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REALSPACE SOVEREIGNS IN CYBERSPACE: PROBLEMS WITH THE ANTICYBERSQUATTING CONSUMER PROTECTION ACT

By Catherine T. Struve and R. Polk Wagner[†]

ABSTRACT

This Article seeks to fill a critical gap in the current literature relating to the international ordering of cyberspace: the link between jurisdictional assertions by realspace sovereigns and their effects on the global effort to administer the Internet. We analyze the United States' response to disputes over domain names, the Anticybersquatting Consumer Protection Act ("ACPA"), which permits a trademark owner to seek cancellation or transfer of the domain name by proceeding *in rem* against the domain name itself, thereby expanding the scope of the ACPA to encompass disputes with little direct connection to the United States. Congress appears to have developed 15 U.S.C. § 1125(d)(2) based on a misunderstanding of the constitutional requirements for adjudicative jurisdiction in the U.S. courts; and early court decisions interpreting the provision have perpetuated the misunderstanding. This Article argues that there exist *no* cases of foreign cybersquatting (aside from certain cases involving anonymous registrants) as to which the *in rem* provision will be both applicable and constitutional. The ACPA is notable for its aggressive approach to jurisdiction, and its expansive view of jurisdiction reveals the extent to which realspace sovereigns have a critical, and yet overlooked, role in the continued viability of a global unsegmented domain name system. By mapping the logical control over the domain name system—the distributed hierarchy that is the basis of the system's design—onto realspace territory, the potential for sovereign regulation of the system becomes apparent, either under the recognized principles of prescriptive jurisdiction in international law or as a *de facto* result of the geographic facts of the domain name system. We contend that the ACPA exemplifies uncoordinated actions that are likely to result in segmentation of the domain name system and thus a decline in social welfare.

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I. INTRODUCTION

In the era of the global Internet, realspace sovereigns face new problems relating to the scope and enforceability of their laws, many of which are intended to protect local individuals and commercial entities. How these traditional sovereigns respond to these challenges will have far-reaching implications for the ordering of social and economic behavior online.¹ In this piece, we take up the case of the domain name system as an example of challenges and solutions yet to come.

1. There have been many contributions to this field. *See, e.g.*, David Post & David Johnson, *Law & Borders: The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996); Jack Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199 (1998); Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295 (1998); David Johnson & David Post, *And How Shall the Net Be Governed? A Meditation on the Relative Virtues of Decentralized, Emergent Law*, in COORDINATING THE INTERNET (Brian Kahin & James Keller eds., 1997); Trotter Hardy, *The Proper Legal Regime for Cyberspace*, 55 U. PITT. L. REV. 993 (1994); Henry R. Perrit, Jr., *The Internet is Changing International Law*, 73 CHI.-KENT L. REV. 997 (1998); A. Michael Froomkin, *Of Governments and Governance*, 14 BERKELEY TECH. L.J. 617 (1999); A. Michael Froomkin, *The Internet as a Source of*

We begin by critically analyzing the United States' response to international disputes over domain names, especially the Anticybersquatting Consumer Protection Act ("ACPA").² The ACPA offers a number of potential remedies to United States trademark owners whose marks are registered as domain names by alleged cybersquatters, both domestic and foreign. It asserts both adjudicative and prescriptive jurisdiction over foreign registrants.³ This Article takes up each of those assertions in turn.

Looking first at the ACPA's provisions with respect to adjudicative jurisdiction, Part II focuses on 15 U.S.C. § 1125(d)(2). This provision purports to authorize a trademark owner to seek cancellation or transfer of a domain name by proceeding "*in rem*" against the domain name itself in cases where the U.S. courts cannot assert personal jurisdiction over the alleged cybersquatter. The text and history of the provision indicate that Congress intended to authorize *in rem* proceedings in cases where a foreign registrant's lack of contacts with the United States would render a U.S. court's assertion of personal jurisdiction over the registrant unconstitutional under the Due Process Clause. However, as we discuss below, in such cases the registrant's lack of U.S. contacts will render *in rem* jurisdiction unconstitutional as well. The ACPA's *in rem* provision, therefore, fails effectively to reach the cases Congress appears to be targeting.⁴

Regulatory Arbitrage (book chapter) in BORDERS IN CYBERSPACE (Brian Kahin & Charles Nesson eds., 1997); Jonathan Weinberg, *Internet Governance*, in TRANSNATIONAL CYBERSPACE LAW (Makoto Ibusuki ed., 2000); Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 DUKE L.J. 187 (2000); Milton Mueller, *ICANN and Internet Governance: Sorting Through the Debris of Self-Regulation*. 1 INFO 477-500, (1999).

2. Pub. L. No. 106-113, Division B, §1000(a)(9), & Appendix I, Title III, § 3002(a), 113 Stat. 1501, 1531-36, 1501A-521, 1501A-545-48 (1999) (codified in relevant part at 15 U.S.C. §1125(d)).

3. The term "prescriptive jurisdiction" denotes the power to legislate, while the term "adjudicative jurisdiction" refers to the power of a court to hear and determine a matter. See generally IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 301 (5th ed. 1998).

4. In a recent article, Suzanna Sherry argues that the ACPA, "while not unconstitutional, [is] shortsighted." Suzanna Sherry, *Haste Makes Waste: Congress and the Common Law in Cyberspace*, 55 VAND. L. REV. 309, 311 (2002). Professor Sherry notes that some courts have found *in rem* jurisdiction available under the ACPA despite finding insufficient contacts between the registrant and the forum to justify *in personam* jurisdiction. See *id.* at 340. Sherry seems agnostic on the question discussed in Part II below: whether an *in rem* suit can proceed in the absence of minimum contacts between the registrant and the forum. See *id.* at 343 (noting one court's conclusion "that the minimum contacts test of *International Shoe* applie[s] to *in rem* as well as *quasi in rem* actions," but taking no position on "[w]hether or not that is a fair reading of *Shaffer*"). Instead, Sherry argues that the ACPA's *in rem* provision is redundant because in cases where courts have proceeded under the ACPA's *in rem* provisions, "it is probable that in the

Apart from its constitutional deficiencies, though, the *in rem* provision is conceptually intriguing because it turns on the assertion that the *res* in question (the domain name) is located within the forum (the United States). The ACPA thus attempts to base *in rem* jurisdiction on the premise that a domain name is located in the United States whenever either the dealer or the administrator involved in registering or assigning the domain name is U.S.-based.⁵ The theoretical and practical problems with such an approach lead naturally to our consideration of the implications of Congress's assertion of prescriptive jurisdiction over domain name disputes, and, more broadly, the role of realspace sovereigns in domain name regulation.

Our analysis of prescriptive jurisdiction begins by describing the aspects of logical control⁶ over the domain name system. The technological facts of the domain name system (in particular the hierarchy in the system's design⁷) correlate control over certain components (especially the root servers) with effective control over the entire system. By mapping this logical control structure onto the contours of realspace, the potential regulatory authority of realspace sovereigns becomes apparent. This regulatory authority can be grounded in either the widely-accepted principles of prescriptive jurisdiction or the *de facto* result of the physical location of elements of the domain name system. In the prescriptive jurisdiction case, the location of certain elements, specifically the root or TLD servers,⁸ within a sovereign's territory will in almost all cases provide at least sub-

absence of the ACPA the courts would have examined the precedent more carefully and found the requisite personal jurisdiction over the defendants." *Id.* at 340.

5. The terms used by the ACPA are "registrar" and "registry." *See* 15 U.S.C. § 1125(d)(2)(A). To help distinguish the functions of these two entities, we use the terms "dealer" and "administrator." *See infra* note 39.

6. By "logical control" we refer to the power conferred by the technological features of the domain name system.

7. The domain name system is designed as a "distributed hierarchy," with a very large number of components relying on a small number of "root servers" for critical information. *See infra* notes 131-137 and accompanying text.

8. "TLD" stands for "top level domain." As one of us has explained previously: Internet domain names take the form "[host].[domain].[top-level-domain]." For example, "www.stanford.edu," where "www" is known as the hostname, "stanford" is the domain name, and "edu" is the top-level-domain name, or "TLD." Because each Internet domain name corresponds uniquely to what is known as an "IP address," a series of numbers that is the means by which transmissions are routed through the Internet, the domain names themselves are normally used as addresses. There are a limited number of TLDs, .com being the best known

....

Radin & Wagner, *supra* note 1, at 1298 n.8.

stantial international legal support for the assertion of jurisdiction. Even if a sovereign's jurisdictional claim is not formally recognized or is controversial, *de facto* control can be exerted via the reality of the technology and geography. In either event, the same basic point holds: *geography matters*.

Importantly, however, while geography may influence the "territorial" control over the domain name system, from a technological standpoint it is largely irrelevant. The geographic facts of the domain name system are uniquely mutable. This provides both the means and the incentive for real-space sovereigns to increase their regulatory authority by altering the geographic facts—in our example, by creating and mandating an alternative root server system. Part IV argues that this ability to exert regulatory influence should concern the global Internet community because the creation of alternative root servers will likely result in the segmentation of the domain name system and a concomitant reduction in its value.

The importance of realspace sovereigns in the regulation of the domain name system calls for a reconsideration of the present regulatory approaches. In particular, the United States, which arguably stands to lose the most from the segmentation of the domain name system, should pursue international coordination of domain names regulation, rather than the extensive assertion of jurisdiction found in the ACPA. This Article concludes with suggestions and observations about the steps that the United States in particular, and realspace sovereigns more generally, might take to effectuate a policy that reflects the substantial interest in an unsegmented domain name system.

II. JURISDICTIONAL OVERREACHING: THE ANTICYBERSQUATTING CONSUMER PROTECTION ACT

In 1999, Congress addressed the problem of "cybersquatting"⁹ by passing the ACPA, which prohibits bad-faith registration of a domain name consisting of another's mark.¹⁰ However, noting the difficulties of suing foreign or anonymous domain name registrants, Congress also created an unusual procedural device for use in cases where the registrant

9. "Cybersquatting" occurs when a person registers as a domain name a word or phrase trademarked by another and does so in the hope of either selling the domain name to the trademark holder or earning advertising revenue from the visits of web users who are looking for the trademark holder's web page. *See* Sherry, *supra* note 4, at 317-18.

10. *See* 15 U.S.C. § 1125(d).

cannot be located or subjected to the jurisdiction of a United States court. In such cases, the ACPA authorizes the mark holder to bring an *in rem* suit¹¹ directly against the domain name itself.¹² Although the available legislative history indicates that Congress believed that the *in rem* provision would close a gap in the enforcement tools available to mark holders, in reality this provision adds little to the preexisting jurisdictional bases for ACPA suits. The analysis that follows examines the juris-

11. In an *in personam* action, jurisdiction flows from the court's authority over the defendant's "person" and any resulting judgment is potentially enforceable against any assets of the defendant, wherever located. By contrast, in an *in rem* action of the type authorized by the ACPA, jurisdiction is based on the court's authority over the *res*—here, the domain name—rather than on authority over the defendant's person. Thus, any judgment in an *in rem* action is limited to the value of the *res* and the judgment can be enforced only against the *res* and not against any other interests of the defendant. *See, e.g.*, CHARLES ALAN WRIGHT & ARTHUR R. MILLER, 4A FEDERAL PRACTICE AND PROCEDURE: CIVIL 3D § 1070, at 281 (2002) (discussing distinctions between *in rem* and *in personam* actions).

12. *See* 15 U.S.C. § 1125(d)(2)(A). The ACPA purports to authorize "an *in rem* civil action." *Id.* Technically, the suit authorized by the ACPA should be termed a *quasi in rem* Type 1 action, because it determines the relative rights of the plaintiff and the registrant in the *res* and not the plaintiff's rights in the *res* as against all the world. *See* *Hanson v. Denckla*, 357 U.S. 235, 246 n.12 (1958) (noting that "[a] judgment *quasi in rem* affects the interests of particular persons in designated property," and that in one type of *quasi in rem* suit, "the plaintiff is seeking to secure a pre-existing claim in the subject property and to extinguish or establish the nonexistence of similar interests of particular persons").

One district court has recently taken a different view, arguing that "ACPA *in rem* actions . . . are of the 'true *in rem*' genre because they involve the rights of a disputed mark for every potential rights holder." *Cable News Network L.P. v. CNNNews.com*, 162 F. Supp. 2d 484, 490 (E.D. Va. 2001). This assessment seems at odds with the structure of the ACPA's *in rem* provisions. The notice requirements set forth in those provisions focus on the domain name registrant, and no one else: they require that the plaintiff send notice of the suit to the registrant and "publish[] notice of the action as the court may direct," 15 U.S.C. § 1125(d)(2)(A)(ii), measures which would satisfy the due process requirements for notice of suit with respect to the registrant, but not necessarily with respect to other entities that might have claims to the domain name. 15 U.S.C. § 1125(d)(2)(A)(ii). Similarly, the ACPA claims turn on the conduct of the registrant, rather than on the relative rights of the plaintiff and any person other than the registrant. Moreover, the ACPA provides that a successful *in rem* plaintiff may obtain forfeiture, cancellation or transfer of the domain name, but the statute does not suggest that a successful ACPA plaintiff is thereby immunized from claims by any other person asserting a superior right to the domain name.

In any event, the distinction between *in rem* actions and *quasi in rem* Type 1 actions does not affect our analysis of the ACPA's provisions. *Cf.* RESTATEMENT (SECOND) OF JUDGMENTS § 6 cmt. a (1980) (questioning "whether the traditional distinction is useful for any purpose"). Accordingly, for simplicity we will use the term "*in rem*" to describe the ACPA's provisions. *Cf.* *Shaffer v. Heitner*, 433 U.S. 186, 199 n.17 (1977) (for convenience, using "*in rem*" to denote both *in rem* and *quasi in rem*).

dictional significance of the *in rem* provision, and concludes that its greatest distinction lies not in its utility (which is minimal, due to constitutional problems) but rather in its approach to the location of domain names.

A. The mechanics of the ACPA

To prevail on a claim under the ACPA, a plaintiff must show that it owns a protected mark, and that the defendant registered, trafficked in, or used a domain name that is identical to, confusingly similar to, or dilutive of the plaintiff's mark.¹³ The ACPA also requires the plaintiff to establish that the defendant acted with "bad faith intent to profit from th[e] mark."¹⁴ To assist courts in assessing the element of bad faith, the Act includes a nonexhaustive list of nine factors.¹⁵ Finally, the Act provides a "safe harbor" for registrants who "believed and had reasonable grounds to believe that the use of the domain name was a fair use or otherwise lawful."¹⁶ Where the prohibited acts occurred prior to the Act's passage, the only remedies available are forfeiture or cancellation of the domain name, or transfer of the domain name to the mark owner.¹⁷ For violations that occur after the date of enactment, the Act authorizes the award of damages and

13. See 15 U.S.C. § 1125(d)(1)(A). More specifically, the ACPA applies only to domain names that meet one of the following three sets of criteria: (1) a domain name that is "identical or confusingly similar to" a mark "that is distinctive at the time of registration of the domain name"; (2) a domain name that is "identical or confusingly similar to or dilutive of" a famous mark "that is famous at the time of registration of the domain name"; or (3) a domain name that "is a trademark, word, or name protected by reason of section 706 of Title 18 [pertaining to the Red Cross] or section 220506 of Title 36 [pertaining to the Olympics]." 15 U.S.C. § 1125(d)(1)(A)(ii).

14. 15 U.S.C. § 1125(d)(1)(A)(i).

15. The factors include: whether the registrant has an intellectual property right to the domain name; the extent to which the domain name is commonly used to identify the registrant; whether the registrant has previously used the domain name in offering goods or services; the registrant's fair use of the mark in a site accessed by means of the domain name; whether the registrant intended to divert web users from the plaintiff's website to the website accessed by means of the domain name; evidence that the registrant's intent was to sell, not use, the domain name; the registrant's failure to provide accurate contact information; the registrant's acquisition of multiple domain names that resemble protected marks; and whether the plaintiff's mark is distinctive and famous. See 15 U.S.C. § 1125(d)(1)(B)(i).

16. 15 U.S.C. § 1125(d)(1)(B)(ii).

17. See 15 U.S.C. § 1125(d)(1)(C); Anticybersquatting Consumer Protection Act, Pub. L. No. 106-113, Appendix I, Title III, § 3010, 113 Stat. 1501A-552 (1999) (providing that damages remedy "shall not be available with respect to the registration, trafficking, or use of a domain name that occurs before the date of the enactment of this Act"); *Virtual Works, Inc. v. Volkswagen of Am., Inc.*, 238 F.3d 264, 268 (4th Cir. 2001) ("The only remedy available for ACPA violations that occurred before November 29, 1999 . . . is to have the domain name transferred to the owner of the mark or canceled").

costs,¹⁸ and permits the plaintiff to elect statutory damages of \$1,000 to \$100,000, as determined by the court.¹⁹ If appropriate, the court may award treble damages, and in exceptional cases the court may also award a reasonable attorney's fee.²⁰

B. Anonymous registrants

The ACPA's drafters believed that the remedies described above would do little good if the plaintiff was unable to discover the registrant's identity. The House Committee report noted that "a significant problem faced by trademark owners in the fight against cybersquatting is the fact that many cybersquatters register domain names under aliases or otherwise provide false information in their registration applications in order to avoid identification and service of process by the mark owner."²¹ The federal courts traditionally have disfavored suits against anonymous defendants, and a plaintiff usually must identify and locate the defendant in order to effect service of process.²²

A suit initiated prior to the passage of the ACPA, *Columbia Insurance Co. v. Seescandy.com*,²³ illustrates the problem of anonymous defendants. The assignee of various trademarks associated with See's Candy Shops, Inc. sued in federal court, asserting federal and state law claims arising from the registration of the domain names *seescandy.com* and *seecandys.com* by "someone other than the plaintiff."²⁴ Because the registrant had provided incomplete or false information when registering the domain names, the plaintiff was unable "to collect the information necessary to serve the complaint" on the registrant.²⁵ The district court recognized the plaintiff's need to ascertain the registrant's identity, but it balanced this need against "the legitimate and valuable right to participate in online fo-

18. See 15 U.S.C. § 1117(a) (providing that an ACPA plaintiff may recover "(1) defendant's profits, (2) any damages sustained by the plaintiff, and (3) the costs of the action").

