>.

iv. Liability of Domain Name Registrants

¶63 A federal district court in 1997 became the first to rule that a domain name registrar was not liable for direct infringement or for dilution because it had not made commercial use of the mark in its capacity as the sole and exclusive domain name registrar.²⁴³ Registrars are not liable for direct, contributory, or vicarious trademark infringement for accepting the registration of an Internet domain name that is confusingly similar to a plaintiff's service mark or trademark.²⁴⁴

¶64 A domain name registry is not liable for IP infringement, but may be subject to tort liability. In *Solid Host, NL v. Namecheap, Inc.*, a California federal district court held that a domain name registrar is not immune from trademark infringement claims for failing to prevent the registration of domain names infringing a trademark owner's registered marks.²⁴⁵ One of the difficulties that trademark owners faced in protecting their marks was to serve process on domain name owners. The *in rem* provisions of the ACPA allow the owner of a federally registered trademark to file suit against the domain name directly, rather than against the registrant, only if there is no personal jurisdiction over the registrant in any district.²⁴⁶

¶65 The first *in rem* proceeding against a domain name under the ACPA occurred when Porsche Cars North America filed an action against 128 domain names, alleging that they infringed or diluted the Porsche trademark.²⁴⁷ The Fourth Circuit ruled that the ACPA enabled Porsche to pursue an *in rem* remedy applying the revisions to the U.S. Copyright Act retroactively.²⁴⁸

²⁴³ 985 F. Supp. 949 (C.D. Cal. 1997) (holding domain name registrar not liable for failing to prevent registration of domain names that violated trademark owner's registered marks).

²⁴⁴ See *Lockheed Martin Corp. v. Network Solutions, Inc.*, 194 F.3d 980 (9th Cir. 1999).

²⁴⁵ 652 F. Supp. 2d 1092, 1104 (C.D. Cal. 2009).

²⁴⁶ Anticybersquatting Consumer Protection Act (ACPA), Pub. L. No. 106-113, 113 Stat. 1501 (codified as amended at 15 U.S.C. §§ 1114, 1116, 1117, 1125, 1127, 1129 (1999)). Under the ACPA, a trademark owner in a cybersquatting action can proceed in personam against the cybersquatter. But if that is unavailing, the owner may proceed in rem against the allegedly infringing domain name.

²⁴⁷ *Porsche Cars N. Am., Inc. v. Porsch.com*, 51 F. Supp. 2d 707 (E.D. Va. 1999).

²⁴⁸ *Porsche Cars N. Am., Inc. v. Porsche.net*, 302 F.3d 248, 253 (4th Cir. 2002).

¶66 The first U.S. court to address the question of whether a domain name could be converted was the Ninth Circuit in *Kremen v. Cohen*.²⁴⁹ In 1994, Gary Kremen registered the domain name sex.com with Network Solutions, the domain name registrar.²⁵⁰ Stephen Cohen, an ex-convict, sent a letter to Network Solutions, making it appear that the letter was from Kremen's company, Online Classifieds.²⁵¹ The fraudulent letter represented that Online Classifieds "had been 'forced to dismiss Mr. Kremen,' but 'never got around to changing [its] administrative contact with the internet registration.'"²⁵² Cohen's letter stated his company's intent to "abandon the domain name sex.com" without further explanation.²⁵³ Network Solutions deleted Kremen's "registration of sex.com and re-registered it to Sporting Houses Management, Inc., one of Cohen's alter ego corporations, with Cohen listed as the administrative contact."²⁵⁴ The domain name registrar made no effort to contact Kremen and transferred the domain name to Cohen, nor did the registrar ascertain whether the letter requesting the domain name was authentic.²⁵⁵

¶67 When Gary Kremen contacted Network Solutions to reinstate his registration, the Registrar's employee "informed him that it would not do so absent a court order."²⁵⁶ Stephen Cohen used the sex.com domain name to develop an Internet pornography empire.²⁵⁷ Kremen filed a lawsuit against Cohen, the perpetrator of the fraud but also against Network Solutions for enabling the fraudulent transfer of sex.com.²⁵⁸

¶68 The district court concluded that the Cohen letter was a forgery, and accordingly, directed him to return the domain name to Kremen.²⁵⁹ The federal district court ruled that Network Solutions could not be liable for conversion because this personal property tort required the plaintiff to have "ownership or right to possession of the

²⁴⁹ 337 F.3d 1024 (9th Cir. 2003).

²⁵⁰ *Id.* at 1026.

²⁵¹ *Id.*

²⁵² *Id.*

²⁵³ *Id.*

²⁵⁴ *Id.* at 1039.

²⁵⁵ *Id.* at 1027.

²⁵⁶ *Id.* at 1019.

²⁵⁷ *Id.* at 1026.

²⁵⁸ *Id.* at 1028.

²⁵⁹ *Id.* at 1027–28.

property at the time of the conversion.”²⁶⁰ The district court reasoned that a domain name was an intangible that could not be possessed.²⁶¹ After the district court decision, Cohen fled the jurisdiction.²⁶²

¶69 Kremen appealed the district court’s decision to revisit his claim that Network Solutions converted his domain name. The Ninth Circuit requested that the California Supreme Court determine whether a domain name could be converted or “specifically, is an Internet domain name merged with a document or other tangible medium?”²⁶³ The California Supreme Court declined to answer the certified questions.²⁶⁴ Reversing in part, the Ninth Circuit ruled that Kremen had a conversion claim against Network Solutions.²⁶⁵ Judge Alex Kozinski, writing for the court, reasoned that Kremen’s ownership of a URL domain name constituted ownership of property under California’s personal property tort of conversion.²⁶⁶

¶70 Domain name litigation continues to evolve in the new century. Recently, in *Baidu, Inc. v. Register.com, Inc.*,²⁶⁷ Baidu, China’s largest search engine, filed a lawsuit for trademark infringement, breach of contract, and gross negligence against Register.com, a domain name registry, for negligent security and enabling a hacker’s cyberattack on Baidu’s website. “Baidu, Inc. provides Chinese and Japanese language Internet search services” that enable Internet users to locate online information such as “[w]eb pages, news, images, multimedia files, and blogs through the links provided on its Websites.”²⁶⁸ On January 11, 2010, a hacker who gained “unauthorized access to Baidu’s account at Register” hijacked

²⁶⁰ Kremen v. Cohen, 99 F. Supp. 2d 1168, 1172 (N.D. Cal. 2000).

²⁶¹ *Id.* at 1173.

²⁶² See Kremen v. Cohen, No. 01-15886, 2002 WL 2017073 (9th Cir. Aug. 30, 2002); Kremen v. Cohen, 337 F.3d 1024, 1027 (9th Cir. 2003) (stating Cohen moved his assets off-shore and defaulted on the judgment).

²⁶³ Kremen v. Cohen, 325 F.3d 1035, 1038 (9th Cir. 2003).

²⁶⁴ Kremen v. Cohen, 2003 Cal. LEXIS 1342, No. S112591 (Cal. Feb. 25, 2003).

²⁶⁵ *Id.* at 1036. The Ninth Circuit certified two questions to the California Supreme Court: (1) whether a domain name is subject to the tort of conversion, and (2) if a domain name is subject to this tort, is an “Internet domain name merged with a document or other tangible medium?” Kremen v. Cohen, 325 F.3d 1035, 1038 (9th Cir. 2003).

²⁶⁶ *Id.*

²⁶⁷ Baidu, Inc. v. Register.com, Inc., 760 F. Supp. 2d 312 (S.D.N.Y. 2010).

²⁶⁸ *Baidu Inc.-Spon ADR (BIDU:NASDAQ GS)*, BLOOMBERG BUSINESS WEEK, http://investing.businessweek.com/businessweek/research/stocks/snapshot/snaps_hot.asp?ticker=BIDU:US (last visited Jan. 14, 2010).

Baidu's website.²⁶⁹ The cybercriminal masqueraded as Baidu's agent requesting a change of its email address in an online chat with Register.com's service representative.²⁷⁰

¶71 The service representative asked the hacker to provide security information and the intruder gave the incorrect answer.²⁷¹ Nevertheless, the representative gave the hacker critical information that enabled him to gain unauthorized access to Baidu's account. The hacker rerouted Internet traffic intended for Baidu to a webpage displaying "an Iranian flag and a broken Star of David proclaiming: 'This site has been hacked by the Iranian Cyber Army.'"²⁷² The hijacking of the Baidu website diverted Internet traffic for approximately five hours.²⁷³ Baidu filed suit against Register.com in a New York federal district court bringing claims of breach of the terms of service agreement, gross negligence, and secondary trademark infringement.²⁷⁴

¶72 Register.com's terms of service agreement limits its liability for interrupted service and other errors or omissions.²⁷⁵ The federal district court held that Baidu's complaint for negligence could nevertheless go forward because Register.com's gross negligence was beyond the sphere of the agreement.²⁷⁶ The court ruled that Register.com was not entitled to a ruling that it was immune because it was acting as a registrar.²⁷⁷ The court found that Register.com was neither registering a domain name nor maintaining it when it gave the intruder unauthorized information that enabled it to control Baidu's website.²⁷⁸ The court ruled Baidu did not meet its burden in proving Register.com was secondarily liable for trademark infringement.²⁷⁹ The court applied the contributory trademark infringement test articulated first in *Tiffany (NJ) Inc. v. eBay, Inc.*²⁸⁰ The court held

²⁶⁹ *Id.*

²⁷⁰ *Id.* at 315.

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ *Id.*

²⁷⁴ *Id.* at 314.

²⁷⁵ *Id.* at 315.

²⁷⁶ *Id.* at 317.

²⁷⁷ *Id.* at 320.

