

March 2016

Regulating Digital Trade

Sapna Kumar

Follow this and additional works at: <http://scholarship.law.ufl.edu/flr>



Part of the [Intellectual Property Law Commons](#)

Recommended Citation

Sapna Kumar, *Regulating Digital Trade*, 67 Fla. L. Rev. 1909 (2016).

Available at: <http://scholarship.law.ufl.edu/flr/vol67/iss6/2>

This Article is brought to you for free and open access by UF Law Scholarship Repository. It has been accepted for inclusion in Florida Law Review by an authorized administrator of UF Law Scholarship Repository. For more information, please contact outler@law.ufl.edu.

REGULATING DIGITAL TRADE

*Sapna Kumar**

Abstract

Under § 337 of the Tariff Act, the International Trade Commission (ITC) has jurisdiction over articles that enter the country and infringe intellectual property rights. Recently, the ITC vastly expanded its powers, asserting jurisdiction over imported digital files that infringe intellectual property rights. This Article examines the limits of the ITC’s authority, arguing that it lacks jurisdiction over digital information, because information in the abstract cannot be controlled by a court or an agency. It maintains that the ITC has misconstrued the breadth of its statutory authority under the Tariff Act and that the traditional tools of statutory interpretation show that Congress intended for the term “articles” to be limited to tangible personal property. Finally, this Article discusses how interest groups including the Motion Picture Association of America are attempting to use the ITC to block information at the U.S. border, and considers the significant risks that this poses to the public welfare.

INTRODUCTION	1910
I. THE ITC’S STRUCTURE AND POWERS.....	1914
A. <i>Introduction to the ITC</i>	1915
1. Jurisdiction.....	1917
2. Customs Enforcement	1918
B. <i>The Rise of Digital Trade of Patented Goods</i>	1920
1. Digital Trade Under the Patent Act.....	1920
a. 35 U.S.C. § 271(a)	1920
b. 35 U.S.C. § 271(f).....	1921
c. 35 U.S.C. § 271(g)	1922
2. The Rise of 3D Printing	1922
3. ClearCorrect <i>Litigation</i>	1924
a. ITC Proceeding	1924
4. Other Relevant Cases	1926

* Associate Professor, University of Houston Law Center. I would like to thank Jack Beerman, Annemarie Bridy, Dan Burk, Anupan Chander, Joshua Fairfield, Eric Goldman, Kristin Hickman, Megan La Belle, Mark Lemley, Sarah Wasserman Rejec, Irina Manta, Jonathan Masur, Kali Murray, Peter Yu, Greg Vetter, Melissa Wasserman, and Beth Winston for their helpful comments, as well as the participants of the ATRIP 2015 Congress, the UHLC Administrative Law Workshop, the 2015 Works in Intellectual Property Conference, the 2015 Internet Law Works-in-Progress Conference, and the 2014 Intellectual Property Scholars Conference. I would also like to thank reference librarians Mon Yin Lung and Daniel Donahue for all of their research support.

a.	Federal Circuit	1926
b.	International Trade Commission	1927
c.	Customs and Court of International Trade	1927
II.	THE LIMITS OF IN REM JURISDICTION	1928
A.	<i>Tangible and Financial Intangible Property</i>	1930
B.	<i>Domain Names</i>	1931
1.	Federal Statutes	1932
2.	Common Law	1933
C.	<i>Digital Information</i>	1934
III.	WHAT IS AN ARTICLE?	1937
A.	<i>Chevron Framework Is Applicable</i>	1938
B.	<i>Plain Meaning</i>	1940
C.	<i>Legislative History</i>	1941
1.	Early Legislative History	1941
a.	1922 Legislative History	1942
b.	1929 Legislative History	1943
2.	Late Legislative History	1944
D.	<i>Canons of Construction</i>	1946
1.	<i>In Pari Materia</i>	1946
2.	Statutory Context	1947
3.	Presumption of Consistent Usage	1948
E.	<i>Analysis of the ITC's Definition</i>	1948
IV.	EXPANDING THE REGULATION OF DIGITAL TRADE	1950
A.	<i>Attempts to Expand the ITC's Jurisdiction</i>	1950
1.	Online Protection and Enforcement of Digital Trade Act	1951
2.	Subsequent Legal Efforts	1951
B.	<i>Expanding the ITC's Jurisdiction</i>	1952
1.	General Concerns	1953
2.	Institutional Design Concerns	1954
a.	Public Welfare Considerations	1955
b.	ITC Powers	1957
	CONCLUSION	1958

INTRODUCTION

People have engaged in international trade for thousands of years. Although scholars are divided as to whether contracts or customary

practices were historically more important,¹ history clearly played a role in shaping modern trade law.² The emergence of digital trade, however, has made it necessary to rapidly adapt trade law without historical guidance.