19. 15 U.S.C. § 1117(d).

20. See 15 U.S.C. § 1117(a); *Shields v. Zuccarini*, 254 F.3d 476, 487 (3d Cir. 2001) (affirming award of attorney's fees under ACPA).

21. H.R. REP. NO. 106-412, at 14 (1999).

22. See, e.g., *Columbia Ins. Co. v. Seescandy.com*, 185 F.R.D. 573, 577-78 (N.D. Cal. 1999) (noting "traditional reluctance for permitting filings against John Doe defendants or fictitious names" and stating that "the default requirement in federal court is that the plaintiff must be able to identify the defendant sufficiently that a summons can be served on the defendant").

23. *Id.*

24. *Id.* at 575.

25. *Id.* at 577.

runs anonymously or pseudonymously.”²⁶ As a result, the court held that the plaintiff must satisfy a four-part test in order to get discovery on the issue.²⁷

The ACPA’s *in rem* provision addresses the anonymous defendant problem by removing the need to identify an evasive registrant. Under § 1125(d)(2)(A)(ii)(II), a mark owner who has an ACPA claim against a domain name registrant may sue the domain name instead of the registrant, if the owner is unable to find the registrant by sending a notice to the postal and email addresses provided by the registrant to the dealer.²⁸ The Act’s requirements that the plaintiff send the notice to the addresses provided by the registrant, coupled with the additional requirement that the plaintiff publish notice of the action,²⁹ satisfy the due process requirements for notice of suit.³⁰ Thus, in situations where the registrant cannot be identified, the *in rem* provision holds the promise of “provid[ing] meaningful protection to trademark owners while balancing the interests of privacy and anonymity on the Internet.”³¹

26. *Id.* at 578.

27. First, the plaintiff “should identify the missing party with sufficient specificity such that the Court can determine that defendant is a real person or entity who could be sued in federal court.” *Id.* Second, the plaintiff should “identify all previous steps taken to locate the elusive defendant.” *Id.* at 579. Third, plaintiff should show that its claims “could withstand a motion to dismiss.” *Id.* Fourth, the plaintiff should specify, and justify, the discovery requests and the entities to which those requests would be addressed. *Id.* at 580.

28. *See* 15 U.S.C. § 1125(d)(2)(A)(ii)(II).

29. The ACPA requires that the plaintiff in an *in rem* ACPA suit “send[] a notice of the alleged violation and intent to proceed under [the ACPA *in rem* provisions] to the registrant of the domain name at the postal and e-mail address provided by the registrant to the registrar; and . . . publish[] notice of the action as the court may direct promptly after filing the action.” *Id.* § 1125(d)(2)(A)(ii)(II).

30. *See* *Mullane v. Cent. Hanover Bank & Trust Co.*, 339 U.S. 306, 314 (1950) (requiring “notice reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections”). Although the ACPA’s notice provisions will probably fail to provide actual notice to a registrant who provides false or incomplete contact information to the dealer, or who fails to keep that information current, such a failure should not raise a due process problem. *Cf.* *Lehr v. Robertson*, 463 U.S. 248, 264 (1983) (approving statutory notice scheme, despite its failure to provide actual notice to appellant, because “the right to receive notice was completely within appellant’s control”).

31. 145 CONG. REC. S10513-02, S10516 (daily ed. Aug. 5, 1999) (statement of Sen. Hatch). Senator Hatch noted that “some have suggested that dissidents or others who are online incognito for similar legitimate reasons might give false information to protect themselves and have suggested the need to preserve a degree of anonymity on the Internet particularly for this reason.” *Id.* The *in rem* provision addresses this concern by “de-

C. Registrants over whom *in personam* jurisdiction is unavailable

In addition to the problem of anonymous registrants, the ACPA's drafters also intended to tackle cases where "a non-U.S. resident cybersquats on a domain name that infringes upon a U.S. trademark."³² To this end, § 1125(d)(2)(A)(ii)(I) provides that the *in rem* action is also available if the mark owner is unable to obtain *in personam* jurisdiction over the registrant.³³ The problem with this provision, as we demonstrate below, is that there exist no cases of foreign cybersquatting as to which § 1125(d)(2)(A)(ii)(I) is both applicable and constitutional. As we discuss in Part II.C.1, in order for a court to have territorial jurisdiction in a particular case, there must be a basis for jurisdiction, and the exercise of that jurisdiction must be constitutional. A review of the pertinent rules shows that if the exercise of such jurisdiction is constitutional, there will always be a basis for *in personam* jurisdiction over ACPA claims against foreign registrants. Thus, § 1125(d)(2)(A)(ii)(I)'s requirement that *in personam* jurisdiction be unavailable is satisfied only in cases where the exercise of *in personam* jurisdiction would violate due process. Part II.C.2 surveys the due process requirements for *in personam* jurisdiction, and Part II.C.3 argues that the same due process requirements apply to *in rem* suits under the Supreme Court's decision in *Shaffer v. Heitner*.³⁴ Thus, Part II.C concludes that in any ACPA case where the exercise of *in personam* jurisdiction would violate due process, the exercise of *in rem* jurisdiction will be unconstitutional as well.

1. Bases for jurisdiction

For suits in federal court,³⁵ the basis for personal jurisdiction is found in Federal Rule of Civil Procedure 4. So long as the exercise of jurisdiction comports with due process, all *in personam* ACPA actions will fit within either Rule 4(k)(1)(A) or Rule 4(k)(2).³⁶ Rule 4(k)(1)(A) authorizes

creas[ing] the need for trademark owners to join the hunt to chase down and root out these dissidents or others seeking anonymity on the Net." *Id.*

32. H.R. REP. NO. 106-412, at 14 (1999).

33. 15 U.S.C. § 1125(d)(2)(A)(ii)(I).

34. 433 U.S. 186 (1977).

35. It appears that the federal and state courts possess concurrent jurisdiction over *in personam* suits under the ACPA. *Cf. Aquatherm Indus., Inc. v. Florida Power & Light Co.*, 84 F.3d 1388, 1394 (11th Cir. 1996) (holding that federal courts do not have exclusive jurisdiction over Lanham Act claims). For purposes of simplicity, this article focuses on ACPA suits brought in federal court.

36. Neither the ACPA nor the Lanham Act addresses the question of service of process for *in personam* actions. *See, e.g., ISI Int'l, Inc. v. Borden Ladner Gervais LLP*, 256 F.3d 548, 550 (7th Cir. 2001) (noting that Lanham Act does not authorize worldwide

service of process on a defendant “who could be subjected to the jurisdiction of a court of general jurisdiction in the state in which the district court is located.”³⁷ Thus, if a foreign registrant’s contacts with a particular state in the U.S. meet the criteria of that state’s long-arm statute, and if the minimum contacts and reasonableness requirements of due process are met, then Rule 4(k)(1)(A) will provide a basis for the assertion of territorial jurisdiction with respect to the claim against that registrant. If the facts of the case do not fit the relevant state’s long-arm statute, or if the registrant lacks minimum contacts with the relevant state, then the plaintiff can turn to Rule 4(k)(2). Rule 4(k)(2) authorizes service of process on a foreign defendant, in a federal question case, provided that the defendant is not subject to jurisdiction in the courts of any state, and provided that the exercise of jurisdiction “is consistent with the Constitution and laws of the United States.”³⁸ The use of Rule 4(k)(2) is “consistent with” the ACPA because nothing in the ACPA forbids worldwide service of process on an *in personam* defendant. However, the use of Rule 4(k)(2) to authorize *in personam* jurisdiction over ACPA claims against a foreign registrant may violate due process, in which event Rule 4(k)(2) is, by its own terms, inapplicable. In sum, Rule 4 will always provide a basis for *in personam* jurisdiction over ACPA claims against foreign registrants, unless the exercise of such jurisdiction violates due process. It is to the constitutional analysis, thus, that we now turn.

2. *Constitutionality of in personam jurisdiction*

In personam suits against foreign registrants may be constitutional in a number of situations, including cases where the domain name was registered with a U.S.-based dealer.³⁹ In other instances, such as where the reg-

service of process); *Quokka Sports, Inc. v. Cup Int’l Ltd.*, 99 F. Supp. 2d 1105, 1110 (N.D. Cal. 1999) (reaching similar conclusion in suit involving claims under Lanham Act and ACPA). Thus, Rule 4(k)(1)(D), which permits service of process “when authorized by a statute of the United States,” is inapplicable.

37. FED. R. CIV. P. 4(k)(1)(A).

38. FED. R. CIV. P. 4(k)(2).

39. A brief discussion of terminology may be helpful. “Registrars” are entities authorized by the Internet Corporation for Assigned Names and Numbers (“ICANN”) to register domain names on behalf of registrants; they function as intermediaries between the individual registrants and the domain name “registry.” See *Fleetboston Fin. Corp. v. Fleetbostonfinancial.com*, 138 F. Supp. 2d 121, 123 n.2 (D. Mass. 2001) (discussing distinctions between registrars and registries). While there are multiple registrars, not all of which are based in the U.S., each TLD has only one registry, which maintains the single authoritative set of records concerning domain names and their registrants. See *id.* Verisign Global Registry Services, a Virginia-based corporation, operates the registry for the .com, .org, and .net TLDs, which account for a very substantial number of all current

istrant uses a foreign-based dealer, due process requirements will often not be met. To meet the requirements of due process, a defendant must possess minimum contacts with the United States⁴⁰ and the exercise of jurisdiction must not be unreasonable.⁴¹ The minimum contacts requirement,

domain names. See Verisign Contact Information, at <http://www.verisigngrs.com/aboutus/contact.html> (last visited July 25, 2002) (stating that Verisign is headquartered in Virginia); *Smith v. Network Solutions, Inc.*, 135 F. Supp. 2d 1159, 1161 & n.2 (N.D. Ala. 2001) (discussing Verisign Global Registry Services' role as registry for the .com, .org, and .net TLDs); Verisign Corporate Overview, <http://www.verisign.com/corporate/about/index.html> (visited July 25, 2002) (asserting that .com, .org and .net domain names represent 27.3 million web addresses). Thus, the relevant registrar may be either a U.S.-based or a foreign corporation, but the pertinent registry for most current domain names is controlled by a U.S.-based corporation. To help distinguish between the two types of entities, we will generally refer to the registrar as the "dealer" and the registry as the "administrator."

40. The Supreme Court has not yet decided whether a defendant's contacts with various parts of the United States can be aggregated for purposes of the due process analysis under the Fifth Amendment. See *Omni Capital International, Ltd. v. Rudolf Wolff & Co.*, 484 U.S. 97, 102 n.5 (1987) (unanimous opinion) (declining "to consider the constitutional issues raised by" litigant's contention that "a federal court could exercise personal jurisdiction, consistent with the Fifth Amendment, based on an aggregation of the defendant's contacts with the Nation as a whole, rather than on its contacts with the State in which the federal court sits"); *Asahi Metal Indus. v. Superior Court*, 480 U.S. 102, 113 n.* (1987) (O'Connor, J., joined by Chief Justice Rehnquist and Justices Powell and Scalia) (finding "no occasion . . . to determine whether Congress could, consistent with the Due Process Clause of the Fifth Amendment, authorize federal court personal jurisdiction over alien defendants based on the aggregate of *national* contacts, rather than on the contacts between the defendant and the State in which the federal court sits"). It appears, however, that when a foreign defendant is sued under a federal statute authorizing nationwide or worldwide service of process, the court may aggregate all of the defendant's United States contacts in order to assess whether the assertion of jurisdiction would comport with due process under the Fifth Amendment. See, e.g., *Go-Video Inc. v. Akai Elec. Co.*, 885 F.2d 1406, 1416 (9th Cir. 1989) (holding that "when a [federal] statute authorizes nationwide service of process, national contacts analysis is appropriate").

Thus, in cases where the defendant lacks minimum contacts with the state in which the district court sits, but has contacts with other parts of the United States, the contacts can be aggregated to satisfy the minimum contacts analysis under Rule 4(k)(2). See, e.g., *ISI Int'l*, 256 F.3d at 551 (holding that federal court can exercise jurisdiction under Rule 4(k)(2) over defendant who has "ample contacts with the nation as a whole, but whose contacts are so scattered among states that none of them would have jurisdiction"). Likewise, because the ACPA's *quasi in rem* section provides for worldwide service of process, see 15 U.S.C. § 1125(d)(2)(A)-(B), this article assumes that a federal district court asserting jurisdiction under that section should assess whether the defendant possesses minimum contacts with the United States as a whole, rather than with the state in which the district court sits.

41. See *Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 476-77 (1985) (discussing reasonableness analysis).

which is designed to prevent the assertion of jurisdiction over a defendant having no significant “contacts, ties, or relations” with the forum,⁴² is satisfied when a defendant “purposefully direct[s]” its actions at the forum and the litigation arises out of or relates to those acts.⁴³

Several considerations support the argument that a registrant who uses a U.S.-based *dealer* to acquire a domain name creates minimum contacts with the United States.⁴⁴ Although the registrant may communicate with the dealer solely over the Internet, the Court has held that minimum contacts may be found even when the defendant never physically enters the forum.⁴⁵ It seems likely that most registrants will be aware of the nationality of the dealer they use. The dealer’s website will usually provide reasonable notice that the dealer is a U.S.-based corporation and may even reveal the specific location of the dealer’s physical headquarters. In instances where a reasonable person would infer from the dealer’s website that the dealer is U.S.-based, registrants who contract with that dealer to register a domain name can be seen as purposefully directing their activities to the United States.⁴⁶

42. *Int’l Shoe Co. v. Washington*, 326 U.S. 310, 319 (1945).

43. *Keeton v. Hustler Magazine, Inc.*, 465 U.S. 770, 774 (1984); *see also Helicopteros Nacionales de Colombia, S.A. v. Hall*, 466 U.S. 408, 414 (1984). “General jurisdiction,” which exists when a defendant’s contacts with the forum are sufficiently extensive to support jurisdiction over claims unrelated to the contacts, will usually not be available in ACPA cases involving foreign registrants, since such registrants are unlikely to have the requisite “continuous and systematic” contacts with the forum.

44. *Cf.* David F. Fanning, Note, *Quasi in Rem on the Cyberseas*, 76 CHI.-KENT L. REV. 1887, 1920 (2001) (arguing that a domain name registrant should be aware “that the forum in which her chosen domain name registrar resides has an interest in regulating the continuing obligation of the registrar”).

45. *See Burger King*, 471 U.S. at 476 (“So long as a commercial actor’s efforts are ‘purposefully directed’ toward residents of another State, we have consistently rejected the notion that an absence of physical contacts can defeat personal jurisdiction there.”).

46. Although a defendant’s contract with a forum resident will not always suffice to establish minimum contacts, such contacts may be shown by the circumstances of the contract. *See Burger King*, 471 U.S. at 478-79 (explaining that “in determining whether the defendant purposefully established minimum contacts within the forum,” a court must consider factors such as “prior negotiations and contemplated future consequences, along with the terms of the contract and the parties’ actual course of dealing”); *McGee v. Int’l Life Ins. Co.*, 355 U.S. 220, 223 (1957) (holding that circumstances surrounding insurance contract established minimum contacts where, *inter alia*, “[t]he contract was delivered in California, the premiums were mailed from there and the insured was a resident of that State when he died”); *Compuserve, Inc. v. Patterson*, 89 F.3d 1257, 1264-65 (6th Cir. 1996) (finding minimum contacts with Ohio where defendant entered into a contract with an Ohio corporation, “purposefully perpetuated the relationship with [the plaintiff] via repeated communications with its system in Ohio,” and “used [the plaintiff corporation] to market his wares in Ohio and elsewhere”). In ACPA cases, the defendant will have

The allegations by which the plaintiff seeks to meet the ACPA's bad faith element⁴⁷ may establish further contacts between the registrant and the United States.⁴⁸ In assessing whether the plaintiff has properly alleged that the registrant acted with a "bad faith intent to profit from [the plaintiff's] mark,"⁴⁹ the ACPA advises the court to consider several factors, including "the [registrant's] intent to divert consumers from the mark owner's online location to a site accessible under the domain name,"⁵⁰ and "the [registrant's] offer to transfer, sell, or otherwise assign the domain name to the mark owner or any third party for financial gain."⁵¹ Where a registrant takes such actions against a U.S.-based mark owner,⁵² the registrant can be seen as intending to cause an effect within the United States,

entered into a contract with a U.S. dealer; the registration will have affected U.S. commerce; and the defendant may have shown an intent to damage the U.S. business of the holder of a mark protected under U.S. law.