²⁷⁸ *Id.* at 320–21.

²⁷⁹ *Id.* at 321.

²⁸⁰ 600 F.3d 93 (2d Cir. 2010).

Register.com did not induce infringement because the intruder had tricked it and it did not have knowledge of direct infringement.²⁸¹

v. Commercial Use in Cyberspace Developments

¶73 During the past decade, a large number of courts have grappled with the question of what constitutes “commercial use” in cyberspace.²⁸² A trademark infringement complainant under the Lanham Act must prove that the defendant has made “use in commerce” of the plaintiff’s trademark.²⁸³ To prevail in a federal trademark infringement claim, a plaintiff must not only establish that it has a valid mark entitled to protection, and that they used the mark in commerce, but also that the defendant used the mark in commerce.²⁸⁴ The Second Circuit in *1-800 Contacts, Inc. v. WhenU.com, Inc.* reversed the district court’s issuance of a preliminary injunction that enjoined WhenU.com from causing “pop up” advertisements to appear on Internet users’ computer screens when they went to 1-800 Contacts’s website or each time a user enters a search with a given trademark.²⁸⁵ The federal appeals court reasoned that WhenU.com’s use of 1-800 Contacts’s trademarks did not constitute “use in commerce”—a predicate for a finding of trademark infringement under the Lanham Act.²⁸⁶ “The fatal flaw” in finding infringement in the pop-up ad context “is that WhenU’s popup ads do not display the 1-800 trademark.”²⁸⁷ The court found the defendant’s use of the trademarks in dispute as “analogous to an

²⁸¹ 760 F. Supp. 2d at 321.

²⁸² See generally Margreth Barrett, *Internet Trademark Suits and the Demise of “Trademark Use,”* 39 U.C. DAVIS L. REV. 371, 396–423 (2006).

²⁸³ See 15 U.S.C. § 1127 (2006) (stating commercial use requirement under the Lanham Act).

²⁸⁴ “[A] plaintiff must establish that (1) it has a valid mark that is entitled to protection under the Lanham Act; and that (2) the defendant used the mark, (3) in commerce, (4) in connection with the sale or advertising of goods or services, (5) without the plaintiff’s consent.” *1-800 Contacts, Inc. v. WhenU.com, Inc.*, 414 F.3d 400, 406–07 (2d Cir. 2005) (citations omitted). Further, “the plaintiff must show that defendant’s use of that mark is likely to cause confusion as to the affiliation, connection, or association of defendant with plaintiff, or as to the origin, sponsorship, or approval of the defendant’s goods, services, or commercial activities by plaintiff.” *Id.* (citations omitted).

²⁸⁵ *1-800 Contacts, Inc. v. WhenU.com, Inc.*, 414 F.3d 400, 412–13 (2d Cir. 2005).

²⁸⁶ *Id.* at 413.

²⁸⁷ *Id.* at 410.

individual's private thoughts about a trademark. Such conduct simply does not violate the Lanham Act."²⁸⁸

¶74 In *Rescuecom Corp. v. Google*, the Second Circuit held that Google used Rescuecom's trademark in commerce when it sold keywords containing its mark.²⁸⁹ Google used Rescuecom's trademark in its Keyword Suggestion Tool, through which it recommended to potential advertisers that the keyword was available for a fee. Trademark protection on social network websites is the most recent dilemma created by the evolving Internet. The next section focuses upon how trade secrets may be lost at the click of a mouse.

c. Trade Secrets in Cyberspace

The power of computer technology has increased exponentially, resulting in more powerful means for the theft and transfer of proprietary information. The rapid growth of the Internet is a reflection of this boom. In fact, the corollary is also true: the Internet is now a tool for the destruction of trade secret assets.²⁹⁰

¶75 Trade secret misappropriation, whether direct or contributory, is essentially a tort and implies the invasion of some legally protected right of the owner.²⁹¹ Trade secrets protection and the remedy of misappropriation give the trade secret owner a competitive advantage.²⁹² The common law of trade secrets was first conceptualized as a business tort in the 19th century.²⁹³ Today, trade secrets are classified as a branch of IP rooted in tort law and the law of contracts. Most U.S. jurisdictions have adopted some version of

²⁸⁸ *Id.* at 409.

²⁸⁹ See generally 562 F.3d 123 (2d Cir. 2009).

²⁹⁰ R. Mark Halligan, *Protection of U.S. Trade Secret Assets: Amendments to the Economic Espionage Act of 1996*, 7 J. MARSHALL REV. INTELL. PROP. L. 656, 657 (2008).

²⁹¹ The emblem of a trade secret is that "some element must be unknown to the public." See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (1974).

²⁹² *Rivendell Forest Prods. v. Georgia Pacific Corp.*, 28 F.3d 1042, 1046 (10th Cir. 1994).

²⁹³ Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CALIF. L. REV. 241, 245 (1998) (contending that Roman law prefiguring trade secret protection is not comparable to modern trade secret law).

the Uniform Trade Secrets Act (UTSA).²⁹⁴ Trade secret protection is particularly difficult in a networked world where digitalized information may be lost at the click of the mouse.²⁹⁵

¶76 One of the first convictions under the federal Electronic Communications Privacy Act occurred when hackers, known as “Prophet” and “Knight Lightning,” gained unauthorized access to BellSouth’s 911 computer files and published them in a hacker’s newsletter.²⁹⁶ The defendants sent “communications to each other via electronic mail” and published an issue of PHRACK, which contained a series of tutorials about breaking into computer systems.²⁹⁷ One of the greatest dangers facing companies is the possibility that malicious hackers, disaffected employees, or unknown third parties will maliciously divulge trade secrets online. Malicious ex-employees can destroy the trade secret status of new product blueprints, customer lists, or other proprietary information with the push of a button. Once a trade secret is revealed to millions on the Internet, it is reasonably certain that it can no longer be classified as a trade secret.

¶77 The Religious Technology Center of the Church of Scientology was the plaintiff in a number of groundbreaking Internet-related cases. In *Religious Technology Center v. Lerma*,²⁹⁸ an ex-Scientologist published Church documents on the Internet.²⁹⁹ The Religious Technology Center (RTC) sought a temporary restraining order prohibiting Lerma’s distribution of documents the church

²⁹⁴ UNIF. TRADE SECRETS ACT (1985). Forty-six states and the District of Columbia have adopted the UTSA, drafted by the National Conference of Commissioners on Uniform State Law. Michael Jacobs & Jana Gold, *Uniform Trade Secrets Act Preemption: An Obscure Doctrine Finally Gets Its Day in Court*, MORRISON & FOERSTER (Sept. 11, 2007), <http://www.mofo.com/uniform-trade-secrets-act-preemption-an-obs-cure-doctrine-finally-gets-its-day-in-court-09-11-2007/>.

²⁹⁵ See generally Elizabeth A. Rowe, *Contributory Negligence, Technology, and Trade Secrets*, 17 GEO. MASON L. REV. 1, 3 (2009) (arguing digital data is more vulnerable to trade secret misappropriation); Andrew Beckerman-Rodau, *Trade Secrets – The New Risks to Trade Secrets Posed by Computerization*, 28 RUTGERS COMPUTER & TECH. L.J. 227 (2002) (describing the difficulties of protecting trade secrets in the modern networked world of computers).

²⁹⁶ *United States v. Riggs*, 743 F. Supp. 556, 556–57 (N.D. Ill. 1990).

²⁹⁷ *Id.* at 557–58.

²⁹⁸ 897 F. Supp. 260 (E.D. Va. 1995).

²⁹⁹ *Id.* at 261.

protected as trade secrets.³⁰⁰ The federal court ruled that the defendants were to preserve the status quo and not make further copies of the Church of Scientology documents.³⁰¹ In a later proceeding, the federal court ruled that Lerma could only use the documents “in a fair use capacity.”³⁰²

¶78 Congress enacted the Economic Espionage Act (EEA) in 1996 to criminalize the misappropriation of trade secrets.³⁰³ An empirical study of all EEA prosecutions from the federal criminal statute’s enactment in 1996 to August 1, 2005 uncovered fewer than fifty economic or espionage prosecutions filed in federal courts.³⁰⁴

d. Patent Law in Cyberspace

¶79 The scope of patent law covers “any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement.”³⁰⁵ Patents do not protect an “abstract, idea, principle or force, law of nature or natural phenomenon.”³⁰⁶ Software code for compilers, applications, and processes performed by a computer game are patentable.³⁰⁷ The courts have played a significant role in determining the reach of e-business patents.

³⁰⁰ *Id.*

³⁰¹ *Id.* at 267.

³⁰² *Religious Tech. Ctr. v. Lerma*, 908 F. Supp. 1353, 1362 (E.D. Va. 1995).

³⁰³ See Economic Espionage Act of 1996, Pub. L. No. 104-294, 110 Stat. 3488 (codified as amended at 18 U.S.C. §§ 1831–39 (2000)); see also J. Michael Chamblee, *Validity, Construction, and Application of Title I of Economic Espionage Act of 1996*, 177 A.L.R. FED. 609, 617–18 (2005) (The EEA was enacted to fill a gap in the law. “Other federal statutes, such as the National Stolen Property Act, 18 U.S.C. §2314, and the Mail and Wire Fraud Statutes, 18 U.S.C. § 1341 and 18 U.S.C. §1343, were also of limited use in combating the problem of economic espionage.”).

³⁰⁴ Michael L. Rustad, *The Negligent Enablement of Trade Secret Misappropriation*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 455, 458 (2006) (presenting empirical findings from study of the first decade of Economic Espionage Act prosecutions).

³⁰⁵ 35 U.S.C. §101 (2006).

