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TRADEMARK LAW LOST IN CYBERSPACE: TRADEMARK PROTECTION FOR INTERNET ADDRESSES

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I. INTRODUCTION

The phenomenal growth¹ (see Table) of the Internet as a commercial medium has brought about a new set of concerns in the realm of intellectual property. Much of the discussion about the Internet's impact on intellectual property has centered around copyright issues, specifically the enhanced potential for illegal copying, plagiarism, and other related violations² as E-mail³ and the World Wide Web⁴ have proliferated.

An unexpected melee has ensued in the trademark arena over Internet addresses. The problem is bipolar: Trademark owners desiring to use their marks as domain names have found the desired form of such names already taken. Conversely, trademark owners have found that their marks are being used as domain names by unauthorized parties, often in a deliberate attempt to free-ride on the goodwill of the mark's owner.

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^{1.} According to a survey by Nielsen Media Research, 37 million people in the United States and Canada now have access to the Internet, amounting to about 16.6% of the adult population of the two countries. Internet World, CommerceNet/Nielsen Announce Internet Survey Results (Oct. 30, 1995), available in World Wide Web, http://www.commerce.net/pr/103095.niels.html. Although the methodology of this study has been criticized, advertisers are keenly interested in this new medium. See Rajiv Roa, Nielsen's Internet Survey: Does It Carry Any Weight?, FORTUNE, March 18, 1996, at 24.

^{2.} See generally Deborah Reilly, The National Information Infrastructure and Copyright: Intersections and Tensions, 76 J. PAT. & TRADEMARK OFF. SOC'Y 903 (1994). For a discussion of the myriad of new unpleasantries on the Internet, many of which are far more pernicious than trademark infringement, see Rosalind Resnik, Cybertort: The New Era, NAT'L L.J., July 18, 1994, at A1.

^{3.} E-mail is the most widely used tool on the Internet. See Gerry Fifer, E-Mail Is a Cheap, Easy Way to Communicate Worldwide, N.Y. L.J., Sept. 6, 1994, at 5 (discussing the ubiquity of E-mail, even for lawyers).

^{4.} Lance Rose, World Wide Web Can Ensuare Unwary Users; Potential Copyright Problems Abound, N.Y. L.J., Feb. 27, 1995, at S3 (discussing the intellectual property issues stemming from the hypertext linking of World Wide Web pages).

Active Domains Date January 1996 240,000 July 1995 120,000 January 1995 71,000 56,000 October 1994 46,000 July 1994 January 1994 30,000 October 1993 28,000 July 1993 26,000 January 1993 21,000

Table: Quarterly Estimates of Internet Domain Activation 5

Because these addresses serve to identify the origin of the goods and services as well as the Internet site itself, tumultuous and acrimonious encounters have occurred as everyone from the White House⁶ to the Golden Arches⁷ scrambled to obtain the electronic addresses of choice.

The following sections will examine the legal and commercial factors currently in play in the ongoing attempt to make trademark law an important part of the developing landscape of rules being formed around the Information Superhighway.

II. TRADEMARK BACKGROUND

Trademark protection differs from that of patents and copyrights in that the legislative authority to protect them does not derive explicitly from the U.S. Constitution.⁸ Nonetheless, Congress passed the first

^{5.} Network Wizards, Internet Domain Survey (Jan. 1996), available in World Wide Web, http://www.nw.com/zone/WWW/report.html (no data available for Oct. 1995); see also M. Lottor, Internet Growth (1981-1991), Request for Comments: 1296 (Jan. 1992), available in World Wide Web, http://www.nw.com/zone/rfc1296.txt.

John Schwartz, White House Unveils Internet Web, WASH. POST, Oct. 20, 1994, at A19.

^{7.} Kevin Goldman, McDonald's to Post Golden Arches Along the Information Superhighway, WALL ST. J., July 21, 1994, at B7.

^{8.} The U.S. Constitution gives to the Congress the enumerated power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, §8, cl. 8.

federal trademark law in 1870⁹ pursuant to its authority under the Commerce Clause. However, the Act was struck down by the Supreme Court on constitutional grounds, holding that its reach went beyond the enumerated powers of the Congress to regulate commerce. It was not until 1946 that the present federal trademark regulations came into being through the Lanham Act. Federal jurisdiction over trademarks remains circumscribed by the Commerce Clause, extending only to marks used in interstate and foreign trade.

Within that limited jurisdiction though, the scope of trademark protection has been broad. For example, well before the inception of the Lanham Act, the Supreme Court held that trademark protection could be extended to a single word. The Lanham Act itself provides a great range of expressions within the ambit of trademark protection, as a trademark is defined as: "any word, name, symbol, or device, or any combination thereof used . . . [or intended to be used] . . . to identify and distinguish his or her goods . . . and to indicate the source of the goods." This broad language has been interpreted by the courts and incorporated by other provisions of the Lanham Act to provide protection for pictures, shapes and packaging, and even shoe soles. 20

^{9.} Act of July 8, 1870, ch. 230, 16 Stat. 210 §§ 77-84. The Act was revised by an "Act to punish the counterfeiting of trade-mark goods and the sale or dealing in of counterfeit trade-mark goods." Act of Aug. 14, 1876, ch. 274, 19 Stat. 141.

^{10.} The Commerce Clause authorizes the Congress "[t]o regulate Commerce . . . among the several States." U.S. CONST. Art. I, \S 8, cl. 3.

^{11.} United States v. Steffens; United States v. Wittemann; United States v. Johnson, 100 U.S. 82 (1879) (known as The Trademark Cases, these cases were disposed of together by the Court).

^{12.} The terms "trademark" and "service mark" can be used interchangeably because they are both protected in the same manner under the Lanham Act. The mark is protected whether it represents a product and is a trademark or whether it represents a service and is a service mark. 15 U.S.C. § 1051 (1994) (trademarks are registerable); 15 U.S.C. § 1053 (1994) (service marks given the same protection as trademarks).

^{13.} Federal Trademark Act of 1946, 15 U.S.C. § 1051 et seq. (1994).

^{14. 28} U.S.C. § 1338 (1994) (granting district courts original, but not exclusive, jurisdiction over trademark cases).

^{15.} Morendoz v. Holt, 128 U.S. 514, 520 (1888).

^{16. 15} U.S.C. § 1127 (1994).

^{17.} E.g., Lanham Act § 43(a), 15 U.S.C. § 1125(a) (1994) (providing for a federal remedy for unfair competition).

^{18.} M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421 (4th Cir. 1986).

^{19.} See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992) (discussing the protectability of trade dress).

^{20.} CITC Indus. v. Levi Strauss & Co., 216 U.S.P.Q. 512, 516 (T.T.A.B. 1982).

Even more recently, the Supreme Court has held that the Lanham Act can provide trademark protection to a color.²¹

It is important to keep in mind that trademarks are inherently adjectival and must remain distinctive²² to retain their protected status. While many formerly distinctive marks have made a transition into common,²³ generic²⁴ nouns ("Kleenex" for "tissue") or even verbs (e.g., "to (make a) Xerox"),²⁵ this metamorphosis, when complete, sacrifices the trademark to the public domain.²⁶

Thus, the more telling inquiry is to determine what is not considered a trademark. There is one primary prerequisite: The Lanham Act will permit a trademark to be registered, provided that it has first been used

22. 15 U.S.C. § 1052(e)(1) (1994) prohibits "merely descriptive" words from being protected as trademarks.

24. "A generic term is one that is commonly used as the name of a kind of goods.... Unlike a trademark, which identifies the source of a product, a generic term merely identifies the genus of which the particular product is a species." Liquid Controls Corp. v. Liquid Control Corp., 802 F.2d 934, 936 (7th Cir. 1986).

25. To prevent losing its mark in this manner, Xerox Corporation places frequent advertisements in various publications, reminding the world: "You can't make a Xerox of a Xerox on a Xerox."

^{21.} Qualitex Co. v. Jacobson Prods. Co., 115 S. Ct. 1300 (1995). However, if such product features are "functional," trademark protection will be denied because it "is the province of patent law, not trademark law, to encourage invention." Id. at 1302. "With a name, functionality is rarely an issue." W.T. Rogers Co. v. Wendell R. Keene and Keene Mfg., 778 F.2d 334, 347 (7th Cir. 1985). The first case to recognize the registrability and protectability of color as a trademark came ten years before in In re Owens-Corning Fiberglas Corp., 774 F.2d 1116 (Fed. Cir. 1985). The latest attempt to push the envelope of trademark protection is coming from motorcycle manufacturer Harley-Davidson, which has filed to trademark the sound of its engine. See J. Taylor Buckley, The Bike That Roared: Can Harley's Sound Be Trademarked?, USA TODAY, Jan. 8, 1996, at 1D. Trademarking sounds, however, is not unprecedented. NBC did it with the three chimes used for station identification. Even "roars" have been registered, such as MGM's lion's growl. See Anna D. Wilde, Harley Hopes to Add Hog's Roar to Its Menagerie of Trademarks, WALL St. I., June 23, 1995, at B1.

^{23.} Yet, sometimes seemingly generic or aphoristic terms are granted protection, as occurred when National Basketball Association coach Pat Riley registered the sports phrase "three-peat," which was arguably an existing cliché. See Todd D. Kantorczyk, How to Stop the Fast Break: An Evaluation of the "Three-Peat" Trademark and the FTC's Role in Trademark Law Enforcement, 2 UCLA ENT. L. REV. 195 (1995) (criticizing the loopholes in current trademark law which can facilitate the registration of generic terms); see also Richard Sandomir, The Economics of a Sports Cliche, N.Y. TIMES, June 22, 1993, at D1; Eric Zorn, Still May Be Time to Think High Fives, CHI. TRIB., Aug. 29, 1993, Chicagoland section, at 1 (estimating Coach Riley's earnings from royalties on the term at "about a million dollars").