⁴⁷ 47. The statute makes "bad faith" an element of *in personam* ACPA claims. See 15 U.S.C. § 1125(d)(1). The ACPA's *in rem* provision does not explicitly mention bad faith. However, it authorizes a suit *in rem* if (1) the domain name violates the plaintiff's trademark rights and (2) the plaintiff is unable to obtain *in personam* jurisdiction over, or is unable to locate, "a person who would have been a defendant in a civil action under" the ACPA's *in personam* provisions. 15 U.S.C. § 1125(d)(2)(A). A number of courts have concluded that this reference to the *in personam* provisions incorporates the bad faith element into the *in rem* claim as well. See *Broadbridge Media, L.L.C. v. Hypercd.com*, 106 F. Supp. 2d 505, 511 (S.D.N.Y. 2000) (holding that bad faith is an element of ACPA *in rem* claims); *Harrods Ltd. v. Sixty Internet Domain Names*, 110 F. Supp. 2d 420, 425 (E.D. Va. 2000) (following *Broadbridge Media*); *Hartog & Co. AS v. Swix.com*, 136 F. Supp. 2d 531, 539 (E.D. Va. 2001) (following *Harrods*). The Fourth Circuit, however, disagrees. See *Harrods Ltd. v. Sixty Internet Domain Names*, 2002 WL 141428, at *12 (4th Cir. 2002) (holding that the ACPA's "*in rem* provision not only covers bad faith claims under § 1125(d)(1), but also covers infringement claims under § 1114 and § 1125(a) and dilution claims under § 1125(c)").

48. For a detailed argument that the evidence relevant to bad faith under the ACPA may also help to establish minimum contacts, see Andrew J. Grotto, *Due Process and In Rem Jurisdiction Under the Anti-Cybersquatting Consumer Protection Act*, 2 COLUM. SCI. & TECH. L. REV. 1, 29-45 (2001). Cf. Sherry, *supra* note 4, at 337 (observing that "courts confronted with bad-faith registration of domain names" have "found ways to conclude that the defendant had targeted the forum state").

49. 15 U.S.C. § 1125(d)(1)(A)(i).

50. 15 U.S.C. § 1125(d)(1)(B)(i)(V).

51. 15 U.S.C. § 1125(d)(1)(B)(i)(VI).

52. Foreign holders of U.S. trademarks can also sue under the ACPA, but a foreign plaintiff presumably would have to show effects on U.S. commerce in order to state a claim. Cf. *Nintendo of Am., Inc. v. Aeropower Co.*, 34 F.3d 246, 249 n.5 (4th Cir. 1994) (holding that the Lanham Act reaches extraterritorial conduct "which has a significant effect on United States Commerce").

thus creating contacts for jurisdictional purposes.⁵³ Moreover, a registrant's choice of a .com domain name, rather than a domain name based on a country-code TLD, may sometimes suggest an intent to target U.S. markets.⁵⁴

It should be noted, however, that in five of the six cases to address the question to date⁵⁵ the court has held that a foreign defendant's registration of a domain name with a U.S. dealer did not create minimum contacts so as to confer *in personam* jurisdiction on a federal court in the district where the dealer is located. One early decision under the ACPA did indicate, without discussion, that a registrant's action in registering the pertinent domain name with NSI, a Virginia corporation, sufficed "to satisfy due process" for purposes of *in personam* jurisdiction.⁵⁶ However, the five subsequent decisions have held to the contrary.⁵⁷ The courts that found a due process violation reasoned that "the utility of a domain name depends in part on the registrar's meeting its obligations, and in part on the operation of the [domain name system], only a small portion of which falls

53. See *Panavision Int'l, L.P. v. Toeppen*, 141 F.3d 1316, 1322 (9th Cir. 1998) (finding minimum contacts with California, under *Calder v. Jones*, 465 U.S. 783 (1984), because defendant knew that the scheme of registering plaintiff's trademarks as domain names would have "the effect of injuring [plaintiff] in California where [plaintiff] has its principal place of business and where the movie and television industry is centered").

54. See, e.g., *Quokka Sports, Inc. v. Cup Int'l Ltd.*, 99 F. Supp. 2d 1105, 1111-12 (N.D. Cal. 1999) (finding that New Zealand defendants targeted the United States when, instead of choosing a .nz domain name, they registered a .com domain name with a U.S.-based dealer; defendants "admitted that they sought out a specific domain name to target the 'lucrative American market'").

55. The issue has been addressed in six published opinions, by three district judges and one magistrate judge, in the Eastern District of Virginia. See *infra* notes 56-57; see also *Porsche Cars N. Am., Inc. v. Porsche.net*, 2002 WL 141442, at *3-*4, *8 (4th Cir. 2002) (implicitly assuming that the federal district court in Eastern District of Virginia lacked personal jurisdiction over registrant); *Harrods Ltd. v. Sixty Internet Domain Names*, 2002 WL 141428, at *3 (4th Cir. 2002) (reviewing judgment rendered by federal district court in Eastern District of Virginia, and noting without criticism the district court's conclusion that it lacked personal jurisdiction over registrant).

56. See *Lucent Techs., Inc. v. LucentSucks.com*, 95 F. Supp. 2d 528, 531 n.5 (E.D. Va. 2000).

57. See *Am. Online, Inc. v. Huang*, 106 F. Supp. 2d 848, 857 (E.D. Va. 2000) (holding that domain name registration agreements did not "create a sufficient relationship between [the registrant] and Virginia to satisfy due process"); *Heathmount A.E. Corp. v. Technodome.com*, 106 F. Supp. 2d 860, 865 (E.D. Va. 2000) (following *America Online*); *Banco Inverlat, S.A. v. www.inverlat.com*, 112 F. Supp. 2d 521, 522 n.1 (E.D. Va. 2000) (following *Heathmount*); *Hartog & Co. AS v. swix.com*, 136 F. Supp. 2d 531, 536 n.5 (E.D. Va. 2001) (following *Heathmount*); *Cable News Network L.P. v. CNNnews.com*, 162 F. Supp. 2d 484, 489 n.16 (E.D. Va. 2001) (citing *America Online* and *Heathmount*).

within the domain name registrar's control."⁵⁸ Moreover, the typical domain name registration transaction is brief, is conducted over the Internet, involves no negotiation of terms, and does not require the dealer to perform "substantial services" in its home state.⁵⁹

Whether or not the use of a U.S.-based *dealer* creates minimum contacts, it seems clear that the involvement of a U.S.-based *administrator*, without more, should not create the requisite contacts.⁶⁰ Registrants typically have no direct interaction with the administrator. Thus, a French registrant might use a dealer based in France to register a *.com* domain name, unaware that the administrator that will record the domain name is located in the United States. Unless other factors indicate that the registrant aimed its acts at the United States, such a registrant lacks sufficient contacts with the forum to justify the exercise of jurisdiction over the registrant.

In any event, even if minimum contacts exist, a defendant can secure dismissal if it can show that the exercise of jurisdiction would nonetheless be unreasonable,⁶¹ based on a five-factor test. The test considers the burden on the defendant, the forum's interest in hearing the dispute, the plaintiff's interest in obtaining relief, the international judicial system's interest in the efficient resolution of controversies, and the shared interests of various nations in furthering substantive social policies.⁶² Admittedly, the

58. *Am. Online*, 106 F. Supp. 2d at 853.

59. *Id.* at 855 n.21; *Heathmount*, 106 F. Supp. 2d at 866-67.

The courts that found a due process violation generally appeared to assume that the minimum contacts analysis should look to the registrant's contacts with a particular state, rather than aggregating all of the registrant's contacts with the United States. As noted above, that assumption is open to question. *See supra* note 40. The courts' preoccupation with assessing the registrant's contacts with the state of Virginia, rather than with the United States as a whole, may have altered some factors in the analysis. Thus, for instance, while it may be true that the registrant of a *.com* domain name would be unaware that NSI is located in Virginia, *see Heathmount*, 106 F. Supp. 2d at 866 & n.7, it is far less plausible that such a registrant would be unaware that it was dealing with a U.S. dealer. On the whole, however, it does not appear that nationwide aggregation of contacts would have altered these courts' conclusions that registration with a U.S. dealer is insufficient to create minimum contacts.

60. The fact that no published opinion to date addresses the latter question suggests that potential plaintiffs agree with this assessment.

61. *See Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 487 (1985) (indicating that defendant has burden of demonstrating unreasonableness).

62. When the Court enunciated these five factors in *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 292 (1980), and applied them in *Burger King*, 471 U.S. at 476-77, 482-84, it was evaluating state courts' assertions of jurisdiction over defendants located outside the forum state but within the United States. Accordingly, the Court described the last two factors in terms applicable to interstate, rather than international, disputes: "the interstate judicial system's interest in obtaining the most efficient resolution

burden on a foreign defendant of litigating an ACPA claim in the United States will be considerable.⁶³ In addition, the policies of other nations with respect to the regulation of trademarks, and domain names in particular, may differ substantially from those of the United States, and a United States court's adjudication of an ACPA claim may contravene such policies.⁶⁴ Balanced against the burden on the defendant and the effect on other countries' trademark policies, however, are the United States' interest in adjudicating the dispute and the plaintiff's interest in obtaining effective relief.⁶⁵ The ACPA grew out of congressional concern that U.S. businesses lacked recourse against cybersquatters, including foreign cybersquatters.⁶⁶ Its remedies are presumably available only to holders of a mark protected under United States law; and though neither the plaintiff nor the defendant need be a U.S. citizen, the ACPA applies only in cases where the bad-faith registration has a significant effect on U.S. com-

of controversies" and "the shared interest of the several States in furthering fundamental substantive social policies." *World-Wide Volkswagen*, 444 U.S. at 292. The Court has since noted that the application of these two factors to the assertion of jurisdiction over a foreign defendant "calls for a court to consider the procedural and substantive policies of other nations whose interests are affected by the assertion of jurisdiction." *Asahi Metal Indus. v. Superior Court*, 480 U.S. 102, 115 (1987) (holding California state court's assertion of jurisdiction over Japanese defendant unreasonable under the circumstances).

63. *See Asahi*, 480 U.S. at 114 ("The unique burdens placed upon one who must defend oneself in a foreign legal system should have significant weight in assessing the reasonableness of stretching the long arm of personal jurisdiction over national borders.").

64. On the other hand, *Asahi's* treatment of the reasonableness factors also suggests that the social policies of other nations may weigh more heavily in the defendant's favor when a state court asserts jurisdiction than when a federal court asserts jurisdiction under a federal statute. The *Asahi* Court noted that a state court's assertion of jurisdiction over an alien defendant must be assessed in light of the federal government's interest in guiding foreign relations. *Asahi*, 480 U.S. at 115. Where Congress has enacted legislation authorizing suit against a foreign cybersquatter, a federal court's assertion of jurisdiction may be less open to question because the concern of state interference with federal foreign policy does not arise.

65. *See Asahi*, 480 U.S. at 114 ("When minimum contacts have been established, often the interests of the plaintiff and the forum in the exercise of jurisdiction will justify even the serious burdens placed on the alien defendant."). It could also be argued that the fifth factor—the international interest in efficient dispute resolution—favors the plaintiff, because an ACPA suit provides a means to determine the rights of each party in the relevant domain name.

66. *See H.R. REP. NO. 106-412*, at 14 (1999) (noting the need to address situations where "a non-U.S. resident cybersquats on a domain name that infringes upon a U.S. trademark").

merce.⁶⁷ Accordingly, the reasonableness analysis may on balance favor the exercise of jurisdiction.

3. *Constitutionality of in rem jurisdiction*

As we have seen, the exercise of *in personam* jurisdiction over ACPA claims against foreign registrants will sometimes be constitutional, but in other cases it will violate due process. In the latter instances, § 1125(d)(2)(A)(ii)(I) purports to make *in rem* jurisdiction available. Contrary to the apparent expectations of the ACPA's drafters, however, due process requires that there be "minimum contacts" between the registrant and the forum, no matter whether the ACPA claims are denominated *in personam* or *in rem*.⁶⁸ In cases where the assertion of *in personam* jurisdiction would violate due process, the assertion of *in rem* jurisdiction would likewise be unconstitutional.⁶⁹

The drafters of the ACPA apparently assumed that a foreign registrant who registered a domain name in bad faith⁷⁰ would lack contacts sufficient to justify the exercise of personal jurisdiction,⁷¹ but that the *in rem* provision would help to fill this gap. The ACPA's drafters predicted that *in rem* suits would not offend due process, "since the property and only the property is the subject of the jurisdiction, not other substantive personal rights of any individual defendant."⁷² In keeping with this view, a number

67. Cases under other provisions of the Lanham Act indicate that a major factor in determining the Lanham Act's reach is whether the defendant's alleged conduct had a significant effect on U.S. commerce. *See, e.g.,* *Buti v. Perosa*, 139 F.3d 98, 104 n.2, 105 (2d Cir. 1998) (affirming dismissal of foreign defendant's Lanham Act counterclaim because defendant failed to use its mark in commerce in the United States and the mark was not a famous mark); *Nintendo of Am., Inc. v. Aeropower Co.*, 34 F.3d 246, 249 n.5 (4th Cir. 1994) (holding that the Lanham Act reaches extraterritorial conduct "which has a significant effect on United States Commerce").

68. *See infra* text accompanying notes 74-93.

69. *See infra* text accompanying notes 94-97.

70. The ACPA also prohibits bad-faith trafficking in or use of domain names. *See* 15 U.S.C. § 1125(d)(1)(A). For purposes of simplicity, however, we focus on bad-faith registration. The jurisdictional issues raised in suits alleging trafficking or use would be similar to those in cases of bad-faith registration; if anything, the case for jurisdiction might be stronger in trafficking or use cases, to the extent that such activities provided additional contacts between the defendant and the United States.

71. *See* H.R. REP. NO. 106-412, at 14 (1999) (stating that "personal jurisdiction cannot be established over the domain name registrant" when the registrant is not a U.S. resident).

72. H.R. REP. NO. 106-412, at 14. Damages are not available in ACPA *in rem* actions. *See* 15 U.S.C. § 1125(d)(2)(D)(i) ("The remedies in an *in rem* action under this paragraph shall be limited to a court order for the forfeiture or cancellation of the domain name or the transfer of the domain name to the owner of the mark.").

of the courts that have applied the ACPA have accepted the notion that *in rem* jurisdiction is available despite the absence of minimum contacts for *in personam* purposes.⁷³ Such a conclusion, however, contravenes the Supreme Court's statement in *Shaffer v. Heitner*⁷⁴ that all assertions of jurisdiction,⁷⁵ whether *in personam*, *in rem* or *quasi in rem*, must meet the minimum contacts requirements developed in *International Shoe Co. v. Washington*⁷⁶ and its progeny.⁷⁷

Shaffer involved attachment jurisdiction, also known as *quasi in rem* Type 2 jurisdiction, but the *Shaffer* Court made clear that the principles it set forth also apply to *in rem* and *quasi in rem* Type 1 jurisdiction. In *Shaffer*, the plaintiff brought a shareholders' derivative suit in Delaware state court against officers and directors of a Delaware corporation,⁷⁸ based on the attachment, pursuant to a Delaware statute, of corporate stock and options owned by the individual defendants.⁷⁹ The plaintiff alleged that the individual defendants had breached their duties to the corporation by causing the corporation and a subsidiary to engage in activities in Oregon that led to a civil damages award and a large criminal contempt fine.⁸⁰

73. See *Harrods Ltd. v. Sixty Internet Domain Names*, 2002 WL 141428, at *3, *6 (4th Cir. 2002) (assuming that *in personam* jurisdiction was unavailable over registrant in Eastern District of Virginia, and holding nonetheless that "courts in Virginia, the state where the Domain Names are registered, may constitutionally exercise *in rem* jurisdiction over them"); *Porsche Cars N. Am., Inc. v. Porsche.net*, 2002 WL 141442, at *8-*9 (4th Cir. 2002) (assuming that the district court in Eastern District of Virginia lacked *in personam* jurisdiction over registrant, but holding that the district court had *in rem* jurisdiction over domain names); *Heathmount A.E. Corp. v. Technodome.com*, 106 F. Supp. 2d 860, 867-68 (E.D. Va. 2000) (finding insufficient contacts for the exercise of *in personam* jurisdiction, but allowing *quasi in rem* claim to proceed); *Banco Inverlat, S.A. v. www.inverlat.com*, 112 F. Supp. 2d 521, 522 n.1 (E.D. Va. 2000) (same); *Hartog & Co. AS v. swix.com*, 136 F. Supp. 2d 531, 536 & n.5 (E.D. Va. 2001) (same); *Cable News Network L.P. v. CNNnews.com*, 162 F. Supp. 2d 484, 491 (E.D. Va. 2001), (same).

74. 433 U.S. 186, 212 (1977).

75. The statement in *Shaffer* pertained to "assertions of state-court jurisdiction," 433 U.S. at 212, but the Court's reasoning is equally applicable to the exercise of jurisdiction by federal courts. See *infra* text accompanying notes 122-123.

76. *Int'l Shoe Co. v. Washington*, 326 U.S. 310 (1945).

77. The argument that Justice Scalia's opinion in *Burnham v. Superior Court*, 495 U.S. 604 (1990), limits *Shaffer*'s statement concerning minimum contacts, is addressed below. See *infra* notes 110-114 and accompanying text.

78. The suit named as defendants Greyhound Corp., Greyhound's wholly owned subsidiary Greyhound Lines, Inc., and twenty-eight current or former officers or directors of one or both entities. *Shaffer*, 433 U.S. at 189-90.

79. *Shaffer*, 433 U.S. at 190-94. Under a Delaware statute, the stock of a Delaware corporation was deemed to be located within the state for purposes of attachment. *Id.* at 192 n.9.

80. *Id.* at 190.