³⁰⁶ *In re Alappat*, 33 F.3d 1526, 1552 (Fed. Cir. 1994), *abrogated on other grounds by In re Bilski*, 545 F.3d 943, 959–60 (Fed. Cir. 2008).

³⁰⁷ See, e.g., *Atari Games Corp. v. Nintendo of Am., Inc.*, 975 F.2d 832, 839 (Fed. Cir. 1992) (“Title 35 protects the process or method performed by a computer program.”).

¶80 Amazon.com devised a method for expediting online orders known as the 1-Click system.³⁰⁸ Amazon.com filed a complaint against Barnesandnoble.com, charging its online competitor with patent infringement.³⁰⁹ The U.S. District Court for the Western District of Washington granted a preliminary injunction enjoining Defendant Barnesandnoble.com, Inc. (BN) from using the “Express Lane” ordering feature of its website because it infringed Amazon’s 1-Click business method patent.³¹⁰ The “1-Click system[] enables customers to purchase goods online from Amazon.com.”³¹¹ The 1-Click system enables “customers who have previously stored information, including credit card numbers and shipping addresses, to place an order without having to reenter the stored information.”³¹²

¶81 The Federal Circuit reversed vacating the injunction based upon patent infringement and remanded the case to the U.S. district court for further proceedings.³¹³ The court reasoned that, while Amazon.com demonstrated a likelihood of literal infringement, Barnesandnoble.com raised substantial questions as to the validity of the 1-Click patent, given prior art that was available at the time of the invention.³¹⁴ In March 2002, the online rivals entered into a confidential settlement of their e-business patent dispute.³¹⁵

¶82 Amazon.com later prevailed in another patent infringement lawsuit regarding its 1-Click system of doing business in 2005.³¹⁶ IPXL Holdings contended “Amazon’s ‘1-click system’ infringed claims 1, 2, 9, 15 and 25 of its U.S. Patent No. 6,149,055 (the ‘055

³⁰⁸ Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1347 (Fed. Cir. 2001).

³⁰⁹ Ralph Libshon, *Madness in the Method: Will ‘Method of Doing Business’ Patents Undermine the Web?*, NETCOMMERCE MAG., Mar. 2000, at 7.

³¹⁰ Amazon.com, Inc. v. Barnesandnoble.com, Inc., 73 F. Supp. 2d 1228 (W.D. Wash. 1999) (ordering injunction against Barnesandnoble.com preventing it from using 1-Click on its online book seller’s site).

³¹¹ Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1347 (Fed. Cir. 2001).

³¹² IPXL Holdings, L.L.C. v. Amazon.com, Inc., 430 F.3d 1377, 1379 (Fed. Cir. 2005) (describing the 1-Click business method).

³¹³ Amazon.com v. Barnesandnoble.com, 239 F.3d at 1366 (Fed. Cir. 2001).

³¹⁴ *Id.*

³¹⁵ Gregory Rosenblatt, Christina K. Peterson, & Jody Lynn DeStefanis, *A Sleeping Tiger? Business Method Patent Protection for Franchise Systems*, 22 FRANCHISE L.J. 9, 14 (2002).

³¹⁶ *IPXL Holdings*, 430 F.3d at 1378.

patent).³¹⁷ The district court found that Amazon did not infringe IPXL's '055 patent "and that all relevant claims were invalid."³¹⁸ The district court awarded Amazon attorney fees and costs ruling that the case was exceptional.³¹⁹ The Federal Circuit affirmed the lower court, but reversed its order for attorneys' fees and costs.³²⁰ In 2010, Amazon.com again withstood a challenge for its 1-click purchasing method.³²¹

¶83 Critics of Internet-related method patents contend that these innovations would develop without patent protection.³²² Internet-related business methods give the holder the right to control the use of the technology. The level and extent of the control depends upon the business method. All patents balance antitrust concerns against market dominance. Patent holders who obtain a patent to discourage competitors will have a chilling impact on e-commerce.

¶84 The Internet has reshaped the course of each branch of IP, which is emblematic of its impact on every other branch of the law. Part III will provide lawyers with the equivalent of an Internet law global positioning system (GPS) to chart the future path of the law across national borders.

III. U.S. & INTERNATIONAL RESOURCES FOR THE LAWYER LOST IN CYBERSPACE

Existing rules and principles can give us our present location, our bearings, our latitude and longitude. The inn that shelters for the night is not the journey's end. The law, like the traveler, must be ready for the morrow. It must have a principle of growth.

– Benjamin Cardozo³²³

³¹⁷ *Id.* at 1378.

³¹⁸ *Id.*

³¹⁹ *Id.*

³²⁰ *Id.*

³²¹ *Cordance Corp. v. Amazon.com, Inc.*, 727 F. Supp. 2d 310, 313 (D. Del. 2010) (reporting jury verdict that Amazon.com did not infringe any of the plaintiff's claims).

³²² Michael A. Carrier, *Unraveling the Patent-Antitrust Paradox*, 150 U. PA. L. REV. 761, 826 (2002) (arguing that too much patent protection for e-business method patents may not be desirable because it undermines competitiveness).

³²³ BENJAMIN N. CARDOZO, *THE GROWTH OF THE LAW* 19–20 (2d ed. 1973).

¶85 The internationalization of Internet law has the potential to create a cross-border legal order linking lawyers in a networked world. Lawyers and legal academics can draw upon a massive treasure trove of civil codes, court decisions, statutes, and administrative rulings from around the world. Internet users can link to law schools, law firms, federal agencies, and international agencies merely at the click of a mouse.

¶86 The Internet's transformative effect on popular culture is unprecedented. "Radio was in existence 38 years before 50 million people tuned in, TV took thirteen years to reach that benchmark. Sixteen years after the first PC kit came out, 50 million people were using one."³²⁴ By March 2011, there were 2.10 billion persons connected to the Internet.³²⁵

¶87 Earlier in this article, we asked what would be different if the Internet was not created, drawing upon a theme from *It's a Wonderful Life*. In that film, a disillusioned George Bailey (played by Jimmy Stewart) makes a wish that he had never lived. Clarence the Angel grants George his wish and shows how life in his hometown would have been different if he had never been born. Our reference to this classic holiday film allowed us to speculate on how the world's legal institutions might be different if the Internet had never been created. We argued that the Internet has transformed the law of IP in profound ways. Internet law is a moving stream, not a stagnant pond, and it is therefore necessary to follow the footsteps of the rapidly evolving path of the law.

¶88 In this part of our article, we explore how the Internet has reshaped legal research methods. The Internet reshapes the way lawyers conduct their legal research and access information, and has made information retrieval far faster and in many ways more efficient than ever before. Internet law is no longer a sleepy backwater, and new research strategies must be developed to be able to trace the future path of the law of cyberspace.

¶89 Thanks to the creation of the Internet, both free and fee-based legal resources have flourished in the world of legal research. When Westlaw and Lexis first switched to a web-based interface in the late

³²⁴ Rustad & Koenig, *supra* note 7, at 362.

³²⁵ *Internet Usage Statistics: The Internet Big Picture*, INTERNET WORLD STATS (Mar. 31, 2011), <http://www.internetworldstats.com/stats.htm>.

1990s, “they moved the search application to their servers and eliminated the need for software to be installed and updated on every computer used for research.”³²⁶ This development meant that with a subscription, a lawyer could access all the resources on Westlaw and Lexis, 24 hours a day, 7 days a week, and from any computer in the world just by entering a username and password. By 2000, “Lexis had 11,400 databases and 2.1 million subscribers worldwide and was adding 8.7 million documents every week.”³²⁷ Westlaw and Lexis, the twin towers of e-libraries, are coming close to fulfilling Justice Benjamin Kaplan’s vision of networks of computers capable of storing the entire treasure of the accumulated knowledge of courts, legislatures, and legal academics. In a 1966 Carpentier Lecture at Columbia University Law School, Justice Kaplan speculated about an interrelated network of computer systems that was not yet in existence:

You must imagine, at the eventual heart of things to come, linked or integrated systems or networks of computers capable of storing faithful simulacra of the entire treasure of the accumulated knowledge and artistic production of past ages, and of taking into the store new intelligence of all sorts as produced. . . . Lasers [and] satellites [among others] will operate as ganglions to extend the reach of the systems to the ultimate users³²⁸

¶90 Nevertheless, escalating costs for using comprehensive online research systems with robust searching features, coupled with the economic downturn and budgetary concerns that have plagued law firms, have caused state, federal, and international government agencies and courts to use free and low cost resources over the last few years.³²⁹ A growing number of law firms are establishing internal

³²⁶ Diane Murley, *Law Libraries in the Cloud*, 101 LAW LIBR. J. 249, 254 (2009).

³²⁷ Paul Hellyer, *Assessing the Influence of Computer-Assisted Legal Research: A Study of California Supreme Court Opinions*, 97 LAW LIBR. J. 285, 287 (2005).

³²⁸ BENJAMIN KAPLAN ET AL., AN UNHURRIED VIEW OF COPYRIGHT, REPUBLISHED (AND WITH CONTRIBUTIONS FROM FRIENDS) 13 (Iris C. Geik et al. eds., Matthew Bender 2005) (1967).

