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COPYRIGHTS AND TRADEMARKS IN CYBERSPACE: A LEGAL AND ECONOMIC ANALYSIS

GEORGIOS I. ZEKOS*

I. INTRODUCTION

Intellectual property is at the center of the “new economy.” New economy products are characterized by declining average costs over a range of outputs, high rates of innovation, and network effects.¹ Classically, intellectual property is one element among many in a production process adding to the value of a firm via licensing for competent exploitation of IP rights, cost reductions, R&D investment, and new products.² Cumulative innovation proceeds as innovators build on each other’s discoveries.

A vital target of IP law is to reward innovation and creation, by granting exclusive rights to use a new invention, information or a cultural good. The legal system induces the economic system, and legal norms must be assessed in ways that lead to the best outcome.³ The return from intellectual property rights is directly correlated to the duration and scope of those rights.

Copyright offers authors a legal instrument that reimburses them for their creative works. Copyrights are not absolute, and a copyright holder never has complete control over all probable uses of his work. A copyright is the right given to creators for their literary or artistic works, encompassing mediums such as books and e-books, plays, newspapers, computer programs, databases, films, musical compositions, paintings, photographs, sculpture, architecture, advertisements and maps. Copyright does not embrace ideas, processes or procedures, mathematical concepts or methods of operation. Similarly, IP rights make digital goods legally exclusive as well. The protection obtainable by copyright is only for the expression of the work.

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1. GEORGIOS I. ZEKOS, MNE’S IN 21ST CENTURY (2016); GEORGIOS. I. ZEKOS, LAW AND ECONOMICS OF IPRS (2016); Richard A. Posner, *Antitrust in the New Economy*, 68 ANTITRUST L.J. 925, 926 (2001).

2. Julie E. Cohen, *Copyright as Property in the Post-Industrial Economy: A Research Agenda*, 2011 WIS. L. REV. 141, 143 (2011) (“[T]he purpose of copyright is to enable the provision of capital and organization so that creative work may be exploited.”)

3. R. H. Coase, *The Institutional Structure of Production*, 82 AM. ECON. REV. 713, 715 (1992).

The goal of copyright law is to preclude the unlawful use or piracy of any literary or artistic work by a third party. Works that are not protected by copyright law therefore belong to the public.

Trademark law allows consumers, in the marketplace, to swiftly identify a product they liked or disliked in the past. Therefore, trademarks allow companies and consumers to distinguish among the different competing manufacturers of a given product. No one is entitled to sell or deliver commodities under the appearance that the commodities derive from someone else. The importance of consumer protection cannot be over-emphasized, and the average consumer standard should remain the central point of the inquiry, even for domain name litigation. Trademark protection promotes three main policies: (1) protection of the trademark holder's goodwill, (2) protection of the consumer, and (3) economic efficiency. Goodwill should be protected to the extent needed to prevent the unjust enrichment of a competitor. When there is no confusion at the time the user clicks on the advertisement or web-link, it does not lead to unjust enrichment. Fair use is a defense to trademark infringement, and one example of fair use is comparative advertising. Trademark protection, while constituting a vital instrument to make certain markets transparent, must be reconciled with other principal values including free expression, by enhancing consumer information and consumer preference, and free competition, averting needless barriers of entry in the market.⁴

The TRIPS Agreement includes a set of minimum principles for IP rights protection and calls for all member countries to use the most-favored-nation principle in IP protection. Nevertheless, IP rights protection is currently not close to harmonization across nations, and the TRIPS Agreement failed to harmonize standards of protection among intellectual property systems. The TRIPS Agreement does, however, include Article 10,⁵ which describes computer programs and compilations of data, as well as Article 11,⁶ which tackles the rights of authors and their successors in title to allow or prevent others from commercially renting their copyrighted works. WIPO further states that copyrights exist "to encourage a dynamic creative culture, while returning value to creators so that they can lead a dignified

4. See Georgios I. Zekos, *Trademarks and Cyberspace*, 9 J. WORLD INTELL. PROP. 496 (2006), available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1422-2213.2006.00301.x/epdf>.

5. Agreement on Trade-Related Aspects of Intellectual Property Rights art. 10, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, [hereinafter TRIPS Agreement].

6. TRIPS Agreement art. 11.

economic existence, and to provide widespread, affordable access to content for the public.”⁷ Therefore, the environment of intellectual property has rapidly altered over the past two decades. With the advent of cyberspace, people have transformed the way they share information and consume intellectual property. As a result, it has become easier than ever for people around the globe to misappropriate protected material.

The goal of this Article is to illustrate the developments in copyright and trademark law due to globalization and cyberspace. These developments will be illustrated by using theory and practice to point toward a tentative relationship between IP rights protection and the distribution of foreign direct investment (“FDI”) across jurisdictions. Moreover, this Article investigates and provides an answer regarding the ultimate impact of copyrights and trademarks on FDI inflows by employing the *zekcopy6* and *zekmark6* indices.

II. COPYRIGHT LAW

A. *The Background of Copyright*

Copyright applies to any original work of authorship fixed in a tangible medium of expression.⁸ It protects the mode in which an author articulates an idea or a set of facts, but not the idea or facts themselves.⁹ Furthermore, copyright applies to an original work of authorship, fixed in a tangible medium embodiment embracing body language, facial expression, and reactions to other actors and elements of a scene.

Only the creative expression in a work is protected by copyright; copyright does not protect functional matter.¹⁰ While software can obtain copyright protection as a literary work,¹¹ courts tend to give it a thin level of protection.¹² For example, in *Oracle America, Inc. v. Google Inc.*, the Federal Circuit held that the application programming interfaces of the Java programming language were copyrightable expression, as opposed to non-copyrightable functional matter.¹³

7. *Copyright and Related Rights*, WORLD INTELL. PROP. ORG., <http://www.wipo.int/copyright/en>.

8. 17 U.S.C. §§ 101, 102(a) (2015).

9. 2 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 4:31 (Mar. 2016).

10. 17 U.S.C. § 103(b) (2015).

11. 17 U.S.C. § 101 (2015).

12. *See, e.g.*, *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014).

13. 750 F.3d at 1368, 1381.

Regarding the rebroadcasting of television programs, the Supreme Court held that doing so infringes the *public* performance right, even when technology is used that effectively gives each viewer a personal antenna.¹⁴ This is because Congress added the definition of “public performance,” called the Transmit Clause, to the copyright statute to cover not only an initial showing, but also the rebroadcasting of any copyrighted content.¹⁵ Notably, in *Cartoon Network LP, v. CSC Holdings, Inc.*, the court held that there was no public performance of the work where customers of Cablevision used remote storage offered by Cablevision to record programs and watch them at their leisure, because the recording system “would not directly infringe [the copyright owners’] exclusive rights to reproduce and publicly perform their copyrighted works.”¹⁶

Copyright applies to written works, and a wide series of creative works, including sculptures, photographs, maps, and computer software. Anyone who contributes to a work, such as an actor in a film, enjoys a separate, personal copyright.¹⁷ Copyright also allows for compilation works, which protect the order and way of presenting the compilation’s elements. However, compilation works do not extend to the elements themselves.¹⁸ Copyright protection also does not extend to systems, procedures, and methods of operation. Systems and procedures are not only analogous to underlying ideas and formulas, but are also within the purview of patent law. Granting copyrights to systems, procedures and methods of operations could develop a backdoor method for obtaining copyrights for ideas incapable of receiving protection through the more rigorous patent law. With this in mind, an author’s description of the procedure may be copyrighted, but not the procedure itself.¹⁹

Under modern copyright law, an author is not required to take any affirmative steps for copyright to accrue; copyright attaches from the

14. *ABC, Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

15. *Aereo*, 134 S. Ct. at 2506.

16. 536 F.3d 121, 140 (2d Cir. 2008).

17. *Garcia v. Google, Inc.*, 766 F.3d 929 (9th Cir. 2014).

18. 17 U.S.C. § 101 (2015). Copyright also protects a compilation work, which is defined as “a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.” *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349 (1991) (“[C]opyright assures authors the right to their original expression . . .”).

19. 17 U.S.C. § 102(b) (2015) (noting that copyright does not extend to “any idea, procedure, system, method of operation, concept, principle, or discovery, regardless of form in which it is described, explained, illustrated or embodied”); *Sparaco v. Lawler, Matusky, Skelly, Eng’rs LLP*, 303 F.3d 460, 468 (2d Cir. 2002); *SecureInfo Corp. v. Telos Corp.*, 387 F. Supp. 2d 593, 611 (E.D. Va. Sept. 9, 2005).

moment of fixation in a tangible medium. Consequently, everything that has been written down, from a novel to an email and everything in between, allows the author to have a copyright, presuming that the writing is an original work exhibiting a minimal degree of creativity.

Copyright also allows free communication of facts, while still protecting an author's expression. This means that every idea, theory and fact in a copyrighted work becomes immediately offered for public exploitation at the moment of publication.²⁰

However, copyright can also hamper creators. While the grant of exclusive rights incentivizes some to create new information, it restricts others' capacity to employ that information as raw material for a new expression following up on the previous material. Proprietary information is also burdensome to lawfully appropriate, since copyright owners can charge any licensing fee they desire, or even decline to license their work altogether.²¹ Protection for intellectual property is provided in the interests of encouraging innovation and creativity. The U.S. intellectual property system is focused on creating optimal incentives that will promote innovation and creativity.²² Ownership of the right grants the author, or the author's exclusive licensee, an exclusive right to exploit the work through its reproduction, distribute copies of the work, publicly perform the work and create derivative works. In addition to the above rights, which are of an economic nature, a copyright also confers moral rights, which are not of

20. *Int'l News Serv. v. Assoc. Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting) ("The general rule of law is that the noblest of human productions—knowledge, truths ascertained, conceptions and ideas—become, after voluntary communication to others, free as the air to common use."); H.R. REP. NO. 1476, at 56, (Sept. 3, 1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670 ("Copyright does not preclude others from using ideas or information revealed by the author's work."); *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (citing *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985)).

21. *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (stating that the "ultimate aim" of copyright law is "to stimulate artistic creativity for the general public good"); *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 820 (9th Cir. 2003) ("The Copyright Act was intended to promote creativity, thereby benefitting the artist and the public alike."); *Warner Bros. Inc. v. Am. Broad. Cos.*, 720 F.2d 231, 240 (2d Cir. 1983) ("It is a fundamental objective of the copyright law to foster creativity."); Julie E. Cohen, *Creativity and Culture in Copyright Theory*, 40 U.C. DAVIS L. REV. 1151 (2007) ("Creativity is universally agreed to be a good that copyright law should seek to promote . . ."); Ned Snow, *The Regressing Progress Clause: Rethinking Constitutional Indifference to Harmful Content in Copyright*, 47 U.C. DAVIS L. REV. 1, 40 (2013) ("[I]n no uncertain terms the Court has articulated a view of copyright that defines the primary objective of copyright as creativity or originality (which turns on creativity).").

22. *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (noting that "[t]he economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.'"); *American Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1, 27 (S.D.N.Y. 1992), *aff'd*, 60 F.3d 913 (2d Cir. 1994) ("[T]he incentive to profit from the exploitation of copyrights will redound to the public benefit by resulting in the proliferation of knowledge. . . . The profit motive is the engine that ensures the progress of science.").

practical relevance for the purposes of economic analysis in the United States. Although the mere existence of copyright does not necessarily per se confer significant market power to owners or their licensees, the success of a given item on the market and the exclusive exploitation of the right imply market power.

The idea of creative freedom is apparent itself in intellectual property laws. Copyright, despite extension after extension, has a termination date codified within the Constitution of the United States in order to secure exclusive rights to authors for a limited time.²³ Thus, copyright is not unlimited. Over the years, it has been extended to cover the length of the creator's life and an additional fifty or seventy years, depending on the date of the author's death, for signatories of the WIPO treaties relating to copyrights.

Copyright protection for original and derivative works encourages creativity by increasing the odds of appropriating the benefits of the creations. The rationale underlying copyright is that without exclusive rights, copyrighted goods would not be produced in adequate quantity and quality, therefore leaving society in worse condition. To be eligible for copyright protection, a work must be original. However, comparatively simple works are entitled to copyright protection so long as the required quantum of originality is present.²⁴ In order for a work to be copyrighted, a work only has to have a minimal level of originality.

Occasionally, an idea can become so entangled with its expression that the two become inseparable. As a result, that specific work should not be protectable, because the work falls within the merger doctrine.²⁵ If there is only one or a very limited number of ways to express an idea, the expression of that idea is not copyrightable, because granting copyright to the expression would grant an impermissible right over the idea itself.²⁶ As a result, the work

23. U.S. CONST. art. I, § 8, cl. 8; 17 U.S.C. § 302 (2015).

24. Katherine L. McDaniel & James Juo, *A Quantum of Originality in Copyright*, 8 CHI.-KENT J. INTELL. PROP. 169 (2009); *Southco, Inc. v. Kanebridge Corp.*, 390 F.3d 276 (3d Cir. 2004) (holding that parts numbers were not copyrightable, because they are both not original and analogous to short phrases or titles); *Matthew Bender & Co. v. West Publ'g Co.*, 158 F.3d 674 (2d Cir. 1998) (holding that publisher's factual enhancements to judicial opinions were not sufficiently creative and original to warrant copyright).

25. Jennifer E. Rothman, *Liberating Copyright: Thinking Beyond Free Speech*, 95 CORNELL L. REV. 463, 481 (Mar. 2010).

26. 17 U.S.C. § 102(b) (2015); *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971) ("When the 'idea' and its 'expression' are thus inseparable, copying the 'expression' will not be barred, since protecting the 'expression' in such circumstances would confer a monopoly of the 'idea' upon the copyright owner."); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1253 (3d Cir. 1983) (an expression will be found to be merged into the idea when "there are no or few

is not capable of attaining copyright protection. The merger doctrine echoes the rule that where the expression is vital to the statement of the idea, or where there is only one mode or very few means of expressing the idea, the idea and the expression “merge” into an un-protectable totality.²⁷ Consequently, when an idea and its expression are inseparable, copyright law finds the two have “merged” into a single expression, which is not copyrightable. The distinction between idea and expression is more difficult to make in case where an image expresses an idea in ways that words cannot.²⁸ Whether a specific visual image is protectable under the merger doctrine is not easily decided.²⁹ For example, a jewelry company could not enjoin the manufacture of all jewel-encrusted pins shaped like bees.³⁰ When these lines are blurred, as they often are in copyright litigation, courts will often favor economic considerations over concerns of freedom of expression.³¹ The merger doctrine mostly applies to architectural works and pictorial, graphic and sculptural works, such as building codes and accountancy forms.³²

Copyright protection can supplant other rights, such as patent rights, where the ideas are not protectable but the expression is pure computer and mathematical algorithms. However, business-method software is one of the fastest-growing categories of new patents, and software patents represent fifteen percent of all patents.³³ The First Circuit held in *Lotus v. Borland* that the menu command structure for a spreadsheet was an

other ways of expressing a particular idea.”); *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 614 (7th Cir. 1987) (citing *Sid & Marty Krofft Television Productions, Inc. v. McDonald’s Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977) (“[T]he test is whether the accused work is so similar to the plaintiff’s work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff’s protectable expression by taking material of substance and value.”)).

27. *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675, 678-79 (1st Cir.1967); *Woods v. Resnick*, 725 F. Supp. 2d 809, 821 (W.D. Wis. 2010).

28. *Mannion v. Coors Brewing Co.*, 377 F. Supp. 2d 444 (S.D.N.Y. 2005); Rebecca Tushnet, *Worth a Thousand Words: The Images of Copyright*, 125 HARV. L. REV. 683 (Jan. 2012).

29. *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992).

30. *Herbert Rosenthal Jewelry Corp.*, 446 F.2d at 742 (9th Cir. 1971) (“When the idea and its expression are thus inseparable, copying the expression will not be barred, since protecting the expression in such circumstances would confer a monopoly of the idea upon the copyright owner free of the conditions and limitations imposed by the patent law.”).

31. Andrew B. Hebl, *A Heavy Burden: Proper Application of Copyright’s Merger and Scenes a Faire Doctrines*, 8 WAKE FOREST INTELL. PROP. L.J. 128 (Winter 2007).

32. *Baker v. Selden*, 101 U.S. 99 (1879).

33. J. Bessen & R.M. Hunt, *An Empirical Look at Software Patents*, J. ECON. & MGMT. STRATEGY 16, 157–89 (2007).

uncopyrightable “method of operation” but this holding was rejected by *Oracle*.³⁴

The lack of inventiveness in newly granted business method patents begs the question as to the degree of inventiveness in other fields of technology. It is worth mentioning here that *Bilski v. Kappos* shows judicial disagreement over whether business methods are patent-eligible subject matter, evidencing patent law’s struggle to address some technological advances.³⁵ Relatedly, copyright law is expected to remain unsettled as new issues arise and technology continues to progress.

B. Copyright and Freedom of Expression

Is free speech being depleted by intellectual property, putting both individual liberty and the public good at risk? The Constitution clearly confers Congress the right to limit speech by forbidding others to make use of copyrighted material.³⁶ To that extent, the Supreme Court has acknowledged the likelihood of a First Amendment defense to copyright infringement claims.³⁷ These traditional contours comprising the First Amendment are the two key exceptions to copyright infringement: fair use and the definitional balance.³⁸ Fair use defenses to copyright infringement

34. *Lotus Dev. Corp. v. Borland Int’l Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff’d by equally divided court*, 516 U.S. 233 (1996); Wendy J. Gordon & Robert G. Bone, *Copyright, in 1610*, *ENCYCLOPEDIA L. & ECON.* 197 (2000) (noting that, “if switching costs are high enough, giving copyright protection to a popular user interface that has become an industry standard can extend the copyright owner’s monopoly into the computer, not just the interface market”); see William H. Page & John E. Lopatka, *Network Externalities in 760*, *ENCYCLOPEDIA L. & ECON.* 970 (2000) (arguing that limiting copyright protection for network externalities in the case of computer software could bleed over into other areas of copyright, such as fan fiction, and that weakening copyright protection allows greater competition by clones but reduces the payoff for innovators); *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014).