^{26. 15} U.S.C. § 1064(3) (1994) denies protection to registered, nondescriptive trademarks that have become the generic names of goods or services. See also 1 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 11.03 [5] (3d ed. 1994) (noting that such fanciful marks as ASPIRIN, CELLOPHANE and ESCALATOR have entered the public domain as generic names for products).

in interstate commerce or an "intent to use" statement has been filed with the Patent and Trademark Office ("PTO").²⁷ Rights to a trademark, therefore, arise from prior usage. Additionally, the Act provides that any trademark may be registered, unless it:

- is immoral, deceptive, or scandalous or disparages or falsely suggests a connection with persons, institutions, etc.; or
- is a flag or coat of arms or other insignia of the U.S., state, municipality or foreign nation; or
- is a name, portrait, or signature of a particular living individual without written consent; or
- resembles a mark which is registered in the U.S. Patent and Trademark Office or a mark previously used in the U.S. by another and not abandoned, as to be likely, when applied to the goods of the applicant, to cause confusion or cause mistakes or deceive; or
- consists of a mark which is merely descriptive.²⁸

These exclusionary paragraphs illustrate that:

[I]t is clear... that the primary purpose of the Act was to eliminate deceitful practices in interstate commerce involving the misuse of trademarks, but along with this it sought to eliminate other forms of misrepresentations which are of the same general character even though they do not involve any use of what can technically be called a trademark.²⁰

^{27.} The trademark application filed with the PTO requires that the applicant explain how the mark is used in commerce. 15 U.S.C. § 1051(a) (1994). An applicant may also register a mark that has not yet been used in commerce by filing an intent-to-use ("ITU") application. Id. § 1051(b). However, an ITU registrant does not receive complete privileges until the mark is actually used.

^{28. 15} U.S.C. § 1052 (1994).

^{29.} Samson Crane Co. v. Union Nat'l Sales, 87 F. Supp. 218, 222 (D. Mass. 1949), aff'd per curiam, 180 F.2d 896 (1st Cir. 1950).

The prohibition against improper trademark usage is based upon the Act's overall purpose of stemming unfair competition.³⁰ According to Congress:

The purpose underlying any trade-mark statute is twofold. One is to protect the public so it may be confident that, in purchasing a product bearing a particular trade-mark which it favorably knows, it will get the product which it asks for and wants to get. Secondly, where the owner of a trade-mark has spent energy, time, and money in presenting to the public the product, he is protected in his investment from its misappropriation by pirates and cheats.³¹

Lanham Act § 43(a) protects consumers by creating a cause of action against:

[a]ny person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which — (A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connec-

^{30.} There is a split among the circuits regarding the scope of the Act. Despite the pronouncement in Samson Crane, the First Circuit limits this section to cases of passing off. See Boothroyd Dewhurst, Inc. v. Corrado Poli, 783 F. Supp. 670, 684 (1st Cir. 1991) (refusing to extend the Act's meaning to anything except a "case in which consumers might be confused as about the source of goods or services they were purchasing"). Nevertheless, the overlap of the laws of the several states in the area of unfair competition and federal trademark law has lead to the gradual federalization of that nexus. Until the Supreme Court's decisions in Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964), and Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964), unfair competition was the domain of state common law. See Duraco Prods. Inc. v. Joy Plastic Enters., 40 F.3d 1431, 1443 (3d Cir. 1994) (stating that "Sears and Compco created a federal unfair competition law"). Congress completed and codified this federalization in the 1988 amendments to the Lanham Act. S. REP. No. 515, 100th Cong., 2d Sess. 40 (1988), reprinted in 1988 U.S.C.C.A.N. 5577, 5603. See Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. at 780 (Stevens, J., concurring in the judgment) ("Section 43(a) . . . has been widely interpreted to create, in essence, a federal law of unfair competition.") (quoting The United States Trademark Ass'n Trademark Rev. Comm'n Report and Recommendations to USTA President and Board of Directors, 77 TRADEMARK REP. 375, 426 (1987)); id. at 783 (Stevens, J., concurring in the judgment) ("Congress codified the judicial interpretation of Section 43(a), giving its imprimatur to a growing body of case law ").

^{31.} S. REP. No. 1333, 79th Cong., 2d Sess. (1946), reprinted in 1946 U.S. CODE CONG. SERV. 1274, 1274; see S. REP. No. 515, 100th Cong., 2d Sess. 4 (1988), reprinted in 1988 U.S.C.C.A.N. 5577, 5605 (1988 amendment).

tion, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person

Thus, the Lanham Act prohibits the use of *any* item, whether a trademark or not, which would be a prevarication in the marketplace.³³

This is especially relevant to controversies involving "trade names." For, while trademarks are used to identify a firm's goods or services, a trade name is the firm moniker itself, and "[f]ederal law does not provide for the registration of trade names."34 Trade names symbolize the reputation of a business as a whole. Trademarks and service marks are used to identify the source or origin of particular products or services sold or proffered by that entity. Of course, the distinction often blurs as companies and their products are labeled the same (e.g., Apple Computer makes Apple® computers). In essence, the functions are coterminous: The trademark serves as an extension of the owner's trade name, carrying within it the identity of the source of its goods and its reputation and goodwill. Thus, the fact that state or county officials accepted a company's fictitious name registration generally is no defense against a proven senior user of the mark.³⁵ Conversely, a senior user of a corporate name can preclude use by the junior user of a registered trademark. In any event, a federal trademark registration is prima facie evidence of the holder's exclusive right to use the mark in commerce, and thereby affords significant legal rights and procedural benefits against challengers or infringers.36

Consequently, the improper usage of both trade names and trademarks can lead to infringement claims. If a company uses another party's trademark or service mark as part of its corporate title and name,

^{32. 15} U.S.C. § 1125(a)(1) (1994). With the Trademark Law Revision Act of 1988, Pub. L. No. 100-667, 102 Stat. 3935, Congress amended § 43(a) to codify existing constructions of that section. See S. REP. No. 515, 100th Cong., 2d Sess. 40 (1988), reprinted in 1988 U.S.C.C.A.N. 5577, 5603; see also Two Pesos, 505 U.S. at 773 (holding that "the protection of trademarks and trade dress under Section 43(a) serves the same statutory purpose of preventing deception and unfair competition.").

^{33.} Thus, holders of both registered and unregistered marks have a private right of action under the Lanham Act. 15 U.S.C. § 1114(1) (1994) (defining a trademark infringement claim when the plaintiff has a registered mark); 15 U.S.C. § 1125(a) (1994) (defining an action for unfair competition in the context of trademark infringement when the plaintiff holds an unregistered mark).

^{34.} Vincent N. Palladino, Selecting and Protecting Trademarks, N.Y. St. B.J., May/June 1995, at 48, 49.

^{35.} See Billie Munro, When You Want an "R" Rating, NATION'S BUS., June 1995, at 53R.

^{36. 15} U.S.C. § 1115(a) (1994).

that company may be liable for trademark infringement. In light of this functional overlap, this discussion will use the term "trademark" for both trademarks and trade names.

While the Lanham Act enumerates objective criteria for determining infringement, the thrust of the established tests is subjective: Whether misrepresentation exists depends on whether the viewer of an infringing mark is confused as to the origin or source of the marked goods. This likelihood of confusion analysis, now the talisman of infringement under the Lanham Act, is aptly presented by Judge Friendly in *Polaroid Corp.* v. *Polarad Electronics Corp.* ³⁷

[T]he prior owner's chance of success [in preventing infringement] is a function of many variables: the strength of his mark, the degree of similarity between the two marks, the proximity of the products, the likelihood that the prior owner will bridge the gap [between the parties' products if the products are different], actual confusion, and the reciprocal of defendant's good faith in adopting its own mark, the quality of defendant's product, and the sophistication of the buyers.³⁸

The majority of jurisdictions have adopted the likelihood of confusion test in such a way that infringement is essentially a strict liability issue in which the factual inquiry focuses on the buyer's subjective state of mind.³⁹ As the Fifth Circuit put it: "Good faith is not a defense to trademark infringement. . . The reason for this is clear: if potential purchasers are confused, no amount of good faith will make them less so. Bad faith, however, may, without more, prove infringement."

However, the value of a trademark can be damaged even when there is no possibility of confusion, as when the mark is used by another party on another product. Until recently, only twenty-five states have laws which protect trademark holders from this and other actions which may

^{37. 287} F.2d 492 (2d Cir. 1961), cert. denied, 368 U.S. 820 (1961).

^{38.} Id. at 495; see also Bristol-Myers Squibb Co. v. McNeil-P.P.C., Inc., 973 F.2d 1033, 1044 (2d Cir. 1992) (rejecting a mechanical application of the *Polaroid* factors in the resolution of the likelihood of confusion issue).

^{39.} See McCarthy, supra note 26, § 23.01; see also Rex S. Heinke & Heather D. Rafter, Rough Justice in Cyberspace: Liability on The Electronic Frontier, The COMPUTER LAW., July 1994, at 1.