³²⁹ Other low cost caselaw databases that are good alternatives to the more expensive research products include Loislaw, Fastcase, Casemaker, and PACER. See generally Laura K. Justiss, *A Survey of Electronic Research Alternatives to LexisNexis and Westlaw in Law Firms*, 103 LAW LIBR. J. 71 (2011).

legal research procedures and guidelines limiting the use of Westlaw, Lexis and other fee-based resources, and encouraging the use of less costly or free online resources.³³⁰

¶91 The most recent trends in online legal research are “The Open Source/Free/Cost-Effective Movement,”³³¹ as well as alert tools and RSS feeds that allow lawyers to stay abreast of the latest Internet case law developments by having breaking news delivered to their email accounts or RSS readers.³³² In the last few years, based largely on economic strains and budget cuts, there has been tremendous growth in the creation and use of complimentary or online legal resources. As a result, “a majority of lawyers now use free online legal resources in their research.”³³³ Fifty-four percent of lawyers first use free online resources, whereas thirty percent first start with online fee-based resources.³³⁴

¶92 Internet law and advances in online technology are transforming every aspect of U.S., international, and foreign law. Not surprisingly, the way academics, practitioners, and government officials conduct legal research is being transformed. Access to free or low cost resources as well as automatic alert services and tools make it possible to keep abreast of the future path of Internet legal research. Just as Google has reshaped legal doctrine, it has also Googilized research methods.³³⁵ Google Scholar, for example, has a searchable library of state and federal cases. Over the course of the next several years, Google will continue to develop user-friendly legal research tools that will increase accessibility for Internet users around the world.

³³⁰ *Id.* at 73.

³³¹ Deborah K. Hackerson, *Access to Justice Starts in the Library: The Importance of Competent Research Skills and Free/Low-Cost Research Resources*, 62 ME. L. REV. 473, 483 (2010).

³³² David Hobbie, *Personal Knowledge Management: Turning Down the Information Fire Hose*, 36 LAW PRAC. 26, 27 (2010).

³³³ David G. Badertscher & Deborah E. Melnick, *Is Primary Legal Information on the Web Trustworthy?*, 49 JUDGE J. 13, 13 (2010).

³³⁴ Nina Platt, *ABA 2010 Legal Technology Survey – v. 5 Online Research*, STRATEGIC LIBRARIAN (Oct. 11, 2010), <http://strategiclibrarian.com/2010/10/11/aba-2010-legal-technology-survey-v-5-online-research/>.

³³⁵ *Googlization*, WIKIPEDIA, <http://en.wikipedia.org/wiki/Googlization> (last visited Mar. 18, 2011).

¶93 Another example of a paradigmatic shift in legal research is WestlawNext. Launched on February 1, 2010, West's new product is "simpler and more intuitive," and allows users to "search everything all at once" without having to choose specific databases or libraries.³³⁶ Peter Warwick, CEO of Thomson Reuters Legal, states that WestlawNext was created "to work the way our customers do . . . to be more human. To that end, WestlawNext is elegant, agile, easy to use, more precise, truly intelligent, and intuitive. But behind the scenes, it has remarkably complex and powerful technology."³³⁷ Lexis is in the process of developing a similar type of user-friendly interface.³³⁸ What Westlaw and Lexis have both tapped into is that users want quick and easy research tools at their fingertips. These commercial services are accommodating to new norms where users often check Google first, before the commercial services.³³⁹

¶94 With so many online legal research tools, it is difficult for legal researchers not to be overwhelmed by information overload. This part of our article gives the reader guideposts to the best available free and subscription resources to stay current with U.S. and global Internet legal developments.

A. Subscription Databases

1. Internet Law Resource Center (BNA)

¶95 *Pike & Fischer's Internet Law & Regulation* recently merged into BNA's *Electronic Commerce and Law Report*³⁴⁰ to create this

³³⁶ Robert Ambrogi, *A Great Leap Forward: WestlawNext is a Complete Reworking of the Search Interface—and Engine*, LAW TECHNOLOGY NEWS (Feb. 28, 2010), <http://www.law.com/jsp/lawtechnologynews/PubArticleLTN.jsp?id=1202444363554&slreturn=1&hbxlogin=1>; see also *WestlawNext, WestlawNext Mobile and Workflow Integration Take Center Stage at AALL*, WEST STORE (July 12, 2010), <http://west.thomson.com/about/news/2010/07/12/westlawnext-center-stage-at-aall.aspx>.

³³⁷ *Id.*

³³⁸ *Id.*

³³⁹ John Palfrey, *Cornerstones of Law Libraries for an Era of Digital-Plus*, 102 LAW LIBR. J. 171, 177 (2010). For a discussion about why legal researchers must develop more advanced searching skills and not rely solely on the Google model, see Bernard J. Hibbitts, *The Technology of Law*, 102 LAW LIBR. J. 101, 106 (2010).

³⁴⁰ *Internet Law Resource Center*, BNA, <http://www.bna.com/products/corplaw/ilrc.htm> (last visited Mar. 13, 2011).

enhanced BNA product. Pike and Fischer's comprehensive database includes full-text decisions and pleadings for major Internet-related cases in the U.S. and around the world, as well as the text of major laws and policies affecting the Internet. Pike and Fischer's service covers "pleadings, statutes, regulations and expert insight addressing the Internet's legal landscape—all in one platform."³⁴¹

2. Westlaw³⁴²

a. Specialized Internet-Related Resources

¶96 To find Internet law cases and developments in law review and journal articles on Westlaw, subscribers can search the Intellectual Property: Law Reviews, Texts & Bar Journals database.³⁴³ Another valuable database is Westlaw Journal: Computer and Internet. This resource covers copyright, patent, and trademark claims; trade secret litigation; contract disputes; antitrust cases; and suits arising from online services and commerce on the Internet, including IP protection, privacy, libel, government regulation, computer crime, and access to data. It also has documents from the formerly-published Andrews databases such as *Andrews Computer & Online Industry Litigation Reporter*, *Andrews E-Patent Litigation Reporter*, and the *Andrews Computer and Internet Litigation Reporter*.

b. Internet Caselaw on Westlaw

¶97 To search for current Internet law cases on Westlaw, select a jurisdiction and limit the search to find cases that have your terms in the synopsis or digest fields.³⁴⁴ Westlaw is a source for a number of specialized Internet-related databases that includes the *Andrews E-Business Law Bulletin*. This specialized database contains the *E-Discovery and Procedure Litigation Reporter*, the *Electronic Privacy Litigation Reporter*, and the *E-Trading Legal Alert*. Westlaw

³⁴¹ *Id.*

³⁴² Westlaw is a subscription database. For more details about any of the Westlaw databases mentioned in this article, see <http://web2.westlaw.com> (last visited Oct. 12, 2011) or contact a Westlaw representative by calling 1-800-937-8529.

³⁴³ From the main directory page, Westlaw subscribers can look under Topical Practice Areas, select Intellectual Property, and then select law reviews, bar journal and legal periodicals.

³⁴⁴ A user would enter "SY(Internet)."

subscribers will find information about recent e-commerce legal developments, including commentaries from Internet law attorneys, discussions of possible legal strategies, and summaries of court decisions in these publications.

c. Internet Law and Practice Guide

¶98 This guidebook provides general information on legal developments arising from electronic communications. It covers commercial transactions between users, including contract formation, content, and interpretation; public networks, including regulation, security, and liability; email in the workplace, including liability and First Amendment issues, lawyers, and litigation procedures; communicating with the government; copyright laws; and torts between users.

d. CCH Law of Electronic Commerce

¶99 E-Commerce is rapidly evolving because it involves integrating the Internet into constantly changing business strategies and objectives. *The Law of Electronic Commerce* provides comprehensive explanations of laws and regulations governing electronic transactions, including privacy rights, IP rights, discovery of electronic data, technology in legal practice, antitrust guidelines, and electronic contracting.³⁴⁵

e. Cybercrime Law Report

¶100 Internet security remains a top concern for companies doing business on the Internet. *The Cybercrime Law Report* includes the latest opinions and developments in cybercrime law and summarizes recent state and federal cases. Each issue contains a synopsis of federal and state court decisions, including one main, in-depth article.

f. Data Security and Privacy Law: Combating Cyberthreats

¶101 This database publishes a treatise by the same name, written by Kevin P. Cronin and Ronald N. Weikers. The treatise provides readers with expert guidance on legal as well as technical aspects of data security and privacy issues, including related statutes and case law.

³⁴⁵ See also JANE KAUFMAN WINN & BENJAMIN WRIGHT, LAW OF ELECTRONIC COMMERCE (Aspen Publishers, 4th ed. 2000).

g. Internet and Online Law

¶102 This database provides the complete text of the treatise *Internet and Online Law* by Kent D. Stucky. It is updated twice a year. Coverage includes negotiating enforceable contracts and licenses, and identifying important legal issues in electronic commerce, regulations and legislation.³⁴⁶

*3. Lexis's Internet-Related Law Resources*³⁴⁷

a. Internet Law Cases on Lexis

¶103 Lexis, like Westlaw, has comprehensive coverage of cases, statutory developments, pleadings, and briefs. This service enables Internet-related research by jurisdiction. Readers interested in recent Internet cases for a specific state can simply enter the state's postal code in the cyberlaw databases. For example, for Massachusetts's cyberlaw cases one would enter "MA cyberlaw cases." Another way to find Internet-related cases is by searching the principal state and federal case database that is called "Federal and State Cases (Combined)" under Legal. Recent Internet law cases and developments are found under Lexis's main directory, under the Area of Law by Topic. Select Cyberlaw & E-Commerce to find Internet-related cases. The subscriber may also wish to search federal & state e-commerce cases, computer and cyberlaw cases combined, or state computer & cyberlaw cases. Lexis, like Westlaw, has an extensive selection of secondary resources.

b. The Law of the Internet

¶104 This treatise summarizes major Internet-related cases and statutes, and provides forms adapted for the specifics of cases. *The Law of the Internet* is an annually updated treatise with a comprehensive analysis of legal issues. In addition, this volume features insightful commentary on the future path of the law.