The Delaware courts denied the defendants' jurisdictional challenge, reasoning that *quasi in rem* jurisdiction, which traditionally was based on attachment of property within the jurisdiction, did not require that the defendants have contacts with the forum.⁸¹ The Supreme Court, however, reversed, rejecting both the jurisdictional conclusion and its premise. Noting that under *International Shoe*, "the relationship among the defendant, the forum, and the litigation" had become "the central concern of the inquiry into personal jurisdiction,"⁸² the Court proceeded to consider whether the *International Shoe* standard "should be held to govern actions *in rem* as well as *in personam*."⁸³ Because "judicial jurisdiction over a thing" (the traditional conception of *in rem* jurisdiction) is merely "a customary elliptical way of referring to jurisdiction over the interests of persons in a thing,"⁸⁴ the Court concluded that "in order to justify an exercise of jurisdiction *in rem*, the basis for jurisdiction must be sufficient to justify" *in personam* jurisdiction—i.e., it must meet "the minimum-contacts standard elucidated in *International Shoe*."⁸⁵ The Court made clear that this standard applied to all assertions of *in rem* jurisdiction, not just to the type of *quasi in rem* jurisdiction that was at issue in *Shaffer* itself: the Court stated flatly that "all assertions of state-court jurisdiction must be evaluated according to the standards set forth in *International Shoe* and its progeny," and it added that "[t]o the extent that prior decisions are inconsistent with this standard, they are overruled."⁸⁶

Consistent with its stated intention to set a standard for application to all *in rem* cases, the Court took pains to assess the likely effect of its new approach on different types of *in rem* jurisdiction.⁸⁷ Under *International Shoe*, although the mere fact that property is present within the forum will not in itself justify jurisdiction, that fact is nevertheless relevant, for it can help to provide the requisite minimum contacts between the defendant and

81. *Id.* at 196.

82. *Shaffer*, 433 U.S. at 204.

83. *Id.* at 206.

84. *Id.* at 207 (quoting RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 56, Introductory Note (1971)).

85. *Id.*

86. *Id.* at 212 & n.39.

87. Justice Powell's concurrence in *Shaffer* provides a further indication of the scope of the majority opinion. Justice Powell wrote separately to express the following caveat: "I would explicitly reserve judgment . . . on whether the ownership of some forms of property whose situs is indisputably and permanently located within a State may, without more, provide the contacts necessary to subject a defendant to jurisdiction within the State to the extent of the value of the property." *Shaffer*, 433 U.S. at 217 (Powell, J., concurring). The fact that Justice Powell felt it necessary to state this reservation suggests that he viewed the Court's opinion as having a potentially broad sweep.

the forum. As the Court put it, “when claims to the property itself are the source of the underlying controversy between the plaintiff and the defendant, it would be unusual for the State where the property is located not to have jurisdiction,” since “the defendant’s claim to property located in the State would normally indicate that he expected to benefit from the State’s protection of his interest.”⁸⁸ Moreover, in such cases the forum will often have “strong interests in assuring the marketability of property within its borders and in providing a procedure for peaceful resolution of disputes about the possession of that property,” and relevant evidence and witnesses will often be found within the forum⁸⁹—factors which would support the argument that the exercise of jurisdiction would be reasonable. Accordingly, the Court concluded that its extension of the *International Shoe* standard to all assertions of state-court jurisdiction was unlikely to affect jurisdiction over most *in rem* actions other than those in which the property attached was unrelated to the claim.⁹⁰

The Court recognized, however, that in *quasi in rem* Type 2 cases such as *Shaffer* itself, the imposition of the *International Shoe* standard would “result in significant change,” because the defendant’s ownership of property within the forum would be unrelated to the plaintiff’s cause of action.⁹¹ Where the cause of action does not relate to, or arise out of, the defendant’s contacts with the forum, those contacts will not meet the *International Shoe* standard unless they are continuous and systematic—a test that will not be met by the mere ownership of property within the forum.⁹² In *Shaffer*, the Court concluded that neither the defendants’ ownership of stock in the Delaware corporation nor their positions as officers or directors of that corporation provided the requisite minimum contacts for purposes of the shareholders’ derivative suit. Accordingly, it held that the Delaware courts’ assertion of jurisdiction violated due process.⁹³

Although it might at first seem that the ACPA’s *in rem* provisions satisfy the minimum contacts analysis sketched out in *Shaffer*, such an argument does not withstand scrutiny. The argument is that a plaintiff can bring an ACPA *in rem* suit only when the domain name was registered by a U.S. dealer or administrator, that in such instances, the ACPA deems the

88. *Id.* at 207-08.

89. *Id.* at 208.

90. *Id.*

91. *Id.*

92. Continuous and systematic contacts with the forum have been held sufficient for the exercise of jurisdiction over an unrelated claim against a corporation. *See Perkins v. Benguet Consol. Mining Co.*, 342 U.S. 437, 447-48 (1952).

93. *See Shaffer*, 433 U.S. at 213-17.

domain name to be property located within the United States, and that the plaintiff's claim thus arises directly out of a claim to the registrant's property located within the forum. However, as the *Shaffer* Court noted, even in cases where the plaintiff's cause of action arises out of, or relates to, the defendant's claim of ownership of the pertinent property, the presence of that property within the forum will not always support the inference of contacts between the defendant and the forum.⁹⁴

The *Shaffer* Court's caveat foreshadows the issues raised by the ACPA. The ACPA's *in rem* provision authorizes suits against domain names registered with a U.S. dealer *or* administrator.⁹⁵ Assuming that Congress has the authority to designate domain names as a form of property that can be subjected to attachment for purposes of *in rem* jurisdiction,⁹⁶ and assuming further that Congress has the authority to provide that such domain names are located within the United States whenever the dealer or administrator involved in registering the domain name is located within the United States, the resulting "presence" of the domain name within the United States does not, without more, provide minimum contacts between the registrant and the United States.⁹⁷ If, for example, the registrant registered the domain name with a foreign dealer and had no idea that the domain name would be administered by a registry based in the United States, the "presence" of the domain name within the United States would not indicate the existence of minimum contacts between the registrant and the United States. In sum, the "presence" of the domain name within the United States adds nothing to the minimum contacts analysis; either the registrant has minimum contacts so as to satisfy due

94. The Court suggested that such an inference might be unfounded, for example, in cases where a chattel was brought into the forum without the owner's consent or where the plaintiff's fraud induced the owner to send the chattel into the forum. *See Shaffer*, 433 U.S. at 208 n.25 (citing RESTATEMENT (SECOND) OF CONFLICTS OF LAWS § 60 cmts. c & d).

95. Such suits are to be brought "in the judicial district in which the domain name registrar, domain name registry, or other domain name authority that registered or assigned the domain name is located." 15 U.S.C. § 1125(d)(2)(A).

96. *See Porsche Cars N. Am., Inc. v. Porsche.net*, 2002 WL 141442, at *9 (4th Cir. 2002) ("Congress may treat a domain name registration if it chooses, without violating the constitution").

97. *Cf. Fleetboston Fin. Corp. v. Fleetbostonfinancial.com*, 138 F. Supp. 2d 121, 135 (D. Mass. 2001) (refusing to interpret the ACPA as permitting suit in any district where documents establishing control of the domain name are deposited with the court, because "a statute that creates a *res* out of an intangible bundle of rights, and then gives to any plaintiff with a colorable claim the right to transfer that *res* to the forum of its choice, anywhere in the nation, offends notions of fair play").

process, or else the *International Shoe* standard will bar the exercise of any type of jurisdiction, either *in rem* or *in personam*.⁹⁸

Under *Shaffer*, then, the ACPA *in rem* provision is of use only in cases involving anonymous registrants; in cases where, instead, the registrant is known but cannot be subjected to an *in personam* ACPA claim, the registrant's lack of minimum contacts with the United States will similarly bar the assertion of *in rem* jurisdiction. Two district courts in the Eastern District of Virginia have resisted this conclusion, arguing that *Shaffer* does not require the application of minimum contacts analysis to ACPA *in rem* actions.⁹⁹ For example, the court in *Cable News Network L.P. v. Cnnnews.com* ("CNN") held that "in an ACPA *in rem* action, it is not necessary that the allegedly infringing registrant have minimum contacts with the forum."¹⁰⁰ The arguments advanced to support this assertion fall into three general categories: (1) that *Shaffer*'s requirement of minimum contacts is *dictum* as applied to the *in rem* cause of action created by the ACPA and can thus be disregarded;¹⁰¹ (2) that Justice Scalia's opinion in *Burnham v. Superior Court*¹⁰² somehow overruled *Shaffer*'s requirement

98. *Shaffer* also forecloses the argument that the limited nature of the remedies available through an *in rem* suit loosens the requirements of due process. See, e.g., *Am. Online, Inc. v. Huang*, 106 F. Supp. 2d 848, 858 n.32 (E.D. Va. 2000) (holding that registration of a domain name did not create contacts sufficient to justify *in personam* jurisdiction, and distinguishing a *quasi in rem* ACPA case on the ground that "the registrant's contact with [the registrar] satisfied due process" in light of "the limited relief available under the *in rem* proceeding, namely forfeiture of the domain name in question"). While the *Shaffer* Court recognized that "the potential liability of a defendant in an *in rem* action is limited by the value of the property," it found this fact irrelevant to the due process analysis because the fairness of subjecting the defendant to jurisdiction "does not depend on the size of the claim being litigated." *Shaffer*, 433 U.S. at 207 n.23.

99. See *Cable News Network L.P. v. CNNews.com*, 162 F. Supp. 2d 484, 491 (E.D. Va. 2001) (holding that because ACPA actions are "properly categorized as 'true *in rem*,' there is no requirement that the owner or claimant of the *res* have minimum contacts with the forum"); *Caesars World, Inc. v. Caesars-palace.com*, 112 F. Supp. 2d 502, 504 (E.D. Va. 2000) (holding that in ACPA actions "it is unnecessary for minimum contacts to meet personal jurisdiction standards" because "under *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"). The drafters of the ACPA also appear to have relied on this contention See H.R. CONF. REP. NO. 106-464, at 114 (1999) (quoting a district court's statement that "[i]n a true *in rem* proceeding . . . due process requires only that the property itself have certain minimum contacts with the territory of the forum").

100. *Cable News Network L.P. v. CNNews.com*, 162 F. Supp. 2d 484, 491 (E.D. Va. 2001).

101. See *id.*

102. 495 U.S. 604 (1990).

of minimum contacts for *in rem* actions;¹⁰³ and (3) that other authorities provide some basis for a refusal to apply the minimum contacts test to ACPA *in rem* claims.¹⁰⁴ However, each of these arguments fails.

As demonstrated above, the *Shaffer* Court clearly intended to extend the *International Shoe* framework to all cases of *in rem* jurisdiction; and whether that extension was dictum or holding, it should be applied to the *in rem* provisions of the ACPA.¹⁰⁵ Notably, the *Shaffer* Court itself characterized as a “holding” its conclusion “that any assertion of state-court jurisdiction must satisfy the *International Shoe* standard.”¹⁰⁶ Moreover, *Shaffer*’s core principle—that jurisdiction over a thing is merely another way of describing jurisdiction over the interests of persons in that thing—applies with equal force to all *in rem* cases, irrespective of whether the cause of action is related to the property that forms the basis for jurisdiction. Indeed, recognizing this, the majority in *Shaffer* analyzed the probable effects of the holding on cases in which “claims to the property itself are the source of the underlying controversy.”¹⁰⁷ Even if *Shaffer*’s statement is dictum as it applies to *in rem* and *quasi in rem* Type 1 cases,¹⁰⁸ it

103. See *Cable News Network*, 162 F. Supp. 2d at 491 nn.19 & 20.

104. See *id.* at 491 n.19 and accompanying text.

105. See *Fleetboston Fin. Corp. v. Fleetbostonfinancial.com*, 138 F. Supp. 2d 121, 134 (D. Mass. 2001) (“The logic of *Shaffer*’s limitations would appear to extend to actions in which the existence of the property in the state cannot fairly be said to represent meaningful contacts between the forum state, the defendant, and the litigation. While this will generally be type II *quasi in rem* actions, it will not be so exclusively”); Paul Schiff Berman, *The Globalization of Jurisdiction: Cyberspace, Nation-States, and Community Definition*, 151 U. PA. L. REV. (forthcoming 2002) (manuscript at *, on file with authors) (noting that although “[s]ome courts read *Shaffer* narrowly,” dicta in the *Shaffer* majority opinion suggest “that the . . . Court intended its holding to extend . . . to all *in rem* jurisdiction,” so that “*Shaffer* may be taken to stand for the proposition that Congress cannot avoid the Constitutional requirements of fair play and substantial justice simply by calling an action *in rem*, and by limiting recovery to the *res* itself”).

106. *Shaffer v. Heitner*, 433 U.S. 186, 208 (1977) (“It appears . . . that jurisdiction over many types of actions which now are or might be brought *in rem* would not be affected by a holding that any assertion of state-court jurisdiction must satisfy the *International Shoe* standard.”).

107. *Id.* at 207. Although the Court then proceeded to focus on the application of the minimum contacts test to the assertion of *quasi in rem* Type 2 jurisdiction, that focus arose not only from the fact that *Shaffer* itself involved *quasi in rem* Type 2 jurisdiction, but also from the Court’s belief that “acceptance of the *International Shoe* test would most affect this class of cases.” *Id.* at 209.

108. It is not self-evident that the statements concerning these types of *in rem* jurisdiction should be viewed as dictum. See Michael C. Dorf, *Dicta and Article III*, 142 U. PA. L. REV. 1997, 2040 (1994) (arguing that the distinction between holding and dictum should turn on the rationale articulated by the court, rather than simply on “facts and outcomes”).

is carefully considered dictum. When the Supreme Court articulates a general principle of constitutional doctrine, and especially when the Court takes pains, as it did in *Shaffer*, to assess the implications of that principle for contexts other than that of the case at hand, lower courts should be slow to brush the principle aside as mere “dictum.”¹⁰⁹

The *CNN* court acknowledged that “there is language in *Shaffer* that could be read to require that *all in rem* cases conform to the same due process constraints as *in personam* cases,” but asserted that “the greater weight of (and more persuasive) authority holds that the language of *Shaffer* requires minimum contacts only for quasi *in rem* II-type cases.”¹¹⁰ The authorities referred to, however, are either inapposite or erroneous. For example, the court cites Justice Scalia’s opinion in *Burnham*, a case in which the Court upheld a state court’s assertion of *in personam* jurisdiction over a defendant who was personally served with process while physically present in the forum state.¹¹¹ In the portion of the *Burnham* opinion cited by the *CNN* court, Justice Scalia, joined by Chief Justice

109. It is a truism that dictum does not constitute binding precedent. As Chief Justice Marshall stated, “general expressions, in every opinion, are to be taken in connection with the case in which those expressions are used. If they go beyond the case, they may be respected, but ought not to control the judgment in a subsequent suit when the very point is presented for decision.” *Cohens v. Virginia*, 19 U.S. 264, 399 (1821). Nonetheless, the lower federal courts customarily accord substantial weight to Supreme Court dictum that was carefully considered by the Court. *See, e.g.,* *Guidry v. Sheet Metal Wkrs. Int’l Assoc., Local No. 9*, 10 F.3d 700, 706 n.3 (10th Cir. 1993) (“If [Supreme Court] dicta had clearly resolved the issue in this appeal we would be bound by that decision.”); *McCoy v. Mass. Inst. of Tech.*, 950 F.2d 13, 19 (1st Cir. 1991) (“[F]ederal appellate courts are bound by the Supreme Court’s considered dicta almost as firmly as by the Court’s outright holdings, particularly when . . . a dictum is of recent vintage and not enfeebled by any subsequent statement.”); *Nichol v. Pullman Standard, Inc.*, 889 F.2d 115, 120 n.8 (7th Cir. 1989) (stating that the Court of Appeals “should respect considered Supreme Court dicta”); *United States v. Underwood*, 717 F.2d 482, 486 (9th Cir. 1983) (en banc) (“The Supreme Court cannot limit its constitutional adjudication to the narrow facts before it in a particular case. In the decision of individual cases the Court must and regularly does establish guidelines to govern a variety of situations related to that presented in the immediate case. The system could not function if lower courts were free to disregard such guidelines whenever they did not precisely match the facts of the case in which the guidelines were announced.”); *Jordon v. Gilligan*, 500 F.2d 701, 707 (6th Cir. 1974) (“Even the Court’s dicta is [sic] of persuasive precedential value.”); *Fouts v. Md. Cas. Co.*, 30 F.2d 357, 359 (4th Cir. 1929) (“[D]icta of the United States Supreme Court should be very persuasive.”); *cf. United States v. Bell*, 524 F.2d 202, 206 (2d Cir. 1975) (stating that “considered or ‘judicial dictum’ where the Court . . . is providing a construction of a statute to guide the future conduct of inferior courts,” though not binding, “must be given considerable weight”).

110. *Cable News Network*, 162 F. Supp. 2d at 490-91.