^{40.} Fuji Photo Film Co. v. Shinohara Shoji Kabushiki Kaisha, 754 F.2d 591, 596 (5th Cir. 1985).

cheapen or "dilute" the value of their marks. 41 Dilution, in jurisdictions that recognized the cause of action, was defined as "either the blurring of a mark's product identification or the tarnishment of the affirmative associations a mark has come to convey." 42 For example, the relevant New York state law defines the cause of action for dilution as follows:

Likelihood of injury to business reputation or of dilution of the distinctive quality of a mark or trade name shall be a ground for injunctive relief in cases of infringement of a mark registered or not registered or in cases of unfair competition, notwithstanding the absence of competition between the parties or the absence of confusion as to the source of goods or service.⁴³

The fact that antidilution statutes were available in only half of the states had made such regulations an ineffective tool in mitigating trademark abuse on the Internet. However, on January 16, 1996, the Federal Trademark Dilution Act of 1995 was enacted to extend dilution protection to federal marks. This act amends the Lanham Act to create a federal cause of action for dilution for owners of famous harks, dispensing with the requirement (still needed to claim infringement) that a likelihood of confusion be established. While this amendment does not invalidate existing state laws, it does bar any action under state law for dilution of federally registered marks. Futhermore, dilution may exist even absent competition among the parties.

Allyn Taylor, Trademarks and the Multimedia Explosion, COMPUTER LAW., Sept. 1995, at 22, n.26.

^{42.} Mead Data Central, Inc. v. Toyota Motor Sales, U.S.A., 875 F.2d 1026, 1031 (2d Cir. 1989) (holding that the automobile trademark "LEXUS" did not dilute the value of the database system trademark "LEXIS" because it has neither a "tarnishing" nor a "blurring" effect).

^{43.} N.Y. GEN. Bus. LAW § 368(d) (McKinney 1961).

^{44.} But see Robert L. Raskopf, Trademarks and the Internet, PAT. COPYRIGHTS TRADEMARKS AND LITERARY PROP. COURSE HANDBOOK SERIES, Sept. 1995, at 15, available in Westlaw, 416 PLI/Pat 1047 (advocating the use of state antidilution remedies until "trademark cases sort themselves out").

^{45.} Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, 109 Stat. 985 (codified at 15 U.S.C. §§ 1125(c), 1127).

^{46.} The Act lists eight non-exclusive criteria for determining if a mark is "famous": (1) the degree of inherent or acquired distinctiveness of the mark (i.e., its strength); (2) the duration and extent of use of the mark; (3) the duration and extent of advertising/publicity of the mark; (4) the geographical area in which the mark is used; (5) channels of trade for the good or services with which the mark is used; (6) the fame of the mark in the trading areas, (7) the nature and extent of use of similar marks by third parties; and (8) whether the mark is federally registered. 15 U.S.C. §1125(c)(1) (1994).

As will be shown in the following sections, there have been many such instances on the Internet.⁴⁷ According to one United States Senator, the Act may "help stem the use of deceptive Internet addresses taken by those who are choosing marks that are associated with the products and reputations of others." The new jurisprudence of federal dilution, however, has yet to be exercised in an action arising from Internet domain name conflicts.

III. INTERNET NAMING CONVENTIONS: YOU KNOW MY NAME, LOOK UP THE NUMBER

A. What's in a Name?

An Internet address is an identifier of an individual computer or group of computers ("subnet"). As part of the Internet Protocol ("IP"), the communications format used on the Internet, Internet addresses are comprised of strings of digits delimited by periods. The delimited fields indicate the network, subnetwork, and local address, reading from left to right. A typical Internet address might appear as "44.56.0.48" where "44" is the network, "56" and "0" refer to subnetworks, and "48" is the computer itself. This all-numeric form is known as the "IP address" or "IP number."

While such naming conventions are readily understood by computers, human users tend to favor an easier method of identification. To accommodate these users, a system was developed which utilizes a Domain Name Service ("DNS") database to link these numerical addresses with mnemonic alphanumeric equivalents called Internet domain names. As with IP addresses, domain names are also delimited by periods. Unlike IP addresses, domain names are read from right to left, moving from the top-level domain ("TLD") to the subdomain(s) and to the individual machine. 50

^{47.} Courts have not treated the Internet as a realm free from trademark law. See Playboy Enters. v. Frena, 839 F. Supp. 1552, 1559-61 (M.D. Fla. 1993) (holding that a BBS operator who used Playboy trademarks on his system had infringed Playboy's marks); see also Sega Enters., Ltd. v. Maphia, 857 F. Supp. 679 (N.D. Cal. 1994).

^{48.} Copyright Protection on the Internet: Hearings on H.R. 2441 Before the Subcomm. On Courts and Intellectual Property of the House Comm. on the Judiciary, 104th Cong., 1st Sess. (1996) (statement of Catherine Simmons-Gill for the Int'l Trademark Ass'n) (quoting Senator Leahy (D-VT)) [hereinafter Simmons-Gill], available in Westlaw, 1996 WL 7135529.

^{49.} In the vernacular, these periods are called "dots." That is, "harvard.edu" would be pronounced "harvard-'dot'-edu."

^{50.} Internet addresses may also have a country code as the final suffix. See infra part III(C).

For example, in the domain name "roscoe.law.harvard.edu," "edu" is the TLD, "harvard" is the second-level domain, "law" is the third-level domain, and "roscoe" is the computer itself.⁵¹ The complete address constitutes the fully qualified domain name. Since the DNS handles all of the routing functions by looking up the IP number, the domain name is independent of IP addresses and can be reassigned should the computer or subnetwork move (either physically or electronically).

B. Domain Constraints

The technical constraints of Internet naming conventions make it difficult for trademarks to be kept distinct on the Internet. limitations preclude organizations from distinguishing themselves through capitalization, stylized formats, or designs which they would normally use in other media. As a result, parties with similar names will find it challenging to keep their domain name distinguishable from others because there are fewer ways to make domain names distinctive. Obviously, such constraints can lead to inadvertent infringement. For example, the current maximum length of twenty-four letters for domain names further restricts the number of possible addresses, as companies with longer names abbreviate or use acronyms which may conflict with the mark of another organization.⁵² For instance, it may be that the firm "Integrated Bituminous Mining" never uses the acronym "IBM" in print or other media. However, in face of the name length limitation, "IBM" may become attractive as an Internet address, had International Business Machines not already registered "ibm.com."53

^{51.} The InterNIC serves as the registry for five TLDs: .gov, .org., .net, .com, .edu. See infra part IV(A). Other TLDs exist (such as .mil, the U. S. Military domain), but are administered through other registeries. For a technical discussion of TLDs see Jon Postel, Domain Name System Structure and Delegation, Request for Comments: 1591 (Mar. 1994), available in Internet, http://rs.internic.net/rfc/rfc1591.txt [hereinafter RFC 1591]. The number of TLDs may grow. For example, Crystal Palace Networking has petitioned the InterNIC and the Assigned Numbers Authority to create a new TLD name, ".inc," to be administered by its registration services. See Crystal Palace Networking, Crystal Palace Networking, Registration Services (1996), available in World Wide Web http://www.palace.net/rs/.

^{52.} See Andre Brunel, Billions Registered, But No Rules: The Scope of Trademark Protection for Domain Names, J. PROPRIETARY RTS., Mar. 1995, at 2.

^{53.} Conversely, there are also constraints on the number of addresses and subnets which can be created under the current 32-bit addressing system. Currently, there are three classes of network identifications ("NetID") in use. Class A uses a 7-bit NetID, yielding only 128 addresses. Class B, the choice for larger networks, uses a 14-bit NetID with 16,000 addresses and over 64,000 possible host server IDs. Class C uses a 21-bit structure, yielding over two million NetIDs, but only 256 host IDs. These addressing space constraints are to be addressed by the next-generation Protocol ("Ipng", also known as "IP Version 6"). Paul Kirvan, Missing in Action: Internet Addresses, COMM. MGMT., Apr.

C. Run for the Border — The Digital Enchilada

A different dimension to this problem arises from the lack of context in the medium of the Internet. In real space, general trademark practice allows organizations to use similar or even completely identical marks as long as the organizations are in distinctly different lines of business and there is no likelihood of confusion in the marketplace.⁵⁴ For example, the Atlantic Richfield Company and ARCO Publishing can both use the trademark "ARCO," because they are in completely different lines of business and there is little, if any, likelihood of confusion.⁵⁵ Under the current Internet naming system, however, one of these companies will not be able to include its mark in its domain name, since there can be only one "arco.com." Thus, inadvertent contention may arise in the Internet where one legitimate user of the name registers it first. (In this case, the winner was Atlantic Richfield.)⁵⁶ The runners-up are often stuck with suboptimal domain names which are less intuitive than the first choice.⁵⁷

This conflict intensifies when geographic-based trademark registration encounters the global network: As there can be a "Squid Hut" in Hawaii and another, different "Squid Hut" in Delaware, both of which might be in contention for "squidhut.com" on the Internet, the borderless nature of the Internet leads to an international complication as well. Even though there can be only one "squidhut.com" in the United States, there can be others in different countries. International suffixes are the only means of distinguishing from "squidhut.com" in the United States

^{1995,} at 50. For an in-depth discussion of Internet Protocol and routing, see STAN HORZEPA, YOUR GATEWAY TO PACKET RADIO (1989).