In a short period of time, it has become possible for people to infringe the rights of intellectual property (IP) owners by transmitting information that could easily enter the country. Copyright law adapted to infringing information crossing borders, as mp3s replaced compact discs and streaming media began to displace television.³ Online file-sharing led interest groups to successfully lobby for strict criminal copyright provisions.⁴ Similarly, trademark law expanded to cover digital rights over domain names.⁵

Patent and trade law, however, are only just beginning to adapt. A person outside the United States can now upload a digital model file to the Internet, allowing anyone in the United States with a proper 3D printer and an internet connection to infringe a patented device.⁶ Such technology is rapidly becoming affordable,⁷ leading to a call for statutory reform.⁸

1. See Emily Kadens, *The Myth of the Customary Law Merchant*, 90 TEX. L. REV. 1153, 1155–58 (2012) (discussing the use of contracts and customs in early international trade but disputing the idea that traders relied on *lex mercatoria* customs to resolve disputes).

2. See *id.* at 1161 (“[S]ome types of medieval commercial private ordering, such as the bill of exchange or the marine insurance policy, demonstrated the ability to spread and become relatively uniform and universal . . .”).

3. Notwithstanding all of the changes that have already occurred in the Copyright Act, the Register of Copyrights of the United States and Director of the U.S. Copyright Office Maria Pallante has called for Congress to overhaul the Copyright Act. Maria A. Pallante, *The Next Great Copyright Act*, 36 COLUM. J. L. & ARTS 315, 315 (2013).

4. See Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 HARV. J.L. & TECH. 41, 49 (2001) (noting the success of content holders “in obtaining extremely broad legal protection for rights management systems”); Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1404 (2004) (“[S]ome of the most powerful lobbying groups in the world are behind stronger criminal copyright enforcement.”).

5. See Xuan-Thao N. Nguyen, *The Digital Trademark Right: A Troubling New Extraterritorial Reach of United States Law*, 81 N.C. L. REV. 483, 486 (2003) (discussing how the Anticybersquatting Protection Act (ACPA) authorizes a U.S. trademark holder to petition a court to transfer a foreign national’s domain name).

6. See Lucas S. Osborn, *Regulating Three-Dimensional Printing: The Converging Worlds of Bits and Atoms*, 51 SAN DIEGO L. REV. 553, 560–61 (2014) (discussing how the Internet has made it possible for users to share digital models that can be used to print a wide range of goods).

7. See Liana Bandziulis, *These Affordable 3-D Printers Are Impressive—and Plagued by Weak Software*, WIRED (Oct. 28, 2014, 5:06 PM), <http://www.wired.com/2014/10/da-vinci-printers>.

8. See Tabrez Y. Ebrahim, *3D Printing & Digital Regulation*, 14 NW. J. TECH. & INTELL. PROP. (forthcoming 2015) (manuscript at 36), available at <http://ssrn.com/abstract=2601460> (calling for 3D printing regulation under the Tariff Act and Patent Act); Deven R. Desai & Gerard

The International Trade Commission (ITC) has been caught in this struggle.⁹ Although Congress designed the ITC to protect U.S. companies against the harsh effects of free trade, IP interest groups successfully expanded the ITC's jurisdiction to include IP disputes when infringing articles are imported into the country.¹⁰ When an imported article infringes a U.S. patent, copyright, or trademark, the ITC can issue an exclusion order, which directs Customs and Border Patrol (Customs) to seize the article at the border.¹¹ The agency's primary jurisdiction is in rem.

Recently, in *Certain Digital Models*, a majority of the ITC commissioners asserted jurisdiction over digital information¹² as part of a wider move to regulate digital trade.¹³ The agency interpreted the term "articles" broadly to include all intangible digital information. In expanding its jurisdiction, the ITC has opened the door to claims for infringing blueprints, movies, and music transmitted from abroad. This case is currently on appeal to the U.S. Court of Appeals for the Federal Circuit as *ClearCorrect v. International Trade Commission*.¹⁴

N. Magliocca, *Patents, Meet Napster: 3D Printing and the Digitization of Things*, 102 GEO. L.J. 1691, 1694–95 (2014) (discussing the need to update patent law in light of 3D printing).