35. 561 U.S. 593 (2010); Laura N. Gasaway, *Copyright Basics: From Earliest Times to the Digital Age*, *WAKE FOREST INTELL. PROP. L.J.* 241 (2009–10).

36. U.S. CONST. art. I, § 8, cl. 8; Ben Depoorter, Essay, *The Upside of Losing*, 113 *COLUM. L. REV.* 817, 837–38 (2013) (describing how a failed constitutional challenge to Congress’s extension of the copyright term “became a symbol representing the darker side of the expansion of intellectual property laws”).

37. *Eldred v. Ashcroft*, 537 U.S. 186 (2003) (finding the ‘traditional contours’ of copyright law have not been disturbed, and therefore the built-in free speech protections available in the Copyright Act are enough to accommodate the First Amendment); *Harper & Row Publishers v. The Nation Enterprises, Inc.*, 471 U.S. 539, 558 (1985); *Golan v. Holder*, 132 S. Ct. 873 (2012); Copyright Act of 1976, 17 U.S.C.A. § 102(b) (2015); *accord Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 350 (1991); Janice E. Oaks, *Copyright and the First Amendment: Where Lies the Public Interest?*, 59 *TUL. L. REV.* 135, 137 (1984).

38. See *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (finding fair use for consumers to use video cassette recorders to time-shift television programs); *Harper & Row, Publishers, Inc.*, 471 U.S. at 539 (1985) (holding that it was not fair use for a magazine, *The Nation*, to quote several hundred key words from the unpublished autobiography of former President Gerald Ford);

claims permit defendants to argue that their infringing use of another's copyrighted work was done for a non-commercial or educational purpose. In addition, courts use the fair use doctrine to ascertain, on a case-by-case basis, whether an accused infringer should be liable for damages. The definitional balance exception precludes copyrighting ideas and facts.³⁹ Like the definitional balance between an idea and its expression, fair use plays a large role in protecting First Amendment interests against private copyright monopolies, if somewhat unsuccessfully.⁴⁰ The definitional balance and fair use analyses are adequate protection for any work that had gained or regained copyright protection from the new legislation.⁴¹

The First Amendment protects non-verbal expression, as well as ideas. The Supreme Court has upheld ideas and non-verbal expression as constitutionally protected free speech. Examples of these forms of protected speech include certain musical lyrics, flag burning, or non-obscene pornography.⁴² When the line between idea and expression is unclear, the copyright infringement becomes more difficult.⁴³

There is no per se ban on First Amendment challenges to copyright infringement claims, but there has yet to be a case in which First Amendment arguments prevailed. Additionally, no act of Congress has, to date, been held to unconstitutionally alter the traditional contours of copyright.⁴⁴ ACTA requires member states to impose both fines and imprisonment for not only copying a work, but also "aiding and abetting" a "criminal" infringer.⁴⁵

Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994) (holding that it could be fair use for the music group 2 Live Crew to make a rap parody version of Roy Orbison's *Oh, Pretty Woman*, and that "[f]air use remained exclusively [a] judge-made doctrine until the passage of the 1976 Copyright Act."); Stewart v. Abend 495 U.S. 207 (1990) (finding no fair use for the producers of Alfred Hitchcock's film *Rear Window* to carry on showing the film after their rights were terminated in the underlying story).

39. 17 U.S.C.A. §§ 107–15 (2010).

40. Rogers v. Koons, 960 F.2d 301 (2d Cir. 1992) (holding that parody is a fair use defense but satire is not); Visual Resources Association, STATEMENT ON THE FAIR USE OF IMAGES FOR TEACHING, RESEARCH, AND STUDY (2011), <http://www.vraweb.org/organization/pdf/VRAFairUseGuidelinesFinal.pdf>.

41. *Golan*, 132 S. Ct. at 874 (restoring copyright status to foreign works formerly in the public domain in the United States, upholding the international copyright treaty and moving public domain works back into protected status, thus leading to more restrictive IP provisions).

42. Amanda Beshears Cook, *Copyright and Freedom of Expression: Saving Free Speech from Advancing Legislation*, 12 CHI.-KENT J. INTELL. PROP. 1 (2013); Ward v. Rock Against Racism, 491 U.S. 781, 790 (1989); Texas v. Johnson, 491 U.S. 397 (1989); Miller v. California, 413 U.S. 15, 24 (1973).

43. *Johnson*, 491 U.S. 418; *United States v. Eichman*, 496 U.S. 310, 317–19 (1990).

44. *Eldred v. Ashcroft*, 537 U.S. 186, 222 (2003).

45. ANTI-COUNTERFEITING TRADE AGREEMENT arts. 23–24, http://keionline.org/sites/default/files/acta1105_en.pdf; Kenneth L. Port, *A Case Against the ACTA*, 33 CARDOZO L. REV. 1131, 1165 (Feb. 2012) (arguing that ACTA provisions "are both vague and

Criminalizing acts that were historically civil infringement concerns free speech proponents.⁴⁶ The DMCA did not violate the First Amendment rights of those who posted decoding programs that would permit other cyberspace users to decrypt and manipulate encrypted content.⁴⁷ It is questionable that the DMCA even serves the goal of protecting intellectual property revenue.⁴⁸ The Uruguay Round Agreements Act (“URAA”), an international treaty that sought to harmonize international copyright laws, restored the copyright protection of many foreign works that had already entered the public domain.⁴⁹

Is there a difference between intellectual property laws in common law and civil law countries? Gradually, the outgoing protection of private property rights has come at the expense of free expression, through modern interpretation of copyright doctrine and recent legislative implementation of particular international agreements. Civil law countries view intellectual property rights as natural rights, and even grant moral rights to copyright holders. By contrast, common law countries, such as the United States, view intellectual property rights as the only channel to carry out the natural right of free expression, and sequentially, the public good. The disregard of inherent conflict erodes the right of public dissemination of information in favor of private property rights creating private monopolies over information and unconstitutionally “chills” expression aggravating the democratic, public benefit rationale of the original constitutional clauses.⁵⁰

Is there a shared purpose of copyright and the First Amendment?⁵¹ Civil law countries view copyright as a “natural” right of authorship, while common law countries view copyright as a way to incentivize works of authorship, and advance the dissemination of information. In common law

frightening to a free society”); Khaliunaa Garamgaibaatar, *Anti-Counterfeiting Trade Agreement: Copyrights, Intermediaries, and Digital Pirates*, 20 COMM. L. CONSPPECTUS 199, 201 (2011).

46. Jennifer L. Hanley, *ISP Liability and Safe Harbor Provisions: Implications of Evolving International Law for the Approach Set Out in Viacom v. YouTube*, 11 J. INT’L BUS. & L. 183, 199 (2012).

47. Universal City Studios v. Reimerdes, 111 F. Supp. 2d 294, (S.D.N.Y. 2000).

48. Daniel J. Gervais, *Cloud Control: Copyright, Global Memes, and Privacy*, 10 J. TELECOMM. & HIGH TECH. L. 53 (Winter 2012).

49. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994); Golan v. Holder, 132 S. Ct. 873 (2012); Clark D. Asay, *A Case for the Public Domain*, 74 OHIO ST. L.J. 753, 755 (2013) (noting that the free software movement is based on the theory that “freedom of use fosters increased collaboration, which in turn spurs inventive and creative activity”).

50. Craig W. Dallan, *The Problem with Congress and Copyright law: Forgetting the Past and Ignoring the Public Interest*, 44 SANTA CLARA L. REV. 365, 425 (2004).

51. Joshua N. Mitchell, *Promoting Progress with Fair Use*, 60 DUKE L.J. 1639, 1642–56 (Apr. 2011).

counties, free speech and public dissemination of ideas are “natural rights” that are more vital than the legislatively granted intellectual property rights.⁵²

Permitting authors to benefit from their works for a limited period of time persuades authors to disseminate their ideas. In this way, the United States Constitution grants Congress the power to ascertain intellectual property rights that do not already exist in a natural state and serve the public good, which is one of the shared goals of the Copyright Clause and the First Amendment.⁵³ The dissemination of information eventually serves the public, as opposed to individual information and the ideas’ own economic gain.⁵⁴ Thus, overprotecting First Amendment rights against copyright law leads to the production of less speech of “public interest.”⁵⁵

C. Restrictions to the Rights of Copyright Owners

Should the unauthorized use of a work be protected by the First Amendment?⁵⁶ Fair dealing and fair use provisions shield personal use copying for purposes of research, study, criticism, and review.⁵⁷ There are very few private or personal fair use decisions in the U.S., due to high difficulties in revealing such uses and the expense of litigation relative to the expected recovery.⁵⁸

The U.S. Code codifies four different fair use factors to use when determining whether an author has infringed upon another’s copyright, or whether the use is allowable, and accommodates the First Amendment by permitting use of another creator’s work through quotations, educational purposes, parody, and non-commercial use.⁵⁹ The “public good” or “public

52. David L. Lange, Risa J. Weaver & Shiveh Roxana Reed, *Golan v. Holder: Copyright in the Image of the First Amendment*, 11 J. MARSHALL REV. INTELL. PROP. L. 83, 86–87 (2011).

53. U.S. CONST. art. I, § 8, cl. 8

54. 5-19E MICHAEL D. BIRNHACK, NIMMER ON COPYRIGHT § 19E.03 (2011).

55. Stephen Fraser, *The Conflict Between the First Amendment and Copyright Law and Its Impact on the Internet*, 16 CARDOZO ARTS & ENT. L.J. 1, 18 (1998); *United Video v. F.C.C.*, 890 F.2d 1173, 1191 (D.C. Cir. 1989).

56. See *Eldred v. Ashcroft*, 537 U.S. 186, 222 (2003); *Golan v. Holder*, 132 S. Ct. 873 (2012).

57. Copyright Law of Japan, Law No. 43, art. 30–31 (June 27, 2012) (Japan) (discussing personal use and private study); Copyright, Designs and Patents Act 1988 §§ 29–30, c. 48 (Eng.); Copyright Act 1968 (Cth) 40–41 (Austl.).

58. *Capitol Records v. Thomas-Rasset*, 692 F.3d 899 (8th Cir. 2012); *Recording Indus. Ass’n of Am. v. Diamond Multimedia, Inc.*, 180 F.3d 1072, 1079 (9th Cir. 1999) (holding consumer space-shifting of music to constitute fair use).

59. 17 U.S.C. § 107 (1992) The four fair use factors are: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the

benefit” plays a role in determining the rationale and nature of use under the first § 107 factor.⁶⁰ Fair use plays a substantial part in balancing the interests of rights holders, users, and the public concerning many activities that the U.S. Congress has not produced explicit R&Is to address.⁶¹ Moreover, fair use initially evolved as a constraint on the scope of U.S. copyright law to balance competing interests in cases in which second comers made productive uses of a first author’s work in producing a new one, not to balance interests in new technology cases.⁶² It is worth mentioning that ad hoc decisions are made for each case on what is or is not exactly fair use.⁶³

Fair use causes respect for copyright law. Codes of fair use best practices permit user communities to come to a consensus about practices that make possible reasonable uses that do not cause appreciable harm to authorial markets.⁶⁴ It is argued that the fair use doctrine inadequately protects huge numbers of creators because permitting even a near-exact copy inhibits artists from creating new works and publishing those works for public view.⁶⁵

The idea/expression (or fact/expression) dichotomy is codified in § 102(b), advancing the dissemination of ideas and permitting an idea or factual information to flow freely from one author to another, and from

copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work. *Id.*

60. Harper & Row v. Nation Enterprises, 471 U.S. 539, 559 (1985); Rosemont Enterprises, Inc. v. Random House, Inc., 385 U.S. 1009 (1967).

61. Lloyd L. Weinreb, *Fair’s Fair: A Comment on the Fair Use Doctrine*, 103 HARV. L. REV. 1137 (1990).

62. Williams & Wilkins Co. v. United States, 487 F.2d 1345 (Ct. Cl. 1973), *aff’d by an equally divided court*, 420 U.S. 376 (1975); *see* Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968); American Geophysical Union v. Texaco, Inc., 60 F.3d 913 (2d Cir. 1994) (finding the practice unfair partly because Texaco was a commercial entity and the copies furthered its commercial interests); *Williams & Wilkins*, 487 F.2d at 1362–63 (finding photocopying within the Classroom Guidelines to be unquestionably fair); 17 U.S.C. § 108(d) (permitting photocopying of single article for library patrons); Princeton Univ. Press v. Michigan Document Services, Inc., 99 F.3d 1381 (6th Cir. 1996) (photocopying of copyrighted materials for educational course packs held unfair because licenses opportunities were available); Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005) (reaffirming the fair use safe harbor but holding that it does not shield those who induce infringement).

63. 17 U.S.C.A. § 107 (2014); Campbell v. Acuff-Rose Music, 510 U.S. 569, 581 (1994) (finding that not all commercial appropriation could be considered infringement, and that the test is how “transformative” the parody is of the original work, as well as how much market value the parody directly takes from the original).

64. PATRICIA AUFDERHEIDE & PETER JASZI, RECLAIMING FAIR USE: HOW TO PUT BALANCE BACK IN COPYRIGHT (2011) (discussing the value of best practices).

65. Jennifer E. Rothman, *Best Intentions: Reconsidering Best Practices Statements in the Context of Fair Use and Copyright Law*, 57 J. COPYRIGHT SOC’Y USA 371, 376 (2010) (arguing that codes of best practices often contain “more wishful thinking than reality” and promise more certainty than existing case law warrants).

authors to consumers of works.⁶⁶ By preserving ideas and facts for the public domain, copyright law evades conflict with the First Amendment serving the public good. Copyright law serves public ends by supplying individuals with an enticement to engage in private ones.⁶⁷

Modern copyright laws grant authors rights to control exploitations of their works.⁶⁸ There is a set of restrictions and impediments (“R&Is”) embraced by legislatures or developed through common law adjudication. R&Is make possible free uses of protected works under national copyright laws, although some R&Is are subject to equitable remuneration obligations.⁶⁹ The following are the various rationales of R&Is:

The rationales of R&Is are grounded in normative values and views on copyright, while others are more pragmatic reactions to the complex difficulties intrinsic in the lawmaking process and the prerequisite to balance competing interests.

R&Is promote ongoing authorship such as the fair use doctrine.⁷⁰ Indeed, one of the most significant functions of fair use in U.S. law is to sponsor ongoing authorship. In *Campbell v. Acuff-Rose Music, Inc.*, the U.S. Supreme Court, speaking on fair use, stated that “permit[ting] . . . courts to avoid rigid application of the copyright statute . . . would stifle the very creativity which that law is designed to foster.”⁷¹ Productive uses are fair when they are neutral or positive about the works on which they draw.⁷²

R&Is create a buffer for user autonomy and personal property. Balancing the interests of the public with those of authors is a purpose of the

66. 17 U.S.C. § 102(b) (1990) (“In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”).

67. See *Eldred v. Ashcroft*, 537 U.S. 186, 212 n.18 (2003).

68. 17 U.S.C. § 106 (2002).

69. 17 U.S.C. §§ 107–22 (2014); Jane C. Ginsburg, *Fair Use for Free, or Permitted-But-Paid*, 29 BERKELEY TECH. L.J. 1383 (recommending permitted-but-paid L&Es for many “redistributive” uses that American courts have ruled are fair, and pointing to foreign L&Es that permit uses subject to remuneration). Some European scholars have proposed a model copyright law for the EU under which some L&Es would be subject to remuneration. See The Wittem Project: European Copyright Code, art. 5 (April 2010), www.copyrightcode.eu.

70. *Emerson v. Davies*, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845) (No. 4,436); *New Era Publ’ns Int’l v. Carol Publ’g Grp.*, 904 F.2d 152 (2d Cir. 1990).

71. 510 U.S. 569, 577 (1994) (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)); Pierre L. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105 (1990).

72. *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605 (2d Cir. 2006); *Hofheinz v. A & E Television Networks*, 146 F. Supp. 2d 442 (S.D.N.Y. 2001); *Cariou v. Prince*, 714 F.3d 694 (2d Cir. 2013); *Swatch Grp. Mgmt. Servs. v. Bloomberg L.P.*, 742 F.3d 17 (2d Cir. 2014) (finding that the distribution of a recording of a company’s conference call with analysts that disclosed the company’s earning was fair use).

international copyright system.⁷³ Some R&Is intend to provide public benefits fostering the Public Interest in Access to Information. Both authorial and broader public interests rationalize R&Is that advance access to works and information. The fair use doctrine is the principal way U.S. law fulfills this function.⁷⁴ The exclusion of U.S. government works from copyright protections elevates public access to information.⁷⁵ Data-mining which entails digitizing works and indexing their contents so that the texts can be analyzed by specialized software programs is considered to be fair use defenses.⁷⁶ *Authors Guild, Inc. v. HathiTrust* held that fair use protected unauthorized scanning and compiling of books into a searchable database involving only a limited set of rationale, so is only preliminary to applying fair use to Google Books as a whole.⁷⁷ In *Cambridge Univ. Press v. Patton* the court also placed more weight on the market influence of the potential loss of licensing revenue reversing a safe harbor approach to the application of fair use to university course books.⁷⁸

R&Is carry out social and cultural policy goals making possible the use of in-copyright materials in the course of face-to-face teaching in nonprofit educational institutions, facilitating libraries and archives to reproduce works to preserve them, and allowing the formation of special format works so print-disabled persons have greater access to literary works.⁷⁹ For instance, in the *HathiTrust* case, the court upheld creation of a full-text

73. *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932), *cited approvingly in* *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 931 (2005); 17 U.S.C. §§ 106(3)–106(5) (2002); Jessica Litman, *Lawful Personal Use*, 85 TEX. L. REV. 1871 (2007).