^{54.} See Richard Baum and Robert Cumbow, First Use: Key Test in Internet Domain Disputes, Nat'l L.J., Feb. 12, 1996, at C17 ("Trademark law accommodates this by providing a classification system, and by recognizing that if goods or services are sufficiently different from one another, consumers are unlikely to be confused as to the sources of those goods and services, even if their names are identical."). The likelihood of confusion and line of business standards are often quite high, however. Apple Computer found itself forced to pay Apple Corp. (the Beatles record label) \$29 million to be able to use the APPLE mark for their computer products capable of processing sound and playing music. See Taylor, supra note 41, at 29.

^{55. &}quot;Concurrent registrations may... be issued by the Commissioner when a court of competent jurisdiction has finally determined that more than one person is entitled to use the same or similar marks in commerce." 15 U.S.C. 1052(d) (1994).

^{56.} Atlantic Richfield has covered all bases by filing for trademark protection as well: "ARCO.COM" has a PTO Number of 74-714,865, filed August 14, 1995.

^{57.} For example, Fidelity Investments, the gargantuan Boston-based investment company, was beaten to the punch when another firm (Fidelity National, a small financial services company in San Jose, California) registered "fidelity.com," leaving it with "fidiny.com" as second prize. Jared Sandberg, Washington Post Co. Wins Unit's Internet Name In Trademark Suit, WALL St. J., Oct. 6, 1994, at B8.

and "squidhut.com.au" in Australia.⁵⁸ The only solution for companies wishing to secure their Internet name and their trademarks is to register in every country and jurisdiction — clearly, an insuperable hurdle for most organizations.

This problem was supposed to be mitigated by the original structure of the TLDs, which made .com a global domain. While many foreign companies have registered in the .com domain, NICs in other countries have often created their own structures, using .com with their country identifier or close variants (e.g., Japan "co.jp"). It seems likely that many countries will adopt the format of using the TLD with their country identifier (e.g., Singapore has adopted ".gov.sg" for its government sites). This may lead to .com being essentially a default for firms in the United States, with country codes indicating foreign concerns.⁵⁹

Siemens Aktiengesellschaft, the multinational electronics concern, maintains a massive array of servers for each of its operations in various countries. The Siemens directory of sites⁶⁰ illustrates the multiplicity of international naming schemes:

- Siemens Australia Ltd. = siemens.com.au
- Siemens A.G. Headquarters in Germany = siemens.de
- Siemens U.S.A. = siemens.com

Sony, on the other hand, has registered most of its multinational operations in Japan, ⁶¹ except for large segments such as Sony U.S.A. ⁶²

^{58.} There have been similar problems in other countries as their trademark protections are confronted by new technologies. For example, Bell Canada applied to have the words, "The Net," registered as its exclusive trademark. TORONTO STAR, Sept. 12, 1995, at C1. Within a week of the announcement, however, the company withdrew the application, saying that negative public response made it impractical to trademark the term. TORONTO GLOBE & MAIL, Sept. 18, 1995, at B2.

^{59.} There is, indeed, a ".us" country code. Its usage, however, has been geographically based. "There are no current plans of putting all of the organizational domains EDU, GOV, COM, etc., under US. These name tokens are not used in the US Domain to avoid confusion." A. Cooper & Jon Postel, *The US Domain*, Request for Comments: 1480 (June 1993), available in Internet, ftp://rs.internic.net/rfc/rfc1480.txt.

^{60.} Sietec Systemtechnik, Siemens im World Wide Web (1996), in World Wide Web, http://www.sietec.de/siemens.de.

^{61.} See Sony Corp., SonyDrive (1996), in World Wide Web, http://www.sony.co.jp. It is interesting to note that Sony makes no specific claims for Internet domain names. See Sony Corp., Major Trademarks and Registered Trademarks of Sony Corporation (1996), available in World Wide Web, http://www.sony.co.jp/Trademarks.html.

^{62.} Sony Corp., Sony on Line (1996), in World Wide Web, http://www.sony.com.

Obviously, future technological developments will make this current debate obsolete and, undoubtedly, historically quaint. 63 The ability, for example, to include digital representations which more fully approximate registrable subject matter as it exists in the physical word and the indexing of such marks to their owners would do much to mitigate the conflicts inherent in the currently constrained system of Internet domain But, at this point, addresses are an important commodity, especially since users interested in communicating with a particular organization or retrieving information about its products must do so without recourse to any centralized, complete directory.⁶⁴ This makes short, easy-to-remember names of paramount value in choosing an address. 65 While there are many indices and search engines available, the process of finding a resource on the Internet nonetheless involves a good deal of guesswork. Such searching tools are keyword⁶⁷ based; if one enters "Widgets," one will get a list of all "hits" containing the word and will be left to ferret out the desired source. If the search returns a source located at "widget.com," the natural presumption is that the document may be of relevance, leading to the possibility of free marketing based on confusion. Of course, having a presence on the Internet is also a method of signaling to clients that one's firm is chic, particularly in the high-technology field: "It's a way of identifying ourselves. And in the technology business, it shows you're hip on the nerd scale."68

^{63.} The implementation of CCITT X.500 directory services and naming conventions, for example, will reduce the importance of domain names as the only identifier of origin on the Internet. See North American Directory Forum, A Naming Scheme for c=US, Request for Comments: 1255 (Sept. 1, 1991), available in World Wide Web, http://www.ua.ac.be/RFC/r1255.html [hereinafter Naming Scheme].

^{64. &}quot;Surfing is dead. You can't surf the Web anymore because of all the garbage, not to mention all the useful content. There's too much of both, and the amount of it doubles every 55 days." Andrew Cohen, Invasion of the Cyber Brahmins!, BOSTON MAG., Dec. 1995, at 56, 65.

^{65.} See Brunel, supra note 52, at 2.

^{66.} One of the most popular search engines is "Yahoo," the invention of two Stanford University students. See Yahoo!, YAHOO! (1996), in World Wide Web, http://www.yahoo.com/. See also Philip E. Ross & Nikhil Hutheesing, Along Came the Spiders, FORBES, Oct. 23, 1995, at 210.

^{67.} See Patricia Alex, E-Mail Robbery on Information Superhighway, Kaplan Was Victim of Rival, REC. N. N.J., Oct. 6, 1994 at A03 ("Since much of this computer cruising is conducted by entering 'key' words into a computer search tool, the name of a company's virtual 'storefront' is an important aspect of its presence on the Internet.").

^{68.} The Name Game: Registering a Domain on the Internet Can Be a Boost to Business, But It Can Be Trickier than One Might Think, AUSTIN AM.-STATESMAN, July 3, 1995, at E1 (quoting David Avery, director of marketing for Acon Technology, a value-added computer retailer) [hereinafter The Name Game].

Internet addresses, then, provide a user with more than just the location of a source of information. To quote one cyberspace cadet: "Domain names are kind of like postal addresses, vanity license plates and billboards, all rolled into one digital enchilada." From a commercial standpoint, it is the billboard component which is the carne of this electronic enchilada, and everyone wants a bite.

IV. DOMAIN NAME TRADEMARK DISPUTES

A. In the Beginning: It Started with Name Calling

In the infancy of the Internet various unconnected networks such as ARAPNET (under the Defense Department), universities, and other organizations sought to "internetwork" by establishing gateways. The Address Number Authority ("IANA"), was created to assign unique addresses to each participating network. The protocol now in use, TCP/IP v4.0, was adopted in 1978.

To provide technical oversight of architectural and taxonomic development on the Internet, the National Science Foundation created the Network Information Center ("InterNIC") in January 1993, contracting with three companies to run it: General Atomics, AT&T, and Network Solutions, Inc., a wholly owned subsidiary of Science Applications International Corp. Network Solutions, following policies set by the IANA, provides registration of all network groups, 72 AT&T provides directory services, and General Atomics oversees the information services. The InterNIC became functional in April 1993. The Internet Society ("ISOC"), a nonprofit corporation, was originally formed as a group of large telecommunications and computing companies to provide administrative governance of the Internet. The ISOC has no explicit governmental authorization to perform the activities it has undertaken,

^{69.} Joshua Quittner, Life in Cyberspace: You Deserve a Break Today, NEWSDAY, Oct. 7, 1994, at A05.

^{70. &}quot;The Assigned Numbers Authority (IANA) is the overall authority for the IP Addresses, the Domain Names, and many other parameters, used in the Internet. The day-to-day responsibility for the assignment of IP Addresses, Autonomous System Numbers, and most top and second level Domain Names are handled by the Internet Registry (IR) and regional registries." RFC 1591, supra note 51, at 1.

^{71.} Mark Voorhees, Making Sense of the Internet, One Lawyer's View of the Landscape, INFO. L. ALERT, May 12, 1995 [hereinaster One Lawyer's View].

^{72.} Therefore, "InterNIC" and "Network Solutions" will be treated as alter egos in this discussion.

^{73.} Reilly, supra note 2, at 903 n.4.

^{74.} See Internet Society, Welcome to the INTERNET SOCIETY, Internauts! (1996), in World Wide Web, http://info.isoc.org.

yet the InterNIC, as an agent of the National Science Foundation, follows the Society's policies.⁷⁵

Technology standards have served as a means of adjudication on the Internet. The setting of technical standards is done by the Internet Architecture Board ("IAB"), ⁷⁶ a volunteer organization that promulgates requests for comments ("RFCs"), suggesting solutions to routing problems and the like. Oftentimes, there is a policy element to ostensibly technical issues. ⁷⁷ In this sense, the RFCs serve in a precedential role, as a new release "obsoletes" previous standards. ⁷⁸

Nonetheless, the RFC disclaiming InterNIC involvement in trademark disputes (written by Jon Postel, one of the "granddaddies of the Internet") illustrates that the IAB's preference is to resolve technical issues and avoid policy questions:

In case of a dispute between domain name registrants as to the rights to a particular name, the registration authority shall have no role or responsibility other than to provide the contact information to both parties. The registration of a domain name does not have any Trademark status. It is up to the requestor to be sure he is not violating anyone else's Trademark.⁷⁹

(The subject of international relations is similarly treated: "The IANA is not in the business of deciding what is and what is not a country." From the outset, questions of ownership and intellectual property have been treated disdainfully as non-issues by those responsible for setting

^{75.} One Lawyer's View, supra note 71.