111. *See Burnham*, 495 U.S. 604 (1990)

Rehnquist and Justice Kennedy, argued that the *International Shoe* minimum contacts analysis need not be applied to the *Burnham* defendant, and distinguished *Shaffer* on the basis that it involved an “absent defendant,” rather than one who is physically present within the forum state at the time of service of process. “The logic of *Shaffer*’s holding—which places all suits against absent nonresidents on the same constitutional footing, regardless of whether a separate Latin label is attached to one particular basis of contact—does not compel the conclusion that physically present defendants must be treated identically to absent ones.”¹¹² Notably, Justice Scalia’s description of *Shaffer*’s “logic” actually supports *Shaffer*’s application to “all suits against absent defendants”—including ACPA *in rem* actions.¹¹³

It is true that Justice Scalia also argued that the result in *Burnham* should turn on the historical pedigree of “tag” jurisdiction, and that this reliance on tradition contradicts the Court’s approach in *Shaffer*, which applied minimum contacts analysis to *in rem* jurisdiction despite its “ancient form.”¹¹⁴ Justice Scalia’s reasoning in *Burnham*, however, would not validate the use of the ACPA’s *in rem* procedure, because as he acknowledged, “[f]or new procedures, hitherto unknown,” the due process inquiry is guided by *International Shoe*.¹¹⁵ Although *in rem* jurisdiction has a long historical pedigree, the same cannot be said of the application of *in rem* jurisdiction to Internet domain names. Rather, the ACPA’s attempt to use domain names and Internet contacts as a basis for jurisdiction is an indisputably modern construct. Justice Scalia’s appeal to tradition in *Burnham* thus provides no support for the constitutionality of the ACPA’s *in rem* provisions. In any event, no part of Justice Scalia’s opinion in *Burnham* gained the votes of a majority of the Justices.

Of the other authorities cited by the *CNN* court, the only sources that directly support *CNN*’s holding¹¹⁶ are one district court case and one law

112. *Id.* at 621.

113. ACPA *in rem* suits involve “absent defendants,” because in all such suits—other than cases involving anonymous registrants—the registrant will be located outside the forum. Accordingly, Justice Scalia’s discussion in *Burnham*, which turned on the presence of the defendant within the forum state, is by its own terms inapposite.

114. *Burnham*, 495 U.S. at 622 (Scalia, J., joined by Rehnquist, C.J., and Kennedy, J.).

115. *Id.*

116. The *CNN* court cites four other authorities which are inapposite.

In *Amoco Overseas Oil Co. v. Compagnie Nationale Algerienne de Navigation*, 605 F.2d 648 (2d Cir. 1979), the court upheld the assertion of *quasi in rem* Type 1 jurisdiction because the attached funds were payments that the plaintiff had made to the defendant with respect to the contract at issue in the case, and the payments were in the

review article.¹¹⁷ In *Caesars World, Inc. v. Caesars-palace.com*,¹¹⁸ the court rejected the argument that the minimum contacts requirement applies to the assertion of *in rem* jurisdiction under the ACPA, reasoning that *Shaffer* is limited to cases in which the cause of action “is unrelated to the property which is located in the forum state.”¹¹⁹ This argument, which is merely a restatement of the “*Shaffer* as dictum” argument, fails for the

relevant New York bank account pursuant to the contract. *See id.* at 655. The court also noted that the doctrine of jurisdiction by necessity supported the exercise of jurisdiction because there was no indication that the defendant would be amenable to suit anywhere else in the world. *See id.* at 655. Finally, the court reasoned that “jurisdiction by attachment of property should be accorded special deference in the admiralty context.” *Id.*

In *Schreiber v. Allis-Chalmers Corp.*, 611 F.2d 790 (10th Cir. 1980), a case involving *in personam* jurisdiction, the court held that *Shaffer* did not undermine the holding of *Perkins v. Benguet Consolidated Mining Co.*, 342 U.S. 437 (1952). In *Perkins*, the Court had held that a corporation that carries on continuous and systematic activities within a state can be sued in the courts of that state on a claim unrelated to the corporation’s in-state activities. *See Perkins*, 342 U.S. at 447-48. Far from being at odds with the *International Shoe* minimum contacts requirement, *Perkins* articulates the nature of that requirement in cases of general jurisdiction. *Shaffer*’s statement that the *International Shoe* analysis governs all state court assertions of jurisdiction does not undermine *Perkins*. Thus, the court’s statement in *Schreiber* that “*Shaffer* is distinguishable,” *Schreiber*, 611 F.2d at 793, is both correct and utterly irrelevant to the question presented by the ACPA.

In *John N. John, Jr., Inc. v. Brahma Petroleum Corp.*, 699 F. Supp. 2d 1220 (W.D. La. 1988), the court found *Shaffer* inapposite because “the property attached is the very subject of the cause of action. *Id.* at 1222. Since the property in question was tangible and the plaintiff shipped it into the jurisdiction on the defendant’s behalf, *see id.* at 1220, the property’s presence within the forum might well be seen to provide contacts between the defendant and the forum. Moreover, the court found that “sufficient contacts” existed because the defendant had purposefully availed itself of the privilege of conducting activities within the state, by contracting to do business within the state. *Id.* at 1222.

Finally, the *CNN* court cites a law review article that does not support the court’s argument. *See* Walter W. Heiser, A “*Minimum Interest*” Approach to Personal Jurisdiction, 35 WAKE FOREST L. REV. 915, 967-68 (2000) (noting that “in *Shaffer*, the Supreme Court concluded that the minimum contacts standard was applicable to all assertions of jurisdiction,” and proposing a “minimum interests test” that “would produce the same due process results in property-based actions as those identified by the *Shaffer* Court”).

117. *See* *Caesars World, Inc. v. Caesars-palace.com*, 112 F. Supp. 2d 502 (E.D. Va. 2000); Thomas R. Lee, *In Rem Jurisdiction in Cyberspace*, 75 WASH. L. REV. 97, 137-40 (2000).

118. 112 F. Supp. 2d 502 (E.D. Va. 2000).

119. *Id.* at 504. Despite its assertion that “it is unnecessary for minimum contacts to meet personal jurisdiction standards,” the *Caesars World* court proceeded to address the question of minimum contacts, and concluded that “the fact of domain name registration with Network Solutions, Inc., in Virginia supplies” such contacts. *Id.*

reasons discussed above. The law review article, likewise, relies mainly on the contention that Justice Scalia's *Burnham* opinion weakens the force of *Shaffer*¹²⁰—an assertion which is unpersuasive for the above reasons.¹²¹

There remain two possible arguments not yet advanced by the courts that have rejected *Shaffer*'s application to ACPA cases: first, that *Shaffer* by its terms applies only to assertions of jurisdiction by state, not federal courts, and second, that even if *Shaffer* ordinarily would require minimum contacts for ACPA *in rem* suits, such suits should be allowed to proceed under the doctrine of jurisdiction by necessity.¹²² Neither argument, however, is likely to succeed.

Admittedly, the limitations imposed by the due process clause of the Fifth Amendment on the exercise of territorial jurisdiction by federal courts differ in some respects from the limitations imposed on state courts through the due process clause of the Fourteenth Amendment. For instance, it appears likely that the Fifth Amendment due process analysis can in appropriate cases look to an absent defendant's contacts with the United States as a whole, rather than just to the defendant's contacts with the state in which the federal court sits.¹²³ However, in other respects the doctrines of federal-court territorial jurisdiction draw heavily upon the due process analysis developed under the Fourteenth Amendment;¹²⁴ and though the *Shaffer* Court referred only to state-court jurisdiction, the logic of the opinion supports a similar analysis with respect to federal-court jurisdiction as well. Accordingly, *Shaffer*'s requirement that the defendant have minimum contacts with the forum should apply equally to federal court assertions of *in rem* jurisdiction under the ACPA, although the minimum contacts analysis would focus on the registrant's contacts with the United States as a whole.

The doctrine of jurisdiction by necessity also does not validate the ACPA's *in rem* provision. That doctrine has been argued to support a

120. See Lee, *supra* note 117, 137-40. Lee also seems to suggest that *Shaffer* itself does not require minimum contacts analysis in *in rem* or *quasi in rem* Type 1 proceedings, and he asserts that in any event the registration of a domain name with NSI in Herndon, Virginia provides the requisite minimum contacts for an ACPA suit. See *id.* at 141-43.

121. See *supra* text accompanying notes 111-115.

122. See Fanning, *supra* note 44, at 1923-26 (discussing application to ACPA of doctrine of jurisdiction by necessity); see also Grotto, *supra* note 48, at 26-28.

123. See *supra* note 40.

124. For example, courts analyzing the scope of federal-court *in personam* jurisdiction under the Fifth Amendment due process clause use the *International Shoe* minimum contacts analysis. See, e.g., *Pinker v. Roche Holdings Ltd.*, 292 F.3d 361, 368-69 (3d Cir. 2002).

court's exercise of jurisdiction over defendants, despite the defendants' lack of minimum contacts with the forum, if no other court would have territorial jurisdiction over the defendants.¹²⁵ For example, the Court in *Shaffer* noted, but did not consider, "the question whether the presence of a defendant's property in a State is a sufficient basis for jurisdiction when no other forum is available to the plaintiff."¹²⁶ The Court subsequently indicated, however, that such a theory is unavailable in cases where the defendant is subject to suit in a foreign court.¹²⁷ The courts of the country where a domain name registrant is located presumably will have territorial jurisdiction over claims against that registrant.¹²⁸ Moreover, domain name registrants are subject to nonjudicial proceedings under ICANN's Uniform Domain Name Dispute Resolution Policy, and those proceedings provide a successful claimant the same remedies as the ACPA's *in rem* provi-

125. Commentators have argued that *Mullane v. Central Hanover Bank & Trust Co.*, 339 U.S. 306 (1950), provides support for the doctrine of jurisdiction by necessity. In *Mullane*, the Supreme Court held that the New York state courts had power "to determine the interests of all claimants, resident or nonresident," in a trust created under New York law. *Id.* at 313. The Court emphasized "the interest of each state in providing means to close trusts that exist by the grace of its laws and are administered under the supervision of its courts." *Id.* Commentators have adduced this reasoning as support for the argument that "defendants who do not have contacts with the state [should] be subject to the jurisdiction of the state for purposes of settling their claims" in cases involving absent trust beneficiaries or claimants to land located within the state. LARRY L. TEPLY & RALPH U. WHITTEN, *CIVIL PROCEDURE* 278-79 (2d ed. 2000). However, such considerations do not justify the assertion of jurisdiction by necessity in litigation under the ACPA. Although the U.S. played a dominant role in the formation of the Internet, domain names are not creatures of United States law in the way that the trust in *Mullane* was a creature of New York state law. Nor does the federal government supervise the administration of the domain name system, as the New York courts supervised the administration of New York trusts: rather, the administration of the domain name system is currently supervised by ICANN. Moreover, as noted in the text, ICANN has its own mechanism for resolving domain name disputes, so that an assertion of jurisdiction by U.S. courts probably would not be considered "necessary."

126. *Shaffer v. Heitner*, 433 U.S. 186, 211 n.37 (1977).

127. In *Helicopteros Nacionales de Colombia, S.A.*, the Court rejected the plaintiffs' jurisdiction by necessity argument on the ground that the plaintiffs "failed to carry their burden of showing that all three defendants could not be sued together in a single forum . . . for example, . . . in either Colombia or Peru." *Helicopteros Nacionales de Colombia, S.A. v. Hall*, 466 U.S. 408, 419 n.13 (1984).

128. Admittedly, the fact that a foreign court would have territorial jurisdiction over the registrant does not necessarily mean that the foreign court would also have subject matter jurisdiction over an ACPA claim against that registrant, or that foreign law would provide any similar remedy. However, these questions are academic, because the availability of the UDRP procedures should remove any argument that jurisdiction by necessity validates the ACPA's *in rem* provisions. *See infra* note 129.

sions.¹²⁹ Accordingly, the doctrine of jurisdiction by necessity seems unlikely to validate those provisions.

In sum, contacts between a registrant and the United States will suffice for *in rem* jurisdiction only if the contacts are extensive enough to support *in personam* jurisdiction as well. If the requisite minimum contacts exist, *in personam* jurisdiction will be available, and thus § 1125(d)(2)(A)(ii)(I) will not apply. As a result, the only cases in which § 1125(d)(2)(A)(ii)(I) provides a basis for *in rem* jurisdiction are those in which the exercise of jurisdiction would violate due process. Once the courts recognize this constitutional problem, the ACPA's *in rem* provision will be of no use to a mark owner seeking to sue a foreign domain name registrant who lacks minimum contacts with the United States. Indeed, the provision already is of little use, as most mark owners choose to proceed under the ICANN Uniform Domain Name Dispute Resolution Policy instead of suing in federal court under the ACPA.¹³⁰ Thus, the significance of the *in rem* provision lies mainly in Congress' aggressive assertion of jurisdiction over domain name disputes involving foreign registrants, and in Congress' attempt to ground the exercise of jurisdiction in the purported "presence" of the domain name within the United States, which in turn depends on the location of the dealer or administrator within the United States. Similarly, as we discuss below, the strength of the United States' claim to prescriptive jurisdiction over international domain name disputes depends largely on the present geographical location of the registry in charge of administering the key top-level domains. But while the *in rem* provision's use of dealer and administrator locations is of conceptual rather than practical interest, as the *in rem* provision is unconstitutional according to our analysis, the significance of geography in the prescriptive jurisdiction analysis has real-world consequences.

129. See ICANN, *Uniform Domain Name Dispute Resolution Policy*, §§ 3(c), 4(i), at <http://www.icann.org/dndr/udrp/policy.htm> (last visited May 15, 2002) [hereinafter UDRP] (stating that the remedies available in UDRP proceeding are the cancellation or transfer of the domain name). Admittedly, there may be cases where a mark holder would not be able to proceed under the UDRP; while "[t]he ACPA applies to registration, trafficking, or use of a domain name, . . . the UDRP requires both registration and use." David E. Sorkin, *Judicial Review of ICANN Domain Name Dispute Decisions*, 18 SANTA CLARA COMPUTER & HIGH TECH. L.J. 35, 50 (2001) (citing ICANN Uniform Domain Name Dispute Resolution Policy § 4(a)(iii)). It seems likely, however, that in most instances a mark owner with an ACPA claim could also proceed under the UDRP.

130. See Sherry, *supra* note 4, at 355 (noting that the UDRP "is apparently much more popular with trademark owners than is the ACPA: there are only about forty reported ACPA cases, but there have been over 4,000 arbitrations under the UDRP").

III. NAMING JURISDICTION: REALSPACE SOVEREIGNS & DOMAIN NAMES

This Article now turns from the adjudicative to the legislative, and from the constitutional to the strategic. Part III considers the implications of the present far-reaching Congressional approach to legislative jurisdiction over domain name disputes, noting that this U.S.-centric view in this new economic structure would not be in the long-term interests of either the global electronic commerce community as a whole, or the U.S. participants in particular.¹³¹

A. Distributed Hierarchy: The Control of Domain Names

As presently constituted,¹³² the domain name system¹³³ is nothing more (and nothing less) than a distributed hierarchical database—a simple list of names and their corresponding IP addresses.¹³⁴ No single computer contains the entire database; the computers that do contain the database (called “DNS servers”) are located in myriad locations worldwide, both physically and logically. Yet the hierarchical nature of the system means

131. See Sherry, *supra* note 4. Sherry argues that the ACPA is potentially ill-advised for several reasons: (1) the inherent confusion resulting from new statutory enactments, *id.* at 342-43; (2) possible First Amendment concerns as a result of confusion in implementing the new provisions, *id.* at 343-48; (3) the ACPA’s limited utility in the face of changing technology, *id.* at 347-50; and (4) its limited utility in light of the expansion of the DNS namespace (by adding TLDs) and the dispute resolution provided by ICANN, *id.* at 354. While we generally agree with Sherry’s suggestion that the ACPA is troubling, only reason (4) describes a concern particular to the ACPA—as opposed to concerns about legislation more generally. In addition, the expansion of the DNS namespace is unlikely to diminish domain name disputes. *Cf. id.* Instead, the expansion of the namespace may actually generate *more* disputes, because the truly scarce (and thus valuable) resource involved is web surfers’ time and attention, not domain names per se. Note, for example, the drop-off in renewal rates for domain names starting in summer 2001. See, e.g., Gwendolyn Mariano, *It’s a Smaller World Wide Web After All*, CNET NEWS.COM, at <http://news.com.com/2100-1023-801088.html?legacy=cnet> (Jan. 2, 2002).

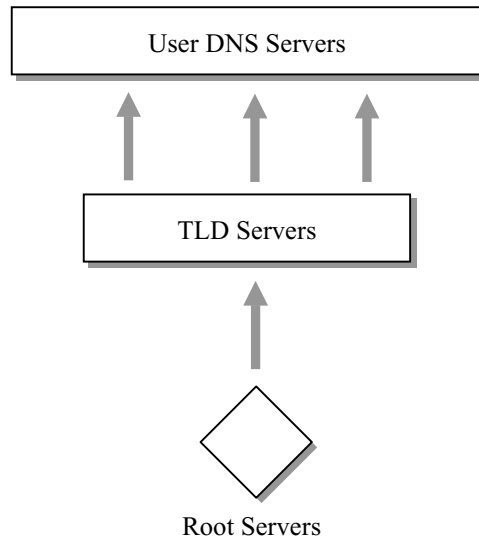
132. circa summer 2002.

133. We assume that readers have a working understanding of the domain name system. Brief, non-technical introductions to the domain name system can be found in a variety of places, both online and off. See, e.g., Radin & Wagner, *supra* note 1, at 1303; Diane Cabell, *Name Conflicts*, in LEARNING CYBERLAW IN CYBERSPACE (1999), at <http://www.cyberspacelaw.org/cabell/index.html>.

134. Internet communications are “packet-based,” meaning that transmissions are separated into small data units, wrapped in addressing (and other) information, and sent across the Internet. In order to reach their destination, packets must be addressed with the appropriate “IP address”—a unique number corresponding to each machine connected to the Internet. When an Internet user requests a page using a domain name (say, for example, *www.yahoo.com*), the domain name system provides the correct IP address.

that some parts of the database are more important than others. For the purpose of illustrating this point, the Article will consider the system as having three distinct levels: the “root” level, the “TLD” level, and the “user” level, as shown in Figure 1.