74. 17 U.S.C. § 113(c) (2005) (exempting photographs or pictures of protected works for purposes of comment or news reporting); 17 U.S.C. § 108(f) (2005) (allowing libraries and archives to make and lend copies of broadcast news programs).

75. 17 U.S.C. § 105 (1976); *Time, Inc. v. Bernard Geis Associates*, 293 F. Supp. 130, 146 (S.D.N.Y. 1968); *Savage v. Council on Am.-Islamic Relations, Inc.*, No. C 07-6076 SI, 2008 WL 2951281 (N.D. Cal. July 25, 2008).

76. *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87 (2d Cir. 2014) (finding a nonprofit digital library made fair use of books from research library collections in developing a full-text searchable database that made it possible for researchers to run search queries for books on certain topics of interest); *A.V. v. iParadigms, LLC*, 562 F.3d 630 (4th Cir. 2009) (finding it fair use to make copies of student papers so that a computer program could detect plagiarism); *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003); *White v. West Pub. Corp.*, No. 12 Civ. 1340(JSR), 2013 WL 544057 (S.D.N.Y. 2014); Matthew Sag, *Copyright and Copy Reliant Technology*, 103 N.W. L. REV. 1607 (2009).

77. *Authors Guild, Inc.*, 755 F.3d at 87.

78. 769 F.3d 1232 (11th Cir. 2014); Dan Nabel, *Top 10 Fair Use Cases of 2014 (Guest Blog Post)*, TECHNOLOGY & MARKETING LAW BLOG (Jan. 5, 2015), <http://blog.ericgoldman.org/archives/2015/01/top-10-fair-use-cases-of-2014-guest-blog-post.htm>.

79. Directive 2001/29/EC of the European Parliament and of the Council on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, arts. 5(2)(c), 5(3)(b), [2001] O.J. (L 167/16–17) [hereinafter InfoSoc Directive].

searchable database containing copyrighted books for reason of preserving the books and of making them more available to print-disabled persons, both of which went beyond the contours of the statutory exceptions.⁸⁰

R&Is permit public institutions to operate by making and distributing copies, and perhaps even to perform, copyrighted works for non-consumptive governmental purposes.⁸¹ Many countries have special exemptions from liability for utilization of in-copyright materials in investigations, adjudications, administrative proceedings and the like.⁸²

R&Is carry out economic purposes promoting commerce, competition, and continuing innovation which means curing or alleviating market failure problems, sometimes through compulsory or statutory licenses and sometimes through obvious discharge. Fair use has permitted the reverse engineering of software in the U.S.⁸³ For instance, Nintendo, which sold a video game system and video games, sued Galoob, a company that sold a product called Game Genie that modified Nintendo's games, for copyright infringement; Nintendo alleged that modifying a game with the Game Genie created a derivative work, violating Nintendo's copyright in their video games.⁸⁴ Another competition-fostering fair use involved the use of copyrighted images in advertising.⁸⁵

R&Is exempt economically unimportant supplementary uses. The European InfoSoc Directive identifies that incidental copies made of digital works not have independent economic significance consenting that these incidental copies be exempted from copyright liability. It is worth mentioning that there is no equivalent provision in U.S. law.⁸⁶

R&Is are embraced for politically useful reasons such as interpreting legal protections as extending to public performance rights.⁸⁷ Some R&Is

80. *Authors Guild, Inc.*, 755 F.3d at 87.

81. *Shell v. City of Radford*, 351 F. Supp. 510 (W.D. Va. 2005); *Jartech, Inc. v. Clancy*, 666 F.2d 403 (9th Cir. 1982).

82. Copyright Act, Law No. 43 of June 27, 2012, art. 42 (Japan).

83. *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992); Directive 2009/24/EC of the European Parliament and of the Council on the Legal Protection of Computer Programs, art. 6, [2009] O.J. (L 111/19).

84. *Lewis Galoob Toys v. Nintendo of America*, 964 F.2d 965 (9th Cir. 1992).

85. *Sony Entm't Am. Inc. v. Bleem LLC*, 214 F.3d 1022 (9th Cir. 2002); Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600 (1982).

86. *Italian Book Corp. v. Am. Broad. Co.*, 458 F. Supp. 65 (S.D.N.Y. 1978) (finding incidental capture of music in news coverage of parade was fair use); 117 U.S.C. § 117(a) (1998) (permitting owners of copies of computer programs to make backup copies); InfoSoc Directive, art. 5(1), [2001] O.J. (L 167/16).

87. *Flo & Eddie, Inc. v. Sirius XM Radio, Inc.*, 62 F. Supp. 3d 325 (S.D.N.Y. 2014).

present flexibility in copyright laws such as in the occasion copyright owners would voluntarily license parodies of their works for the reason that they may be indisposed to subject their works to the kind of critical commentary that parodies are expected to bring about.⁸⁸

D. Copyright in the Digital Era

Advances in digital technology, the commercialization of the Internet, and the invention of entire new fields of human activity, such as e-commerce, nanotechnology, biotechnology and nanobiotechnology, have driven alterations in the core of copyright.⁸⁹ Copyright vests in an inventor, the moment he “fixes” the work to a tangible medium of expression.⁹⁰ Cyberspace reduces creators’ opportunity for profit as illegal activities and free content undercut the legitimate market.⁹¹

Copyright, by contrast to patent law, has for the most part ignored technology and in doing so it has purchased some useful adaptability to technological change. New technologies regularly disrupt international copyright law, requiring that legislatures adjust laws to align with the market. International norms shift and develop over time. The internet has tested copyright markets and copyright law because the internet has a dark side embodied in its broadly realized capability for unlicensed, but always

88. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 592 (1994).

89. Tom W. Bell, *The Specter of Copyism v. Blockheaded Authors: How User-Generated Content Affects Copyright Policy*, 10 VAND. J. ENT & TECH. L. 841, 852–54 (2008) (explaining that technology advances have decreased cost of producing and distributing expressive works, resulting in more blockhead authors); JOHN TEHRANIAN, INFRINGEMENT NATION: COPYRIGHT 2.0 AND YOU, 14 (2011) (describing today’s copyright laws as “a legal regime that threatens to make criminal infringers of us all”); *id.* at 129 (“[T]he widening ambit of copyright protection has increasingly encroached upon critical First Amendment values, suppressing transformative uses of copyrighted works that advance creativity and free speech rights.”); PETER BALDWIN, THE COPYRIGHT WARS: THREE CENTURIES OF TRANS-ATLANTIC BATTLE (2014) (opposing the author-oriented Continental copyright tradition against the public minded Anglo-American copyright tradition and contending that undue attention to authors restricts access to culture and suppresses expression).

90. *Marvel Characters, Inc. v. Kirby*, 726 F.3d 119, 143 (2d Cir. 2013) (concluding that Kirby’s comic book characters were works made for hire, and therefore Kirby had no right to terminate transfer of copyright to Marvel); *Siegel v. Warner Bros. Entm’t*, 542 F. Supp. 2d 1098, 1064–79 (C.D. Cal. 2008) (finding that certain “Superman” works were works made for hire, and therefore not within scope of termination right); Wendy J. Gordon, *The Core of Copyright: Authors, Not Publishers*, 52 Hous. L. Rev. 613 (2014) (stating that Congress does not have power to enact copyright laws for the benefit of disseminators if they do not also benefit authors).

91. ROB LEVINE, FREE RIDE: HOW DIGITAL PARASITES ARE DESTROYING THE CULTURE BUSINESS, AND HOW THE CULTURE BUSINESS CAN FIGHT BACK 252–53 (2011); Robert McCrum, *From Bestseller to Bust: Is This the End of an Author’s Life?*, THE GUARDIAN, Mar. 2, 2014, <http://www.theguardian.com/books/2014/mar/02/bestseller-novel-to-bust-author-life> (citing the rise of free content on the internet as a challenge for authors today and finding that writing is increasingly unprofitable for unknown authors).

perfect, copies and streams of copyrighted works. Moreover, the internet makes prospective copyright infringers of us all. Copyright law should promote copyright commerce requiring not just readily divisible and transferable rights, but also information about those rights. The abundance and ready substitutability of copyright goods systematically press toward competitive prices.

The copyright law has every time failed to safeguard the rights of artists and authors on cyberspace. In addition, public opinion is hostile toward improved copyright protections. Copyright law will remain unsettled as new issues arise and technology continues to develop.⁹² Digitization and the internet permitted immediate perfect replication and so IPRs had to grow. In 2005, the U.S. Supreme Court expanded the Copyright Act to embrace a form of liability it had never before acknowledged in the context of copyright, providing technology that stimulates copyright infringement.⁹³ Moreover, copyright law present, under the judicially-developed merger doctrine, that property rights under copyright law are denied when an unprotectable idea cannot be separated from protectable illustration of the idea.⁹⁴

The technology that brings works directly to users' computers and personal portable devices no longer necessitates conventional publishing's infrastructure of intermediaries. In any case, every computer-equipped author makes his work directly available to his audience via cyberspace. Although availing the resources of distribution is one thing, making a *living* from the works one distributes is another.⁹⁵

Copyright is about maintaining control—both economic and artistic—over the fate of the work.⁹⁶ Attribution and integrity clauses have

92. Laura N. Gasaway, *Copyright Basics: From Earliest Times to the Digital Age*, WAKE FOREST INTELL. PROP. L.J. 241 (2009–10).

93. *MGM Studios v. Grokster, Ltd.*, 545 U.S. 913 (2005).

94. *Mercantile Exch., Inc. v. Intercontinental Exch., Inc.*, 497 F.3d 109 (2007).

95. Trent Hamm, *The Truth About Making Money Online*, THE CHRISTIAN SCI. MONITOR, Oct. 29, 2013, <http://www.csmonitor.com/Business/The-Simple-Dollar/2013/1029/The-truth-about-making-money-online> (describing how “the only way to make money consistently online is to produce a lot of content on a very consistent basis,” and that proceeds are often realized in the long-term, not immediately after publication); Jim Edwards, *Yes, You Can Make Six Figures as a YouTube Star . . . And Still End Up Poor*, BUSINESS INSIDER, Feb. 10, 2014, <http://www.businessinsider.com/how-much-money-youtube-stars-actually-make-2014-2> (finding that even YouTube content providers that generate high gross revenue see less than 50% of that revenue, resulting in unsustainable costs for building a business).

96. Vineet Kumar, *Making “Freemium” Work*, HARVARD BUS. REV. 27 (May 2014) (“Over the past decade ‘freemium’—a combination of ‘free’ and ‘premium’—has become the dominant business model among internet start-ups and smartphone app developers”).

distinguished licenses in the open source software community.⁹⁷ Authors who self-distribute on the internet face the possibility of respect for their names and their works, but without remuneration.⁹⁸ Cyberspace and social media have stimulated revolutions both in the music industry.⁹⁹ Technological advances have made it significantly easier for musicians not only to create/ produce music, but also to distribute it. The Recording Industry Association of America (RIAA), the trade association representing the labels, has claimed that “illegal downloading” has resulted in “fewer musicians.”¹⁰⁰

Modern media technologies from the VCR onwards have made reader copying much easier, and digital media technologies often make copies as part of the ordinary reading or playback process. Fair use has stepped in to make certain that ordinary acts of reading remain non-infringing.¹⁰¹ Copyright ignores robots.¹⁰² Robotic reading is a form of automation, and as such it has to confront familiar critiques of automation’s effects on humans.¹⁰³ It is argued that works authored through artificial intelligence should be copyrightable.¹⁰⁴

Copyright laws do not protect the users’ data, as the users energetically surrender the protection when clicking to agree to terms of service.¹⁰⁵ The

97. Rebecca Schoff Curtin, *Hackers and Humanists: Transactions and the Evolution of Copyright*, 54 IDEA 103, 115–16 (2014) (noting that free software “values a software author’s moral rights over the kinds of exclusive rights conveyed by U.S. copyright law” and describing incorporation of rights of integrity and attribution into free software licenses).

98. Greg R. Vetter, *The Collaborative Integrity of Open-Source Software*, UTAH L. REV. 563, 672, tbl.2 (2004) (comparing the inclusion of rights of integrity and attribution in a few open source licenses and discussing the enforcement of the right of integrity under an open source license).

99. Marvin Ammori, *First Amendment Architecture*, 2012 WIS. L. REV. 1, 44 (2012).

100. *Who Music Theft Hurts*, RIAA (2015), https://www.riaa.com/physicalpiracy.php?content_selector=piracy_details_online.

101. *Fox Broad. Co., Inc. v. DISH Network L.L.C.*, 747 F.3d 1060 (9th Cir. 2013); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

102. James Grimmelman, *Copyright for Literate Robots*, 101 IOWA L. REV. 657 (2016).

103. *Denison v. Larkin*, 64 F. Supp. 3d 1127 (N.D. Ill. Aug. 13, 2014) (finding fair use to copy blog post for use in an attorney discipline proceeding); *White v. West Pub’g Corp.*, 29 F. Supp. 3d 396 (S.D.N.Y. 2014) (finding transformative fair use for West and Lexis to make comprehensive databases of filed legal briefs); *Stern v. Does*, 978 F. Supp. 2d 1031, 1045 (C.D. Cal. 2011) (finding transformative fair use to forward email, because “[b]y forwarding the post in e-mails, they conveyed the fact of the post rather than its underlying message”).

104. Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, STAN. TECH. L. REV. 5 (2012); Rebecca Tushnet, *Economies of Desire: Fair Use and Marketplace Assumptions*, 51 WM. & MARY L. REV. 513, 537 (2009) (“[C]reativity is a positive virtue, not just because of its results but because of how the process of making meaning contributes to human flourishing.”).

105. 17 U.S.C. § 106A (2006); Ed Bayley, *The Clicks that Bind: Ways Users “Agree” to Online Terms of Service*, ELECTRONIC FRONTIER FOUNDATION, Nov. 16, 2009, <https://www.eff.org/wp/clicks-bind-ways-users-agree-online-terms-service>.

doctrine of unconscionability does not protect users from application owners wielding their superior power to take away individuals' rights.¹⁰⁶ The convergence of technology and new art methods in the form of applications has shown that current copyright law is not equipped to provide adequate protection.¹⁰⁷

Creators of sound recordings are granted separate exclusive rights that can similarly be transferred or licensed to record labels to administer, in exchange for capital investment, marketing, promotion and distribution.¹⁰⁸ In the United States, two types of objects attract copyright in a piece of recorded music: musical works and sound recordings. The musical work copyright is granted to the composers of the music and lyrics, and the sound recording copyright is granted to the creators of the sound recording.¹⁰⁹ Since streaming comprises a public performance right, a performance license needs to be obtained from property rights offices.¹¹⁰ Copyright arguably has become the law of missed opportunities.¹¹¹

E. The Online Piracy Problem

The level of online piracy of copyrighted works today is unanticipated. With the growth of streaming services, direct download sites, and peer-to-peer services such as BitTorrent, the old problem of online piracy has

106. Roger C. Bern, "Terms Later" Contracting: *Bad Economics, Bad Morals, and a Bad Idea for a Uniform Law*, Judge Easterbrook Notwithstanding, 12 J.L. & POL'Y 641, 795 (2004); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1452 (7th Cir. 1996) (holding that a user accepted the terms by using the product after clicking through the license agreement on the screen and is, therefore, bound by them).

107. 17 U.S.C. § 106A (2006); Lauren Russell, *Mobile Phones Give Artists New Tools to Create*, CNN, Sept. 19, 2012, http://www.cnn.com/2012/09/19/living/iphone-art/index.html?iid=article_sidebar; MONICA HORTEN, THE COPYRIGHT ENFORCEMENT ENIGMA: INTERNET POLITICS AND THE 'TELECOMS PACKAGE', 16-19 (2012).

108. Alex Solo, *The Role of Copyright in an Age of Online Music Distribution*, 19 MEDIA AND ARTS L. REV. 169, 179 (2014); Peter DiCola, *Money from Music: Survey Evidence on Musicians' Revenue and Lessons About Copyright Incentives*, 55 ARIZ. L. REV. 301 (2013); Peter Jenner, *Copyright in the Digital Age; Benefiting Users and Creators?*, 8 REV. ECON. RES. ON COPYRIGHT ISSUES 55, 60 (2011); Seth Ericsson, *The Recorded Music Industry and the Emergence of Online Music Distribution: Innovation in the Absence of Copyright (Reform)*, 79 GEO. WASH. L. REV. 1783, 1898 (2011).

109. Capitol Records, Inc. v. MP3tunes, LLC, 821 F. Supp. 2d 627, 640-41 (S.D.N.Y. 2011); Brian Day, *In Defense of Copyright: Creativity, Record Labels, and the Future of Music*, 21 SEATON HALL J. SPORTS & ENT. L. 61, 71 (2010).