^{76.} The IAB and its ancillary organizations are being subsumed by the ISOC, a non-profit corporation which will continue the IAB's chartered raison d'etre "[t]o facilitate and support the technical evolution of the Internet as a research and education infrastructure, and to stimulate the involvement of the scientific community, industry, government and others in the evolution of the Internet." See A. Marine et al., Answers to Commonly Asked "New Internet User" Questions, Request for Comments: 1594 (Mar. 1994), available in World Wide Web, http://www.internic.net/fyi/fyi4.html.

^{77.} Most RFCs are the descriptions of network protocols or services, often giving detailed procedures and formats for their implementation. Other RFCs report on the results of policy studies or summarize the work of technical committees or workshops. . . While RFCs are not referred publications, they do receive technical review from either the task forces, individual technical experts, or the RFC Editor, as appropriate. Currently, most standards are published as RFCs, but not all RFCs specify standards.

Benjamin Wittes, Witnessing the Birth of a Legal System, CONN. L. TRIB., Feb. 27, 1995. at 8A.

^{79.} RFC 1591, supra note 51, at 6.

^{80.} Id.

registration policies on the Internet: "Concerns about 'rights' and 'ownership' of domains are inappropriate."81

While the use of technical regulations functioned well when the Internet was populated only by the military and academic institutions, things began to run rough as the invisible hand disturbed this virtual world. "Networks... are built on an underlying naming and numbering infrastructure, usually in the form of names and addresses. For example, some authority must exist to assign network addresses to ensure that numbering collisions do not occur. This is of paramount importance for an environment which consists of multiple service providers." While the InterNIC has been able to prevent "numbering collisions" from occurring, it made no effort to prevent naming collisions from happening.

The InterNIC clearly did not consider the implications in the trademark arena: "[The trademark issue] just sort of caught everyone here by surprise. Nobody gave the idea of trademarks a second thought." In fact, the InterNIC took no position on any area of law and informed registrants that: "Registering a domain does not confer any legal rights to that name, and any disputes between parties over the rights to use a particular name are to be settled between contending parties using normal legal methods." A spokesman for the InterNIC summed it up: "It's first come, first served. Collisions occur."

B. The Name Game: January 1993 - July 1995

Within a very short period of time, collisions occurred. One infamous case was that of Jim Cashel, who in August 1994 "out of curiosity" registered eighteen domain names which contained famous marks such as "hertz" and "esquire." As it turned out, the holders of the trademarks did not contact him and, after tiring of dealing with reporters, he relinquished them back to the InterNIC. 86 Other cases, however, have

^{81.} Id. at 5 (describing policies for creation of new top-level domains).

^{82.} Naming Scheme, supra note 63.

^{83.} Brunel, supra note 52, at 2 n.13 (quoting Brock N. Meeks, Is Your Trademurk Fair Game on the Internet?, INTERACTIVE WK., Oct. 10, 1994, at 48).

^{84.} Id. at 2 n.17 (quoting the InterNIC's pre-July 1995 registration form, rs.internic.net/templates/domain-template.txt).

^{85.} The Name Game, supra note 68, at E1 (quoting Bob McCollum of Network Solutions). The InterNIC "hand[s] out the names for free under a very simple rule: First come, first served. Trademark violations are the requestor's responsibility." Joshua Quittner, Making a Name On the Internet, NEWSDAY, Oct. 7, 1994, at A4 (discussing speculation in addresses such as medonalds.com).

^{86.} Elizabeth Corcoran, For D.C. Man, a Flier on E-Mail Addresses Yields a 'Net' Loss, WASH. POST, Sept. 8, 1994, at B11.

been generally less amicable, especially where the registrant's intent was to force the trademark holder to buy back the address.⁸⁷

This lack of regulatory authority lead to a free-for-all of "domain grabbing" where individuals and firms intentionally registered domain names containing the trademarks of prominent companies in the hopes that these latecomers would pay a ransom to recover their domain name when they went on the Internet. The InterNIC attempted to head off such speculation by returning to an older policy of assigning only one domain address per organization. In September 1994, in the midst of these disputes, the InterNIC began "rationing" domain names to one per "organization." However, there still remained the problem of what was considered to be an "organization," as this term was not well-defined. For holders of multiple trademarks, this created problems. Conversely, grandfathering resulted in inequity: The more than 670 companies which had already registered more than two address names each were allowed to keep them. The horses were already out of the stable, however.

^{87.} See BBB Has Trademark Gripe, SAN JOSE MERCURY NEWS, May 12, 1995, at 1C (describing one man's temeritous attempts to extract money from the Better Business Bureau by registering "bbb.com" and "bbb.org" and the Bureau's less-than-friendly response); Sandberg, supra note 57, at B8 ("Such 'name' thefts have become a major problem on the global computer network. Internet's main registration center is being pressured by many companies to stop the practice before they lose control of their valued trademarks."); cf. Mark Voorhees, Ugliness on Internet: It Could be Worse. Study Shows that Common Computer Addresses Are Few and Far Between, INFO. L. ALERT, May 27, 1994 (finding only "around 50 conflicts" between registrants in the ".com" domain and the corporate name of the owners).

^{88.} Free from the constraints of trademark laws, large companies also exploited the possibility of obtaining monopolies on names. Philip Morris' Kraft Foods Co. registered 133 names, including "hotdogs.com" (clearly too generic to cut the mustard under the Lanham Act) and "velveeta.com." Procter & Gamble Co. laid claim to such desirable domains as "diarrhea.com" and "pimples.com." Steve Higgins, Computers & Technology. What's In An Internet Name? To On-Line Marketers, Lots, INVESTOR'S BUS. DAILY, Oct. 17, 1995, at A10.

^{89.} On the Internet, The Name of The Game Is Names, NEWSDAY, Oct. 2, 1994, at A04, [hereinaster Name Games].

^{90.} For a humorous example from one firm which holds a plethora of trademarks, see Coca-Cola Co., THE FINE PRINT (1996), in World Wide Web, http://www.cocacola.com/legal.html.

^{91.} Name Games, supra note 89, at A04.

^{92.} To some extent, the Internet has been self-regulating. Some rules of etiquette, which have been informally adopted, are loosely termed "netiquette." . . . Increased use of the Internet will likely make greater regulation necessary. Due to . . . attempts to grab well-known names, [the InterNIC] . . . recently announced its intent to limit each organization to one address. A more official and comprehensive system of self-regulation is needed in the future for the [Internet] to be successful.

companies had found the most desirable form of their domain name registered by someone else. ⁹³ Nevertheless, the personnel of the InterNIC viewed their role as clerical and steadfastly declined to promulgate any policies: "They expect me or somebody here to pronounce the final judgment and make it all right. But all we can do is say, 'You guys need to come to some agreement of your own. We're just a registry, not an enforcer." A number of episodes provide insight into this stance and the resulting problems.

In June 1993, Adam Curry, then employed as an MTV video jockey, registered the domain name "mtv.com" with the InterNIC, apparently with the approval of MTV management. After Curry left MTV, MTV sued to recover the use of the domain name. Will fight this all the way to the Supreme Court, said Curry. "This will be the 'Roe vs. Wade' of the . . . information superhighway. . . . I registered [mtv.com] with the InterNIC. . . . It's mine. That's all it is, an address."

The court never reached the issues, however, since MTV and Curry settled in March 1995. So, as it turned out, the settlement of the case resolved little in the trademark area. Neither party had anything to say about the litigation following the settlement, but MTV did come away with "mtv.com."

A few months later, Stanley Kaplan Co., the largest test preparation company in the world with annual profits of more than \$85 million, became the victim of an Internet name hijacking. As a "prank," Kaplan's arch-rival, Princeton Review, registered "kaplan.com" and

Bumpy Road Lies Ahead, 8 HARV. J.L. & TECH. 2, 278 n.19 (1995) (internal citations omitted).

^{93.} Joshua Quittner, Billions Registered: Right Now, There Are No Rules to Keep You From Owning a Bitchin' Corporate Name As Your Own Internet Address, WRED, Oct. 1994, at 54 (clarifying how Quittner had himself "hijacked" the domain name "mcdonalds.com").

^{94.} Elizabeth Weise, Name Flap on Internet Raises Question of Trademark Law, ASSOCIATED PRESS, Feb. 21, 1994 (quoting a domain name manager at the InterNIC).

^{95.} See Quittner, supra note 93, at 54.

^{96.} MTV Networks v. Curry, 867 F. Supp. 202 (S.D.N.Y. 1994).

^{97.} Cyberspace Suit Rocks ex-MTV VJ, L.A. DAILY NEWS, May 15, 1994, at N20.

^{98.} See Mark Voorhees, MTV. Curry Settle, INFO. L. ALERT, Mar. 24, 1995 ("For all the publicity it obtained, the case never presented clean trademark issues and would unlikely have settled lingering legal questions if there had been a final judgment.").