9. See Sapna Kumar, *Expert Court, Expert Agency*, 44 U.C. DAVIS L. REV. 1547, 1553 (2011) [hereinafter Kumar, *Expert Court*].

10. See Sapna Kumar, *The Other Patent Agency: Congressional Regulation of the ITC*, 61 FLA. L. REV. 529, 544–45, 550 (2009) [hereinafter Kumar, *Other Patent Agency*].

11. *Id.* at 534.

12. See *In re Certain Digital Models, Digital Data, & Treatment Plans for Use in Making Incremental Dental Positioning Adjustment Appliances, the Appliances Made Therefrom, and Methods of Making the Same*, Inv. No. 337-TA-833, USITC Pub. 2013-18437, at 22 (Apr. 10, 2014) (Final) [hereinafter *Certain Digital Models (Final)*], available at <http://www.itcblog.com/images/Digital-Models-Commission-Opinion-lowres-10Apr14.pdf>

13. The ITC defines "digital trade" as "U.S. domestic commerce and international trade in products and services delivered via the Internet," and explicitly excludes "physical goods." See U.S. INT'L TRADE COMM'N, DIGITAL TRADE IN THE U.S. AND GLOBAL ECONOMIES, PART I, at 1-1, 1-2, Inv. No. 332-531, USITC Pub. 4415 (2013), available at <http://www.usitc.gov/publications/332/pub4415.pdf>. The ITC's interest in regulating this area is reflected in an expansive two-part study on digital trade that it released in 2014. See *id.* at i, xv; U.S. INT'L TRADE COMM'N, DIGITAL TRADE IN THE U.S. AND GLOBAL ECONOMIES, PART 2, at 13, Inv. No. 332-540, USITC Pub. 4485 (2014), available at <http://www.usitc.gov/publications/332/pub4485.pdf>.

14. A few days before this Article went into print, the Federal Circuit handed down its decision in *ClearCorrect v. International Trade Commission*, No. 2014-1527, 2015 WL 6875205 (Fed. Cir. Nov. 10, 2015). In a 2–1 decision, the court reversed the ITC, holding that the ITC's analysis failed *Chevron* Step One because Congress was clear that "articles" is limited to "material things." *Id.* at *13. In dicta, the court also maintained that the ITC's analysis fails *Chevron* Step Two because the ITC "failed to properly analyze the plain meaning of 'articles,' failed to properly analyze the statute's legislative history, and improperly relied on Congressional debates." *Id.* at *14.

The ITC's move into the digital arena raises questions regarding the scope of the agency's jurisdiction. In rem jurisdiction generally applies to real property, tangible property, and intangible property of a financial nature.¹⁵ Although some courts have found in rem jurisdiction over web domains,¹⁶ no court has claimed it over purely digital information. Thus, an argument can be made that the ITC lacks in rem jurisdiction.

The ITC engages in formal adjudication and is eligible for strong deference under *Chevron U.S.A. v. Natural Resources Defense Council* when it interprets its organic statute.¹⁷ However, the ITC's expansive definition of "articles" is both unreasonable and inconsistent with Congress's clear intent,¹⁸ and consequently fails both Step One and Step Two of *Chevron*.¹⁹

After the failure of the proposed PROTECT IP Act (PIPA) and the Stop Online Piracy Act (SOPA), several interest groups seeking to block infringing online content have turned their attention to the ITC.²⁰ A leaked document from the 2014 Sony Pictures Entertainment hack (Sony hack) reveals that the Motion Picture Association of America (MPAA) wants to use the *Certain Digital Models* decision to facilitate blocking infringing information on websites.²¹ Others have lobbied for legislation to expand the ITC's jurisdiction to include web content.²² This is

15. See *infra* Sections II.B–C.

16. *ClearCorrect*, 2015 WL 6875205 at *14.

17. *Suprema v. Int'l Trade Comm'n*, 796 F.3d 1338, 1346 (Fed. Cir. 2015) (holding that the *Chevron* framework is appropriate for reviewing ITC interpretations of § 337); Kumar, *Expert Court*, *supra* note 9, at 1549.