³⁴⁶ KENT D. STUCKEY, INTERNET AND ONLINE LAW (Law Journal Press, 1st ed.1996), available at <http://books.google.com/books?id=b2QL54Jp09gC&lpg=PR19&dq=internet%20and%20online%20law&pg=PR19#v=onepage&q&f=false>.

³⁴⁷ Lexis is a subscription database. For more details about any of the Lexis databases discussed in this article, see <https://www.lexisnexis.com> (last visited Aug. 12, 2011) or contact a Lexis representative by calling 1-800-543-6862.

c. Lexis Law Review Articles

¶105 To find relevant articles on Lexis, the subscriber goes to the main directory and under Area of Law chooses the Topic. For example, users interested in Internet law will select the topic Cyberlaw & E-Commerce. Under search analysis, law reviews & journals, select Law Reviews & Journals or search All Computer, Science and Technology Law Reviews.

d. Cyber Tech & E-Commerce: Mealey's Litigation Report

¶106 This monthly periodical covers disputes arising from e-commerce, and tracks emerging legal issues, including: Internet security, data destruction and/or alteration, defamation on the Web, software errors, hardware failure, electronic theft, email trespass, online privacy, government action, shareholder lawsuits, Internet jurisdiction issues, and file sharing (copyright) disputes among other contemporary topics.

e. Computer Law

¶107 *Computer Law* focuses on the law of software and information technology, including extensive coverage of U.S. and international privacy and data protection, electronic discovery, electronic evidence, and U.S. and international software protection. It includes analysis and case discussions.

f. Defamation on the Internet

¶108 The Communications Decency Act of 1996 was originally enacted to protect the “infant industry” of service providers from defamation liability as publishers.³⁴⁸ Prior to 1996, there was great uncertainty as to whether online service providers would be liable for the defamatory postings of their subscribers.³⁴⁹ In the decade and a half since Congress passed the Act, defamation continues to be the most important cybertort development. Defamation cases frequently

³⁴⁸ Communications Decency Act of 1996, Pub. L. No. 104-104, §509, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.).

³⁴⁹ *Compare* *Cubby, Inc. v. CompuServe, Inc.*, 776 F. Supp. 135 (S.D.N.Y. 1991) (holding a provider could not be liable for defamatory statements made on a forum), *with* *Stratton Oakmont, Inc. v. Prodigy Servs. Co.*, 23 Media L. Rep. 1794 (N.Y. Sup. Ct. 1995) (denying Prodigy's motion to dismiss a defamatory action against service provider arising out defamatory posting by a subscriber on a Prodigy newsgroup).

involve a clash between legally protectable rights in reputation and the First Amendment. This online resource provides analysis of important cases, codes, statutes, rulings, and emerging issues.

g. Other Selected Cyberlaw Lexis Resources

¶109 *The New York Times – Cyberlaw Stories* is a resource that collects *New York Times* articles dealing with cyberlaw. *MH Legal Articles – Cyberlaw* has searchable articles offering attorney insights into decisional law, commentary on new statutes and regulations, and other professional developments related to cyberlaw.

4. Staying Current with Cyberspace Case Law

*a. E-Commerce Law Daily (BNA)*³⁵⁰

¶110 This daily service provides subscribers with daily reports with national and global perspectives. The reports include new developments affecting the law of electronic commerce and all relevant practice areas. The reports also include current legal, legislative, and regulatory information, in-depth looks at the top news stories, and analysis of e-commerce legal trends. Subscribers can register to receive regular emails from BNA with summaries of recent developments.

*b. United States Law Week (BNA)*³⁵¹

¶111 This weekly publication includes significant developments in state and federal law including cases, legislation, and regulations. Subscribers can find all Internet-related publications by browsing the index and selecting Internet. It allows users to perform advanced searches to pinpoint specific cyberlaw developments. The circuit splits database is an invaluable user guide. As with *E-Commerce Law Daily*, subscribers can sign-up to receive automatic updates via email summaries.

³⁵⁰ BNA's E-Commerce Law Daily is a subscription database. For more details go to <http://www.bna.com/electronic-commerce-law-p6796/> (last visited Aug. 12, 2011).

³⁵¹ BNA's U.S. Law Week is a subscription database. For more details go to <http://www.bna.com/united-states-law-week-p5949/> (last visited Aug. 12, 2011).

c. Westlaw Current Developments

¶112 Westlaw has a number of features that help its subscribers stay current with Internet developments. One of the best resources is Westlaw Topical Highlights: Intellectual Property or E-Commerce. These current databases contain documents prepared by the West editorial staff that summarize recent developments in the law, whether a court decision or other legal activity of interest.³⁵²

i. Alerts Through Westclip

¶113 The WestClip virtual clipping service on Westlaw enables subscribers to monitor thousands of news and business databases for legal, political, and business news. A lawyer can monitor settlements and verdicts relating to a given practice area, such as copyright law or the field of Internet torts, by using the service to track new cases, legislation, regulations, and standards. WestClip runs Terms and Connectors searches automatically at intervals selected by the user (e.g., daily or weekly) and delivers the results to the user's email address, fax machine, or printer.

ii. Docket Alert of New Internet Cases

¶114 Docket Alert is a service that allows subscribers to monitor new Internet-related case filings. Docket Alert permits the user to select the courts they would like to monitor. Next, the subscriber can set the alert to retrieve either all new filings or filings matching particular criteria such as "domain names & trademarks" or cybercrimes or Internet security federal cases. Docket Alert assembles results, and there are multiple ways to deliver content to selected destinations (e.g., printer, fax, email address, etc.).

iii. KeyCite Alert

¶115 KeyCite Alert automatically monitors the status of cases, statutes, administrative decisions, and regulations, and sends the subscriber updates if their KeyCite results change. This valuable feature provides subscribers with the most current KeyCite information for their specified Internet-related research topic.

³⁵² To access these topical highlights, go to the main Westlaw research page and in the Search for a Database field in the left margin type "topical highlights intellectual property" or "topical highlights e-commerce."

*d. Lexis's Current Developments Tools**i. Lexis Alerts*

¶116 Lexis Alerts can be activated for searches researchers save and to run automatically at intervals they specify. The results can be stored for the user to view online. Another option is for the alerts to be sent to the subscriber via email. Lexis Alerts enables lawyers to stay current on Internet-related cases.³⁵³

ii. Continuous Alerts

¶117 This feature allows Lexis subscribers to set up an alert to receive breaking news through their email within minutes of the time it is published on the service. The continuous alerts retrieve results from 9,000-plus news, business, and other sources.

iii. Shepard's Alerts

¶118 Shepard's Alerts enables users to run regularly-scheduled Shepard's reports on key cases to obtain updates about changes to citations or other dispositions.

B. Free Internet Law Resources

¶119 Those Internet lawyers without access to Westlaw or Lexis should explore the free public resources that are available via public law libraries and trial court libraries in many states.³⁵⁴ Many public law libraries have some form of free public access to Westlaw and/or Lexis, as well as other subscription law review databases like HeinOnline, LegalTrac, and Wilson Index to Legal Periodicals. In addition, Washington and Lee University has assembled a comprehensive list of law reviews.³⁵⁵ Findlaw is another excellent

³⁵³ To save a search as an Alert, first run a search. When the user has the results they want, they need only click the "Save as Alert" link. They can then specify how frequently they want the Alert to run or how the results are to be delivered (email, print, etc.). The subscriber can specify the method by which they are notified of a current development.

³⁵⁴ See, e.g., MASSACHUSETTS TRIAL COURT LAW LIBRARIES, <http://www.lawlib.state.ma.us/libraries/databases/index.html> (last visited Nov. 17, 2011); SUFFOLK UNIVERSITY LAW SCHOOL, CAREER DEVELOPMENT OFFICE, <http://www.law.suffolk.edu/offices/career/handouts/> (last visited Mar. 16, 2011).

³⁵⁵ See WASHINGTON & LEE LAW JOURNALS DATABASE, <http://lawlib.wlu.edu/lj/> (last visited Mar. 13, 2011).

source for locating articles published in law journals related to e-commerce or Internet law.³⁵⁶

1. Social Science Research Network (SSRN)

¶120 The Social Science Research Network, unlike Westlaw and Lexis, is a free service where scholars disseminate working papers, law review articles, and excerpts from books and current research projects,³⁵⁷ often before they have even been accepted and published in law journals. SSRN is searchable and organized by field of law. This database features a network dedicated to working papers and publications on cyberspace law.³⁵⁸ It publishes abstracts of papers dealing with all aspects of the regulation of cyberspace through law, social norms, and the architecture of the network.

2. Free Internet Law Case Reporters

¶121 Public Library of Law contains (1) U.S. Supreme Court and U.S. Courts of Appeal opinions; (2) a fifty-state collection of cases from 1997 to the present; (3) federal statutory law and code from all states; and (4) regulations, court rules, and constitutions among other resources.³⁵⁹ The Google Scholar database comprises all state appellate and state supreme court cases since 1950. It also contains federal and U.S. Supreme Court cases from 1791 to the present. Google Scholar's Advanced Scholar feature enables users to refine their searches. For example, a user can search all federal cases with the term "cybercrime" decided after a given year. Google Scholar also allows the user to create email alerts notifying the user when specified state or federal courts hand down a decision incorporating the term "cybercrime."³⁶⁰

³⁵⁶FINDLAW, http://stu.findlaw.com/journals/ip_and_cyberspace.html (last visited Sept. 10, 2011).

³⁵⁷The Social Science Research Network (SSRN) is devoted to the rapid worldwide dissemination of social science research and is composed of a number of specialized research networks in each of the social sciences. SOCIAL SCIENCE RESEARCH NETWORK, <http://www.ssrn.com/lsn/index.html> (last visited Nov. 17, 2011).