^{99.} MTV has learned its lesson in the uncouth world of the Internet. On its "Standards" page resides the disclaimer: "All trademarks mentioned herein belong to their respective owners." MTV Networks, Formats & Standards (1996), available in World Wide Web, http://www.mtv.com/standards.html. MTV has since registered "MTV.COM" as a trademark: PTO No. 75-026,908, filed Dec. 1, 1995.

^{100. &}quot;Our attitude right along was that this was a prank," said John Katzman, founder and president of Princeton Review. Elizabeth Corcoran, Panel Backs Post Unit on Internet Address, WASH. Post, Oct. 7, 1994, at A04.

established a Web site at that address. When browsers tapped into "kaplan.com" they were immediately informed that it was, in fact, Princeton Review that they had reached and then they were asked to contribute to a list of complaints about the Kaplan company. Princeton Review "offered to seli . . . [the Kaplan name] to them for a case of beer."101 Princeton Review's fun lasted only four days, before Kaplan threatened to go to court to stop it. The parties settled in arbitration, and as a result. Princeton Review was not awarded any beer, but Kaplan walked away with "kaplan.com." Neither party received damages or fees. 102

In an interview with journalist Joshua Quittner in the fall of 1994, Scott Williamson, an InterNIC manager, said staffing constraints are the key reason why the InterNIC does not check for trademark violations: "If we had to research every request for a domain name right now, I'd need a staff of 20 people. . . . Trademark problems are the responsibility of the requester."103 Quittner asked Williamson if that meant there would be nothing to stop him from registering "mcdonalds.com." nothing that says I can stop you from doing that," Williamson said. "We really need some policy. The problem with the Internet is, who's in charge? When we figure that out, there will be a meeting."104 Quittner then registered "mcdonalds.com" himself, and invited readers to send in extortion suggestions, should the company wish to acquire the address from him. 105 He was well aware beforehand that "McDonald's is among the most aggressive companies in stopping use of its name. It goes after everybody, whether it's a dentist calling himself 'McDental,' or a motel calling itself 'McSleep.'"106 Nevertheless, McDonald's, after applying immense legal pressure on the InterNIC, ended up ransoming their address from Ouittner by making a donation for computer equipment to an elementary school. 107

This incident probably had a lot to do with the January 1995 formation of a task force by the International Trademark Association

^{101.} Sandberg, supra note 57, at B8.

^{102.} Id. Kaplan has taken advantage of their victory and can now be found at "kaplan.com." Stanley Kaplan Co., Test Yourself (1996), in World Wide Web, http://www.kaplan.com.

^{103.} Quittner, supra note 93, at 54 (in responding to the assertion that the InterNIC had only "2.5" people to handle registrations, Quittner quipped: "Would one person be assigning quit-claims to a gold rush?").

^{104.} Id.

^{105.} Victoria Slind-Flor, 'Domains' Are there for Taking; Companies Sue over Addresses on the Internet, THE NAT'L L.J., June 5, 1995, at A7.

^{106.} Quittner, supra note 93, at 54 (quoting Bruce Keller), see, e.g., Quality Inns Int'l, Inc. v. McDonald's Corp., 695 F. Supp. 198 (D. Md. 1988).

^{107.} McDonald's also registered the domain as a trademark: "MCDONALDS.COM," PTO No. 74-636,671, filed Feb. 21, 1995, published Oct. 10, 1995.

("INTA") to "identify and examine the difficulties in protecting corporate identities on the Internet." David Maher, a partner at Chicago's Somenschein, Nath & Rosenthal (and counsel to McDonald's) was named as a co-chair of this task force.

A few months before the its decision, the INTA also recognized the need to develop new policies to ensure that newly assigned names will not infringe on others' intellectual property rights. ¹⁰⁹ No action was taken, however, until July 1995. ¹¹⁰ Meanwhile, the Patent and Trademark Office ("PTO") began allowing domain names to be registered as trademarks, although it had yet to become involved in any registration disputes. ¹¹¹ The InterNIC remained clearly anxious to avoid becoming involved in these legal imbroglios. ¹¹² Scott Williamson's response to the Quittner-McDonald's situation sums it up: "Once the lawyers got involved, it became unruly." ¹¹³

The InterNIC and the INTA, however, did not agree on what form the new rules should take. In September 1995, the INTA Board of Directors approved a resolution that provided that domain names can function as trademarks and that the assignment and use of domain names can result in infringement of trademark rights. The InterNIC, however, continued its previous stance and refused to follow the INTA's admonition that it must "come to grips with legal issues. They can't just say that a domain mark is not a trademark."

^{108.} Mark Voorhees, Trademark Ass'n Forms Internet Name Task Force, INFO. L. ALERT, Jan. 13, 1995.

^{109.} Corcoran, supra note 86, at B11.

^{110.} See infra part IV(C).

^{111.} See Registration of Domain Names in the USPTO, SPECIAL BULL. (INT'L TRADEMARK ASS'N), 1995.

^{112.} In December 1994, KnowledgeNet, Inc., a computer consulting company located in Illinois, sued David Boone and his company D.L. Boone & Co. from Vienna, Virginia, for trademark infringement in federal court in Chicago. Boone had registered "knowledgenet.com" for a trade association of consultants he recently formed called "Knowledgenet." Also named as a defendant was Digital Express, Boone's service provider. Digital Express quickly settled with the plaintiff, agreeing to not host Boone's site. Of greater import is the response of the other named defendant, Network Solutions, Inc. In its motion to dismiss, Network Solutions reiterated its hands-off policy in regard to InterNIC registration and its refusal to consider trademark issues: "The InterNIC does not participate in disputes between registrants regarding superior rights to a domain name.... InterNIC policy also provides that a domain name does not have any trademark value, and it is the responsibility of the registrant to ensure that it does not violate any other party's trademark rights." Mark Voorhees, Knowledgenet v. David Boone, Parties Try to Settle Internet Trademark Suit, Money May Be Holding up Deal on End to Litigation, INFO. L. ALERT, May 12, 1995 (quoting Network Solution, Inc.'s motion to dismiss).

^{113.} Name Games, supra note 89, at A04.

^{114.} Simmons-Gill, supra note 48.

^{115.} Slind-Flor, supra note 105, at A7 (quoting David Maher).

C. The New Registration Rules

In July 1995, the InterNIC announced that the rules for registration of domain names had been changed. This new dispute policy was subsequently revised in November, 1995. The number of registered commercial (".com") domains had continued to rocket, growing from 18,000 in July 1994 to 82,600 in July 1995. The InterNIC's clear goal was to cut down on the number of applications and to ensure that it would not face those applicants in court.

Under the new rules, the InterNIC continued its policy of assigning domain names on a first-come, first-served basis, but applicants are required to state on their registration form that they have a legal right to the application name. If a trademark holder disputes the ownership of the domain and the domain owner has no proof of a trademark, the address can be suspended until the problem is resolved (all applicants now must agree to binding arbitration). If there are dueling or ambiguous trademark holders, the domain owner must agree to protect

NSI WILL NOT BE LIABLE FOR ANY LOSS OF USE, INTERRUPTION OF BUSINESS, OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING LOST PROFITS) REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, EVEN IF NSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL NSI'S MAXIMUM LIABILITY UNDER THE POLICY EXCEED FIVE HUNDRED (\$500.00) DOLLARS.

InterNIC Policy, supra.

^{116.} See Network Solutions, Inc., NSI Domain Name Dispute Policy (Nov. 23, 1995), available in World Wide Web, ftp://rs.internic.net/policy/internic/internic-domain-4.txt> [hereinafter InterNIC Policy]. The revision to the InterNIC Policy was made effective November 23, 1995, allowing, inter alia, claimants to submit to arbitration. Id. The most important change was the closing of a loophole which had allowed the unscrupulous to simply obtain a trademark registration (from any country!) and challenge a domain holder's title, regardless of which user was the more senior. For a complete discussion of these revisions, see Carl Oppedahl, Changes in Domain-Name Rules Could Result in Ownership Loss, N.Y. L.J., Nov. 28, 1995, at 5. A very telling change in this revision was the excision of the word "resolution" from the title of the policy: "1. The policy name does not include the word "Resolution", as the policy relates to Domain Name disputes, not the resolution of them." InterNIC Policy, supra. Paragraph 7 of the Policy, the only segment appearing in all capital letters, reads:

^{117.} Peter Lewis, Trademark Holders Win Net Name Battle, SAN DIEGO UNION & TRIB., Aug. 22, 1995, at 5.

^{118.} See InterNIC Policy, supra note 116.

^{119.} Id. This is naturally abhorrent to the holders of state-registered or common law marks.

InterNIC from the costs of defending any lawsuits or face suspension of the domain until the dispute is resolved. 120

The InterNIC's new policy has not met with much approval from the INTA: "David Maher, a partner at Chicago's Sonnenschein, Nath & Rosenthal, says that the policy put forward by Network Solutions . . . is a copout, shielding the company from liability rather than providing clarity to trademark owners."121 According to critics, instead of correcting the multitudinous problems unleashed by its previous policies. the InterNIC made no substantive change to its procedures, aside from seeking to indemnify itself from the legal liabilities - an allegation which is not denied by the InterNIC: "Since we don't have any jurisdiction over name disputes and are not in the position to deal with issues that belong in the courts . . . we wanted to protect ourselves from any accusations of aiding and abetting trademark infringement."122 "We want to emphasize that users don't need to have a trademark to get a domain name," said InterNIC lawyer Grant Clark. "The problem is that NSI doesn't have the authority or the expertise to adjudicate trademark disputes."123

The new policy, however, has not stopped the threat of lawsuits from unhappy trademark holders: Since the change in policy, Network Solutions has been named in several trademark suits in which trademark owners have found their preferred address taken.¹²⁴

^{120.} Policy to Protect Internet Addresses, STAR TRIB. (Minneapolis-St. Paul), July 28, 1995, at 02D.