110. Richard Hooper & Ros Lynch, *Streamlining Copyright Licensing for the Digital Age*, INTELLECTUAL PROPERTY OFFICE 9 (July 2012), <http://www.ipo.gov.uk/dce-report-phase2.pdf>.

111. Olufunmilayo B. Arewa, *Creativity, Improvisation, and Risk: Copyright and Musical Innovation*, 86 NOTRE DAME L. REV. 1829, 1840 (2011) (arguing that today's copyright would have "inhibited creativity by composers such as Bach and Mozart," who "borrowed extensively in their works").

extended and spread in new and often arbitrary manners.¹¹² Peer-to-peer systems have become bastions of Internet piracy. Nearly 98.8% of files on the LimeWire peer-to-peer system were copyrighted and likely distributed without authorization.¹¹³ Moreover, around 95% of downloads through the Torrentbox and Isohunt sites infringed copyrights.¹¹⁴ This piracy problem is not attributable to just a few die-hard infringers, however. The International Federation of the Phonographic Industry found that 28% of Internet users access unauthorized content services each month.¹¹⁵ Today's pirates grew up in a globe with limited enforcement of copyright online. The public backlash against SOPA and PIPA has made the U.S. Congress to follow any new online copyright enforcement legislation.¹¹⁶ Copyright holders are left with the existing copyright law, which has proven unproductive and mismatched to stopping piracy in the cyberspace age.¹¹⁷ The DMCA, approved by Congress in 1998, is the endeavor of the United States Congress to limit Internet piracy of intellectual property. The DMCA implemented a new, self-help procedure for copyright owners to exercise control over their intellectual property creating problems when copyright holders who, for political rationale or reason of corporate espionage, want to reduce the speech of others abuse it.¹¹⁸ Are technological protection measures such as DRM (digital rights management) effective? Various methods of DRM have been largely ineffectual.¹¹⁹

112. Robert Layton & Paul Watters, *Investigation into the Extent of Infringing Content on BitTorrent Networks*, INTERNET COM. SEC. LAB., at *18 (Apr. 2010), http://www.afact.org.au/assets/research/bt_report_final.pdf (excluding pornographic works from conclusions due to uncertainty over infringing status).

113. Arista Records LLC v. Lime Grp. LLC, 784 F. Supp. 2d 398, 412 (S.D.N.Y. 2011).

114. Columbia Pictures Indus., Inc. v. Fung, No. CV 06-5578 SVW(JCx), 2009 WL 6355911, at *4, *17 (C.D. Cal. Dec. 21, 2009).

115. *Digital Music Report 2012*, INT'L FED'N OF THE PHONOGRAPHIC INDUS. 9, 16 (2012), <http://www.ifpi.org/content/library/DMR2012.pdf>.

116. Jack Schecter, *Online Piracy Legislation: Is the Cure Worse than the Disease?*, 59 APR. FED. LAW 20 (April 2012).

117. Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011); Protect IP Act, S. 968, 112th Cong. (2011); see generally Zach Carter & Ryan Grim, *SOPA Blackout Aims to Block Internet Censorship Bill*, HUFFINGTON POST, Jan. 18, 2012, http://www.huffingtonpost.com/2012/01/18/sopa-blackout-internet-censorship_n_1211905.html.

118. Thomas A. Mitchell, *Copyright, Congress, and Constitutionality: How the Digital Millennium Copyright Act Goes Too Far*, 79 NOTRE DAME L. REV. 2115, 2117 (Oct. 2004).

119. Andrew V. Moshirnia, *Giant Pink Scorpions: Fighting Piracy with Novel Digital Rights Management Technology*, 23 DEPAUL J. ART, TECH. & INTELL. PROP. L. 1, 50, 61 (2012) ("A technologically-impervious DRM is unlikely to emerge."); Jie Hua, *Toward A More Balanced Model: The Revision of Anti-Circumvention Rules*, 60 J. COPYRIGHT SOC'Y U.S.A. 327, 328-30 (2013) (describing DRM as a preventative measure against piracy and noting criticism of the DMCA's overprotection of DRM technologies).

Anti-piracy interventions are not guaranteed to be effective. Seizing the dominant unlicensed website may have significant costs on the structure of the piracy market, because it could both incentivize entry of new platforms, and engender more competition among existing websites to get a piece of the un-served market.¹²⁰

Taking down infringing websites is a means to diminish consumption of pirated media content and boost licensed consumption. The media industry has been significantly influenced by digitization, with information and communication technologies altering the way music, movies, and books are consumed and produced. Luis Aguiar, Jörg Claussen and Christian Peukert argue “concentration of demand decreases after the shutdown, with users basing their unlicensed movie consumption on a larger set of websites rather than on a single platform.”¹²¹

F. Direct Liability and Secondary Liability

The Digital Millennium Copyright Act (DMCA) offers a broad definition of online service providers and covers different categories of online intermediaries. These online intermediaries include Internet Service Providers (ISP), search engines and hosting facilities.¹²² The ability to restrict the liability of online intermediaries was one of the most vital policy decisions that formed the design of the cyberspace and the freedom of users.¹²³

Online intermediaries have now taken various shapes and forms, thus confronting some of the assumptions underlying early liability policies. Copyright holders aimed to transfer some of the burden and costs of monitoring, detecting, and enforcing rights to online intermediaries.¹²⁴

The Copyright Act contemplates enforcement through lawsuits against individual direct infringers.¹²⁵ It is nearly impracticable to hold individual

120. B. Danaher, M. Smith, & R. Telang, *Piracy and Copyright Enforcement Mechanisms in Innovation Policy and the Economy*, 14 INNOVATION POLICY & ECON. 25 (2014).

121. LUIS AGUIAR, JÖRG CLAUSSEN & CHRISTIAN PEUKERT, ONLINE COPYRIGHT ENFORCEMENT, CONSUMER BEHAVIOR, AND MARKET STRUCTURE 23 (European Commission Joint Res. Ctr. Tech. Report, 2015).

122. 17 U.S.C.A. § 1201 (1999).

123. See *Playboy Enterprises, Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993).

124. Stop Online Piracy Act (“SOPA”), H.R. 3261, 112 Cong. (2011) (expanding the liability of online intermediaries for copyright infringement and moving copyright enforcement to private hands).

125. 17 U.S.C.A. § 501(a) (2006) (defining an infringer as “[a]nyone who violates any of the exclusive rights of the copyright owner” and allows “[t]he legal or beneficial owner of an exclusive right under a copyright” to “institute an action for any infringement of that particular right committed while he or she is the owner of it”).

Internet users liable for copyright violations. The costs of enforcing copyrights—by identifying infringers, gathering evidence, suing several individual infringers, and collecting damages—are amplified to such an extent that it rendered conventional enforcement measures economically unproductive.

It is worth mentioning that in the early 1990s, some ISPs in the United States were liable for copyright infringements committed by their subscribers under a strict liability standard. The ISPs were found to be strictly liable, because the simple hosting and transmission of infringing materials amounted to copyright infringement. Strict liability was later discarded by courts and replaced with secondary liability.¹²⁶

“Vigilantism” is born from a malfunction of the law.¹²⁷ Vigilantism only occurs when the established order breaks down, such that people begin seeking extrajudicial solutions. The turn to private enforcement of copyright is the result of a long, persistent breakdown of public copyright enforcement.

The complexity of holding direct infringers accountable led copyright holders to look at alternate liability theories. Secondary liability suits against ISPs are slowed down by the safe harbors embodied in section 512 of the Digital Millennium Copyright Act (DMCA).¹²⁸ In order to affirm their rights against the immeasurable anonymous cyberspace users pirating their works, copyright owners have to convince a court of the need of ISP subpoenas and contend with the unwillingness of ISPs to identify subscribers.¹²⁹ ISPs providing Internet access cannot be held liable for direct copyright infringement, since merely holding a system that others employ to make copies lacks an “aspect of volition or causation,” which is an indispensable ingredient in establishing liability.¹³⁰ ISP liability means adequate

126. Stop Online Piracy Act (“SOPA”), H.R. 3261, 112 Cong. (2011).

127. Rachel Storch, *Copyright Vigilantism*, 16 STAN. TECH. L. REV. 453, 454 (2013).

128. 17 U.S.C. § 512 (2006).

129. *New Sensations, Inc. v. Does 1-306*, No. 2:12-cv-1885-GEB-EFB, 2012 WL 5031651, at *2 (E.D. Cal. Oct. 17, 2012) (“Courts in the Ninth Circuit apply a ‘good cause’ test in deciding whether to permit expedited discovery before the Rule 26(f) conference.”); *Digital Sin, Inc. v. Does 1-176*, 279 F.R.D. 239, 241 (S.D.N.Y. 2012) (“Courts in this district have applied a ‘flexible standard of reasonableness and good cause’ in determining whether to grant a party’s expedited discovery request.”); *Patrick Collins, Inc. v. Does 1-72*, No. 11-58 (RMU/JMF), 2012 WL 177864, at *3 (D.D.C. Jan. 19, 2012) (“The Court, therefore, will order plaintiff to show cause why it should assert jurisdiction over the person of each John Doe defendant unless it has a good faith belief that that person is domiciled in the District of Columbia which . . . may be premised on ‘utilizing geolocation services . . .’”).

130. *CoStar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544, 548 (4th Cir. 2004); *Viacom Int’l Inc., v. YouTube, Inc.*, 718 F. Supp. 2d 514, 526 (S.D.N.Y. 2010); *Hendrickson v. eBay, Inc.*, 165 F. Supp. 2d 1082, 1094 (C.D. Cal. 2001) (holding that eBay is eligible for the DMCA safer harbor); *UGM Recording v. Shelter Capital Partners*, 667 F.3d 1022, 1031 (9th Cir. 2011) (holding that video hosting facilities such as YouTube and Veoh are covered by the DMCA as it “meant to cover more than the mere electronic

knowledge concerning the infringing activity was acquired. Intermediaries are held indirectly liable for their subscribers infringing behavior under a range of legal doctrines of secondary liability. Liability under copyright law does not require an intentional conduct, but volitional conduct on the part of the defendant is needed to confirm direct liability to copyright infringement.¹³¹ Many jurisdictions have employed safe harbor regimes for online intermediaries, which mean that intermediaries are sheltered from liability for users' actions.¹³²

New technologies persistently arise to make each hard-fought secondary liability battle outdated. Services and Internet users have caught copyright owners in a never-ending game of cat-and-mouse in which the law is too slow to carry on with technological advances. ISPs intended their network to be used for piracy and energetically encouraged their users to share infringing files.¹³³ Moreover, ISPs benefit from cooperating with content owners to tackle piracy concerns. Although the DMCA provides a safe harbor to ISPs that simply serve as passive conduits for infringing material distributed by users, more and more face the risk of falling outside of the safe harbor as technology becomes more complicated ISPs.¹³⁴

ISPs take on and implement policies that assist copyright enforcement on its system. The DMCA safe harbor provisions renewed the necessity to diminish liability, in particular, circumstances given the diversity of services offered by ISPs on top of the numerous types and different size of ISPs. Moreover, online intermediaries were cut off from copyright liability,

storage of data, to specifically encompass the access-facilitating processes offered by a video sharing platform service"); J. de Beer & C. Clemmer, *Global Trends in Online Copyright Enforcement: A Non-Neutral Role for Network Intermediaries?*, 49 JURIMETRICS J. 375, 404–05 (2009) (targeting enforcement efforts at individual infringers, such as the global recording industry's lawsuits against alleged file sharers, have proven to be ineffective); *Playboy v. Frena*, 839 F. Supp. 1552, 1559 (M.D. Fla. 1993) (holding that a Bulletin Board System operator was strictly liable for distributing infringing materials which were uploaded and downloaded by his users).

131. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 131 (2d Cir. 2008); *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 932–33 (2005).

132. J. Zittrain, *A History of Online Gatekeeping*, 19 HARV. J.L. & TECH. 253, 270 (2006) ("OSPs, ISPs, and search engines dominated the technological landscape of 1996–97, and the DMCA and CDA were designed to encourage these companies to act only in ways that would not drastically alter their business models or technological architectures.").

133. *MGM Studios, Inc.* 545 U.S. 913, 925–26 (2005); Bryan H. Choi, *The Grokster Dead-End*, 19 HARV. J.L. & TECH. 393, 403 (2006).

134. 17 U.S.C. § 512(a) (2012).

providing they remained passive facilitators of content that others originated and reacted upon knowledge of infringing content.¹³⁵

The Court of Justice of the European Union (CJEU) determined that there was a close relationship between monitoring/filtering duties and civil liberties.¹³⁶ An ISP was under no duty to take affirmative steps against infringements, and so a general obligation to monitor compromises fundamental rights: the freedom to conduct business, the right to protect of personal data, and the freedom to receive or impart information.

ISPs have been targeted but with limited outcome.¹³⁷ ISPs sought an explicit immunity under the law but clear-cut rules regarding ISPs' liability in managing infringement claims present a higher level of certainty. To that extent, online intermediaries were conceived of as offering a rather open and neutral facilitation of access to content. Keeping intermediaries neutral was a purpose that several cyberspace policies shared.

As cyberspace is now the key channel for many forms of human interactions, mega platforms such as Facebook, Twitter and hosting facilities such as Apple, Amazon, YouTube, shape exchanges and access to information with some imperative inference for competition and consumer welfare on top of access to knowledge and civil liberties. Currently, online intermediaries display a new type of convergence, exercising control over content, access, as well as end users. Moreover, as publishers, online intermediaries control both what content becomes available by restrictions on open source apps in Apple App Store and the format in which content becomes available. Intermediaries are more and more able to exercise control over the use of content and so the mounting engagement of online intermediaries in publishing content position them in conflict with their role as neutral facilitators: in quest of maximizing their income from proprietary content, on the one hand, while making possible free-access to open content and User Generated Content (UGC) on the other hand.

Free access to online content is considered as a risk to commercial interests, as users are unwilling to pay for content that is freely available on

135. 17 U.S.C. § 512 (c)(1)(A)(iii) (2012); Council Directive 2000/31/EC §14 (2003); M. E. Kaminski, *Positive Proposals for Treatment of Online Intermediaries*, 28 AM. U. INT'L L. REV. 203, 208 (2012).

136. SABAM v. Netlog, C-360/10 (Belg. 2012); SABAM v. Scarlet, C-70/10 (Belg. 2011); *Viacom Int'l, Inc.*, 940 F. Supp. 2d 110, 118–19 (S.D.N.Y. 2013) (rejecting the link between profits and duties).

137. Roadshow Films Pty Ltd v iiNet Ltd, 248 CLR 42, 70 (Austl. 2012); *see generally* Arista Records LLC v. Lime Group LLC, 715 F. Supp. 2d 481 (S.D.N.Y. 2010).

the same platform.¹³⁸ The convergence of control over access, content, and users' personal data opposes the neutrality of online intermediaries that was the center for policies elaborated in the 1990s.¹³⁹ As a result, access to content in the digital ecosystem is conquered by a handful of online intermediaries, and so the ascendancy of a small number of online intermediaries inflates severe concerns about the competitiveness and openness of future information markets influencing the fitting regulation of intermediaries.

Online intermediaries have faced increasing anxiety to take on a more positive approach to copyright enforcement. Online intermediaries have been forced to embark on affirmative steps (*ex ante*) to avert or lessen copyright infringements. Copyright holders instruct online intermediaries to install filters or accept monitoring method to detect infringing behavior being contradictory to the absence of a general duty to monitor.¹⁴⁰ At the same time, online intermediaries take on voluntarily measures such as applying filters or implementing enforcement policies.¹⁴¹ In fact, online intermediaries have involved directly as content publishers or by strengthening their partnerships with copyright right holders.

Cyberspace service providers, website operators, content providers, and cyberspace users cannot abide by copyright law on the global digital network as a consequence of the large number of countries' copyright laws that apply to the actors' cyberspace activities.¹⁴² The variety of potentially applicable national copyright laws is triggered by the nature of copyright as an intangible right produced by national laws and by the rules for choice of law applicable to copyright infringement and other copyright-related matters.

138. J. E. COHEN, *CONFIGURING THE NETWORKED SELF: LAW, CODE, AND THE EVERYDAY PRACTICE* (Yale University Press, 2012).

139. Frank Pasquale, *Paradoxes of Digital Antitrust: Why the FTC Failed to Explain Its Inaction on Search Bias*, HARV. J.L. & TECH., OCCASIONAL PAPER SERIES, at *4 (2013).

140. MGM Studios, Inc. v. Grokster, Ltd., 545 U.S. 913, 939 (2005) (holding inducement doctrine may consider failure to install preventive measures as a proof of intent, which is necessary for establishing liability for inducement); *see, e.g.*, Case C-70/10, Scarlet v. Sabam, 2011 E.C.R.; Case C-360/10, SABAM v. Netlog, 2012 E.C.R. (holding that requiring an OSP to install a filtering system screening the entire traffic in order to prevent copyright infringements would be at odds with the e-commerce Directive prohibiting imposing a general duty to monitor on intermediary service providers).

141. Christina Angelopoulos, *Filtering the Internet for Copyrighted Content in Europe*, AMSTERDAM L. SCH. RES. PAPER NO. 2012-04 10 (2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1983866; SUSY FRANKEL & DANIEL J. GERVAIS, *THE EVOLUTION AND EQUILIBRIUM OF COPYRIGHT IN THE DIGITAL AGE* 29 (2014).

142. Marketa Trimble, *The Multiplicity of Copyright Laws on the Internet*, 25 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 339, 348 (2015); Graeme B. Dinwoodie, *Developing A Private International Intellectual Property Law: The Demise of Territoriality*, 51 WM. & MARY L. REV. 711, 729–33 (2009) (reviewing the scope of application of the *lex loci protectionis* rule).