³⁵⁸SSRN, THE LEGAL SCHOLARSHIP NETWORK: CYBERSPACE LAW EJOURNAL, http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=225 (last visited Mar. 11, 2011).

³⁵⁹THE PUBLIC LIBRARY OF LAW, <http://www.plol.org/Pages/Search.aspx> (last visited Mar. 13, 2011).

³⁶⁰GOOGLE SCHOLAR, <http://scholar.google.com/> (last visited Mar. 13, 2011).

¶122 LexisOne is a free LexisNexis product that allows subscribers to browse cases, search by case citation or keywords with terms and connectors, and limit searches by date, parties, judge, or counsel. This product is an exceptional source for recent Internet-related case law research. This first-rate service includes cases from the U.S. Supreme Court (1781–present), U.S. Courts of Appeals, and state appellate courts (from the last ten years).³⁶¹

3. United States Department of Justice

¶123 The U.S. Department of Justice Computer Crime and Intellectual Property website has helpful links on Internet-related crime, both domestic and international. The website links to current cybercrime and criminal IP cases, legislation, guidelines, and the latest press releases for cybercrime indictments and convictions.³⁶² The “hot topics” page contains reports on IP enforcement, testimony on combating IP-related crime, statutes governing economic espionage and trade secrets misappropriation, as well as summaries of recent law review articles. Lawyers or legal academics interested in cybercrimes can seek out the Justice Department’s *Prosecuting Computer Crimes Manual* as well as the *Prosecuting Intellectual Property Crimes Manual*. Such resources are helpful to understand cybercrime law in action, from the Department’s perspective.³⁶³ The Federal Bureau of Investigation also maintains handy information on cybercrime statutes and developments.³⁶⁴

4. America Online Legal Department

¶124 The America Online Legal Department website links to Internet-related decisions, legislation, and the E-Commerce Project. The website’s decisions and litigation sections are not currently available as they are under construction,³⁶⁵ but this website is a fine

³⁶¹ LEXISONE, <http://law.lexisnexis.com/webcenters/lexisone/> (last visited Mar. 11, 2011).

³⁶² UNITED STATES DEPARTMENT OF JUSTICE, COMPUTER CRIME & INTELLECTUAL PROPERTY SECTION, <http://www.justice.gov/criminal/cybercrime/> (last visited Mar. 11, 2011).

³⁶³ *Id.*

³⁶⁴ FEDERAL BUREAU OF INVESTIGATIONS (FBI), CYBER CRIME, <http://www.fbi.gov/about-us/investigate/cyber/cyber> (last visited Mar. 14, 2011).

³⁶⁵ AMERICA ONLINE LEGAL, <http://legal.web.aol.com/ip/ipguide/index.html> (last visited Mar. 13, 2011).

source for sample anti-spam policies, whitelisting, and privacy policies.

5. *ABA Cyberlaw Committee*

¶125 The American Bar Association Business Law Section's Committee on Cyberspace Law posts papers from ABA Business Law Section meetings as well as policy papers. The committee explores important policy issues in the crossroads between contract law and Internet law. The Section describes its mission as providing

analysis of corporate, transactional and regulatory issues related to the Internet and digital technologies. The Committee works in a wide range of legal disciplines including electronic commerce and contracts, consumer protection, intellectual property, cybersecurity & privacy, jurisdiction, Internet governance, and online financial activities.³⁶⁶

¶126 The Cyberspace Committee covers topics such as electronic contracting, licensing and Internet Content, Intellectual Property and the Conduct and Regulation of Internet Commerce. The Cyberspace Committee is one of the best sources for locating and evaluating Global E-Commerce regulations and cyberspace law cases and statutory developments.

6. *IP Mall, Franklin Pierce/University of New Hampshire*

¶127 The Franklin Pierce Intellectual Property Mall (IP Mall) provides comprehensive coverage of primary and secondary materials on patents, copyrights, trademarks, and trade secrets. To access Franklin Pierce's IP Mall, users need only select the IP Links tab at the top of the page <http://ipmall.info/>. The IP Mall includes materials on e-commerce and technology and an IP in E-Commerce tutorial.³⁶⁷

7. *Free Resources for Staying Current*

a. *Google Alerts*

¶128 Google Alerts dispatches emails each time the alert terms appear among billions of documents in Google's vast treasure trove

³⁶⁶ *Committee on Cyberspace Law Mission Statement*, AMERICAN BAR ASSOCIATION, <http://apps.americanbar.org/dch/committee.cfm?com=CL320000> (last visited Mar. 13, 2011).

³⁶⁷ IP MALL, http://ipmall.info/hosted_resources/fplchome.asp (last visited Mar. 11, 2011).

of services. Google Alerts are especially useful in tracking Internet law news stories, statutory developments, and cases from around the globe.³⁶⁸

b. ListTool

¶129 ListTool indexes a number of online mailing lists (also known as online discussion lists or listservs).³⁶⁹ Attorneys and scholars can network with other experts and share their views on recent Internet law cases and developments. To access this resource, users should go to the “select a list” pull-down menu and select Internet & Computers Law, Internet Lawyer List, or Internet & Computer Law Association.

c. The Blogosphere

¶130 Most blogs permit users to sign up for RSS feeds so they can automatically receive updates when something has been posted concerning a reader’s area of interest.³⁷⁰ Google Reader and the Microsoft Outlook RSS Feed Reader encourage users to have their feeds appear directly in email folders. Eric Goldman, a law professor and director of Santa Clara University School of Law’s High Tech Law Institute, features Internet-related IP developments on his blog. Professor Goldman also comments on Internet-related symposiums such as the *Stanford Technology Law Review* symposium on Internet intermediary liability. Professor Goldman regularly posts on featured cases, statutory developments, and works-in-progress.³⁷¹

d. Jurist’s Internet Resources

¶131 Under the supervision of University of Pittsburgh law professor Bernard Hibbitts, this exceptional blog provides legal news and real-time legal research services, and is published by a mostly-volunteer team of part-time law student reporters, editors, and Web

³⁶⁸ GOOGLE ALERTS, <http://www.google.com/alerts> (last visited Mar. 13, 2011).

³⁶⁹ LISTTOOL, <http://www.listtool.com/subscribe/listtoollaw.html> (last visited Mar. 11, 2011).

³⁷⁰ The Really Simple Syndication (RSS) is an acronym for a web feed format.

³⁷¹ Eric Goldman, TECHNOLOGY & MARKETING LAW BLOG, <http://blog.ericgoldman.org/> (last visited Mar. 12, 2011).

developers.³⁷² The Jurist website includes state, federal, and international materials.³⁷³

e. Berkman Center for Internet and Society

¶132 Harvard University's Berkman Center blog has a remarkable collection of Internet law-related materials including blog entries, symposium proceedings, and podcasts.³⁷⁴ The Berkman Center conceives of itself as a center of public policy. It takes on the perspective of an architect rather than of a plumber, with its focus on big policy, Internet trends, and how the present law restricts or fosters new Internet-related development. The Berkman Center offers a wide scope of information and resources,³⁷⁵ and the Berkman Buzz offers a weekly summary of online developments.³⁷⁶

f. Stanford Center for Internet and Society: People and Blogs

¶133 Stanford University's Center for Internet and Society allows visitors to explore specific issues like cybercrime and Internet libel. For most Internet law categories, Stanford provides a case update category, which lists up-to-date cases relevant to featured subject matter.³⁷⁷

g. Digestible Law (Perkins Coie's Internet Case Digest)

¶134 *Digestible Law* (formerly Perkins Coie's Internet Case Digest) has wide-ranging collections of Internet-related cases in digested form. This law firm blog is updated regularly and includes investigations of emergent issues and big policy issues. *Digestible*

³⁷² *Id.* (To research Internet law, go to Under Topics/Current Awareness and select Cyber Law).

³⁷³ See generally UNIVERSITY OF PITTSBURGH SCHOOL OF LAW, THE JURIST, <http://jurist.law.pitt.edu/> (last visited Mar. 11, 2011).

³⁷⁴ See generally HARVARD UNIVERSITY, BERKMAN CENTER FOR INTERNET AND SOCIETY, <http://cyber.law.harvard.edu/> (last visited Mar. 11, 2011).

³⁷⁵ See generally *id.*

³⁷⁶ See *Berkman Buzz*, BERKMAN CENTER FOR INTERNET AND SOCIETY, <http://cyber.law.harvard.edu/node/7071> (last visited Sept. 22, 2011).

³⁷⁷ See generally *People & Blogs*, THE CENTER FOR INTERNET AND SOCIETY, <http://cyberlaw.stanford.edu/people-and-blogs> (last visited Mar. 12, 2011).

Law includes an extraordinary collection of cases and statutory developments, and it is searchable.³⁷⁸

h. Internet Library of Law & Court Decisions

¶135 Attorney Martin Sampson's Internet Library of Law and Court Decisions is the most user-friendly of all Internet law collections. Sampson's Internet case law library contains "a brief synopsis of each court decision, indexed alphabetically by subject matter."³⁷⁹ His digests abridge cases from more than six hundred courts and provide links to many full-text decisions.³⁸⁰ These decisions are indexed by subject matter, but one deficiency is that this website does not seem to be updated for 2009–11 cases.³⁸¹ Nevertheless, Sampson's website remains one of the informative sources for cases from Internet-related adult entertainment to zoning.

C. Paper-Based Treatises and Loose-Leafs

1. Computer Cases – CCH

¶136 Computer Cases³⁸² is a loose-leaf service that reports computer law decisions rendered by federal and state courts throughout the United States.