Figure 1: Domain Name Hierarchy



The user DNS servers respond to individual groups of users or machines—for example, subscribers to a particular ISP or those within a corporate or university network. That is, the user DNS servers for the University of Pennsylvania contain the addressing information for the machines relating to *upenn.edu*, the University of Pennsylvania’s assigned domain name, and serve DNS queries sent by these machines.¹³⁵

The TLD servers hold the addressing information for the user DNS servers about an entire top-level-domain. Here, the *.edu* TLD server would contain (among others) the addressing information for the *upenn.edu* DNS server.¹³⁶

135. For example, the IP address for the machine with the name *law.upenn.edu* is 130.91.144.200. This information is maintained by the Penn DNS servers, the primary one of which is located at 128.91.254.4.

136. This information is easily found by conducting a “whois” query on the appropriate database. A web-based user interface to one such database can be found at <http://www.netsol.com/cgi-bin/whois/whois>. The whois record for *upenn.edu* contains the following DNS data (last visited July 21, 2002):

The “root servers” hold addressing information relating to the TLD servers, such as the location of the *.edu* TLD server.¹³⁷ Because DNS requests for out-of-network resources (say a user in the Penn network requests the address corresponding to *www.yahoo.com*) will in theory¹³⁸ require requests to each level of the DNS system described above, it becomes apparent that the hierarchy of the system determines the number of requests to which the various servers must respond. That is, the *.edu* TLD server will (absent caching) be involved in all out-of-network requests involving the *.edu* domain, and the root server will be involved in essentially all DNS requests.

This distributed hierarchy, then, has unquestionable regulatory significance: involvement in DNS requests means an ability to exert power, at least over the immediately higher (in our Figure 1) DNS level. Indeed, the regulatory significance of the DNS hierarchy is what ICANN, the present administrator of the public root server system, uses to ensure universal adoption of the Uniform Dispute Resolution Policy (UDRP). Because ICANN controls the root servers, it determines the status of the TLD servers. Further, ICANN can essentially exert full regulatory control over the domain name system by mandating that any TLD administration applicant either: (a) agree to require its domain name registrants to consent to the provisions of the UDRP; or, (b) seek ICANN’s specific approval for any alterations from the UDRP.¹³⁹

Domain servers in listed order:

<i>noc3.dccs.upenn.edu</i>	128.91.254.4
<i>noc2.dccs.upenn.edu</i>	128.91.254.1
<i>dns1.udel.edu</i>	128.175.13.16
<i>dns2.udel.edu</i>	128.175.13.17

137. As of Summer 2002, the TLD servers for *.edu* were:

a.root-servers.net.
h.root-servers.net.
c.root-servers.net.
g.root-servers.net.
f.root-servers.net.
b.root-servers.net.
i.root-servers.net.
e.root-servers.net.
d.root-servers.net.

138. As a practical matter, local DNS servers often “cache” recent requests.

139. See ICANN, *New TLD Application Process Overview*, at <http://www.icann.org/tlds/application-process-03aug00.htm> (Aug. 3, 2000) (“For unsponsored TLDs, ICANN will have policy-formulation responsibility for the new TLD and the policies will initially be generally defined as the existing policies for *.com*, *.net*, and *.org* . . .”). Of course ICANN can (and does) delegate some policymaking authority to TLD operators, most prominently in the case of a “sponsored” TLD—where ICANN delegates some policy-

B. Mapping Control: Geography and the Domain Name System

Thus far we have described what might be called “logical” control over the domain name system: the technological ability to exert power by virtue of administration of the important components of the DNS system.¹⁴⁰ And yet while this alone raises a number of interesting questions,¹⁴¹ we want to raise a slightly different set of issues: those surrounding the realspace sovereigns’ approach to regulation of the domain name system.

The domain name system unquestionably exists in realspace. It is merely a collection of computer hardware and software (and people who administer and maintain them); each of these constituent components is “real” in any sense of the word, and can be found at various geographic points throughout the world. As such, it is possible to map the domain name system onto realspace, where concepts like borders and sovereignty are crucially important (at least from a regulatory perspective). Thus, the resulting map of the distributed hierarchy of the domain name system has what might be called “territorial” regulatory significance. It is to the implications of this territorial regulatory significance that we now turn.

C. The Significance of Territorial Regulation

Territorial significance plays out in at least two ways. First, as an international legal matter, the geographic location of the domain name system may be widely recognized as supporting a strong claim to prescriptive (or legislative) jurisdiction over various disputes that arise relating to the system. Second, even if a prescriptive jurisdictional claim is not widely recognized, the geographic location of the domain name system may

making authority to the sponsoring organization. See ICANN, *New TLD Program*, at <http://www.icann.org/tlds/> (last updated July 18, 2002) (“Generally speaking, an ‘unsponsored’ TLD operates under policies established by the global Internet community directly through the ICANN process, while a ‘sponsored’ TLD is a specialized TLD that has a sponsor representing the narrower community that is most affected by the TLD. The sponsor thus carries out delegated policy-formulation responsibilities over many matters concerning the TLD”). Nonetheless, the control (provided by administration of the root server system) is there.

140. This general view—the correlation between control over technology and policymaking—is a common theme in recent “cyberlaw” scholarship. For an excellent overview, see LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999).

141. Many issues surround the ICANN’s establishment as the authoritative body for the present public root server system. See generally Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 *DUKE L.J.* 187 (2000); Milton Mueller, *supra* note 1, at 477-500. See also the excellent material relating to ICANN collected by ICANN Watch, a watchdog organization, at <http://www.icannwatch.org/>.

nonetheless determine whether (and to what extent) realspace sovereigns can regulate the system. However, the geographic location of the domain name system is essentially arbitrary. That is, while the logical regulatory significance of the hierarchy of the domain name system is inherent in the technology, the geography is not. Put simply, the root servers could move, taking with them the territorial regulatory significance. Furthermore, a realspace sovereign¹⁴² set on increasing the present regulatory authority available to itself—either recognized under international law or *de facto*—could alter the geographic facts, by creating additional root servers and requiring their use. This observation suggests a reconsideration of the aims of present regulation of the domain name system by realspace sovereigns, in particular the United States' approach embodied in the ACPA. We take up this final point in Section IV below, while first discussing the dual implications of territoriality and the domain name system.

1. *Recognized Authority: Prescriptive Jurisdiction & Domain Names*

We turn first (and briefly) to the significance of prescriptive jurisdictional claims.¹⁴³

a) The Principles of Prescriptive Jurisdiction

As a general matter, international law widely recognizes at least two bases of prescriptive jurisdiction:¹⁴⁴ the principles of territoriality¹⁴⁵ and nationality.¹⁴⁶

142. Or set of sovereigns, of course. For example, a group of sovereigns, perhaps organized regionally or culturally, might establish and mandate its own root server system, with shared or delegated policy authority.

143. This subsection is not intended as a comprehensive description of the issues surrounding prescriptive jurisdiction. Rather, our goal is to provide context to support our argument that the geography of the domain system will have realspace regulatory implications.

144. We use the terms “legislative jurisdiction” and “prescriptive jurisdiction” interchangeably here, given the context in which we write: the analysis of the scope of Congressional authority to legislate on the matter of domain names. *See, e.g.*, RESTATEMENT OF THE LAW, THIRD, FOREIGN RELATIONS LAW OF THE UNITED STATES, § 401(a) (1987) [hereinafter RESTATEMENT].

145. *See* RESTATEMENT, *supra* note 144, § 402(1); BARRY CARTER & PHILIP TRIMBLE, INTERNATIONAL LAW 728-733 (2d ed. 1995).

146. RESTATEMENT, *supra* note 144, § 402(2); CARTER & TRIMBLE, *supra* note 145, at 728. Other recognized principles of prescriptive jurisdiction include: (a) the “protective” principle; (b) the “passive personality” principle; and, (c) the “universality” principle. *See* CARTER & TRIMBLE, *supra* note 145, at 728-733. Each of these, while established in international law, is applied in specific circumstances unlikely to implicate disputes over domain names. *See, e.g.*, RESTATEMENT, *supra* note 144, § 402 cmt. f (de-

“Territoriality” refers to the notion that a sovereign state has a claim to prescribe conduct within its physical territory,¹⁴⁷ and the “status of persons, or interests in things, present within its territory.”¹⁴⁸ Although some commentators have suggested that the territorial principle should be the complete basis for asserting prescriptive jurisdiction,¹⁴⁹ the modern view recognizes that the territorial principle is both under- and over-inclusive: it fails to account for cases in which states have a legitimate claim to prescriptive jurisdiction, and must yield in certain circumstances to extraterritorial principles that have developed to address the under-inclusiveness.¹⁵⁰ Indeed, some commentators question the continuing viability of the territorial principle in the context of the international economic system and the United States’ role in the world economy.¹⁵¹

The principle of “nationality” is also rooted in traditional notions of state sovereignty, though in this case the “sovereignty” refers to the state’s citizens or subjects, rather than the state’s physical territory.¹⁵² As typically stated, nationality refers to the right to prescribe “the activities, inter-

scribing protective principle); RESTATEMENT, *supra* note 144, § 402 cmt. g (describing passive personality); RESTATEMENT, *supra* note 144, § 404 (describing universality). *See generally* CARTER & TRIMBLE, *supra* note 145, at 777-89; MARK JANIS, INTRODUCTION TO INTERNATIONAL LAW 329-330 (2d ed. 1993); J.G. STARKE, INTRODUCTION TO INTERNATIONAL LAW 225-226 (9th ed. 1984).

147. “It is an essential attribute of the sovereignty of this realm, as of all sovereign independent States, that it should possess jurisdiction over all persons and things within its territorial limits and in all causes civil and criminal arising within these limits.” J.G. STARKE, *supra* note 146, at 194 (quoting Lord Macmillan). “The principles of the territorial sovereignty and the jurisdiction of states have been two of the most fundamental principles of international law.” JANIS, *supra* note 146, at 322-23.

148. RESTATEMENT, *supra* note 144, § 402(1)(b).

149. “[T]he character of an act as lawful or unlawful must be determined wholly by the law of the country where the act is done. . . . For another jurisdiction, if it should happen to lay hold of the actor, to treat him according to its own notions rather than those of the place where he did the acts, not only would be unjust, but would be an interference with the authority of another sovereign, contrary to the comity of nations, which the other state concerned justly might resent.” *Am. Banana Co. v. United Fruit Co.*, 213 U.S. 347, 356-357 (1909) (Holmes, J.).

150. This recognition, however, is not without controversy. *See infra* note 160 and accompanying text.

151. *See generally* Jonathan R. Turley, “When in Rome”: *Multinational Misconduct and the Presumption Against Extraterritoriality*, 84 NW. U. L. REV. 598 (1990). *See also* Stephen B. Burbank, *The World in Our Courts*, 89 MICH. L. REV. 1456, 1464 (1991) (noting the difficulty of currently-justifying a presumption against extraterritoriality).

152. *See, e.g.*, *Blackmer v. United States*, 284 U.S. 421, 437 (1932) (“Nor can it be doubted that the United States possesses the power inherent in sovereignty to require the return to this country of a citizen, resident elsewhere, whenever the public interest requires it, and to penalize him in the case of refusal”).

ests, status, or relations of its nationals outside as well as within its territory.”¹⁵³

While the invocation of basic international legal principles upon which sovereigns may prescribe behavior at least *implies* limits upon the scope of such jurisdictional claims,¹⁵⁴ the modern reality is rather different. The trend since early in the twentieth century, particularly with respect to the United States, has been towards “increasingly expansive” views of prescriptive jurisdiction.¹⁵⁵ For example, the *Restatement (Third) of Foreign Relations Law of the United States* suggests that prescriptive jurisdiction clearly exists with respect to any activities that have “substantial effect[s]” in the United States.¹⁵⁶ The U.S. Supreme Court has vacillated confusingly on this issue,¹⁵⁷ but it is nonetheless clear that, to the extent that they exist at all,¹⁵⁸ limitations on prescriptive jurisdiction in this context are largely a matter of international political considerations.¹⁵⁹

The generally hortatory nature of international legal limitations on prescriptive jurisdiction paradoxically illuminates the importance of such assertions that are based largely on the traditionally-accepted bases of terri-

153. RESTATEMENT, *supra* note 144, § 402(2).

154. *See, e.g.*, GARY B. BORN, INTERNATIONAL CIVIL LITIGATION IN UNITED STATES COURTS 493 (3d ed. 1996).

155. *Id.* at 501. *See also* RESTATEMENT, *supra* note 144, pt. IV, ch. 1, introductory note; Burbank, *supra* note 151, at 1460-61 (noting the parallel nature of the “loosening of mandatory controls on the exercise of lawmaking power” in both domestic and international cases in United States courts).

156. RESTATEMENT, *supra* note 144, § 402(1)(c). Such extraterritorial application is, according to the RESTATEMENT § 403, limited by what Professor Burbank describes as “the jurisdictional ‘rule of reason’.” Burbank, *supra* note 151, at 1464.

157. *Compare* EEOC v. Arabian Am. Oil Co. (ARAMCO), 499 U.S. 244, 248 (1991) (invoking a presumption against extraterritorial application of laws in refusing to extend Title VII to extraterritorial application), *with* Hartford Fire Ins. Co. v. California, 509 U.S. 764, 795-99 (1993) (extending application of Sherman Act to extraterritorial conduct by virtue of effects in the United States).

158. *See* BORN, *supra* note 154, at 510-511 (noting that it is “well established” that U.S. laws may violate customary international law and yet be enforceable—at least in U.S. courts); *United States v. Alcoa*, 148 F.2d 416, 443 (2d Cir. 1945). *See also* Burbank, *supra* note 151, at 1463 (noting the weakness of international legal limits on prescriptive jurisdiction).

159. As a practical matter such issues arise in the U.S. context because (and when) Congress has failed to specify the scope of a statute’s jurisdiction. *See* Burbank, *supra* note 151, at 1463; BORN, *supra* note 154, at 510-11. Thus questions of “limits” on U.S. legislative jurisdiction are analyzed chiefly through the lens of statutory interpretation, and international principles of jurisdiction are implemented as presumptions in favor of one statutory construction versus another. *See, e.g.*, ARAMCO, 499 U.S. at 248; *Hartford Fire*, 509 U.S. at 795-99. *See generally* Burbank, *supra* note 151, at 1463-65.

itoriality and nationality. That is, recent history demonstrates that the expansion of (at least) U.S. prescriptive jurisdiction beyond these boundaries generates substantial international controversy¹⁶⁰; accordingly, where such assertions of jurisdiction comport with territoriality and nationality, we can expect—at minimum—less international dispute.

b) Prescribing Domain Names

If territoriality and nationality are important bases of international prescriptive jurisdiction—at least in a political economy, if not practical, sense—then it follows that the interaction between these principles and the geographic and technologic realities of the domain name system will have regulatory significance. Because we are especially interested in the United States' present regulatory approach (*i.e.*, the ACPA, especially the *in rem* provisions¹⁶¹), and because the current geographic facts of the domain name system are remarkably U.S.-based, this discussion will necessarily be heavily U.S.-focused. (Note that in the particular context in which Congress has presently acted—legislating for domain name disputes as they relate to trademarks—there will be one or more registered U.S. trademarks involved.¹⁶² For purposes of our argument, however, we set aside the international trademark issues.¹⁶³)

160. One commentator notes more than fifteen “blocking statutes” passed by other nations in response to extraterritorial application of the United States antitrust laws. See Joseph P. Griffin, *United States Antitrust Laws and Transnational Business Transactions: An Introduction*, 21 INT'L LAW. 307, 308-309 (1987). See also BORN, *supra* note 154, at 584-587 (noting “protests” against extraterritorial application); Thomas C. Fischer, *Case Two: Extraterritorial Application of United States Law Against United States and Alien Defendants (Sherman Act)*, 29 NEW ENG. L. REV. 577, 586 & n.38 (1995).

161. 15 U.S.C. § 1125(d) (2000).

162. See 15 U.S.C. § 1125(d) (allowing claims based on infringement of a “mark”). Federal trademarks are registered by application to the United States Patent and Trademark Office, pursuant to 15 U.S.C. §§ 1051-72.

163. It is an understatement to say that the application of trademark law to the online context presents difficult international law issues. Dinwoodie has noted that the continued expansive interpretation of national trademarks in the online context threatens to “reduce” trademark rights to “their most destructive form”—the mutual ability to block (or at least interfere with) the online use of marks recognized in other countries. Graeme Dinwoodie, *Private International Aspects of the Protection of Trademarks* (Jan. 19, 2001) (WIPO Doc. No. WIPO/PIL/01/4), available at http://wipo.int/pilforum/en/documents/pdf/pil_01_4.pdf. Accordingly, the World Intellectual Property Organization (WIPO) approved in Fall 2001 a resolution calling for a more flexible recognition of “use” of trademarks on the Internet, one that would provide protections from liability for legitimate users of marks who disclaimed the intent to conduct commerce in a particular country. See WIPO, *Joint Recommendation Concerning Provisions on the Protection of*

Our analysis suggests that the present form of the domain name system offers the United States a strong claim of prescriptive jurisdiction along several dimensions of the analysis. Maintaining our focus on the bases of nationality and territoriality, we note the following important factors involved in this analysis:

Citizenship. The citizenship of the parties to the dispute obviously invokes the nationality principle, supporting the prescriptive claim for any corresponding sovereign.

TLD Server Location. Because almost all domain name disputes will arise in the context of second-level domain names, the most direct authority over and responsibility for these domain names will rest with the operation of the relevant TLD server, thereby supporting the prescriptive claim of the sovereign in which that server is located.¹⁶⁴

Root Server Location. As noted above, control over the root server allows at least some level of control over the entire system, though at times this support will be indirect.¹⁶⁵ As such, the geographic location of the root server will support—though to a lesser degree than the location of the TLD server—the assertion of prescriptive jurisdiction based on the principle of territoriality.