Copyright enforcement on cyberspace is challenging because copyright owners cope with infringers located in various states and with varying laws. For instance, the law in the jurisdiction of the service provider's domicile might not view the content as infringing.¹⁴³

G. EU Copyright

Open-ended R&Is make it possible for the law to adjust to new circumstances, which results in the need for flexible R&Is. It could be argued that the necessity for more openness in copyright law is clear in the present information society of decidedly vibrant and volatile variation.¹⁴⁴ Fair use has taken on an imperative role in allowing copyright law to adjust to new technological challenges not considered by the legislature.

United States law, by harmonizing individual rights with societal rights, allows for fair use of works and fair dealings benefitting the public, without sacrificing the creators' rights. In most of Europe, a broad fair use exception does not exist, but a category of uses are permitted.¹⁴⁵ Copyright in common law countries has utilitarian roots, while copyright in civil law countries has natural rights roots.¹⁴⁶

EU legislation has to be interpreted as far as possible in light of international obligations.¹⁴⁷ EU decision-makers have taken into account "i) the collective and individual licensing of national copyright titles, ii) the definition and implementation of copyright exceptions in the digital

143. SAM RICKETSON & JANE C. GINSBURG, *INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS: THE BERNE CONVENTION AND BEYOND* § 20.01 (2d ed. 2005) ("[D]eriving from the Berne text supranational choice of law rules is a delicate, if not improbable, operation."); PAUL GOLDSTEIN & BERNT HUGENHOLTZ, *INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE* 129 (2010) (arguing that Article 5(2) of the Berne Convention is not a choice of law provision but is "essentially no more than a rule barring discrimination against foreign right holders, which requires a country to apply the same law to works of foreign origin as it applies to works of its own nationals").

144. *Public Consultation on The Review of The EU Copyright Rules*, European Commission, http://ec.europa.eu/internal_market/consultations/2013/copyright-rules/index_en.htm; Neelie Kroes, *Reform of EU Copyright Rules: Your Chance to Give Your Views!*, European Commission (Sept. 1, 2014), http://ec.europa.eu/commission_2010-014/kroes/en/content/reform-eu-copyright-rules-your-chance-give-your-views.

145. Tyler G. Newby, *What's Fair Here Is Not Fair Everywhere: Does the American Fair Use Doctrine Violate International Copyright Law?*, 51 *STAN. L. REV.* 1633, 1648–49 (1999); PAUL GOLDSTEIN & BERNT HUGENHOLTZ, *INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE* 7 (2010).

146. BRUCE A. LEHMAN, *INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS* 63 (1995).

147. *Peek & Cloppenburg KG v Cassina SpA*, [2008] C-456/06, paras 30–31 (Ger.), ¶¶ 30–31; *Titus Alexander Jochen Donner*, [2012] C-5/11, ¶¶ 22–24 (Ger.).

environment and iii) the types of online enforcement measures that member states have to make available to rights-holders as a result of the transposition of EU copyright directives” so as to enhance the creation and development of EU copyright matters.¹⁴⁸ There is a need to preserve contractual freedom of both content owners and commercial exploiters. EU legislative measures cannot divest copyright holders of the prospect to target a particular public and to make licensing fees for online exploitation fair to the actual audience reached by content transmissions. Giuseppe Mazziotti argues “[a]ll copyright holder representatives firmly reject the idea of any kind of legislative reform at EU level that could lead to a more open, technologically neutral and effectively harmonised legal framework for copyright exceptions.”¹⁴⁹

It has to be taken into account that the territorial nature of copyright is not the only element that generates a prevalent national dimension of markets for digital content in Europe. Individual creators, content licensors and commercial exploiters take a ‘country-by-country’ approach in their relevant businesses as a consequence of Europe’s cultural diversity, linguistic specificities and digital divides varying *per capita* income from one member country to another.

The making of the EU Digital Single Market is a policy objective rooted in the “Digital Agenda for Europe.”¹⁵⁰ Markets for digital content are disintegrated and highly differentiated for grounds that are not related to the territorially limited scope of copyright. In Europe, unauthorized access to online content through peer-to-peer networks is broadly prevalent, but in the U.S. legitimate services, providing online content like Netflix, engender much more traffic than in the EU.¹⁵¹ Unification of EU copyright law would have instant EU-wide effect, giving rise to a single market for copyright and related rights through eliminating the territoriality of national copyright rules, particularly if the system were construed as prevailing over national titles entailing a legislative reform of EU law.¹⁵² There is a *de facto* harmonization of the originality condition for subject-matter other than

148. Giuseppe Mazziotti, *Copyright in the EU Digital Single Market Report of the Ceps Digital Forum*, Centre for European Policy Studies, at *9 (2013).

149. *Id.* at *11.

150. Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Digital Agenda for Europe*, COM(2010) 245 (May 19, 2010), [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0245R\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0245R(01)&from=EN).

151. *Global Internet Phenomena Report*, SANDVINE INTELL. BROADBAND NETWORK, 2H (2012).

152. Treaty on the Functioning of the European Union, art. 118, 2012/C 326/01 (Dec. 13, 2007).

computer programs, photographs and databases, but also paved the way to a comprehension of EU copyright architecture as one of open-ended subject-matter categorization.¹⁵³ It is worth mentioning that diverging standards of originality across the EU ruins the running of the internal market.¹⁵⁴ It is worth mentioning that that copyright protection is reserved to ‘works’ in the Berne sense, i.e. subject-matters that are intellectual creations of their authors.¹⁵⁵

In *Football Dataco v. Sportradar*, the CJEU held that the act of re-use is deemed to be located in the territory where user’s computer receives the content for purposes of storage and display on screen.¹⁵⁶ In *UsedSoft*, the CJEU defined the exclusive right of distribution of the owner of a computer program.¹⁵⁷ To this end, the provisions of the 2001 Information Society Directive define the exclusive rights of distribution and of making content available to the public would need to be revised with the intention of making the exhaustion principle applicable to permanent sales of intangible copies of copyrighted works. It is argued that exhaustion of the right of distribution applies to the tangible copy of a work.¹⁵⁸ The CJEU concluded that Article 4(2) of the InfoSoc Directive has to be interpreted as meaning that the rule of exhaustion therein does not apply in circumstances in which the reproduction of a protected creation has undergone a substitution of its medium, and is placed on the market again in its new form. Does the law allow digital exhaustion? It is argued that there is no exhaustion for digital copies of works and e-books are subject to the principle of exhaustion.¹⁵⁹ In

153. EUR. PARL. (2009/24/EC) (2009) (addressing the legal protection of computer programs); EUR. PARL., O.J. (L 111) (2009); EUR. PARL., O.J. (L 77) (1996) (addressing the legal protection of databases); EUR. PARL., O.J. (L 372) (2006) (codifying the term of protection of copyright and certain related rights); Case C-5/08 *Infopaq Int’l A/S v. Danske Dagblades Forening*, [2009] I-06569; Case C-393/09 *Bezpečnostní softwarová asociace – Svaz softwarové ochrany v. Ministerstvo kultury*, [2010] I-13971; Joined Cases C-403/08 *Football Association Premier League Ltd and Others v. QC Leisure and Others* and C-429/08 *Karen Murphy v. Media Protection Services Ltd*, [2011] I-09083.

154. E. ROSATI, ORIGINALITY IN EU COPYRIGHT: FULL HARMONIZATION THROUGH CASE LAW (Edward Elgar, 2013).

155. Case C-5/08, *Infopaq Int’l A/S*, *cit.*, [33]–[35].

156. C-173/11 *Football Dataco Ltd and Others v. Sportradar GmbH et Sportradar AG*, 18 October 2012, paras. 39–43.

157. C-128/11 *UsedSoft GmbH v. Oracle International Corp.*, 3 July 2012.

158. *Art & Allposters International BV v. Stichting Pictoright*, C-419/13, EU:C:2015:27 (concluding that “exhaustion of the distribution right applies to the tangible object into which a protected work or its copy is incorporated if it has been placed onto the market with the copyright holder’s consent”); Directive 2001/29, art. 4(2) (providing that for the InfoSoc Directive, the authorised first sale of a work within the territory of the European Union exhausts the right of the copyright owner to control any subsequent distribution of the work in question).

159. 22 U 60/13 (Ct. of App. of Hamm); see E Rosati, *No Exhaustion Beyond Software: Katfriend Translates German Decision on Audiobooks*, THE IPKAT (July 1, 2014), <http://ipkitten.blogspot.co.uk/>

the US, it is unclear whether the law permits application of the first sale doctrine within §109 of the U.S. Copyright Act to digital copies.¹⁶⁰

The sale of intangible copies through cyberspace entails the exercise of the sole right of making content available, whereas exhaustion applies only to the right of distribution of physical copies.¹⁶¹ Amazon has developed a system of ‘data stores’ where the user who no-longer desires to retain the right to access the now used digital content is given the likelihood of transferring it to another user’s personalized data store, while deleting the used content from the originating data store.¹⁶²

Article 5(3)(k) of Directive 2001/29 (the “InfoSoc Directive”) permits member states to set up into their own copyright laws an exception or limitation to the rights of reproduction, communication and making available to the public, and/or distribution, for the purpose of “caricature, parody or pastiche” but there is no definition of these concepts.¹⁶³ The CJEU held that the person who owns the copyright to a work has a legitimate interest in making certain that this is not related with the message communicated by its parody if it is prejudiced. A parody evokes an on hand work while being perceptibly different from it, and constitutes an expression of humor. The AG then stated that the notion of parody must be considered as an autonomous concept of EU law demanding a uniform application of EU law.¹⁶⁴ Additionally, one of the objectives of the InfoSoc Directive is to harmonize specific aspects of copyright and related rights. Besides

2014/07/no-exhaustion-beyond-software-katfriend.html; District Court of KG ZA 2014, C/13/567567 14-795 SP/SV, Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet (Neth.); see M. Olmedo Cuevas, *Dutch Copyright Succumbs to Aging as Exhaustion Extends to E-Books*, 10 J. INTELL. PROP. L. & PRACTICE 8 (2015).

160. Capitol Records, LLC v. ReDigi Inc., 934 F. Supp. 2d 640 (S.D.N.Y. 2013); Eleonora Rosati, *Online Copyright Exhaustion in a Post-Allposters World*, J. INTELL. PROP. L. & PRACTICE (forthcoming), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2613608.

161. Directive 2009/24/EC of the European Parliament and of the Council on the Legal Protection of Computer Programs, art. 6, [2009] O.J. (L 111/19) (codifying the content of Council Directive 91/250 EEC of 14 May 1991); InfoSoc Directive, art. 4.2 [2001] O.J. (L 167/16).

162. U.S. Patent No. 8,364,595 B1 (filed May 5, 2009).

163. C-201/13, Judgment in *Deckmyn v Vandersteen*, EU:C:2014:2132; InfoSoc Directive, art. 4.2 [2001] O.J. (L 167/16); E. Rosati, *Originality in EU Copyright. Full Harmonization through Case Law* (Edward Elgar, 2013); C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, EU:C:2009:465, ¶ 27; C-467/08, *Padawan SL v Sociedad General de Autores y Editores de España (SGAE)*, EU:C:2010:620, ¶ 32; C-510/10, *DR and TV2 Danmark A/S v NCB — Nordisk Copyright Bureau*, EU:C:2012:244, ¶ 33; R. Jacob, *Parody and IP claims: A Defence?*, in *INTELLECTUAL PROPERTY AT THE EDGE: THE CONTESTED CONTOURS OF IP* 427, 431 (Rochelle Cooper Dreyfuss & Jane C. Ginsburg, eds., 2014) (arguing that “when it comes to parody ‘the genre’ has no rules, making legislation immensely difficult. Parody ranges from the downright brutally offensive to the respectful homage”).

164. C- 201/13, Opinion of Advocate Pedro Cruz Villalón in *Deckmyn v Vandersteen*, EU:C:2014:458.

harmonization, the other InfoSoc Directive's objective was to align EU copyright law and implement into the EU legal order the 1996 WIPO Internet Treaties. Videogames are not considered merely as computer programs, but being complex multimedia works expressing autonomous narrative and graphic creations, such games are regarded as intellectual works protected by copyright under the InfoSoc Directive.¹⁶⁵ Member States have to embrace a very similar, if not identical degree of copyright protection not including where InfoSoc Directive leaves them some liberty, as is for example the case of the optional list of exceptions and limitations in Article 5.¹⁶⁶ It is argued that the scope of copyright protection should not depend on the probable differences in the degree of creative freedom in the production of different categories of works, which means that the InfoSoc Directive envisages the protection of all intellectual creations by the same reproduction right.¹⁶⁷

Are the copyright exceptions in the EU still suitable? The Information Society Directive did not manage to successfully harmonize copyright exceptions beyond a specific extent, since there was no agreement between EU legislators about the acts and uses that should have been exempted from copyright's scope in digital surroundings. The 2001 Directive did not make its exhaustive list of exceptions and limitations mandatory for member states. The concept of fair compensation, within the meaning of Article 5(2)(b) of the Information Society Directive, is an autonomous concept in EU law. In *Padawan v. SGAE*, the CJEU simply held that fair compensation should be designed on the grounds of the criterion of the harm caused to authors of protected works by the introduction of the private copying exception.¹⁶⁸

Hardware-based levies are no longer desirable, since new models of content distribution are developing rapidly and cloud-computing is revolutionizing consumers' copying habits.¹⁶⁹ Hardware and device manufacturers promote the accomplishment of alternative forms of fair compensation, and assure copyright owners revenues in the long run and a well-functioning ecosystem for creativity.

165. Case C-355/12, *Nintendo Co Ltd v PC Box Srl* (Jan. 23, 2014); Case C-355/12, Opinion of Advocate General Eleanor Sharpston in *Nintendo Co Ltd v PC Box Srl*, (Sept. 19, 2013); InfoSoc Directive [2001] O.J. (L 167/16).

166. Case C-170/12, *Peter Pinckney v KDG Mediatech AG* (Oct. 3, 2013); Case C-387/12 *Hi Hotel HCF SARL v Uwe Spoering* (Apr. 3, 2014).

167. Case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, [2009] I-06569; UK Copyright Designs and Patents Act 1988 ("CDPA").

168. C-467/08, *Padawan SL v. Sociedad General Autores y Editores de Espana (SGAE)* (Oct. 21, 2010).

169. C-462/09, *Stichting de Thuiskopie v. Opus Supplies Deutschland GmbH* (June 16, 2011).

The development and diffusion of broadband cyberspace access services and cloud-based platforms have made it easy for both large-scale copyright infringers and unauthorized users to retrieve content through cyber lockers and other web-based platforms. This new copyright infringement has extended its negative cost on the business of creative industries by aiming at areas such as the film industry. Piracy had not been a considerable influence in copyright law before the advent of broadband cyberspace and cloud-computing. In *L'Oréal v. eBay*, the CJEU shed light on the intricate interaction of online enforcement measures and of the liability exemption that the law grants to hosting service providers.¹⁷⁰ The online operator benefited from the safe harbor provision insofar as it confined itself to providing a neutral service by a simply technical and automatic processing of the content provided by its customers. To that extent, the exemption should not apply when the online intermediary plays an *active role* that would imply knowledge of (or control over) such content.

Member states and national courts cannot impose on online intermediaries general obligations to monitor the content they store or transmit.¹⁷¹ The CJEU has held that, in granting online enforcement measures, the protection of intellectual property should be reasonable against the protection of fundamental rights of persons and firms that unlimited filtering measures would without doubt influence.¹⁷²

Injunctions that would compel systematic and enduring filtering measures on online intermediaries challenge the principle of freedom of expression and communication insofar as filtering tools cannot differentiate between transmissions of unlawful and lawful content.¹⁷³ Copyright enforcement on cyberspace leads to restriction of lawful content communications, particularly when the target of measures is a website where some lawful content might be stored. Global waves of protests against SOPA in the U.S. and ACTA in the EU have resulted. Arguments and policy aims such as 'Internet freedom' and net neutrality have been used very broadly by civil liberties organizations to appraise and discard all forms of online content blocking for reasons of copyright enforcement. A balancing equation

170. C-324/09, *L'Oréal v. eBay International* (July 12, 2011).

171. Directive 2000/31/EC of the European Parliament and of the Council on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market (Directive on Electronic Commerce) [2000] O.J. (L 178/13).

172. C-275/06, *Promusicae v. Telefonica* (Jan. 29, 2008); C-70/10, *Scarlet Extended v. SABAM* (Nov. 24, 2011); C-360/10, *SABAM v. Netlog* (Feb. 16, 2012).

173. C-70/10, *Scarlet Extended v. SABAM* (Nov. 24, 2011); C-360/10, *SABAM v. Netlog* (Feb. 16, 2012) (addressing, respectively, lawfulness of enforcement measures requiring lasting filtering technologies to an ISP and the owner of a social network platform).

between copyright enforcement and cyberspace censorship has been projected often to portray the chilling consequences stemming from content bans or technical restrictions to information made available online.