18. See *Certain Digital Models* (Final), *supra* note 12, at 2, 5, 7 (Comm'r Johanson, dissenting).

19. 467 U.S. 837, 842–43 (1984); see *infra* Section III.A (describing Step One and Step Two of *Chevron*).

20. See *infra* Subsection IV.A.1.

21. See *Site Blocking: AGENDA* (Aug. 15, 2014), <https://s3.amazonaws.com/s3.documentcloud.org/documents/1381538/250191720-agenda-oct-8-2014-sb-confab.pdf>; see also Russell Brandon, *Hollywood Is Still Obsessed with Breaking the Internet*, VERGE (Dec. 15, 2014, 3:44 PM), <http://www.theverge.com/2014/12/15/7396639/hollywood-is-still-obsessed-with-breaking-the-internet> (discussing the leaked memo and the MPAA's "single-minded focus on site-blocking" to prevent piracy); Eli Dourado, *Is the MPAA Even Pro-Hollywood Any More?*, MEDIUM (Jan. 13, 2015), <https://medium.com/tech-liberation/is-the-mpaa-even-pro-hollywood-any-more-9fef31467c36> (discussing the MPAA's attempt to use the ITC to block websites and noting that "[i]t's unlikely that Congress intended to vest the ITC with authority over all international telecommunications data transmissions"); Timothy B. Lee, *How Hollywood Could Use Trade Laws to Create an Internet Blacklist*, VOX (Jan. 6, 2015, 2:30 PM), <http://www.vox.com/2015/1/6/7503315/hollywood-internet-blacklist-trade-law> (noting that the leaked document "outlines a legal strategy" to use the ITC "to force internet service providers to block access to sites found guilty of distributing pirated content—an idea strikingly similar to the one internet activists defeated three years ago").

22. See *infra* Part IV.

problematic, given that the ITC favors strong IP rights, notwithstanding harm the public welfare.²³

No information border or electronic checkpoint currently exists for digital information entering the United States.²⁴ Indeed, outside a national security context,²⁵ the government appears to lack authority to monitor e-mail, private servers, or the like without a search warrant or court order.²⁶ Providing the ITC with jurisdiction over information could not only cause immediate problems with regard to access to digital content²⁷ but also would likely lead to attempts to create a digital net through which all content must pass once technology makes this possible.²⁸ Those that support such measures must still ask whether the ITC is the best institution to implement them.

This Article is the first to examine the ITC's jurisdiction over digital trade. Part I provides a brief overview of the ITC and discusses the nature of its jurisdiction. Part II discusses the scope of in rem jurisdiction and argues that it does not cover digital information. Part III considers what are "articles" and maintains that the ITC should not receive deference for its expansive interpretation of the term. Part IV examines how third parties are attempting to expand the ITC's jurisdiction to create a digital border in the United States and considers the risks that this poses to the public.

I. THE ITC'S STRUCTURE AND POWERS

Several groups have suggested that Congress and the courts have historically favored the strong enforcement of U.S. IP rights against

23. See *infra* Subsection IV.A.3.b.

24. Other countries do have digital borders. The "Great Firewall" censors and blocks information that enters into China. However, the firewall does contain holes that allow determined individuals to circumvent it. Brad Stone & David Barboza, *Scaling the Digital Wall in China*, N.Y. TIMES, Jan. 16, 2010, at B1, available at <http://www.nytimes.com/2010/01/16/technology/internet/16evade.html>.

25. Barton Gellman et al., *In NSA-Intercepted Data, Those Not Targeted Far Outnumber the Foreigners Who Are*, WASH. POST (July 5, 2014), http://www.washingtonpost.com/world/national-security/in-nsa-intercepted-data-those-not-targeted-far-outnumber-the-foreigners-who-are/2014/07/05/8139adf8-045a-11e4-8572-4b1b969b6322_story.html ("Ordinary Internet users, American and non-American alike, far outnumber legally targeted foreigners in the communications intercepted by the National Security Agency from U.S. digital networks . . .").

26. See Nicole Friess, *When Rummaging Goes Digital: Fourth Amendment Particularity and Stored E-Mail Surveillance*, 90 NEB. L. REV. 971, 985–88 (2012).

27. See Brief of Amici Curiae Public Knowledge and the Electronic Frontier Foundation in Support of Appellants at 17, *ClearCorrect Operating, LLC v. Int'l Trade Comm'n*, No. 2014-1527 (Fed. Cir. Oct. 17, 2014), at 17 ("The threat of a Commission cease and desist order could cause service providers to refuse carriage of new and innovative services, block access to data, and otherwise restrain an open and unfettered arena of technological growth.").