2. E-Commerce and Internet Law: Treatise with Forms

¶137 Thomson/West publishes this comprehensive four-volume loose-leaf set that includes commentary and forms. It also includes practice tips and forms, nearly 10,000 detailed footnotes, and references to unpublished court decisions.³⁸³

³⁷⁸ See PERKINS COIE LLP, DIGESTIBLE LAW, <http://www.digestiblelaw.com/> (last visited Aug. 12, 2011).

³⁷⁹ Martin Samson, INTERNET LIBRARY OF LAW AND COURT DECISIONS, <http://www.internetlibrary.com/> (last visited Mar. 13, 2011).

³⁸⁰ "If the decision is of interest, click on its case title for a more thorough analysis of the court's decision, and, where available, its full text." *Id.*

³⁸¹ Designer Skin LLC v. S & L Vitamins, Inc., No. CV 05-3699-PHX-JAT (D. Ariz. May 19, 2008) is listed as a recent addition to the website. *Id.*

³⁸² CCH, GUIDE TO COMPUTER LAW (CCH INC. 1989–).

³⁸³ IAN C. BALLON, E-COMMERCE & INTERNET LAW – TREATISE WITH FORMS (Thomson/West, 2d ed. 2011), <http://store.westlaw.com/e-commerce-internet-law-treatise-forms-2d/150658/32000002/productdetail> (last visited Nov. 16, 2011).

3. *Digital Communications Law*

¶138 This Aspen Publishers treatise includes information on access to networks and facilities, liability for injurious communications, and liability for service failures or failures of products to perform, among other topics.³⁸⁴

4. *Data Identity and Security: Mealey's Litigation Report*³⁸⁵

¶139 Also available via Lexis.com, this report covers issues involving access to personal, medical, and financial data; database invasion; electronic privacy; government surveillance; and workplace privacy issues. It also includes up-to-date case summaries; hard-to-find filings, opinions and pleadings; and legislative and regulatory roundups.

5. *The Computer & Internet Lawyer*³⁸⁶

¶140 This newsletter by Aspen Law & Business provides an analysis of important case law and covers international developments in computer and Internet law.

6. *The Journal of Internet Law*³⁸⁷

¶141 This journal is also available via Westlaw.com and provides an in-depth analysis of path-breaking Internet law cases and statutory developments. This journal contains a first-rate analysis of international developments. It also digests selected law review articles by leading cyberlaw academics and practitioners.

7. *Electronic Commerce and Law Report (BNA)*³⁸⁸

¶142 This weekly newsletter covers legal developments and trends related to the most important legal issues surrounding digital communications, transactions, and infrastructure, on federal, state,

³⁸⁴ HENRY H. PERRITT, JR., *DIGITAL COMMUNICATIONS LAW* (Aspen Publishers 2010–).

³⁸⁵ For the print version, see *MEALEY'S LITIGATION REPORT: DATA AND IDENTITY SECURITY* (LexisNexis).

³⁸⁶ RONALD L. JOHNSTON, *THE COMPUTER & INTERNET LAWYER* (Aspen Publishers 2000–)

³⁸⁷ DAVID B. ROCKOWER & MARK RADCLIFFE, *JOURNAL OF INTERNET LAW* (Aspen Publishers 1997–)

³⁸⁸ *Electronic Commerce & Law Report*, BNA, <http://www.bna.com/electronic-commerce-law-p6796/> (last visited Aug. 12, 2011).

and international levels. It covers Internet law topics such as electronic contracting, web and software developments, privacy, online marketing, digital copyright, taxation of e-commerce, domain name disputes, and telecommunications policies. Key features of this publication include special reports, current legislation, current litigation, and web resources. This journal reports on international organizations such as the Internet Corporation for Assigned Names and Numbers (ICANN).

8. E-Commerce Law Report, Buying and Selling on the Internet

¶143 This resource is a monthly newsletter covering legislation, regulation, and court decisions pertaining to e-commerce. It provides wide-ranging information on Internet issues regarding security, privacy, and liability.³⁸⁹

D. International Internet Law

1. Subscription Databases

a. Westlaw

¶144 Westlaw's All-RPTS database contains all reported cases from courts in the European Union and other courts worldwide as selected by the editors. This commercial service includes decisions, judgments, and orders as reported by the courts. European Union Case Law (EU-CS) is another rich Westlaw database to use to research Internet law cases. In this database, the subscriber can perform a keyword field search for the word Internet, cyberlaw, or specific substantive topics.

b. Lexis

¶145 Lexis's databases include extensive foreign materials and databases of cases and statutes. To access these wide-ranging resources, the subscriber goes to Area of Law – By Topic, International Law, and Find Cases (View More). The user will find a number of resources for finding cases in many foreign jurisdictions.

³⁸⁹ This newsletter is also available on both Westlaw & Lexis. *See also* RUSTAD, *supra* note 18.

c. Foreign Law Guide

¶146 This database includes descriptions of the legal systems of nearly two hundred countries and jurisdictions. It highlights mostly legislative resources but does include information about court decisions. It makes available foreign law resources, including complete bibliographic citations to legislation. This service often notes the existence of English translations. It also evaluates how current the materials are and lists secondary sources translated into English.³⁹⁰

2. Free Resources on International Law

¶147 The “Open Source/Free/Cost-Effective Movement”³⁹¹ is not just a U.S. phenomenon, but also a global one. There are a number of free resources that will allow lawyers to access international and foreign Internet law resources. Some contain documents written in the official language of a particular country or jurisdiction, but for many, either the English translations or the databases and their documents are available primarily in English.

a. Curia

¶148 This caselaw database is part of the Europa site, which is the official website of the European Union.³⁹² *Curia* publishes the full text of judgments, Opinions of the European Court of Justice, Advocates General’s Opinions, and orders of the Courts of the European Union, from June 17, 1997 to the present. This website publishes the full text of selected unpublished decisions dating back to May 2004. The text of judgments is available on the day of delivery. The website publishes judicial opinions on the day they are issued, whereas the Advocate General publishes Advocates General’s Opinions on the day of their delivery. Orders are only made public after the litigants have been notified. The texts are available in all EU official languages when they are published in the Reports of Cases before the Court of Justice and the Court of First Instance.³⁹³

³⁹⁰ See generally Thomas Reynolds & Arturo Flores, FOREIGN LAW GUIDE, <http://www.foreignlawguide.com/> (last updated Aug. 29, 2011).

³⁹¹ Hackerson, *supra* note 331, at 483.

³⁹² See generally CURIA, CASE-LAW, <http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en> (last updated Aug. 27, 2011).

³⁹³ *Id.*

b. FLARE – Foreign Law Research

¶149 FLARE reflects collaboration between the major libraries collecting law in the United Kingdom: Institute of Advanced Legal Studies, Bodleian Law Library, Squire Law Library, British Library, and School of Oriental and African Studies. This site contains research guides that discuss case reporters for each jurisdiction.³⁹⁴

c. GlobaLex

¶150 GlobaLex is a product distributed by New York University Law School without charge, and seeks to provide research guides for a growing number of countries. The foreign legal system guides often highlight the preeminent resources for accessing International and foreign cases. The information published by GlobaLex includes research and teaching resources that are used by many legal academics, practitioners, and other specialists from around the world. Scholars, well known in their respective fields, author articles about foreign jurisdictions in these comprehensive GlobaLex resources.³⁹⁵

d. The Global Legal Information Network (GLIN)

¶151 This public database contains official texts of laws, regulations, judicial decisions, and other complementary legal sources. GLIN membership and contributors are made up of governmental agencies and international organizations that share original-language, officially published, full-text documents in electronic format.³⁹⁶

e. World LII

¶152 The World Legal Information Institute is a comprehensive resource for searching international case law. It is a “free, independent and non-profit global legal research facility” and was developed collaboratively by the following legal information institutes: Australasian, British, Irish, Canadian, Hong Kong, Cornell University, Pacific Islands, and the Wits University School of Law.

³⁹⁴ *FLARE*, FOREIGN LAW RESEARCH, <http://ials.sas.ac.uk/flare/flare.htm> (last updated June 28, 2010).

³⁹⁵ *GlobaLex*, HAUSER GLOBAL LAW SCHOOL PROGRAM, <http://www.nyulawglobal.org/Globalex/> (last visited Aug. 12, 2011).

³⁹⁶ GLOBAL LEGAL INFORMATION NETWORK (GLIN), <http://www.glin.gov/search.action> (last visited Mar. 17, 2011).

This multi-jurisdictional website enables researchers to access all case law from national high courts or superior courts.³⁹⁷

f. LegiFrance

¶153 This site includes all-inclusive French legislation and judicial decisions. Most resources are only available in French. LegiFrance does not publish English translations of the statutory materials. This service provides a user-friendly guide called “About Law” that discusses the organization of the French court system and judicial decisions.³⁹⁸

g. German Law Archive

¶154 This German law website includes full-text decisions of judgments and other decisions by German courts. It also compiled a large bibliography that “aims to include everything published on German law in English language,” and can be searched by author and title words. It is continuously updated and users can suggest new entries.³⁹⁹

h. Legal Information Institute of India (INDLII)

¶155 The goal of INDLII is to aggregate legal information about India and “publish it on the Internet with free and full public access.” It is a comprehensive resource for Indian court decisions and tribunal judgments. It includes decisions of the Supreme Court, High Court, Central Administrative Tribunals, and District Courts.⁴⁰⁰

i. The Incorporated Council of Law Reporting (ICLP)

¶156 This database covers court decisions from England and Wales, as well as decisions from the Royal Courts of Justice and the European Court of Justice. Users can view daily case summaries by selecting the “Latest Cases” link at the top of the screen. Researchers can also perform a keyword search by selecting the “Subject Matter

³⁹⁷ WORLD LII, <http://www.worldlii.org/forms/search1.html> (last visited Mar. 17, 2011).