Is there a relation between copyright versus freedom to run a business? The broad filtering measure requested by the Belgian collecting society SABAM would have led to a serious restriction of the freedom of the ISP to conduct its business which means that such a measure obligate the ISP to put in place an intricate, costly, and permanent filtering technology at its own expense.¹⁷⁴

EU law obliges member states to make personal data available for collection for precise, explicit and legitimate reasons, and any processing should be pertinent and balanced to the objective pursued. Copyright enforcement is a legitimate reason validating the treatment of personal data.¹⁷⁵

III. TRADEMARK LAW

A. *Trademarks Legal Background*

Trademarks have been used to designate the source or origin of products for years. A trademark is “any word, name, symbol, or device, or any combination thereof” used by a company to identify itself as the source of particular goods and distinguish its goods from those manufactured or sold by competitors.¹⁷⁶

A trademark can be identified as a nexus between a specific mark and a producer. A manufacturer must not defraud or mislead the consumer, who, as the end-user of the product in circulation, will eventually be called upon to interpret and assess this nexus. No one is entitled to sell or deliver commodities under the appearance that the commodities derive from someone else.¹⁷⁷ It is essential to avoid misleading consumers and facilitates

174. C-70/10, *Scarlet Extended v. SABAM* (Nov. 24, 2011).

175. Directive 95/46/EC of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data, art. 6 [1995] O.J. (L 281/31); C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* (Jan. 29, 2008).

176. 15 U.S.C.A. § 1127 (2006); *see Wal-Mart Stores, Inc. v. Samara Bros.* 529 U.S. 205, 209 (2000) (quoting 15 U.S.C.A. § 1127); *see also Qualitex Co. v. Jacobson Prods. Co.* 514 U.S. 159, 170–71 (1995); *Dastar Corp. v Twentieth Century Fox Film Corp.* 123 S. Ct. 2041, 2045 (2003); *Park ‘N Fly, Inc. v Dollar Park & Fly, Inc.* 469 U.S. 189, 198 (1985).

177. *Millington v Fox* (1838), 3 My. & C. 338 (U.K.); *Perry v Truefitt* (1842), 6 Beav. 66, 49 Eng. Rep. 749 (“A man is not to sell his own goods under the pretence that they are the goods of another man; he cannot be permitted to practice such a deception, nor to use the means which contribute to that end.”).

consumer inclination to sustain additional expenses in exchange for assurances that the product being purchased emanates from a particular source or producer. The consumer has a right to expect a consistent and uniform level of quality when purchasing goods or services associated with a specific trademark originating from a single source. When a producer uses another's trademark to deceive the consumer, he or she violates the rights of the legitimate trademark holder. Trademark law displaces confusion between two trademarks and so a future trademark that engenders a likelihood of confusion with a registered trademark may not be registered.

Cyberspace is used to disseminate information, expand networks and generate commercial opportunities.¹⁷⁸ Cyberspace engenders trans-boundary disputes over trademarks and other aspects of intellectual property. The globalization of communications via the Internet has led to a system where trademarks and trade names may be used as a method of communication, via domain names. Thus, domain names may be both address and trademark.

B. Marks as Trademarks

A trademark is "any word, name, symbol, or device, or any combination thereof" used in commerce to indicate the source of the goods, even if that source is unknown.¹⁷⁹ Trademarks, when registered at the Patent and Trademark Office (PTO), merit protection against infringements, unfair competition, dilution etc. Similarly, trade names are names used to identify a person's business or vocation. They cannot be protected as trademarks, but are still entitled to protection against unfair competition. Certification marks designate that particular goods have been certified by the owner of the mark regarding origin, material, method of infrastructure, quality and accuracy.¹⁸⁰ Certification marks, as protected by national and international IP law, have become a de facto obstacle to market access for exporters from developing and the least developed states that are not members of TRIPS.¹⁸¹

A descriptive mark is a word, name, or symbol used to indicate a brand of merchandise or service describing the qualities or characteristics of the

178. The number of "hits" a domain name receives can be used in determining the value of the domain name, because a potential domain name purchaser is more likely to pay more for a domain name that receives many "hits" than one that receives very few.

179. Lanham Act 45, 15 U.S.C.A. § 1127 (2006).

180. Mariela Maidana-Eletti, Market Access and Trademark Protection in the WTO Regime: *The Case of Certification Marks*, RECHT UND GESUNDHEIT: JUNGE RECHTSWISSENSCHAFT LUZERN 69, 82 (2013), available at <http://ssrn.com/abstract=2602000>.

181. NEIL WILKOF & DANIEL BURKITT, TRADE MARK LICENSING, 176–78 (Sweet & Maxwell 2d ed. 2005).

merchandise or service sold under that mark. The Lanham Act allows applicants to register marks that are “distinctive” of the applicant’s goods or services in commerce, including descriptive marks that have “become distinctive.”¹⁸²

Descriptive marks do not distinguish the origin or source of a product as well as a mark that is fanciful, arbitrary or suggestive because descriptive terms retain their original descriptive meaning.¹⁸³ Hence, descriptive terms used as marks do not automatically or immediately signal a brand (unlike inherently distinctive marks), because they also describe the attributes of the product.

Generic marks, such as “Shredded Wheat” breakfast cereal, include the common name for a class of products or services and are never considered worthy of trademark protection.¹⁸⁴ If the key connotation of the term in the minds of the consuming public is the product, rather than the producer, the mark cannot be protected under trademark law.¹⁸⁵ Protecting exclusive rights in generic terms would restrain free expression in the marketplace and damage competition, and companies cannot have a monopoly on the use of common words that consumers use to refer in general to a product.

Trademark law stifles the free flow of commercial information more than necessary when it protects exclusive rights in inherently distinctive marks and descriptive marks. Trademark laws harm speech when they grant exclusive rights in marks that are not inherently distinctive. Trademark law should persuade companies to use inherently distinctive marks as these marks instantaneously tell a customer that the term refers to a brand name, not a product attribute.¹⁸⁶ It is necessary to protect the capability of consumers to identify and distinguish among the products of a business and its competitors; descriptive trademark laws do not directly advance this interest and are more extensive than necessary.¹⁸⁷ Distinctiveness is a requirement to register a mark on the federal principal register, and for protection of exclusive trademark rights. However, the term “distinctive” is

182. 15 U.S.C.A. §§ 1052(e)(1), 1052(f), 1053 (2006).

183. *Qualitex Co. v. Jacobson Prods Co.* 514 U.S. 159, 162–63 (1995), quoted in *Wal-Mart Stores, Inc. v. Samara Bros.* 529 U.S. 205, 212–3 (2000) (“Consumers are therefore predisposed to regard those symbols as indication of the producer.”).

184. *Kellogg Co. v. Nat’l Biscuit Co.* 305 U.S. 111, 118 (1938) (rejecting the plaintiff’s contention that it was entitled to exclusive use of the generic term “shredded wheat”).

185. *Id.*

186. *Park ‘N Fly, Inc. v. Dollar Park & Fly* 469 U.S. 189 (1985).

187. *Central Hudson Gas & Electric Corp. v. Public Service Commission* 447 U.S. 557 (1980); *S.F. Arts & Athletics, Inc. v. United States Olympic Comm.*, 483 U.S. 522 (1987).

not defined anywhere in the Lanham Act.¹⁸⁸ The distinctiveness of a mark is judged either on the basis of its nature or character, or on the starting point of whether it has been used to such an extent that it has come to be established as signifying the origin of the applicant's goods or services.¹⁸⁹ To this extent, only distinctive marks are eligible for trademark protection, generic terms can never become valid marks, and descriptive terms are protectable if they acquire distinctiveness.¹⁹⁰

Existing descriptive trademark laws arguably restrict more speech than required by protecting rights in marks that are not distinctive and used fairly and in good faith by others. As a result, trademark law is broader than necessary by granting and enforcing exclusive rights in descriptive marks, along with protecting trademark rights in inherently distinctive marks.¹⁹¹ If the mark owner stops using the mark and does not intend to again use the mark, trademark rights for the mark will be extinguished and the mark will be abandoned.¹⁹² If clients think the mark is the name of the product rather than a source indicator, the mark has ceased to function as a trademark, becoming the generic term for the product itself.¹⁹³

Trademark use has been a requirement for the acquisition and maintenance of trademark rights, and showing that the defendant used or is

188. Federal Trademark Act, 15 U.S.C.1051–1127 (2002).

189. Michael Handler, *A Critical Assessment of Trade Mark Distinctiveness and Descriptiveness under Australian Law*, 28th Annual Intellectual Property Society of Australia and New Zealand (IPSANZ) Conference, Queenstown, New Zealand, Sept. 19–21, 2014, <http://ssrn.com/abstract=2509994>; *Modena Trading Pty Ltd v Cantarella Bros Pty Ltd* [2013] FCAFC 110; *Cantarella Bros Pty Ltd v Modena Trading Pty Ltd* [2014] HCATrans 53

190. *Toyota Motor Sales, U.S.A., Inc. v. Tabari*, 610 F.3d 1171, 1175–76 (9th Cir. 2010) (use of Lexus mark in domain names by independent Lexus brokers to identify the services they offered); *Century 21 Real Estate Corp. v. Lending Tree, Inc.*, 425 F.3d 211, 217–22 (3d Cir. 2005) (use of real estate company marks by Internet real estate referral service on its website); *New Kids on the Block v. News America Publishing, Inc.*, 971 F.2d 302, 308 (9th Cir. 1992) (use by newspaper of pop music group's mark for telephone survey among readers).

191. *Lorillard Tobacco Co. v. Reilly* 533 U.S. 525, 572 (2001) (Thomas, J., concurring in part and concurring in judgment) (noting that the majority correctly determined that “the regulations [at issue] fail even the intermediate scrutiny of Central Hudson”); *United States v. Edge Broad. Co.* 509 U.S. 418, 426 (1993) (“The Constitution therefore affords a lesser protection to commercial speech than to other constitutionally guaranteed expression”); *City of Cincinnati v. Discovery Network, Inc.* 507 U.S. 410, 422 (1993) (“Speech proposing a commercial transaction is entitled to lesser protection than other constitutionally guaranteed expression”); *S.F. Arts & Athletics, Inc. v. United States Olympic Comm.* 483 U.S. 522, 535 (1987) (“Commercial speech ‘receives a limited form of First Amendment protection’”).

192. 15 U.S.C. § 1127 (2006).

193. *Nautilus Group, Inc., v. ICON Health & Fitness, Inc.* 372 F.3d 1330, 1341 (Fed. Cir. 2004) (stating that “generic terms . . . are not [capable of receiving trademark protection]. Generic terms describe a category of products, and therefore cannot signal any particular source: A trademark answers the buyer's questions ‘Who are you? Where do you come from? Who vouches for you?’ But the generic name of a product answers the question ‘What are you?’”).

using the plaintiff's mark, or a mark similar to it, is required for bringing a claim of trademark infringement. Trademarks are a psychological incident, deriving their function and effectiveness from the human inclination to rely on a likeable symbol for making purchasing choices.¹⁹⁴

As mentioned earlier, a trademark is any “‘symbol’ or ‘device’ . . . capable of carrying meaning” that serves as a commercial signature placed upon the merchandise or the package in which it is sold.¹⁹⁵ A right to the mark in gross and the legal protection of the “psychological function of symbols” are separated.¹⁹⁶ Trademarks convey property rights in gross.¹⁹⁷ Any conduct in which trademark law applies has to engross the use of a symbol in a way that consumers can perceive the symbol so that it can exert its commercial pull on them.

Proper trademark usage requires use of the mark as directly associated with the goods sold under the mark as possible with immediate customer perception of the relationship of goods and mark, is indispensable for the creation of trademark rights.¹⁹⁸ Hence, there is a need for open and noticeable use of the mark in close proximity to the goods sold under it, so as to permit consumers to perceive the goods and mark together. Physical affixation of the mark on the goods if possible is required.¹⁹⁹ It is worth mentioning that the development of digital goods and services makes the affixation of a mark in electronic form important for those goods and services in order for customers to perceive the mark and goods together. Trademark law permits a high level of protection for arbitrary trademarks, for example, a common

194. *United Drug Co. v. Theodore Rectanus Co.*, 248 U.S. 90, 98 (1918) (viewing trademarks as “a convenient means for facilitating the protection of one’s good-will in trade by placing a distinguishing mark or symbol—a commercial signature—upon the merchandise or the package in which it is sold”).

195. *Qualitex Co. v. Jacobson Prods. Co., Inc.*, 514 U.S. 159, 162 (1995); *United Drug Co. v. Theodore Rectanus Co.*, 248 U.S. 90, 98 (1918); 15 U.S.C. 1127 (2001).

196. *Theodore Rectanus Co.*, 248 U.S. at 97; *Mishawaka Rubber & Woolen Mfg. Co. v. S.S. Kresge Co.*, 316 U.S. 203, 205 (1942).

197. *Brookfield Communications, Inc. v. West Coast Entm’t Group*, 174 F.3d 1036 (9th Cir. 1999); *Promatek Indus., Ltd v. Equitrac Corp.*, 300 F.3d 808 (7th Cir. 2003); *Forum Corp. of N. Am. v. Forum Ltd.*, 903 F.2d 434, 437 (7th Cir. 1990) (defendant used allegedly infringing mark as its corporate name, in its advertising and marketing materials, and to identify itself to callers on the telephone); *Green Prods Co. v. Independence Corn By-Products Co.*, 992 F. Supp. 1070, 1072 (N.D. Iowa 1997) (defendant used plaintiff’s trademark as domain name for defendant’s web site); *Teletech Customer Care Mgmt (Cal.) Inc. v. Tele-Tech Co.*, 977 F. Supp. 1407, 1410 (C.D. Cal. 1997) (defendant used allegedly infringing mark in a domain name for the defendant’s website).

198. *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1380 (Fed. Cir. 2002); *McDonald’s Corp. v. Burger King Corp.*, 107 F. Supp. 2d 787, 790 (E.D. Mich. 2000).

199. *Playboy Enters. v. Netscape Commc’ns Corp.*, 354 F.3d 1020, 1029 (9th Cir. 2004) (applying the likelihood of confusion test to ascertain whether the defendant’s use of its trademark violated plaintiff’s trademark right).

word or phrase that is used in an uncommon way, and descriptive trademarks that have acquired secondary meaning with a relatively lower level of protection.²⁰⁰

Trademarks express source and quality information to consumers through the use of brand names, logos or symbols adorning goods and services.²⁰¹ A trademark signifies that goods bearing the mark come from the same source and are of consistent level and quality. Companies utilize new branding techniques that make use of “non-traditional marks” such as color, sound and even scent to distinguish their products from competitors’ products and entice consumers. Businesses use these symbols not only as source signifiers, but also as promises of reliability and quality. Consumers neither know nor care about the true origin of the product, only that it is the quality they seek. As mentioned earlier, a mark is a source-identifying symbol, and customers depend on these marks to differentiate one brand of a product from another.²⁰²

The functionality doctrine bars trademark protection for source identifying product features that add to the functional performance of a product. In patent and copyright law, functionality clearly assigning intellectual property subject matter to the IP law designed to incentivize it. In patent law, only functionally useful inventions can obtain utility patents and the distinction between functional and ornamental defines the line between utility patents and design patents. In copyright, the idea-expression and merger doctrines direct functionally useful subject matter to the patent system.²⁰³ The rationale of trademark law is not to incentivize innovation, but rather to guard source-identifying symbols that consumers utilize to access information concerning product quality.

The European Court of Justice (ECJ) addressed non-traditional trademark registration and established procedures tackling many of the

200. *Interstellar Starship Servs., Ltd. v. Epix, Inc.*, 304 F.3d 936, 943 n.6 (9th Cir. 2002) (applying the test developed in *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 9 (2d Cir. 1976), and noting that “Amazon” for an online bookstore is an example of an arbitrary trademark); *see also* *Champions Golf Club, Inc. v. The Champions Golf Club, Inc.*, 78 F.3d 1111, 1117 (6th Cir. 1996) (stating that “[a]n ‘arbitrary’ mark has a significance recognized in everyday life, but the thing it normally signifies is unrelated to the product or service to which the mark is attached, such as CAMEL cigarettes or APPLE computers”) (internal quotations omitted); *Brother Records, Inc. v. Jardine*, 318 F.3d 900, 905 n.1 (9th Cir. 2003) (“The law conceptually classifies trademarks along a spectrum of increasing distinctiveness: (1) generic, (2) descriptive, (3) suggestive, and (4) arbitrary or fanciful.”)

201. *Jacob Siegel Co. v. F.T.C.*, 327 U.S. 608, 612 (1946) (noting that trademarks are “valuable business assets” and it is “the policy of the law to protect them as assets of a business”).

202. *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 163–64 (1995).

203. Robert G. Bone, *Trademark Functionality Reexamined*, UNIV. TEX. SCH. L., L. & ECON. RESEARCH PAPER NO. E557, at 1, 2 (May 2015).

concerns raised by non-traditional trademarks in the United States. The European Union's strict graphic representation requirement for non-traditional trademark registrations provides legal certainty and accessibility.²⁰⁴ Two initiatives combine to create European Union trademark law—the First Council Directive and the Community Trade Mark Regulation.²⁰⁵ Graphic representation ensures that the scope and nature of the mark are plainly defined and comprehensible so that searchers checking the registry can readily ascertain what is registered. The ECJ requires graphic representation by “means of images, lines or characters, so that [the mark] can be precisely identified.”²⁰⁶ European Union trademark law acknowledges that while consumers often recognize traditional marks, such as words and logos as readily indicating source, this may not be the case with colors, sounds and scents.