^{121.} Mark Voorhees, Take This Policy and Shove It, Info. L. Alert, Sept. 8, 1995.

^{122.} Kara Swisher, More Protection Due for Addresses On the Internet; Official Registry Seeks to Avoid Involvement in Trademark Fights, WASH. POST, July 27, 1995, at B09 (quoting David Graves, a spokesman for Network Solutions Inc.).

^{123.} Id. This ignores the fact that trademark holders have other incentives to sue: A company may be forced to litigate or risk forfeiture of its trademark. Lanham Act § 46, 15 U.S.C. § 1127 (1994) amended by Pub. L. No. 103-465, 108 Stat. 4981 ("Nonuse [of mark] for three consecutive years shall be prima facie evidence of abandonment.").

^{124.} In one case, Fry's Electronics, a California computer vendor, sued to recover "frys.com" from Frenchy Frys, a Washington State restaurant equipment distributor. See Lewis, supra note 117, at 5. In an ironic recent encounter, toy maker Hasbro Inc. persuaded a U.S. District Court in Seattle to issue an injunction preventing Internet Entertainment Group ("EG") from using "candyland.com" as the domain name for its adult entertainment site. Hasbro intends to use the site to host an electronic version of its "Candy Land" children's board game. Courts, Internic Grapple with Name Rules, INTERNET WK., Feb. 12, 1996, available in Westlaw, 1996 WL 7055476. Still unresolved is an ironic battle over the domain name "interlaw.com." See 'Lectric Law Library, 48 Law Firm's 1600 Lawyers vs. The 'Lectric Law Library (1996), in World Wide Web, http://www.com/lll.html. Also pending is a suit between the holder of "roadrunner.com" against the InterNIC. See Oppedahl & Larson, Roadrunner Computer Systems, Inc. v. Network Solutions, Inc. (1996), in World Wide Web, http://www.patents.com/nsi.sht. This action directly challenges the InterNIC's policies. See Mark Voorhees, Internet Name Policy Draws Suit it Was Intended to Avoid, INFO. L. ALERT, Apr. 5, 1996, available in Westlaw, 1996 WL 8913580.

On September 14, 1995, the InterNIC imposed a \$50 annual fee on all registrants in the five top-level domains it administers. The press release marked the end of NSF funding for InterNIC registration.¹²⁵ The press release emphasized InterNIC's efforts to reduce the volume of registrations¹²⁶ and its liability exposure:

In the last two years, registrations have jumped tenfold. It's estimated that by the end of this year, the figure will have topped 20,000 per month. This unbelievable volume has put us five weeks behind and we had to impose the fee immediately to avoid an Oklahoma land rush of registrations trying to beat a deadline. 127

The fee served as a deterrent to idle speculation, as the InterNIC again downplayed the trademark value: "A domain name is the Internet's equivalent of a real estate address." In the first six weeks following the imposition of the fee, weekly registrations fell from 5,000 to about 1,300 per week. But the retardant effect was ephemeral: Internet domain name registrations continue to grow geometrically. Internet

Throughout, the InterNIC clung to its mantra: "We're simply a registrar," says Dave Graves, Network Solutions' business manager.

125. The exponential growth of the Internet, due mostly to the connecting of commercial organizations to the Internet over the past couple years, has had a directly proportional affect on the registration activity of the Registrar. The increased activity, with the corresponding growth of operating costs, have [sic] resulted in funding requirements exceeding the National Science Foundation's budget. In addition, it is appropriate that Internet users, instead of the U.S. Federal Government, pay the costs of domain name registration services. Accordingly, the Registrar will begin charging a fee for the registration and maintenance of domain names in the "COM," "ORG," "NET," "EDU," and "GOV" domains.

Network Solutions, Inc., Fee for Registration of Domain Names (1996), available in World Wide Web, http://rs0.internic.net/announcements/fce-policy.html.

^{126.} However, the InterNIC presented the fee plan as a cost-recovery system: "Q[uestion]. Do you think this will slow down the rate of Internet domain name requests? A[nswer]. No, we don't believe this modest fee will have any impact at all. In fact, we expect the number of Internet registrations to continue to climb rapidly." Network Solutions, Inc., Questions and Answers about Domain Name Fees (1995), in World Wide Web, http://rs0.internic.net/announcements/more-QnA.html.

^{127.} InterNIC Press Release, Sept. 14, 1995, available in World Wide Web, http://rs.internic.net/announcements/press-release.html.

^{128.} Id.

^{129.} Higgins, supra note 88, at A10.

^{130.} Simmons-Gill, supra note 48.

"This is a gray area of the law." ¹³¹ As of this writing, the InterNIC has announced that it plans to revise its policies yet again, but has not yet given details. ¹³²

V. CONCLUSION

INTA counsel Bruce Keller equates the current InterNIC registration system to state incorporation:

When you incorporate a company in a state, the state doesn't bother to see if there are other conflicts with trademarks that may be registered in other states — it just checks with the secretary of state to see if the same name has been registered. . . . That in no way entitles you to use the name if in fact there is a conflict with a federally registered trademark. ¹³³

Mr. Keller's colleague, David Maher, reduces this statement to its essence: "What we really have right now is no law at all on the issue of trademarks and the Internet." 134

This leaves the resolution of domain name trademark debates in the hands of the courts. It is unreasonable to expect judges to be experts in the field of computer science as parties wrangle over the mechanics of the Internet. Indeed, trademark law itself has become a confusing subject for the courts, even without the complication of technological dimensions: "Regretfully, the body of law relating to the Lanham Act has developed into a tangled morass. . . . Courts struggling to move mountains often find they have only affected minuscule changes in trademark jurisprudence and occasionally have created their own likelihood of

^{131.} Joanne Cleaver, Your Trademark Is Worthless: On the Internet, Copyright Law Is Just Emerging, CRAIN'S CHI. BUS., Oct. 9, 1995, at 1.

^{132.} See Mark Voorhees, If at First you Don't Succeed... Network Solutions to Rework Policy Governing Internet Domain Names, INFO L. ALERT, Apr. 19, 1996, available in, Westlaw, 1996 WL 8913586.

^{133.} Quittner, supra note 93, at 51 (quoting Bruce Keller of Debevoise & Plimpton, "one of the country's top trademark attorneys").

^{134.} Paul Andrew., Trademark Issues Stir New Legalities on Net, SAN ANTONIO EXPRESS-NEWS, Nov. 5, 1995, available in Westlaw, 1995 WL 9508431. Mr. Maher believes that a solution is feasible: "I offered some tentative solutions to the trademark issue such as turning naming functions over to a governmental agency such as the U.S. Patent and Trademark Office or, as a preferred alternative, developing a system analogous to that of the Patent and Trademark Office in which domain names are published before assignment so that there could be an opposition and a cancellation procedure." One Lawyer's View, supra note 71 (quoting David Maher). Once submitted, the USPTO publishes a proposed mark for 30 days to allow for objections. 15 U.S.C. § 1062 (1994).

confusion." Adding computers to the mix has naturally led to further confusion among judges and litigants.

It has been recommended that domain names be treated in a similar fashion to telephone mnemonics with regard to trademark. However, addresses are not technically analogous to telephone mnemonics, since there is no direct letter-number equivalence between a numeric domain name and the alphanumeric enharmonic. Furthermore, there exists a distinct split among jurisdictions regarding the protectability of telephone mnemonics as trademarks. The judge in MTV v. Curry recognized the unique nature of addresses, distinct from telephone numbers:

[D]omain names are similar to telephone number mnemonics, but they are of greater importance, since there is no satisfactory equivalent to a telephone company white pages or directory assistance, and domain names can often be guessed. A domain name mirroring a corporate name may be a valuable corporate asset, as it facilitates communication with a customer base. 138

Attempts to inequitably convert or dilute the value of such assets have not been efficiently deterred.

In essence, infringement is a type of fraud. Fraud has been an issue ever since the earliest computer litigation. The imbalance of power and information between technologists and non-technologists leaves open a potential for abuse. Indeed, specialized knowledge of the Internet and related telecommunications issues are often not well understood by so-called "computer experts," especially those who have not kept up with

^{135.} Coach Leatherware Co. v. AnnTaylor, Inc., 933 F.2d 162, 171 (2d Cir. 1991) (internal citations omitted).

^{136.} Dan L. Burk, Trademarks Along the Infobahn: A First Look at the Emerging Law of Cybermarks, 1 U. RICH. J.L. & TECH. 1 (1995,) available in World Wide Web, http://www.urich.edu/~jolt/v1il/burk.html; Carl Oppedahl, Advise Clients on Domain Names that Infringe Trademarks, N.Y. L.J., Feb. 14, 1995, at 5 ("The existing body of law regarding phone numbers and ticker symbols is probably within grabbing distance of being able to deal with domain names, once judges have the opportunity to be educated about what domain names are and how they affect competitors.")

^{137.} See Terry Ann Swift, Comment, Telephone Numbers That Spell Generic Terms: A Protectable Trademark or An Invitation to Monopolize a Market?, 28 U.S.F. L. REV. 1079 (1994).