28. See *infra* Subsection IV.A.3.a.

foreign entities.²⁹ But this is not entirely correct. An examination of the ITC's history shows that the agency has evolved over time, and was initially limited in power. Although the ITC and Article I courts have favored strong patent protection, the Federal Circuit has taken a far more measured approach, especially for method claims.

Section I.A provides background on the ITC, explaining its structure and powers. Part I.B examines the rise of digital trade and discusses related IP cases. It discusses the *ClearCorrect* litigation and other relevant cases.

A. Introduction to the ITC³⁰

The ITC is an independent agency composed of six commissioners who oversee five administrative law judges (ALJs).³¹ Its predecessor, the Tariff Commission, was created in 1916. The Tariff Commission provided information to Congress to help it set tariff rates, made recommendations at Congress's request, and provided information to the President to help administer the tariff laws.³²

Over time, the Tariff Commission's powers were expanded. Under the Tariff Act of 1930, it gained investigative powers over acts of unfair

29. *See, e.g.*, Brief of the Motion Picture Association of America and Recording Industry Association of America as Amici Curiae in Support of U.S. International Trade Commission and Affirmance at 8, *ClearCorrect Operating, LLC v. Int'l Trade Comm'n*, No. 2014-1527 (Fed. Cir. Feb. 25, 2015), available at <http://www.mpa.org/wp-content/uploads/2015/08/2015-02-25-Brief-of-AC-MPAA-RIAA-2.pdf> (maintaining that "[t]here is no evidence that Congress intended to limit the scope of the statute to particular forms of merchandise or modes of importation, or to allow the statute to discriminate among technologies"); Brief of the Association of American Publishers as Amicus Curiae in Support of U.S. International Trade Commission and Affirmance at 9–10, *ClearCorrect Operating, LLC v. Int'l Trade Comm'n*, No. 2014-1527 (Fed. Cir. Feb. 25, 2015), available at http://publishers.org/sites/default/files/uploads/PandP/2015-02-25_ecf_0073_brief_of_association_of_american_publishers_as_amicu.pdf (arguing that requiring Congress to update the Tariff Act to reflect technological changes would contravene case law of the now-defunct CCPA and that Congress not defining the term showed intent to leave the term open).

30. For a more detailed overview of the ITC, see Kumar, *Other Patent Agency*, *supra* note 10, at 534–35.

31. *See* 19 U.S.C. § 1330(a) (2012) ("The United States International Trade Commission (referred to in this subtitle as the 'Commission') shall be composed of six commissioners who shall be appointed by the President, by and with the advice and consent of the Senate."); 19 C.F.R. § 210.3 (2014) ("Administrative law judge means the person appointed under section 3105 of title 5 of the United States Code who presides over the taking of evidence in an investigation under this part."); *Administrative Law Judge Photos*, U.S. INT'L TRADE COMM'N, http://www.usitc.gov/press_room/bios/alj_photos.htm (last visited Nov. 11, 2015) (listing the five ALJs of the ITC).

32. ROGER G. NOLL, REFORMING REGULATION: AN EVALUATION OF THE ASH COUNCIL PROPOSALS 61 (1971).

competition related to international trade.³³ In 1974, the agency was renamed the International Trade Commission and was given new powers to provide redress for U.S. companies that were the victim of unfair competition from imported goods.³⁴ Among the new powers was the ability to grant cease-and-desist orders using nationwide in personam jurisdiction. President Richard Nixon supported the expansion of the agency in order to secure votes from protectionist congressmen for the liberalization of trade.³⁵

In the 1980s, the ITC's mission was once again redirected. In 1988, IP interest groups successfully lobbied to strengthen the ITC to allow for greater protection of IP rights.³⁶ In particular, patent holders wanted to take advantage of the ITC's ability to issue exclusion orders, which direct Customs agents to seize infringing goods at the border.³⁷ These groups were successful in convincing Congress to create a new provision in the Tariff Act that specifically addressed IP infringement.

Although federal courts seldom grant injunctive relief, the ITC almost always grants an exclusion order when it finds that infringement has occurred.³⁸ Consequently, ITC actions often have severe consequences for the infringer.