Harmonized EU trademark law absorbs the role traditionally vested in national unfair competition laws by proposing broader protection of goodwill and growing control over “referential” (nominative) use.²⁰⁷ There is a need for broad trademark rights to also harmonize trademark law in the EU, such as combining a general fair use clause with several more precise provisions.²⁰⁸ The Parliament and the Council rejected the initial Commission proposal, which sought to reduce trademark protection to the traditional understanding of trademarks.²⁰⁹ Trademark protection does not unnecessarily limit freedom of expression and competition, and the recommendation explains that the interests of trademark proprietors and consumers are not only at stake, but also those of competitors. The use of the mark should only be held to infringe where it is obviously unfair.²¹⁰ Because

204. Case C-447/02 P, KWS Saat AG v. OHIM, 2004 E.C.R. I-10119; Case C-283/01, Shield Mark BV v. Joost Kist H.O.D.N., 2003 E.C.R. I-14323; Case C-273/00, Sieckmann v. Deutsches Patent und Markenamt, 2001 E.C.R. I-11750.

205. First Council Directive 89/104/EEC of 21 December 1988 to Approximate to the Laws of the Member States Relating to Trade Marks, recitation 9, 1989 O.J. (L 40/1); Council Regulation (EC) No. 40/94 of 20 December 1993 on the Community Trade Mark, 1994 O.J. (L 11/1).

206. Case C-273/00, Sieckmann v. Deutsches Patent und Markenamt, 2001 E.C.R. I-11750; Case C-283/01, Shield Mark BV v. Joost Kist H.O.D.N., 2003 E.C.R. I-14323; Case C-49/02, Heidelberger Bauchemie GmbH 2004 E.C.R. I-6134.

207. Case C-487/07, L'Oréal SA v. Bellure NV, 2009 E.C.R. I-05185.

208. Case C-236/08-238/08, Google France SARL v. Louis Vuitton Malletier SA, 2010 E.C.R. I-02417.

209. Proposal for a Regulation of the European Parliament and of the Council Amending Council Regulation (EC) No 207/2009 on the Community Trade Mark, at 3, COM (2013) 161 final (Mar. 27, 2013).

210. G.B. Dinwoodie, *Lewis & Clark Law School Ninth Distinguished IP Lecture: Developing Defenses in Trademark Law*, 13 LEWIS & CLARK L. REV. 99, 152 (2009) (“However, as the scope of trademark protection expands and the metes and bounds of protection become more uncertain, we cannot

marks indicate their commercial origin, and channel the flow of revenues procured on the market back to their proper commercial source, they do not interfere with competition on the production level. Therefore, competitors are free to offer exactly the same product, but only if they use a different mark indicating a different origin.²¹¹ Marks consisting of the shapes of goods are not to be treated differently from other marks,²¹² because shapes are subject to an absolute and enduring exclusion from protection in order to safeguard competition interests.²¹³

C. Trademarks as Domain Names

Managing domain names remains central for the functioning of cyberspace. State-enacted law has been very inadequate in terms of regulating domain names, even with intervention. Special private tribunals or panels, such as the Uniform Domain Name Dispute Resolution Policy (“UDRP”), decide conflicts concerning domain names. Legal certainty and predictability are difficult to accomplish with the UDRP, because of the lack of precedent, and the multinational composition of the panels.

ICANN organizes and oversees the Internet’s underlying address book, namely the Domain Name System (“DNS”). The DNS administers the DNS root zone management, such as generic (“gTLD”) and country code Top-Level Domains (“ccTLD”).

The first step in materializing a corporate presence in cyberspace is to choose a domain name that is thoroughly conceived in order to sufficiently represent the company or organization using it. A domain name is equivalent to a telephone directory or directory assistance for the Internet. If the organization switches IP addresses, the same memorable or deducible domain name can still be used by the organization. Dilution problems arise when any non-trademark holders use domain names based on famous marks for their own websites.²¹⁴

The chosen domain name often conflates the company’s trademark. In other words, if a company has a mark or trade name, the company should

rely exclusively on creative interpretation of the *prima facie* cause of action to establish limits. Trademark law must more consciously develop defenses that reflect the competing values at stake in trademark disputes.”).

211. Case C-205/13, Hauck GmbH & Co. KG v. Stokke; Case T450/09, Simba Toys v. OHIM (concerning trade mark protection for a three dimensional puzzle in the shape of Rubik’s cube).

212. Cases C-53/01–C-55/01, Linde, Winward and Rado v. DPMA, 2003 E.C.R. I-03161 (concerning the shapes of a fork-lift truck, a torchlight and a wristwatch).

213. Cases C-108/97 and C-109/97, Windsurfing Chiemsee v. Huber and Attenberger, 1999 E.C.R. I-2823.

214. Polaroid Corp. v. Polaroid, Inc., 319 F.2d 830, 836 (7th Cir. 1963).

have a domain name that is the same as the mark or trade name enhancing communication with the company's customer base. The chosen name must plainly identify the company, enabling the consumer to distinguish the requisite nexus between the corporation and the Internet URL. A URL or Internet site address will contain a trademark as the second level domain and as a distinctive identifier of a company.

Except for functioning as locators/addresses, domain names function as signs to pinpoint goods or services that are being offered on cyberspace. As a result, such unauthorized commercial uses normally constitute trademark infringement. Therefore, the overlap between trademark law and domain names is very high.²¹⁵

A domain name facilitates the identification of Internet hosting services; entails the devolution of rights to a single, exclusive owner; and conveys uninterrupted monopolies in cyberspace.²¹⁶ Rules pertaining to trademark registration do not extend to domain name registration, and due to weak registration requirements, registrants have the power to create a monopoly in generic terms such as "mail," "toys" or "book."²¹⁷

Internet domain names increasingly require rigid protection and enforcement.²¹⁸ Courts clearly should continue to apply the likelihood of confusion standard, the average consumer test, whenever confronted with domain name disputes. If a company uses a domain name with the aim of hijacking customers from another competitor, its conduct clearly violates the Lanham Act.²¹⁹

Domain name registration alone would not amount to using a trademark pursuant to the Trademark Act.²²⁰ The name must be used as a source indicator. Hence, the resemblance between two trademarks remains a determining factor in the inquiry, because where two marks are wholly dissimilar, there is no likelihood of confusion. Comparable considerations also govern scenarios where users of contentious trademarks operate in

215. Chih-Hong (Henry) Tsai, *The Trademark/Domain Name Protection War: A Comparative Study of the U.S., UDRP and Taiwanese Law*, 12 J. MARSHALL REV. INTELL. PROP. L. 350 (2013).

216. *Thomas v. Network Solutions Inc.*, 176 F.3d 500, 503-04 (D.C. Cir. 1999).

217. *Shade's Landing, Inc. v. Williams*, 76 F. Supp. 2d 983 (D. Minn. 1999) (expounding that for "Internet businesses who make the mistake of choosing a domain name deemed descriptive or generic, there seems to be little that they can do to gain trademark protection for their domain name").

218. *Sallen v. Corinthians Licenciamentos LTDA*, 273 F.3d 14, 19 (1st Cir. 2001) (finding that "disputes over domain names have become increasingly common with the expanding commercial use of the Internet").

219. *Planned Parenthood Fed'n of Am., Inc. v. Bucci*, 42 U.S.P.Q.2d (BNA) 1430, 1439 (S.D.N.Y. 1997), *aff'd* 152 F.3d 920 (2d Cir. 1998), *cert. denied*, 525 U.S. 834 (1998) (confronting an anti-abortion website).

220. *Brookfield Commc'ns, Inc. v. W. Coast Entm't Corp.*, 174 F.3d 1036, 1051 (9th Cir. 1999).

geographically different markets. There is a need to examine whether the products or services offered are inextricably intertwined, along with the “competitive proximity” between the companies and products at hand. Moreover, courts examine whether the same customer is targeted and whether cyberspace is used as a vehicle for marketing and advertisement. In *Brookfield*, both marks relied on a common channel to disseminate information.

Are domain names more like addresses, and geographic designators, rather than trademarks? Because marks that are primarily geographic in nature are not entitled to trademark protection, neither would be domain names if they were more like street addresses than trademarks. Federal trademark law in the United States and Greece allow concurrent use of the same mark by others, as long as such use is not likely to cause confusion or to cause mistake or to deceive. Another problem that arises is that names that could not be registered or protected as trademarks nonetheless receive a perpetual monopoly as domain names. Furthermore, trademarks that consist of “immoral, deceptive, or scandalous matter” or that are primarily geographically descriptive or primarily surnames are not capable of being registered. Therefore, marks must be distinctive in order to be registered. Marks that consist of coined words or arbitrary uses of language that are arbitrary or fanciful are considered to be inherently distinctive, and so marks that require mental imagination, thought and perception to reach a conclusion as to the nature of goods are suggestive and also inherently distinctive. On the other hand, marks that are merely descriptive or generic are not capable of becoming trademarks. Although descriptive terms can attain secondary meaning through use and advertising, and so become distinctive and registration-worthy, generic terms, such as the common descriptive term for the genus of a product or service, are never distinctive and cannot get protection as trademarks. The purpose of the distinctiveness requirement is to keep common words and phrases in the public domain, in order to ensure a competitive marketplace. Trademark laws now protect descriptive terms that have become distinctive through the secondary meaning principle.²²¹

The merger of trademark law with Internet domain names indicates that borrowing concepts in law is the basic instrument of developing the law. The distinctive aspects of trademark use in cyberspace have led companies to

221. Lisa P. Ramsey & Jens Schovsbo, *Mechanisms for Limiting Trade Mark Rights to Further Competition and Free Speech*, 44 Int'l Rev. Intell. Prop. & Competition L., 671 (2013) (such as “Fish-Fri”).

adopt strategies to get the most value from their trademarks. The most common method of locating an unknown domain name is merely to type in the company name or logo with the suffix “.com.” Companies prefer their domain name to be comprised of the company or brand trademark, and the suffix “.com.”²²² Trademarks are used in e-commerce in a variety of ways. A trademark could be used as part of the domain name of a website, or on the face of a web page and in the metatags of a web page.

Cyberpiracy and cybersquatting are the two activities threatening companies by utilizing their trademarks as domain names. Cyberpirates acquire domain names in order to switch customers from a trademark owner’s site to their own, allowing them to profit off the mark’s goodwill and benefit by either confusing customers as to the source of the goods or services sold, or by generating advertising revenue from the additional customers. Revenue on the web is still driven mainly by advertising, and advertising is based on traffic hits to the site, rather than sales from the site. Cyberpirates seek to attract this traffic by registering domains names that are identical or similar to popular trademarks. A cybersquatter is a person who knowingly reserves a trademark as a domain name simply to sell it for a profit. Companies often prefer to pay off cybersquatters rather than pursue lawsuits against them.²²³

Predominantly with regard to the phenomenon of cybersquatting, traditional trademark law was clearly unable to cope with the new challenges.²²⁴ Courts relied on the Federal Trademark Dilution Act (“FTDA”) as the tool of choice in combating cybersquatters. However, the FTDA only protects famous marks, and thus does not provide any protection to “ordinary” trademark owners.²²⁵ The FTDA requires trademark use by the defendant of the allegedly infringing term, which is not met where a cybersquatter simply and passively holds a domain name without connecting it to a website. The Anti-Cybersquatting Consumer Protection Act (“ACPA”) enables trademark owners to recover domain names incorporating terms identical to, or similar to, the plaintiffs’ marks from

222. *Sporty’s Farm L.L.C. v. Sportsman’s Mkt., Inc.*, 202 F.3d 489, 493 (2d Cir. 2000).

223. *Jews for Jesus v. Brodsky*, 993 F. Supp. 282, 304 (D.N.J. 1998).

224. *Intermatic Inc. v. Toeppen*, 947 F. Supp. 1227, 1228–29 (N.D. Ill. 1996); *Panavision Int’l, L.P. v. Toeppen*, 141 F.3d 1316, 1318–19 (9th Cir. 1998).

225. *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 431 (2003) (noting that for famous trademarks, the federal trademark dilution law extends protection against subsequent uses that blur or tarnish the distinctiveness of the famous trademark, even absent a likelihood of confusion).

parties who have registered such domain names in bad faith.²²⁶ Internet domain name disputes focus on protecting holders of trademarks from bad-faith registrations and uses of domain names that correspond to relevant trademark interests.

D. Trademarks and Territoriality

Trademark law is territorial since the initial IP conventions of the late nineteenth century, the Paris Convention and the Berne Convention for the Protection of Literary and Artistic Property, were given national treatment.²²⁷ A signatory state was obliged to offer protection to nationals of other signatory states that matched the protection afforded its own nationals. Law is contextual, and geography is a central part of context. Trademark rights have been defined territorially. Trademark rights that have been defined territorially flowed logically from the intrinsic purpose of trademark law. Whether viewed as an instrument to safeguard producer goodwill, or to protect consumers against confusion, the purpose of trademark law was served by recognizing rights in the local producer.²²⁸

Territoriality reflects efforts to protect goodwill to the extent of its geographic reach. On the other hand, global markets and digital communication have encouraged a need for more effective international enforcement of rights and the motivation of cross-border trade. Trademarks function as badges of origin by designating the source of goods or services to the consumer. As a result, trademark rights preclude others from taking advantage of the reputation associated with a trademark and diverting trade away from the trademark owner's selling.²²⁹

According to article 6 of the EU Directive, the scope of the territorial right is limited in order to preserve its essential function of a trademark.²³⁰

226. *Cable News Network L.P. v. Cnnnews.com*, 177 F. Supp. 2d 506, 523 (E.D. Va. 2001), *aff'd*, 56 Fed. Appx. 599, 600 (4th Cir. 2003).

227. Berne Convention for the Protection of Literary and Artistic Works, July 24, 1971, 1161 U.N.T.S. 31; Paris Convention for the Protection of Industrial Property, July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 305.

228. *Nat'l Ass'n for Healthcare Commc'ns, Inc. v. Cent. Ark. Area Agency on Aging, Inc.*, 257 F.3d 732, 733 (8th Cir. 2001) (recognizing the right of the junior user nationally to exclude the senior user from the local area in which the junior user was the first to use).

229. *Case T-79/00, Rewe-Zentral v. OHIM (LITE)*, 2002 E.C.R. II-717; *Case T-128/01, Daimler-Chrysler Corp. v. OHIM*, 2003 E.C.R. II-711; First Council Directive 89/104/EEC of 21 December 1988 to Approximate to the Laws of the Member States Relating to Trade Marks, art. 5(1)–(2), 1989 O.J. (L 40/1).

230. *Case C-206/01, Arsenal Football Club plc v. Matthew Reed* 2002 E.C.R. I-10291; *Case T-130/01, Sykes Enterprises Inc. v. OHIM*, 2003 E.C.R. II-5187.

The boundaries of trademark law have been delineated in part by reference to physical geography. However, in cyberspace, apparent spatial boundaries are collapsed because, as a technological matter, there can be only one diavlos.com domain name, and it can only point to one firm.²³¹ The court in *Panavision Int'l v. Toeppen* expanded the geographical reach of trademark law with regard to domain names.²³² As a result, applying trademark law to domain names has resulted in trademark law becoming unmoored to physical geography, and is more likely to operate extra-territorially. Parties claiming ownership in a mark could sue in a different country, and due to differences in substantive law, each party could win. As a result, enforcement becomes a problem as trademark law grows in scope in cyberspace.²³³ The ACPA provides *in rem* jurisdiction over the domain name wherever that name is registered by creating assertions of jurisdiction. The question is whether they comport with Constitutional Due Process guarantees.²³⁴ Congress cannot avoid the constitutional requirements of fair play and substantial justice purely by calling an action *in rem*, and by limiting recovery to the res itself.²³⁵

As first described in *Polaroid Corporation v. Polarad Electronics Corp.*, the factors taken into consideration in determining whether a likelihood of confusion exists between two marks are: the strength of the mark, the degree of similarity between the two marks, the proximity of the products, the likelihood that the prior owner will bridge the gap, actual

231. *United Drug Co. v. Theodore Rectanus Co.*, 248 U.S. 90, 101 (1918) (“[W]here two parties independently are employing the same mark upon goods of the same class, but in separate markets wholly remote from the other, the question of prior appropriation is legally insignificant.”).

232. *Panavision Int'l v. Toeppen*, 141 F.3d 1316, 1326 (9th Cir. 1998) (citing *Panavision Int'l v. Toeppen*, 945 F. Supp. 1296, 1304 (C.D. Cal. 1996)); Federal Trademark Dilution Act, 15 U.S.C. § 1125 (2012); Anticybersquatting Consumer Protection Act, 15 U.S.C. § 1125(d) (2012); *see also* H.R. REP. NO. 106-479 § 3002 (1999) (providing an explicit Federal remedy to combat so-called “cybersquatting”).

233. *Mecklermedia Corp. v. DC Congress GmbH* [1998] 1 All E.R. 148, 160 (reaching a different conclusion on ownership of a mark from the one reached in other countries).

234. *Fleetboston Financial Corp. v. Fleetbostonfinancial.com*, 138 F. Supp. 2d 121, 135 (D. Mass. 2001) (finding that *in rem* provisions of the ACPA violate due process when the domain name registration paper is subsequently transferred to a district other than the district where the registrar is located); *Heathmount A.E. Corp. v. Technodome.com*, 106 F. Supp. 2d 860, 865–66 (E.D. Va. 2000) (finding that the registration of a domain name, without more, cannot be sufficient minimum contacts for the purposes of *in personam* jurisdiction); *America Online, Inc. v. Chih-Hsien Huang*, 106 F. Supp. 2d 848, 859–60 (E.D. Va. 2000) (finding that filing an online domain name registration agreement with Network Solutions is not sufficient contact with Virginia to justify *in personam* jurisdiction); *Caesars World, Inc. v. Caesars-Palace.com*, 112 F. Supp. 2d 502, 504 (E.D. Va. 2000) (finding sufficient contacts for purposes of *in rem* jurisdiction); *Lucent Technologies, Inc. v. LucentSucks.com*, 95 F. Supp. 2d 528, 531 n.5 (E.D. Va. 2000) (finding that registration is sufficient minimum contact for *in personam* jurisdiction).