^{138.} MTV Networks v. Curry, 867 F. Supp. 202, at n.2 (S.D.N.Y. 1994).

^{139.} Clements Auto Co. v. The Service Bureau Corp., 298 F. Supp. 115 (D. Minn. 1969), aff d in part and rev'd in part, 444 F.2d 169 (8th Cir. 1971) (finding tort liablity for misrepresentation of computer systems capabilities).

the rapid rate of changes in the technologies.¹⁴⁰ For these reasons, "an expression of opinion by a person who has or purports to have expert knowledge of a matter, such as an expert in computer technology may be fraudulent, as may the expression of an opinion when it is coupled with a misrepresentation of an existing fact."¹⁴¹

The proliferation of technologies, products, and services have left even "sophisticated" parties vulnerable. MTV's ignorance allowed Curry to "steal" their name; even MCI, a telecommunications company— and an Internet infrastructure provider, was caught with its virtual pants down when Sprint was able to temporarily hijack the name "mci.com." When parties are negotiating and contracting in unknown technologies, the efficient bearer of the risk of failure is the developer. This is the proper realm of regulation: To ensure that parties negotiate equitably and efficiently. The risk of loss should be placed on the least cost avoider, the party with the best knowledge who can be encouraged though incentives and disincentives not to externalize his costs.

"Unfortunately, . . . the general ignorance of law enforcement officials as to the capabilities and limitations of [computer systems] will lead to difficulties . . . "145 This statement has already proven true as existing regulatory agencies continue to fail to confront these issues on the Infobahn. For example, the Federal Trade Commission ("FTC") is charged with the enforcement of statutes regulating competition and unfair and deceptive advertising practices. Under Section 5 of the FTC

^{140.} Indeed, even the InterNIC has been outsmarted, as evidenced by the success one "hacker" had in spoofing the identity of a well-known computer security specialist, convincing the InterNIC to rename his domain. Jared Sandberg, Shimomura, Pursuer of Hackers, Finds Himself Homeless on the Web, WALL ST. J., Feb. 9, 1996, at B1.

^{141.} DAVID F. SIMON, COMPUTER L. HANDBOOK 264 (1990); see also Strand v. Librascope Inc., 197 F. Supp. 743 (E.D. Mich. 1961). Some jurisdictions allow a cause of action under negligent misrepresentation without requiring intent to mislead or knowledge of falseness. See RESTATEMENT (SECOND) OF TORTS § 552(1) (1977); CAL. CIV. CODE §§ 1709, 1710(2 (1985)).

^{142.} See Quittner, supra note 93, at 50 ("Why did Sprint want to register its rival's name as a domain name? Sprint won't say, exactly: 'For the record, Sprint won't discuss its plans for the domain name,' said Evette Fulton, a spokesperson, who added, for anyone too dumb to read Sprint's lips, 'We're in an extremely competitive business.' As soon as the InterNIC got wind of it a week or so later, mci.com was re-registered to MCI.").

^{143.} See United States v. Wegematic Corp., 360 F.2d 674, 676 (2d Cir. 1966).

^{144.} L. Boorin, Who Should Pay for Risk of Revolution in New Technologies?, COMPUTER L. SERV. § 3-5, art. 1 at 5 (1976).

^{145.} JOHNATHAN D. WALLACE & REES W. MORRISON, SYSLAW: THE SYSOP'S LEGAL MANUAL 83 (1988).

Act, the Commission is granted injunctive power to stop "unfair methods of competition," ¹⁴⁶ as well as a prohibition against false advertising. ¹⁴⁷

Until March 1996 however, the FTC only once exercised its powers on the Information Superhighway. In September 1995, the FTC stopped an individual who made false claims on the commercial service, America Online. Although the FTC has its own Web site of gathering and disseminating information about the need for policing advertising practices on the Internet, until recently it seems to have been unaware of the many conflicts and thus, remained on the sidelines: I am not an advocate of fixing something that isn't broken, said the FTC Commissioner. But I want to be wary of when they might break. The Commissioner, however, now considers Internet fraud to be serious,

^{146. 15} U.S.C. § 45(a)(1) (1994) ("Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful.").

^{147. 15} U.S.C. § 52 (1994) (making it unlawful to disseminate false advertisements "by any means").

^{148.} Michael D. Scott, Advertising in Cyberspace: Business and Legal Considerations, THE COMPUTER LAW., Sept. 1995, at 1, 4. The Department of Transportation ("DOT"), which performs a similar role to the FTC with regard to transportation pricing, has also only once issued a citation on the Infobahn, fining Virgin Atlantic Airways \$14,000 for placing a "misleading" fare ad on the Internet. U.S. Fines Virgin Atlantic \$14,000 Over Internet Add, ATLANTA J. CONST., Nov. 22, 1995, at B2.

^{149.} Federal Trade Comm'n, Federal Trade Commission (1996), in World Wide Web, http://www.ftc.gov/. In November 1995, the NAD announced its first decision on false advertising on the Internet. See John P. Feldman, Update at the NAD: Policing Cyberspace Advertising (1995), available in World Wide Web, http://www.webcom.com/~lewrose/article/nad.html. There are many other unresolved questions with regard to regulated industries and the Internet. See Peter S. Reichertz, Legal Restrictions on the Advertising and Promotion of Pharmaceutical and Biological Products on the Internet and Other Emerging Technologies (Dec. 8, 1995), available in World Wide Web, http://www.webcom.com/~lewrose/speech/fda.html (discussing FTC and FDA inexperience in Internet marketing issues).

^{150.} Fara Warner, FTC Considers Need to Tighten Reins on Cyberspace Marketing, WALL ST. J., Apr. 14, 1995, at B5. Nevertheless, the Commissioner was aware of the problem in general:

[[]F]or a borderless market to thrive, manufacturers must be able to communicate effectively with consumers in other countries. This means that they must be able to provide consumers with information about their products through advertising. As a result, there is a need for advertising standards that are flexible enough to accommodate both consumer protection and international trade considerations.

Roscoe B. Starek, III, Commissioner, U.S. Federal Trade Commission, Consumer Protection in the Age of Borderless Markets and the Information Revolution, Speech before the Conference on Transborder Consumer Regulation and Enforcement University House Balmain Crescent, Australian National University Canberra, Australia (June 7, 1995), available in World Wide Web, http://www.webcom.com/~lewrosc/speech/starek.html.

and announced enforcement actions against nine Internet-based companies in a March press release. 151

For over a decade, Congress has been aware of the potential for fraud associated with computers. The Counterfeit Access Device and Computer Fraud and Abuse Act of 1984 made a simple yet potentially potent addition to Chapter 47 of Title 18 of the United States Code: § 1030 — "Fraud and related activity in connection with computers." This was the first federal law directly proscribing computer crime. The legislative debate centered around wire fraud and conversion of information, but not trademarks. Two years later, in 1986, Congress enacted the Electronic Communications Privacy Act ("ECPA"). The purpose of the ECPA was to prohibit unauthorized access to computer systems and gaining access through false pretenses (i.e., "hacking in").

During the World War II era, as the Lanham Act was being drafted, advances were also taking place in technology and commerce, leading Congress to acknowledge that "trade is no longer local, but is national. Marks used in interstate commerce are properly the subject of Federal regulation. It would seem as if national legislation along national lines securing to the owners of trade-marks in interstate commerce definite rights should be enacted and should be enacted now," 157

Just as the development of telecommunications systems and highways made interstate commerce feasible and forced a reassessment of the law fifty years ago, the meta-jurisdictional nature of today's Internet presents a challenge in applying existing trademark law to electronic fora. "Whatever cyberspace is, it's not local," said Nicholas Negroponte, founder of the Massachusetts Institute of Technology Media Lab. "I look at the law as something that is flopping around, sort of like a dead fish on a dock." Judge Learned Hand would concur: "There is

^{151.} FTC News Release, FTC Tackles Fraud on the Information Superhighway; Charges Nine On-Line Scammers, available in Westlaw, 1996 WL 111565.

^{152.} Counterfeit Access Device and Computer Fraud and Abuse Act Of 1984, Pub. L. No. 98-473, 98 Stat. 2190 (1984).

^{153.} See MICHAEL D. ROSTOKER & ROBERT H. RINES, COMPUTER JURISPRUDENCE. LEGAL RESPONSES TO THE INFORMATION REVOLUTION 346 (1986).

^{154.} H. Rep. No. 98-894, 98th Cong., reprinted in 1984 U.S.C.C.A.N. 509.

^{155. 18} U.S.C. § 2701 et. seq. (1994).

^{156. 18} U.S.C. § 2701(a)(1) (1994).

^{157.} S. REP. No. 1333, 79th Cong., 2d Sess. 5 (1946); H.R. REP. No. 219, 79th Cong., 1st Sess. 4 (1945).

^{158.} Despite this jurisdictional quandary, the INTA does not see a need to make any changes to the Lanham Act: "We are of the view that the Lanham Act is sufficiently broad and elastic to provide relief to trademark owners against those who adopt domain names that infringe upon or dilute the rights of the mark's rightful owner." Simmons-Gill, supra note 48.

^{159.} Andrews, supra note 134.

no part of the law which is more plastic than unfair competition, and what was not reckoned an actionable wrong twenty-five years ago may have become such today." 160

^{160.} Ely-Norris Safe Co. v. Mosler Safe Co., 7 F.2d 603, 604 (2d Cir. 1925), rev'd on other grounds, 273 U.S. 132 (1927).