Focusing on the United States, we note that the primary root server (*a.root-servers.net*) is located within the United States.¹⁶⁶ The array of possibilities for prescriptive claims are:

Marks, and Other Industrial Property Rights in Signs, on the Internet (October 2001) (WIPO Pub. No. 845), available at http://www.wipo.org/aboutip/en/development_iplaw/pub845.htm.

We set aside the issues specific to international application of US trademark law for several reasons. Most generally, we consider the truly notable question here to be Congress' approach to the regulation of domain names, especially the self-styled *in rem* provisions of the ACPA; in this view, the effects on the international regulation of trademarks are parasitic on a particular view of domain names as what one of us has described as "a species of mutant trademark." Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295, 1303 (1999). Here, looking beyond the mutant trademark aspects of domain names allows, we hope, for a more focused consideration of the challenges facing sovereigns in cyberspace.

164. Note that for simplicity, we are conflating the location of the actual hardware (*i.e.*, the machine) that constitutes the TLD server, and the location of the administrative authority. We assume, for the purposes of our argument, that the hardware will typically be in the same country as the administrators and system operators.

165. See *supra* text accompanying note 139.

166. As of July 30, 2002, a lookup of *a.root-servers.net* reveals an IP address of 198.41.0.4. Using the "NetGeo" form available at <http://netgeo.caida.org/perl/netgeo.cgi>,

Table 1: U.S. Prescriptive Jurisdictional Claims

case	party citizenship	TLD server location	recognized prescriptive claim
1	US	US	US
2	mixed	US	US
3	non-US	US	US
4	US	non-US	US
5	mixed	non-US	US
6	non-US	non-US	unclear

Cases 1 and 2 are relatively easy: in each, both nationality and territoriality support the U.S. claim; in Case 2, there is a potential competing claim based on nationality, but the clear weight of the interests balances in favor of the U.S.¹⁶⁷ Case 3 is perhaps more controversial. If the non-US citizens are from separate countries, then there are at least three potentially competing claims. Among the three, we suggest that none will have a “clearly greater” interest than the U.S. If the non-US citizens are from the same country, then the relative claim of that country would seem stronger.¹⁶⁸ In Cases 4 and 5, the U.S. claim is supported by nationality, as well as the basis for territoriality provided by the location of the root server.¹⁶⁹ In our view, the location of the TLD server does not provide a “clearly greater” claim in this context, though we admit these Cases are close.

the physical location of *a.root-servers.net* is revealed as Herndon, Virginia, USA (or approximately 38° 98' N, 77° 39' W).

167. Where multiple sovereign states have significant and potentially-conflicting claims to jurisdiction, courts will often resort to devices that compare—or balance—the relative strengths of the interests. For example, pursuant to RESTATEMENT § 403(3), *supra* note 144, when multiple countries have competing claims, a “clearly greater” claim must be recognized. *See also* Burbank, *supra* note 151, at 1463-64 (noting the techniques for resolving these conflicts).

168. *See, e.g.*, *Heathmount v. Technodome.com*, 106 F. Supp. 2d 860 (E.D. Va. 2000) (ACPA action between Canadian citizens). The court in *Heathmount* did not address this issue.

169. Note that the analysis of the “effects” of domain name activity is likely to approximate a wash in cases where the DNS system is available worldwide. That is, the effects of a domain name in the United States is likely to be similar to the effects of the same domain name in another country; both states might be able to note the effects in their territory, but it seems unlikely that either effect would be clearly greater than the other.

Case 6 has an uncertain result. Of course, the U.S. would have at least some support from the principle of territoriality as a consequence of the location of the root server. We think, however, that this support would be less than the support provided by the location of the TLD server. Yet that would be the full extent of the support for the U.S. claim, leading us to conclude that the U.S. claim will likely (though not certainly) be outweighed by a competing claim, especially if the location of the TLD server and the citizenship of at least one of the parties corresponds.

This exercise leads us to two points. First, even though the U.S. Constitution severely limits the impact of the *in rem* provisions of the ACPA,¹⁷⁰ the U.S. prescriptive jurisdictional claim (under the widely-recognized principles of territoriality and nationality) appears to be quite strong generally. Second, as far as recognizable claims of prescriptive jurisdiction goes, geography matters: the physical location of the TLD and root servers plays a crucial role in evaluating potentially competing claims of prescriptive jurisdiction, at least according to the traditional bases of territoriality and nationality. Here, the geographic fact that the root servers (at least the primary one and its administration) and the most populated TLD servers are geographically located within the United States, grants the United States a considerable amount of regulatory latitude under recognized principles of international jurisdiction. And while the U.S. government has, we think, a limited ability to exercise jurisdiction over domain name disputes as a Constitutional matter, other sovereigns may not be so limited.¹⁷¹ As we note below, this insight has substantial implications.

2. De Facto Regulatory Significance

Even if a particular sovereign's claims for prescriptive jurisdiction are unrecognized or controversial under international legal principles, the geography of the domain name system can nonetheless provide substantial regulatory leverage. This *de facto* regulatory significance flows from the distributed hierarchy of the domain name system: a sovereign can exercise control over the domain name system to the extent that elements of the domain name system are under its potential physical control. This

170. As we analyzed in section II above, these *in rem* provisions, found in 15 U.S.C. § 1125(d)(2) apply to cases of anonymous registrants and cases involving registrants lacking minimum contacts with the United States. In the latter cases, the assertion of *in rem* jurisdiction over the domain name will violate due process.

171. This assumes the same level of geographic connections to the critical features of the domain name system. As we note in Section IV below, sovereigns can also take steps to alter the geographic facts in their favor.

typically comes from the elements being geographically located within the sovereign's territory. For example, because the administration of the root server offers logical control over the entire domain name system,¹⁷² sovereign control over the root server would then allow *de facto* control over the domain name system.

For example, consider the case of the United States, under the present geographic and technical facts of the domain name system. In principle, Congress could pass laws (or an agency could issue regulations) directed to the public root server system. Perhaps these laws might specify the standards by which TLDs would get access to the root servers, or even specify the TLDs and their policies themselves. These laws might give preferences to U.S. companies and individuals in domain name disputes, charge taxes on any entity using a domain name, or specify the types of uses that domain names can be put to.¹⁷³ By controlling the root server, the U.S. government could effectively control the TLD servers by threatening banishment from the public root server system and the concomitant loss of operation. And by controlling the TLD servers, the U.S. government could exercise *de facto* control over the entire range of second-level domain names available in the public root server system.

There is no evidence at all, we think, that the United States government is planning any activities of this sort.¹⁷⁴ Nor, of course, are we advocating such a course, as we argue in some detail below. At present, even the most aggressive assertion of jurisdiction we describe here—the *in rem* provisions of the ACPA—falls well short of the sort of widespread *de facto* control set forth above. Yet the point we noted above remains: geography matters. Put simply, both recognized and *de facto* control over the domain name system are remarkably correlated with geographic facts. This, we think, has considerable implications for the future of the domain name system.

172. At least over the domain name system utilizing that root server. As we noted above, this is how ICANN presently exerts nearly complete policy control over the domain name system. *See supra* notes 139 and accompanying text.

173. Obviously, the U.S. Constitution would provide an important limit to such regulations, especially those that might implicate rights of free expression. *See, e.g.*, U.S. CONST. amend. I. Note, however, that such constraints would not necessarily restrict similar actions by other sovereigns.

174. *See generally* William J. Clinton and Albert Gore, *A Framework for Global Electronic Commerce (The White Paper)* (July 1, 1997), available at http://www.ejus.it/db/data/Framework_Electronic_commerce_1-7-97.htm; U.S. Dept. of Commerce, *Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers* (Nov. 25, 1998), available at <http://www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm>.

IV. THE CRUCIAL ROLE OF REALSPACE SOVEREIGNS

Thus far we have analyzed the aspects of logical and territorial control over the domain name system, arguing that in the context of realspace sovereigns, the mapping of the logical control structure onto the physical world results in a regulatory hierarchy. That is, those states with critical components of the domain name system in their territory could have great regulatory leverage over the system as a whole. This argument leads to two other important observations. First, we note that the geographic facts of the domain name system are both essentially arbitrary and uniquely mutable attributes,¹⁷⁵ thereby providing realspace sovereigns with an important hook to attempt to alter the geographic facts in their favor. Second, and following from the first, we argue that the likely result of greater regulatory activism by various realspace sovereigns will be the segmentation of the domain name system, and the dramatic reduction in utility provided by the system itself.

A. Geographic Alteration: The Virtual Land Grab

Assume that Country X decides that the present quasi-U.S. approach to the regulation of the domain name system is not in its interest. Perhaps this country is troubled by the present strong protection of commercial trademarks embedded in both the ICANN-mandated policies and the ACPA.¹⁷⁶ Or perhaps Country X disagrees with the principles of free expression that have been held to extend to domain name disputes.¹⁷⁷ Or Country X might simply see the domain name system as a potential source of revenue.¹⁷⁸

Whatever the reason, it is clear that Country X would have substantial ability to at least attempt to alter the geographic facts. Country X could establish a root server system of its own, and mandate that local networks

175. Given the distributed hierarchical nature of the DNS, the geographic location of the “A” root servers is not especially relevant to the operation of the system. *See supra* text accompanying notes 132-139.

176. *See supra* note 129 and accompanying text, and the Introductory Section.

177. *See, e.g.*, *Bally Total Fitness Holding Corp. v. Faber*, 29 F. Supp. 2d 1161, 1166 (C.D. Cal. 1999) (rejecting trademark claim against use of a domain name because of, *inter alia*, First Amendment concerns). *See generally* *L.L. Bean, Inc. v. Drake Publishers, Inc.*, 811 F.2d 26 (1st Cir. 1987) (discussing First Amendment and Trademark Law).

178. *See, e.g.*, Anna Soderblom, *Island Joins the Dots and Will Net Fortune*, THE TIMES (LONDON), Nov. 6, 2000 (noting that the island nation of Tuvalu expects to net over \$50 million from registrations in the .tv TLD space, “or about three times Tuvalu’s gross domestic product”). The Tuvalu case is slightly different than what we suggest here, of course, as Tuvalu controls only the .tv TLD, rather than the root server.

use the “official” root server.¹⁷⁹ In a fairly benign form of this “virtual land grab,” the Country X root server might mirror or link to the existing public root server system, and merely offer additional TLDs.¹⁸⁰ Country X would be able to exert regulatory control over the additional TLDs, while the remaining TLDs would be unaffected and remain available to Country X users. A more troubling arrangement would be if Country X limited, or reassigned the TLDs available in the new root server, or otherwise created conflicts between its root server and the public server. This second set of circumstances creates great potential for the *segmentation* of the worldwide domain name system, and the dramatic reduction in the value of the system.

B. Segmenting Domain Names

The domain name system becomes “segmented” when: (1) the same DNS requests sent by users in different networks yield different results; or (2) some number of TLDs are unavailable to users, depending upon the root server system they use. Both of these circumstances arise when different root server systems are used—though the existence and use of different root servers is a necessary but not a sufficient condition.¹⁸¹

Segmentation arises when the various root server systems in use are either in conflict, or do not accurately reflect the content of other root servers. For example, the official “Country X Root Server” might send requests for the *.com* TLD to a different server than the ICANN *a.root-servers.net*, thereby creating a conflict—resulting in, for example, a request for *www.yahoo.com* yielding a different web page in different networks.¹⁸² Or the Country X Root Server might ignore requests for the *.com* TLD altogether, rendering a large part of the domain name system unusable (for its users). An even more likely case is that any additional TLDs

179. Alternatively, the regulations could identify a private “alternative” root server system—perhaps as part of a wider agreement involving policies, taxation, etc. Such alternative root server systems already exist. *See, e.g.*, New.net, Mission Statement, at http://www.new.net/about_us_mission.tp (last visited July 25, 2002).

180. This type of arrangement has been described as a “virtual inclusive root”. *See* S. Higgs, *Root Zone Definitions*, at <http://www.simon.higgs.com/net/draft-higgs-root-definitions.txt> (May 2001).

181. As noted in S. Higgs’s *Root Zone Definitions*, multiple root server systems presently exist with little, if any, problems for the system. Higgs, *supra* note 180. Higgs in particular describes “private” root server systems, which are not publicly available and are intended to serve only a single network, as well as “inclusive” root servers, which expand the TLDs available on the standard root server system. *Id.*

182. This would not necessarily be the case, of course. Depending upon the details of Country X’s redistribution plan, Yahoo!, Inc. might purchase the rights to *yahoo.com* in the County X Root Server zone.

established by Country X may not be recognized by the public root server system, thereby making them unavailable to the Internet user community at large.¹⁸³

We predict that segmentation would result under the following circumstances:

First, a new root server system (formed or mandated by a sovereign's regulatory activity) could create conflicts with the existing public root server system. These conflicts could result in unexpected behavior or the inability for certain segments of the global Internet to utilize TLDs publicly available elsewhere.

Second, and perhaps even more importantly, segmentation must be considered a potential response by one or more sovereigns to any others' attempts to exert unwanted regulatory influence over the domain name system. For example, if Country X established its own root server system, and established policies for expanded TLDs that were in conflict with the policies of Country Y, a potential response for Country Y would be to responsibly create (or mandate) a root server system that effectively "blocked" the Country X TLDs. Lest this possibility seem farfetched, consider China's recent suggestion that it would take steps to ensure that it controlled the distribution and administration of all Chinese-character domain names—a task that certainly implicates the creation of alternative root server systems, or the threat thereof.¹⁸⁴

183. Note that we distinguish here between what we call "segmentation" of the domain name system and the present use and availability of "alternative" or "inclusive" root server systems. In terms of numbers of users, the major alternative root server systems differ from the hypothetical segmented system we outline above because they explicitly include the information provided by the public root server system, and because they are created by and backed with market forces, not sovereign government regulatory action. We recognize that such alternative root server systems may stimulate much-needed innovation and competition in the field of domain name administration. Yet the increasing popularity of such services only increases the chances that true segmentation develops.

184. See, e.g., Rachel Ross, *China Demands Jurisdiction Over Domain Names In Chinese*, TORONTO STAR, Nov. 13, 2000 ("We think that as 97.5 per cent of the people using Chinese characters live in the mainland and Taiwan, the U.S. government has no right to authorize any company to manage Chinese domain names with Chinese characters," said CNNIC director Hu Qiheng 'A company shouldn't be allowed to provide Chinese domain names registration services in China without the approval of the Chinese government.'"); *Character Debate: CNNIC Opposes Foreign Firms Registering Chinese-Language Domain Names*, CHINAONLINE, Nov. 3, 2000 (explaining how China is objecting to the registration and use of Chinese-character domain names by foreign entities); *Furious Fight Arises in Registration of Chinese Domain Names*, Xinhua General News Service, Nov. 17, 2000 (same); *China to Strengthen Management of Chinese-Character Domain Names*, CHINAONLINE, Nov. 15, 2000 (same); China Channel, *CNNIC Disagree*

As should be easily apparent, segmentation of the domain name system would dramatically decrease its value to the Internet user community.¹⁸⁵ As a means of searching and selecting online resources, the domain name system's value is directly related to its scope; its value is at its highest when the system includes all named online resources. Importantly, if the domain name system cannot reliably be considered authoritative of the resources available, its value diminishes remarkably—if an Internet user does not have confidence that typing *www.yahoo.com* will yield the information she expects, then the DNS request will be of far less value. And while there are good arguments that the domain name system has outlived its usefulness as a uniform means of addressing the Internet searching problem, we think that an unsegmented domain name system remains a significant value to Internet users.¹⁸⁶ This premise—that an unsegmented domain name system is desirable—has substantial policy implications for realspace sovereigns.

C. Unsegmenting Policy: Realspace Sovereigns and Domain Names

The present United States approach to domain name regulation—at least as reflected in legislation¹⁸⁷—appears to be focused solely on the po-

Over Chinese Character International Domain Names, CHINAONLINE, Oct. 10, 2000 (same). At present, the ICANN-approved registrars are still registering such domain names. See Verisign, *Key Points About the VeriSign Global Registry Services Internationalized Domain Name Testbed*, at <http://www.verisigngrs.com/idn/testbed/keypts.html> (last visited July, 26 2002).

185. This appears to be a nearly universal sentiment. See, e.g., Internet Architecture Board (Network Working Group), *IAB Technical Comment on the Unique DNS Root*, at <http://www.faqs.org/rfcs/rfc2826.html> (May 2000); ICANN, *ICP-3: A Unique, Authoritative Root for the DNS*, at <http://www.icann.org/icp/icp-3.htm> (July 9, 2001).

186. We think a significant argument can be made that the development of a segmented domain name system would dramatically devalue the current system and generate alternatives to the searching and selection problem that may prove at least as effective as the present domain name system. One obvious example might be an increasing investment in web search engines or directories. Or the development of new technologies, such as the former RealNames “keywords” system. See, e.g., RealNames Corp., *About Internet Keywords*, at http://web.archive.org/web/20011031162600/www.realnames.com/Virtual.asp?page=Eng_Corporate_How_Work (last visited July 25, 2002). The rise of and eventual replacement by alternatives to the domain name system should not necessarily be viewed as unfortunate. Nonetheless, an unsegmented domain name system appears at present to be high on the list of valuable approaches to the searching problem.