235. *Caesars World, Inc. v. Caesars-Palace.com*, 112 F. Supp. 2d 502, 504 (E.D. Va. 2000) (“[U]nder Shaffer, there must be minimum contacts to support personal jurisdiction only in those *in rem* proceedings where the underlying cause of action is unrelated to the property which is located in the forum state.”).

confusion, the reciprocal of the defendant's good faith in adopting its own mark, the quality of the defendant's product, and the sophistication of the buyers are.²³⁶ Protecting famous trademarks constitutes a vital purpose in IP law, stemming from the broader international thrust purporting to enshrine and protect well-known marks.²³⁷ Safeguarding well-known marks is important, along with concurrently generating disincentives for manufacturers to intrude upon famous marks. Well-known marks will often become household brand names and may be sold, licensed, or assigned by legitimate owners of the mark for considerable financial gain. To that extent, domain names have become the priceless intangible real estate of cyberspace. A trademark has to be used for selling a product or service. The present legal framework tolerates comparative advertising by allowing for a comparison of products when the objective is to inform the end-user of the differences between similar products.²³⁸

Traditionally, trademark law is designed for minimizing consumer search costs, and the basic doctrinal structure of attenuated, perception-based rights must be preserved. Traditional trademark law—in contrast to trademark dilution law—possesses “a built-in First Amendment compass,” making it “wholly consistent with the theory of the First Amendment, which does not protect commercial fraud.”²³⁹ Distinctiveness and confusion are the two terms in which courts have developed their views regarding the protection and use of trademarks. The importance of consumer protection cannot be over-emphasized, and the average consumer standard should remain the central point of the inquiry, even during under domain name litigation.

236. 287 F.2d 492, 495 (2nd Cir. 1962); *see also* *ETW Corp. v. Jireh Publ'g, Inc.*, 332 F.3d 915, 939–40 (6th Cir. 2003).

237. Paris Convention for the Protection of Industrial Property, July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 305.

238. Trade-marks Act R.S.C., ch. T-13, 11.16(2)–(3) (1985).

239. *Mattel, Inc. v. MCA Records, Inc.*, 296 F.3d 894, 905 (9th Cir. 2002); *Playboy Enters. v. Netscape Commc'ns Corp.*, 354 F.3d 1020, 1034 (9th Cir. 2004) (holding that a search engine could be liable for initial confusion created by banner advertisement appearing on search results page); *Google Inc. v. Am. Blind & Wallpaper Factory, Inc.*, 74 U.S.P.Q.2d 1385, 1393 (N.D. Cal. 2005) (allowing infringement case to go forward against the search engine for selling advertisements on website keyed to trademarked terms).

IV. ECONOMETRIC ANALYSIS

A. *Data and Methodology*

All the national laws in force by the end of 2012 of the seventy-nine investigated jurisdictions have been examined and used in the ranking of the various factors when constructing ZEKIPR6 index.²⁴⁰ Therefore, all future changes to intellectual property laws and their enforcement will continue to alter our indices. Therefore, the IPRs' index will be continuously updated. Furthermore, sub-indices for the protection of the individual intellectual property rights, such as patents, copyright and trademarks can be obtained by the national laws of the investigated countries by taking only the national law plus the enforcement legal rating into account. The following indices are used:

ZEKIPR6= Membership in International Treaties + INDEX OF PATENT RIGHTS + INDEX OF COPYRIGHT+ INDEX OF TRADE-MARK RIGHTS + Enforcement legal rating (Legal Tradition (Rule of law) + Legal Education+ Economic level)

Zekcopy6= INDEX OF COPYRIGHT+ Enforcement legal rating (Legal Tradition (Rule of law) + Legal Education+ Economic level)

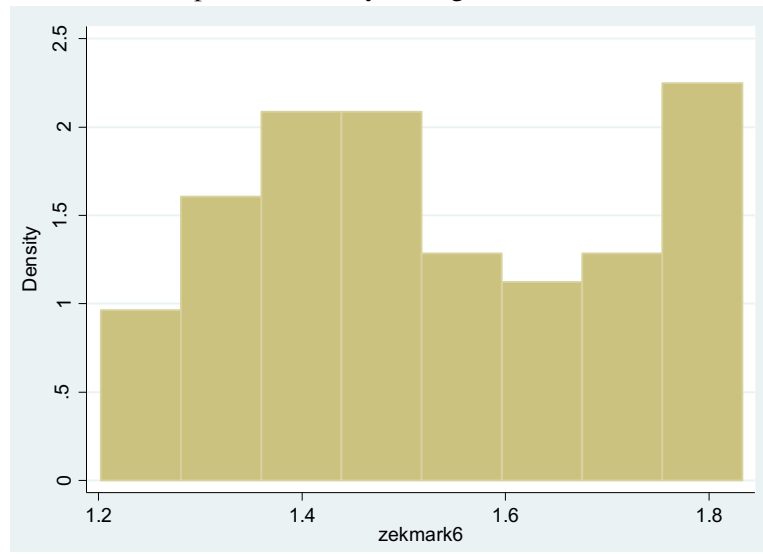
Zekmark6= INDEX OF TRADE-MARK RIGHTS + Enforcement legal rating (Legal Tradition (Rule of law) + Legal Education+ Economic level)

Enforcement legal rating (Legal Tradition (Rule of law) + Legal Education+ Economic level) is made according to this author's evaluation.

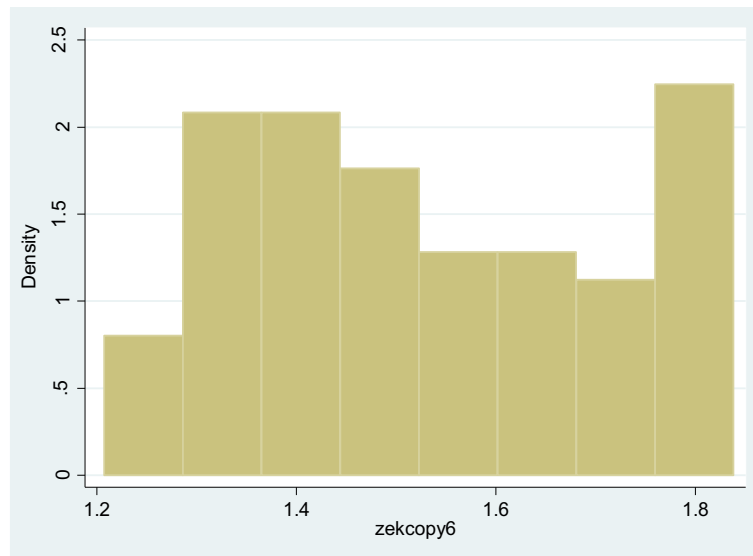
The following graphs illustrate the prices of zekmark6 & zekcopy6:

240. GEORGIOS I. ZEKOS, IPRS PROTECTION AND THEIR IMPACT UPON FDI, GDP GROWTH AND TRADE (2013).

Graph 1: Two-Way Histogram zekmark6



Graph 2: Two-Way Histogram zekcopy6



A linear model is in the form

$$j=1$$

where, for the i th case, Y_i is the response variable, $X_{i,1}, \dots, X_{i,p}$ are p regressors, and ε_i is a mean zero error term. The quantities β_0, \dots, β_p are unknown coefficients, whose values are determined by least squares.

In detail, the following are the econometric models that are used in our investigation to find the impact of IPRs and GCI upon attracting FDI inflows:

$$FDI_{it} = b_0 + b_1 Zekcopy6_{it} + b_2 GDP_{it} + b_3 Trade_{it} + b_4 Inflation_{it} + u_{it} \quad (1)$$

$$FDI_{it} = b_0 + b_1 GCI_{it} + b_2 GDP_{it} + b_3 Trade_{it} + b_4 Inflation_{it} + u_{it} \quad (2)$$

$$FDI_{it} = b_0 + b_1 Zekmark6_{it} + b_2 GDP_{it} + b_3 Trade_{it} + b_4 Inflation_{it} + u_{it} \quad (3)$$

The first thing to notice is the two subscripts: one denotes the i th individual country, and the second, t , denotes the t th time period. The analysis is focused on FDI inflows. FDI inflows FDIin2012=US Dollars at current prices and current exchange rates in millions, 2012 UNCTADstat, b_0 is the intercept, and (GDP GR 2012 = GDP growth (annual %) 2012 World Bank, INF2012= Inflation, consumer prices (annual %), 2012 World Bank, TRADE2012= Trade (% of GDP), 2012 World Bank, GCI. The Global Competitiveness Index in 2011–12 (GCI) are the explanatory variables.

B. Empirical Results

We start with correlating the variables utilized in our econometric models in order to avoid multicollinearity:

```
. corr zekcopy6 zekmark6 gdp2012 trade2012 gdpgr2012 inf2012 gci12
(obs=55)
```

	zekcopy6	zekmark6	gdp2012	tra~2012	gdpgr2~2	inf2012	gci12
zekcopy6	1.0000						
zekmark6	0.9843	1.0000					
gdp2012	0.4423	0.4291	1.0000				
trade2012	0.2377	0.2501	-0.2145	1.0000			
gdpgr2012	-0.4992	-0.5126	-0.2538	-0.0850	1.0000		
inf2012	-0.4506	-0.4927	-0.1406	-0.2268	0.2879	1.0000	
gci12	0.8216	0.8368	0.4169	0.4371	-0.2474	-0.5375	1.0000

The analysis of the data utilizing our econometric models gives the following results:

1. FDI Inflows OLS Model 1/ Model 3 Beta Coefficients

We start our investigation with Model 1 by using OLS standardized coefficients, or beta coefficients. The results (Coef. 5.70***, 5.77***, 6.50***) show the significance of zekcopy6 in 2012 for the five- and ten-years reference for foreign direct investment, net inflows U.S. Dollars at current prices and current exchange rates in millions, according to 2012 UNCTADstat (Table 1). It is worth

mentioning here that the zekcopy6 beta regarding FDI inflows are 0.6664939, 0.6750876 and 0.7339297, respectively.

We continue our investigation with Model 3, by using OLS standardized coefficients or beta coefficients. The results (Coef. 5.82***, 6.12***, 6.66***) show the significance of zekmark6 in 2012 for the five- and ten-years reference for foreign direct investment, net inflows U.S. Dollars at current prices and current exchange rates in millions, according to 2012 UNCTADstat (Table 1). Here the zekmark6 beta regarding FDI inflows are 0.6839728, 0.7247498 and 0.7592528, respectively.

Table 1: FDI Inflows OLS Model 1/ Model 3 Beta Coefficients

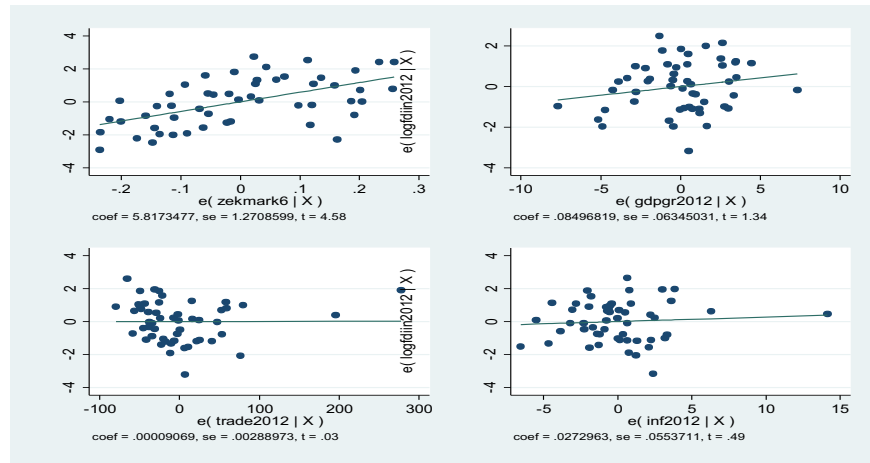
Variables	(1) logfdiin201 2	(2) logfdiin5 y	(3) logfdiin10 y	(4) logfdiin201 2	(5) logfdiin5 y	(6) logfdiin10 y
zekcopy6	5.70*** (1.231)	5.77*** (1.140)	6.50*** (0.982)			
gdpgr2012	0.08 (0.063)			0.08 (0.063)		
trade2012	0.00 (0.003)			0.00 (0.003)		
inf2012	0.01 (0.054)			0.03 (0.055)		
gdpgr5y		0.18** -0.061			0.20** -0.062	
trade5y		-0.00 (0.003)			0 -0.003	
inf5y		-0.02 (0.047)			-0.01 -0.047	
gdpgr10y			0.14 (0.071)			0.16* (0.072)
trade10y			-0.00 (0.002)			-0.00 (0.002)
inf10y			-0.00 (0.000)			-0.00 (0.000)
zekmark6				5.82*** (1.271)	6.12*** (1.167)	6.66*** (0.986)
Constant	-0.45 (2.023)	-0.47 (1.981)	-1.77 (1.685)	-0.67 (2.093)	-1.08 (2.028)	-2.04 (1.691)
Observations	52	76	79	52	76	79
R-squared	0.35	0.36	0.45	0.35	0.37	0.45
Adj. R-squared	0.30	0.32	0.42	0.29	0.33	0.42

Standard errors in parentheses

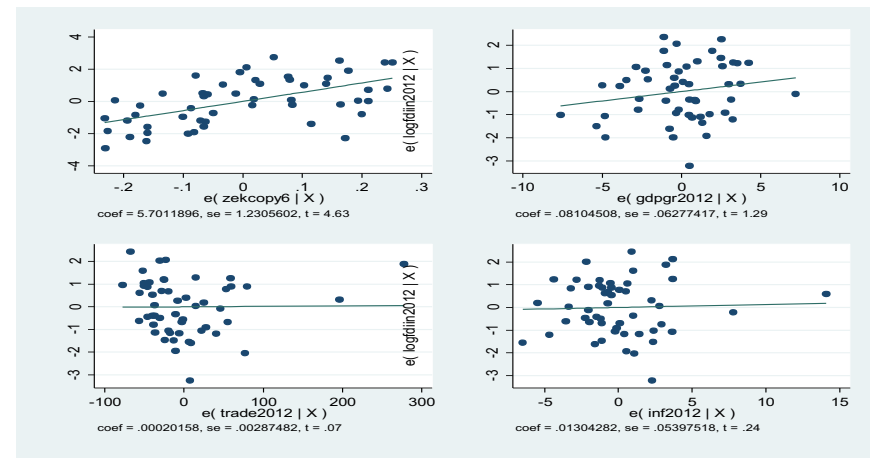
*** p<0.001, ** p<0.01, * p<0.05

The following avplots (graphs an added-variable plot, a.k.a. partial regression plot) illustrate the econometric outcomes:

Graph 3: reg logfdiin2012 zekmark6 gdpgr2012 trade2012 inf2012,beta



Graph 4: reg logfdiin2012 zekcopy6 gdpgr2012 trade2012 inf2012,beta



2. FDI inflows OLS Model 2 beta coefficients

We carry on our investigation with model 2 using OLS standardized coefficients or beta coefficients. The results (Coef. 2.06***, 1.82***, 1.87***) show the significance of gci in 2012. The five and ten years reference for Foreign direct investment, net inflows of U.S. Dollars at current prices and current exchange rates in millions, according to 2012 UNCTADstat are also measured. It is worth mentioning here that the gci betas for FDI inflows are 0.7735433, 0.721484 and 0.723533 respectively.

V. CONCLUSIONS

Copyright laws must expand as technology develops, in order to have an adequate balance between private rights and public interests. One of the most challenged issues in the field of intellectual property law is the level to which legally created rights may be restraining, rather than encouraging, scientific research. Although IP rights are intended to promote scientific progress, over proliferation or distortion of an optimal arrangement of rights generates bottlenecks that hamper the flow of research.

The above analysis of copyright and trademark law allows us to understand IP rights while preparing our own IP rights indices.²⁴¹ Moreover, the constant development of the legal regulation and enforcement of IP rights, results in a nonstop alteration of an index regarding copyright and trademark protection. The brief econometric analysis further shows the significance of zekcopy6 and zekmark6, and the competitiveness in attracting FDI inflows. Finally, the analysis of the legal background of copyright and trademark law shows a continuous development of the legal regulation and enforcement of IP rights. Therefore, there is a need for continuous alteration of an index (zekcopy6- zekmark6) regarding the protection of copyrights, trademarks and IP rights.

Copyright law must advance the creation, dissemination, and preservation of works that are valuable to society, expressed not only by traditional means but also by electronic means. Developing digital goods and services makes the introduction of electronic trademarks necessary. The current legal environment does not tender sufficient protection in the changing technological environment, but there is a need to support technological advancement while protecting users' data and interests. Presently, technology is changing in a faster rhythm than the law, and this failure translates into IPRs regulation. In the cyberspace and globalization era, copyright regulation is not effective in complying with the needs of creators and society. As a result, creators will have no motivation to create. The development of e-trademarks demands an effective electronic international trademarks regulation. Of course, to some extent, conventional trademarks laws are applicable to e-trademarks as well. The territoriality of trademarks would transform into cyber-territoriality for cyber-trademarks affixed to cyber-goods and services. Therefore, a system of electronic IP rights is necessary to best protect the interests of creators and businesses in the digital economy.

241. GEORGIOS I. ZEKOS, *LAW AND ECONOMICS OF IPRS* (2016).