³⁹⁸ See LEGIFRANCE, <http://Legifrance.gouv.fr> (last updated Sept. 2, 2011). Click on À propos du droit, in the left margin and select the English translation.

³⁹⁹ See generally GERMAN LAW ARCHIVE, <http://www.iuscomp.org/gla/> (last visited Mar. 17, 2011).

⁴⁰⁰ See generally LEGAL INFORMATION INSTITUTE OF INDIA, <http://www.indlii.org/index.aspx> (last updated Sept. 2, 2011).

Search” link at the top of the screen. Readers can receive alerts and summaries of new decisions by selecting WLR (D) Alerts in the left margin. After registering, users receive email updates, at a frequency they choose, as soon as new case summaries are available online.⁴⁰¹

j. EuroLex

¶157 This site provides free access to European Union law and other documents. The database contains over 2,815,000 documents, dating back to 1951. EuroLex is updated daily, and roughly 12,000 documents are added every year. It has the Official Journal of the European Union online, simple and advanced searching, browsing options, and the ability to display and/or download documents in PDF, HTML, DOC, and TIFF formats.⁴⁰²

3. Websites

a. World Intellectual Property Organization

¶158 The World Intellectual Property Organization (WIPO) is a specialized agency of the United Nations. It is dedicated to “developing a balanced and accessible international intellectual property (IP) system, which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.”⁴⁰³

b. Council of Europe, Cybercrime

¶159 The Council of Europe “helps protect societies worldwide from the threat of cybercrime through the Convention on Cybercrime and its Protocol on Xenophobia and Racism, the Cybercrime Convention Committee (T-CY) and the Project on Cybercrime. It serves as a guideline for any country developing comprehensive national legislation against Cybercrime.”⁴⁰⁴

⁴⁰¹ See generally THE INCORPORATED COUNCIL OF LAW REPORTING (ICLP), <http://www.lawreports.co.uk/> (last visited Mar. 17, 2011).

⁴⁰² See generally *Access to European Law*, EUROLEX, <http://eur-lex.europa.eu/en/index.htm> (last updated Jan. 9, 2011).

⁴⁰³ See generally WORLD INTELLECTUAL PROPERTY ORGANIZATION, <http://www.wipo.int/> (last visited Mar. 15, 2011).

⁴⁰⁴ *Cybercrime*, COUNCIL OF EUROPE, http://www.coe.int/t/DGHL/cooperation/economiccrime/cybercrime/default_en.asp (last visited Mar. 15, 2011).

c. Global Cyber Law Database

¶160 Global Cyber Law Database (GCLD) is a comprehensive source of cyber laws. It has detailed cyber law profiles for forty-eight countries and jurisdictions, and “aims to be the most comprehensive and authoritative source of cyber laws for all countries.” This site is a public initiative of the Asian School of Cyber Laws.⁴⁰⁵

d. Computer Crime Research Center

¶161 The Computer Crime Research Center was created in 2001 to research the legal, criminal, and criminological problems of cybercrime. It is a non-profit, non-government organization, and its mission is to “research and warn of unlawful acts involving computer and information technologies, including computer crimes, Internet fraud, and cyber terrorism.”⁴⁰⁶

e. SCADPlus: Summaries of European Union Legislation

¶162 The “Summaries of EU legislation” website provides approximately 3,000 summaries of European legislation, divided into thirty-two subject areas corresponding to the activities of the European Union. This site is unique because, unlike other EU databases like EUR-Lex and Europe Direct that often provide rather technical and lengthy pieces of legislation, it provides easy-to-read summaries.⁴⁰⁷

f. Annual International Conference on Cyberlaw

¶163 This annual conference brings academics from all over the world and members of the judiciary together to exchange ideas and discuss recent cyberlaw topics. The conferences explore comparative

⁴⁰⁵ GLOBAL CYBER LAW DATABASE, <http://www.cyberlawdb.com/main/> (last visited Mar. 15, 2011).

⁴⁰⁶ COMPUTER CRIME RESEARCH CENTER, <http://www.crime-research.org/> (last visited Mar. 15, 2011).

⁴⁰⁷ *Summaries of EU Union Legislation*, EUROPA, http://europa.eu/legislation_summaries/index_en.htm (last visited Mar. 15, 2011).

approaches to intellectual property and discuss privacy, information technology and other late-breaking cyberlaw issues.⁴⁰⁸

4. *Treatises & Loose-Leafs*

¶164 There are a number of treatises and loose-leafs that address international Internet law issues. A few noteworthy ones include: *Online Service Providers: International Law & Regulation*; *Internet Jurisdiction and Choice of Law: Legal Practices in the EU, U.S. and China*; *Cross-border Internet Dispute Resolution*; *International Computer Law: A Practical Guide to the International Distribution and Protection of Software and Integrated Circuits*; and *Global Perspectives in Information Security: Legal, Social and International*.⁴⁰⁹

5. *Law Reviews & Journals*

¶165 Internet law is becoming less U.S.-centric and there are now extensive resources to chart foreign Internet case law and regulatory developments. Many more general international, computer, technology, and IP law reviews and journals now include comparative or foreign Internet-related articles. A few noteworthy specialized publications deal with international Internet legal developments on a regular basis. Among the best resources are: *Computer Law Review International*; *Computer & Telecommunications Law Review (UK)*; *Computer, Computer Law & Security Review* (Netherlands); *Competition and Regulation in Network Industries* (Belgium); *Electronic Business & Technology Law* (New Zealand); *Global Review of Cyberlaw*; *International Review of Law, Computers & Technology*, and *World Internet Law*

⁴⁰⁸ See generally *Annual International Conference on Cyberlaw*, ASSOCIATION INTERNATIONALE DE LUTTE CONTRE LA CYBERCRIMINALITE, <http://www.cyberlaw-conference.org/> (last visited Mar. 15, 2011).

⁴⁰⁹ See generally *ONLINE SERVICE PROVIDERS: INTERNATIONAL LAW & REGULATION* (Steven J. Barber & Christopher Gibson eds., 2003); FAYE FANGFEI WANG, *INTERNET JURISDICTION AND CHOICE OF LAW: LEGAL PRACTICE IN THE EU, U.S. AND CHINA* (2010); JULIA HÖRNLE, *CROSS-BORDER INTERNET DISPUTE RESOLUTION* (2009); J.A. KEUSTERMANS & I.M. ARCKENS, *INTERNATIONAL COMPUTER LAW: A PRACTICAL GUIDE TO THE INTERNATIONAL DISTRIBUTION AND PROTECTION OF SOFTWARE AND INTEGRATED CIRCUITS* (1988); HOSSEIN BIDGOLI, *GLOBAL PERSPECTIVES IN INFORMATION SECURITY: LEGAL, SOCIAL AND INTERNATIONAL* (2009).

Report.⁴¹⁰ To locate more international law reviews and journals on Internet law, consult the Washington and Lee Law Journals Database.⁴¹¹

CONCLUSION: THE FUTURE PATH OF INTERNET LAW

¶166 Justice Holmes's trajectory of the common law drew upon centuries of Anglo-American case law, whereas Internet law is drawn from approximately two decades of worldwide legal opinions, directives, regulations, conventions, and national statutory developments. Decades from now, we will remember how the Internet profoundly shaped the path of nearly every branch of the law in such a brief period of time. In a decade and a half, U.S. courts have forged new Internet-related rules for nearly every branch of American law.

¶167 Since Judge Easterbrook's talk on *The Law of the Horse*, the Internet has shaped every branch of the law, and lawyers need to refine their research strategy to avoid drinking out of an information fire hose. Even though the World Wide Web is less than two decades old, it is difficult to envision mass culture before the commercialization of the Internet and without applications such as YouTube, Twitter, and Facebook. The World Wide Web will shortly celebrate its twenty-first birthday and can rightfully claim adulthood.

¶168 The oracles of Internet law are drawn from two decades of court decisions, statutes, industry standards, and international organizations.⁴¹² To keep up with cyberspace law developments, it is necessary to become familiar with the legal resources found in Part

⁴¹⁰ See generally VERLAG O. SCHMIDT, COMPUTER LAW REVIEW INT'L (2003–2011); MICHELE T. RENNIE, COMPUTER & TELECOMMUNICATIONS LAW REVIEW (1988–2011); STEVE SAXY, THE COMPUTER LAW AND SECURITY REVIEW (2009–2011); MATTHIAS FINGER & ROLF KÜNNEKE, JOURNAL OF COMPETITION & REGULATION IN NETWORK INDUSTRIES (2006–2011); ELECTRONIC BUSINESS & TECHNOLOGY LAW (2011); DEN BOSCH, GLOBAL REVIEW OF CYBERLAW (2001–2011); INTERNATIONAL REVIEW OF LAW, COMPUTERS & TECHNOLOGY (2011); WORLD INTERNET LAW REPORT (2011).

⁴¹¹ WASHINGTON & LEE UNIVERSITY SCHOOL OF LAW, LAW JOURNALS DATABASE, <http://lawlib.wlu.edu/lj/> (last visited Nov. 20, 2011). To access this International Internet resource, select the science, technology & computing subject area and then select non-US.

⁴¹² “Even if the Internet or personal computer have the promised transformative social impact, they are unlikely to generate a characteristic body of law.” Joseph H. Sommer, *Against Cyberlaw*, 15 BERKELEY TECH L.J. 1145 (2000).

III. The shrinking of national boundaries means that Internet law is no longer U.S.-centric. Online companies cross national borders and must be prepared to submit to mandatory foreign laws and regulations. The Internet is, in effect, an international system of legal research. Lawyers representing e-businesses need to track foreign and international developments to protect clients' rights and avoid infringing the rights of others.