33. Tariff Act, ch. 497, § 337, 46 Stat. 96, 703 (1930) (codified as amended at 19 U.S.C. § 1330) (“To assist the President in making any decisions under this section the commission is hereby authorized to investigate any alleged violation hereof on complaint under oath or upon its initiative.”).

34. See Kumar, *Other Patent Agency*, *supra* note 10 at 542–44; S. REP. NO. 93-1298, at 3–4 (1974), as reprinted in 1974 U.S.C.C.A.N. 7186, 7187 (stating that the purpose of the 1974 Tariff Act was “[t]o strengthen the independence of the United States Tariff Commission” and “[t]o improve procedures for responding to unfair trade practices in the United States and abroad”).

35. See *Special Message to the Congress Proposing Trade Reform Legislation, April 10, 1973*, in PUBLIC PAPERS OF THE PRESIDENTS OF THE UNITED STATES: RICHARD NIXON 143 (U.S. Gov't Printing Office 1975) (President Nixon stating that “while trade should be more open, it should also be more fair”); Kumar, *Other Patent Agency*, *supra* note 10, at 542–44.

36. Kumar, *Other Patent Agency*, *supra* note 10, at 547–48. This lobbying resulted in the Omnibus Trade and Competitiveness Act of 1988, which broadened Section 337 to facilitate its use for IP infringement by weakening the domestic industry requirement. *Id.* at 548–50; *Comparing Major Trade Bills: Hearings Before the Committee on Finance United States Senate One Hundredth Congress First Session on S. 490, S. 636, and H.R. 3*, 100th Cong. 347 (1987) (“By proposing to eliminate the requirement of injury to an industry in the United States, the amendments seek to fundamentally alter the purpose for which Section 337 was enacted . . . to protect an established or about to be established U.S. industry from harm.” (statement of the ITC Trial Lawyers Association)).

37. See 19 U.S.C. § 1337(d)(1) (2012) (stating that the ITC, upon a determination of a violation of Section 337, “shall direct that the articles concerned . . . be excluded from entry into the United States”).

38. See Kumar, *Expert Court*, *supra* note 9, at 1557 n.45 (“There have only been three cases since 1974 where the ITC has found an imported good to infringe a valid patent, but declined to issue an exclusion order.”).

1. Jurisdiction

One of the ITC's distinguishing features is that its primary jurisdiction is based in rem.³⁹ When an infringing article is imported into the United States, the rights holder can file suit in the ITC.⁴⁰ If the rights holder is merely seeking an exclusion order, it does not have to establish in personam jurisdiction over any of the wrongdoers.⁴¹ Instead, the ITC automatically has in rem jurisdiction over the imported article.⁴² Although no provision in the Tariff Act explicitly mentions in rem jurisdiction, the Court of Customs and Patent Appeals noted that “[t]he *subject matter* jurisdiction of the ITC over ‘the importation of articles into the United States’” coupled with the ITC’s “authority to exclude ‘the articles concerned’” confers jurisdiction.⁴³

In rem jurisdiction is important because it allows the ITC to remedy infringement when in personam jurisdiction does not exist, as is sometimes the case for manufacturers of infringing goods.⁴⁴ The ITC’s primary power, granting exclusion orders, is an in rem remedy that attaches to the infringing article.⁴⁵ When the ITC issues a limited exclusion order, it orders Customs to seize infringing articles that the named respondent attempts to import.⁴⁶ When it issues a general exclusion order, it allows Customs to seize infringing articles regardless

39. See *Suprema, Inc. v. Int’l Trade Comm’n*, 796 F.3d 1338, 1346–47 (discussing how the language of Section 337 is based on in rem jurisdiction, while the language of § 271 of the Patent Act is based on in personam jurisdiction).

40. See 19 U.S.C. § 1337(a)(1)(B) (2012).

41. See *Sealed Air Corp. v. U.S. Int’l Trade Comm’n*, 645 F.2d 976, 985 (C.C.P.A. 1981) (“An exclusion order operates against goods, not parties. Accordingly, that order was not contingent upon a determination of personal or ‘in personam’ jurisdiction over a foreign manufacturer.”).

42. See *id.*

43. *Id.* at 986 (citing 19 U.S.C. § 1337(a), (d) (1976)).