187. An interesting aspect of this issue is the apparent tension between the assertive approach taken by the Congress in passing the ACPA, especially the *in rem* provisions, and the more “hands off” version followed by the Clinton Administration. See, e.g., Clinton & Gore, *supra* note 175; U.S. Dept. of Commerce, *supra* note 175.

tential for harm to a particular form of indigenous commercial interests: trademarks. Little legislative attention has been paid to the significant value in the unsegmented domain name system, or more particularly, the significant diminishment in value should the system become segmented. This omission becomes all the more serious when one considers that the aggressive assertion of jurisdiction in the ACPA¹⁸⁸ may well satisfy the conditions under which the domain name system becomes segmented: the encouragement of responsive actions on the part of other sovereigns.¹⁸⁹ This is a perilous path, one that risks harming the growth and development of the global Internet, and correspondingly portends harm to United States interests.

In this section, we briefly discuss the justifications and contours of a more encompassing approach to the regulation of domain names by real-space sovereigns—in particular the United States. Such an approach, we argue, would result in greater deference to and support of the growth of nonterritorial regulatory devices for this uniquely global asset, thereby decreasing the momentum towards segmentation.

1. *Encompassing Interests*

Given that the growth of e-commerce development thus far has largely benefited U.S. commercial interests,¹⁹⁰ the continued development of the Internet should be viewed as beneficial; concomitantly, obstacles to such growth should be avoided.¹⁹¹ We have established above that an unsegmented domain name system is significantly more valuable to the global Internet community than one that is partially or fully segmented. It fol-

188. A claim, we suggest, that can be seen most expansively in the ACPA's *in rem* proceedings. See 15 U.S.C. § 1125(d).

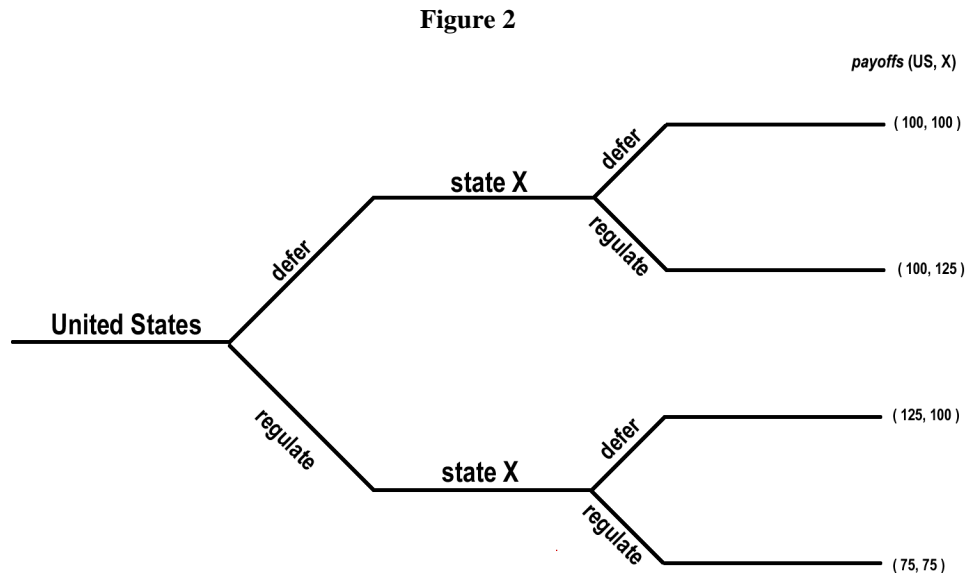
189. See *supra* Section III.C.1.

190. Measurement of the commercial activity online is, of course, subject to various problems. But under any set of criteria, the United States seems to be doing quite well. The top ten most visited "web properties" worldwide are all U.S. companies. See Nielsen/Netratings, *Top 25 Web Properties*, available at <http://www.nielsennetratings.com/pr/pr011113.pdf> (Nov. 14, 2001). The top ten electronic commerce sites (measured in terms of customer sales) are entirely American. See NextCard, *Ecommerce Index*, at http://www.nextcard.com/Indexes/sept_index_movers10_05_01.html (Sep. 2001). The top ten e-commerce businesses in terms of market share are entirely American. See *Nearly Half of All Americans Buy Online, According to Nielsen/NetRatings and Harris Interactive; \$3.5 Billion Spent Online in March, Jumping 36 Percent in Past Year*, BUSINESSWIRE, at <http://www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=273> (Apr. 24, 2001).

191. Note here we are setting aside the many (and significant) non-commercial United States' interests in the growth of the Internet—for example the spread of democratic values.

laws, then, that avoiding segmentation must be included as a significant factor in the regulatory calculation for realspace sovereigns.

We can review this broader approach by explicitly considering the harm due to segmentation. Stylizing the situation under a two-player game, we will assume two binary choices: either to assert prescriptive jurisdiction and regulate, or defer to other sovereign entities.¹⁹² We consider three outcomes, with arbitrary numbers assigned for illustrative purposes. First, if both states defer, the system will remain unsegmented. If only one state regulates (and no other state retaliates by segmenting), the system will remain unsegmented, with some additional benefit flowing to the regulator. And if both states regulate, the system becomes segmented, resulting in a diminishment of value. Figure 2 sets forth this basic situation, with the payoffs as noted.



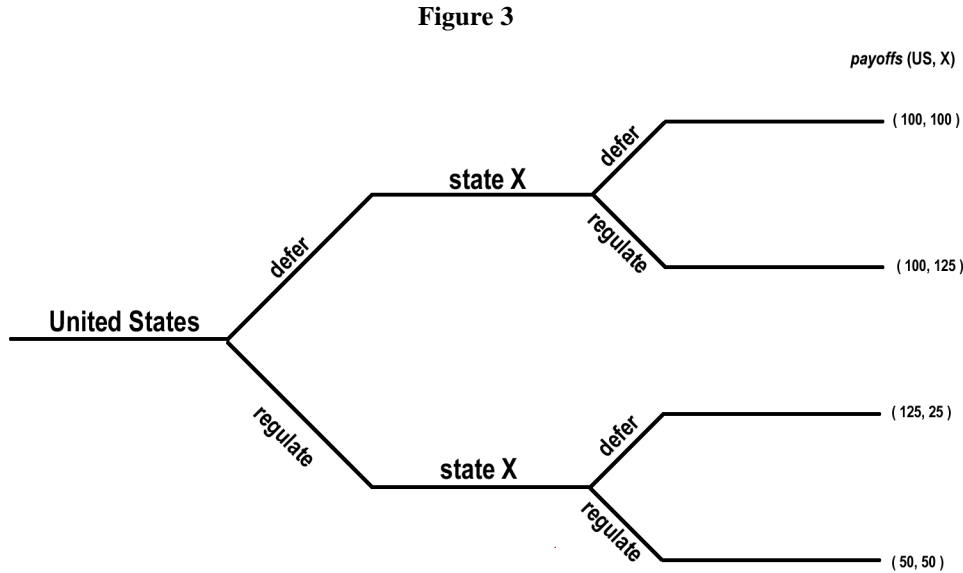
Here, the U.S. decision would be to regulate, on the assumption that State X's response would be to defer.¹⁹³ Thus, the Figure 1 example might

192. As should be apparent, there are a number of "middle grounds" here that these models fail to adequately capture.

193. This is a form of a dynamic game with complete information, as State X can easily see the U.S. decision. The sub-game represented by the top branch has expected payoffs of (100, 125), while the bottom branch has payoffs of (125, 100). Accordingly, the U.S. decision will be to regulate. *See* H. SCOTT BIERMAN & LUIS FERNANDEZ, *GAME THEORY WITH ECONOMIC APPLICATIONS* 124-135 (2d ed. 1998); DOUGLAS BAIRD ET AL.,

be said to describe the present status quo—where the U.S. has regulated to some degree,¹⁹⁴ and other nations appear to be more deferential.

Yet an adjustment in the payoffs could dramatically alter the nature of this game, as shown in Figure 3.



Here, we have adjusted the payoff State X perceives if the United States regulates and it does not. This reduction in payoff could be due to variety of factors, a few of which we have noted above.¹⁹⁵ Under these new conditions, State X will choose to respond to the U.S. regulation with regulation, and the domain name system will become segmented. Accordingly, the best U.S. decision is to defer.

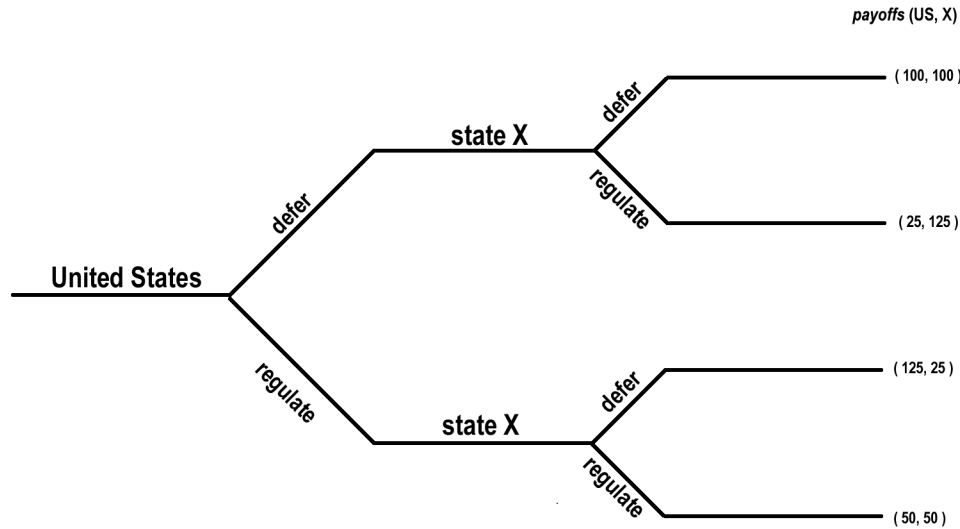
Figure 4 notes one final example, where the U.S. payoff to State X regulation is reduced as well.

GAME THEORY AND THE LAW 50-77 (1994); ERIC RASMUSSEN, GAMES & INFORMATION 108 (3d ed. 2001).

194. At least to the extent of the *in rem* provisions of the ACPA.

195. See *supra* Section IV.A.

Figure 4



Here again, the best U.S. decision is to regulate. That such a decision yields the suboptimal condition of segmentation reveals the nature of this game as a form of the prisoner's dilemma.¹⁹⁶

(Note of course that a still better view of this problem is as a repeated game—that is, each sovereign has many opportunities to decide whether to regulate or defer. Thus, if the United States considered the assertion of regulation by another sovereign to be more harmful to its interests, it could take the next opportunity to respond by regulating—and thereby further confirm the suboptimal nature of this situation.)

2. Towards Coordination

The concerns outlined above describe a substantial danger that the present domain name system will become segmented. And yet, as with most prisoner's dilemmas, coordination provides a solution.¹⁹⁷ In particular, our analysis here establishes the strong interests that realspace sovereigns, and especially the United States, have to coordinate their regulatory behavior with an eye to avoiding segmentation.

196. The expected payoffs for the top branch are (25, 125), while the expected payoffs for the bottom branch are (50, 50).

197. See, e.g., BIERMAN & FERNANDEZ, *supra* note 193, at * (noting the difference in outcomes between cooperative games and noncooperative games); BAIRD ET AL., *supra* note 193, at * (observing the importance of "binding agreements" between parties facing a prisoner's dilemma).

Such coordination will invariably require greater deference to nonterritorial domain name regulatory bodies. The paradigmatic example of this, of course, is ICANN. As many have observed, there are a number of substantial problems with the present form of ICANN.¹⁹⁸ However, advocating international coordination does not, we think, necessarily require endorsement of the present policies and procedures established by ICANN, or the way in which that organization has been developed.

The challenge of integrating sovereign interests into a coherent international regulatory framework is plainly considerable,¹⁹⁹ and we will not solve that problem here.²⁰⁰ Instead, having noted in particular the perverse incentives created by the current United States regulatory regime, and the strong interests the United States has in avoiding segmentation, we offer a few observations and suggestions for future consideration.

1. The *in rem* provisions of the ACPA are misguided and should be repealed or substantially revised. They are of only limited value,²⁰¹ and appear to serve primarily as a particularly obnoxious example of expansive U.S. claims to regulate domain names.²⁰²
2. The United States government (and other realspace sovereigns) should take a more active role in supporting the development of international domain name policy coordination. The present ICANN approach of avoiding any signifi-

198. Such problems include questions about ICANN's legitimacy, as well as its alleged bias against non-trademark holders. *See, e.g.*, Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 DUKE L.J. 187 (2000) (discussing legitimacy concerns); Michael Geist, *Fair.com?: An Examination of the Allegations of Systemic Unfairness in the ICANN UDRP*, 27 BROOK. J. INT'L L. (alleging bias in the ICANN UDRP process). *But see, e.g.*, Michael Kaplan, *Never Cry Wolf: A Response to Professor's Geist's Condemnation of the ICANN UDRP 1-11* (2002) (unpublished manuscript, on file with authors) (disputing any showing of bias).

199. *See, e.g.*, Jonathan Baert Wiener, *On the Political Economy of Global Environmental Regulation*, 87 GEO. L.J. 749, 760-88 (1999) (discussing the theories by which the development of international environmental regulation might be viewed); Barbara Stark, *Economic Rights in the United States and International Human Rights Law: Toward an Entirely New Strategy*, 44 HASTINGS L.J. 79, 79-82 (1992) (discussing obstacles to adoption of international human rights law). *See generally* CARTER & TRIMBLE, *supra* note 145.

200. For a recent effort along these lines, see generally Paul Schiff Berman, *The Globalization of Jurisdiction: Cyberspace, Nation-States, and Community Definition*, 151 U. PA. L. REV. (forthcoming 2002).

201. *See supra* notes 94-98 and accompanying text.

202. *See supra* note 155 and accompanying text.

cant government involvement, and instead attempting to build a strictly nongovernmental regulatory authority, fails to grasp the unavoidable involvement of realspace sovereigns in domain name regulation.²⁰³ Such support would include diplomatic efforts as well as concrete actions that lend additional credibility to these organizations.

3. Finally, Congress should consider revising the ACPA to reflect greater deference to the decisions of international regulatory bodies. For example, Congress might consider implementing a requirement that disputing parties seek resolution from the international domain name regulatory body prior to filing a federal lawsuit.²⁰⁴ Alternatively, lawsuits concerning a dispute where a decision has been made by the domain name body might be more limited in their scope, in the nature of an appeal process rather than an initial action.²⁰⁵

We are under no illusions that the kind of coordination required to effectively regulate the domain name system will be simple or uncontested. Yet if we are to maintain the value of the domain name system as a solution to the searching and selection problem, realspace sovereigns must recognize the urgent importance of coordination and deference, and tailor their regulatory approach accordingly.

V. CONCLUSION

It has become commonplace to describe our world (especially the economic world) as “interdependent.” Increasingly, the flow of capital as well as goods and services show little respect for traditional sovereign borders; nations unable or unwilling to respond to economic changes can suffer harm at the hands of the global marketplace.

The advent of the Internet as a powerful commercial and social medium is likely to present still greater challenges. For the Internet brings

203. See *supra* Section III.C.1.b.

204. The analogy here would be to administrative exhaustion principles.

205. Note that the ICANN UDRP proceedings explicitly allow parties the right to seek relief from a court prior to actions being taken against a domain name. See UDRP, *supra* note 129, ¶ 4(k). This is in the nature of granting an appellate right; we suggest that Congress may want to formalize such an appellate process as part of an effort to recognize the authority of international domain name regulation. Cf. *Parisi v. Netlearning, Inc.*, 139 F. Supp. 2d 745, 7. 52-53 (E.D. Va. 2001) (holding that UDRP decisions do not fall within the limited scope of review for arbitration awards provided by the Federal Arbitration Act).

new meaning to “interdependent”: in a world where geography is fundamental to our understandings of sovereignty, the contested aspects of online “territoriality” mean that regulation might occur everywhere, or even nowhere. In an era when the “effects” of a commercial dispute in cyberspace might be “felt” both everywhere and nowhere, realspace sovereigns have great power to affect the global progress of the Internet. And there is perhaps no nation with as much at stake in this game as the United States, and no nation with as much power to lead the community of nations in determining the Internet’s future.

Yet the evidence of the U.S. approach to date has not been altogether heartening. With respect to the regulation of domain names—perhaps the “canary in the coal mine” of global internet regulation—the U.S. appears, via enactment of the ACPA, and especially its self-styled *in rem* provisions, to have acted in an ill-informed manner that may be contrary to its long-term interests. As we argued above, these statutory provisions suffer from the double ignominy of being both of little value²⁰⁶ and inapt.²⁰⁷

We do not, however, believe that all is lost, or that the current U.S. approach to domain name regulation will inexorably lead to the segmentation of the domain name system. To the contrary, the mere presence of the ICANN dispute resolution mechanism as well as the absence (to date) of any serious attempts by other sovereigns²⁰⁸ to assert jurisdiction over domain names demonstrates that this problem is not unsolvable at an international scale. But any discussion about the future of international regulation of domain names (and, in a larger sense, the Internet) must proceed with full awareness of the essential role that realspace sovereigns play in both the form and the content of any regulatory approach.

206. Useless in the sense that anytime the section authorizing the *in rem* assertion of jurisdiction (over known persons) will be necessary, it will also violate the US Constitution to accept jurisdiction. *See supra* 94-98 and accompanying text.

207. Inapt in a strategic sense: because it works an aggressive approach to jurisdiction over domain names that creates significant incentives for other countries to regulate, thus raising the possibility of segmenting the domain name system.

208. China may be the exception. *See supra* note 184 and accompanying text.