44. See Kumar, *Other Patent Agency*, *supra* note 10, at 535; see also Annemarie Bridy, *Carpe Omnia: Civil Forfeiture in the War on Drugs and the War on Piracy*, 46 ARIZ. ST. L. J. 683, 691 (2014) (noting, in the context of civil forfeiture actions, “the *in rem* fiction gives the government power over property owners that it otherwise couldn’t get because of the heightened due process protections that apply when it acts *in personam*”).

45. Compare 19 U.S.C. § 1337(d)(1) (2012) (granting the ITC authority to issue exclusion orders over articles), with 19 U.S.C. § 1337(f)(1) (2012) (noting that the ITC may issue a cease-and-desist order as an alternative remedy).

46. See 19 U.S.C. § 1337(d)(1) (2012).

of the source.⁴⁷ The ITC can also issue cease-and-desist orders, provided that it has in personam jurisdiction over the target.⁴⁸

2. Customs Enforcement

Although the ITC has formal adjudicative power over infringing imports, it lacks direct enforcement power. No part of the ITC's organic statute permits the ITC to directly seize infringing articles. Rather, ITC exclusion orders are enforced by Customs, which is part of the Department of Homeland Security.⁴⁹

There is little guidance, however, on the scope of Customs' authority with regard to exclusion orders. The only Customs regulation that addresses exclusion orders gives port directors authority to refuse entry of excluded articles.⁵⁰ A Customs Directive from 1999 further states that "Customs enforces Exclusion Orders both prior and subsequent to their becoming final."⁵¹ The Customs Office of Regulations and Rulings administers the exclusion order, and its Office of Field Regulation processes the exclusion order and transmits it to field officers.⁵²

47. The ITC can issue general exclusion orders where it "is necessary to prevent circumvention of an exclusion order limited to products of named persons" or "there is a pattern of violation of this section and it is difficult to identify the source of infringing products." 19 U.S.C. § 1337(d)(2) (2012); *see* *Kyocera Wireless Corp. v. Int'l Trade Comm'n*, 545 F.3d 1340, 1356–58 (Fed. Cir. 2008) (comparing limited and general exclusion orders); *Fuji Photo Film Co. v. Int'l Trade Comm'n*, 474 F.3d 1281, 1285–86 (Fed. Cir. 2007) (discussing a pattern of violation involving importation of disposable cameras).

48. 19 U.S.C. § 1337(f) (2012).

49. The Tariff Act states that the ITC "shall direct that the articles concerned . . . be excluded from entry in the United States" and notes that the Secretary of the Treasury "shall, through the proper officers, refuse such entry." *Id.* § 1337(d)(1) (2012). The U.S. Customs Service, which was part of the Department of Treasury, actually enforced the orders. *See* 19 C.F.R. § 210.71(a)(1) (2014) ("Whenever the [ITC] issues an exclusion order, the [ITC] may require any person to report facts available to that person that will help the [ITC] assist the U.S. Customs Service in determining whether and to what extent there is compliance with the order."); *id.* § 210.74(a)(1) (noting that the ITC may modify reporting requirements of exclusion orders to help it "assist the U.S. Customs Service in ascertaining that there has been compliance with an outstanding exclusion order"). Under the Homeland Security Act of 2002, all functions of the U.S. Customs Service, "including the functions of the Secretary of the Treasury relating thereto" were transferred to the Department of Homeland Security (DHS), at which time the U.S. Customs Service became part of Customs and Border Patrol (Customs). 6 U.S.C. § 203(1) (2012). This agency is distinct from the U.S. Immigration and Customs Enforcement.

50. *See* 19 C.F.R. § 12.39(b)(2) (noting that articles covered by an exclusion order "will be refused entry"); *id.* § 12.39(b)(3) ("Port directors shall notify each importer or consignee of articles released under bond pursuant to paragraph (b)(2) of this section when the Commission's determination of a violation of section 337 becomes final and that entry of the articles is refused.").

51. U.S. DEP'T OF HOMELAND SEC., BUREAU OF CUSTOMS & BORDER PROT., CUSTOMS DIRECTIVE, No. 2310-006A, ¶ 3.2 (1999), *available at* <http://www.cbp.gov/sites/default/files/documents/2310-006a.pdf>.

52. *Id.* ¶ 4.

The Directive states that “Customs officers should seek the advice of Customs laboratories . . . in determining whether goods meet the parameters of the subject patent.”⁵³ It also notes that “[w]here goods determined to be subject to an Exclusion Order are presented to Customs, field officers must exclude the goods from entry into the United States.”⁵⁴ The choice of language is important because the term “goods” is generally limited to tangible property.⁵⁵

The focus on Customs’ power at ports of entry appears to prevent it from enforcing an exclusion order pertaining to electronic information. As Commissioner David Johanson noted in his dissent, “Electronic transmissions do not arrive at ports of entry, are incapable of being held in Customs custody, cannot be presented to Customs, and therefore can never be refused or denied entry.”⁵⁶ Customs thus does not appear to have jurisdiction over digital information that arrives via the Internet.

Consequently, for digital trade investigations, the sole power at the ITC’s disposal is its ability to issue cease-and-desist orders against conduct occurring in the United States. For example, in *Certain Digital Models*, the ITC affirmed the ALJ’s issuance of a cease-and-desist order against ClearCorrect prohibiting the importation of digital data sets. The ITC’s dependence upon such orders in digital trade cases raises two important questions, discussed in Part IV. First, given that in personam jurisdiction is required for issuing cease-and-desist orders, why is the ITC the appropriate forum for these cases? Second, by granting the ITC more power, is there a risk of government control over information at the border?

53. *Id.* ¶ 4.1.1.

54. *Id.* ¶ 4.1.2.

55. For example, the Uniform Commercial Code (UCC) defines “[g]oods” as “all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities (Article 8) and things in action.” U.C.C. § 2-105(1) (2012). This definition generally excludes intangibles such as software. *See generally* Andrew Rodau, *Computer Software: Does Article 2 of the Uniform Commercial Code Apply?*, 35 EMORY L.J. 853 (1986). In the Anti-Counterfeiting Trade Agreement, which is enforced by Customs, “pirated copyright goods” are defined as “any goods which are copies,” therefore referring to only copyrighted works that are fixed. Anti-Counterfeiting Trade Agreement art. 5(k), Oct. 1, 2011, *available at* http://www.mofa.go.jp/policy/economy/i_property/pdfs/acta1105_en.pdf. For a discussion of the definition of “goods” when the Tariff Act was passed, see *infra*, Section III.C.

56. *Certain Digital Models* (Final), *supra* note 12, at 6 (Comm’r Johanson, dissenting). A related agency—U.S. Immigration and Customs Enforcement (ICE)—does have authority to seize web domains related to digital piracy or the sale of counterfeit goods. *See* Joseph Menn, *U.S. Seizes Domain Names of 82 Websites*, FIN. TIMES (Nov. 30, 2010, 6:57 PM), <http://www.ft.com/cms/s/2/2df7c1d4-fcac-11df-bfdd-00144feab49a.html#axzz3jDWliPGr>. However, ICE does not appear to have any authority under the Tariff Act.

B. *The Rise of Digital Trade of Patented Goods*

The Supreme Court has emphasized that “[o]ur patent system makes no claim to extraterritorial effect,”⁵⁷ and that the Patent Act was not meant to extend beyond the U.S. border.⁵⁸ But the rise of digital trade has made boundary drawing quite complicated.⁵⁹ Because the ITC’s jurisdiction is dependent upon importation, these problems are arising with increasing frequency inside the agency.

1. Digital Trade Under the Patent Act

Although the *ClearCorrect* litigation will be the first time a court directly addresses the ITC’s jurisdiction over digital trade, the issue of transborder enforcement is not new. Several prior decisions under § 271 of the Patent Act help shed light on the limits of extraterritoriality.

a. 35 U.S.C. § 271(a)

Section 271(a) of the Patent Act covers direct infringement of a patented invention. It states that anyone who “without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.”⁶⁰

In the context of digital trade, the Federal Circuit has treated the infringement of method claims differently than other claims. In *NTP, Inc. v. Research in Motion, Ltd.*,⁶¹ the Federal Circuit considered whether Research In Motion’s (RIM) e-mail system for the then-popular Blackberry device infringed NTP’s patents under § 271(a).⁶² The technology RIM employed relied on routing information through a relay in Canada.⁶³

The court acknowledged that § 271 has limited territorial reach, and that § 271(a) was only actionable against infringement occurring inside the U.S.⁶⁴ However, it noted that use occurs at “the place at which the system as a whole is put into service, i.e., the place where control of the system is exercised and beneficial use of the system obtained.”⁶⁵ Because

57. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972).

58. *AT&T Corp. v. Microsoft Corp.*, 550 U.S. 437, 455 (2007).

59. See Dan L. Burk, *Patents in Cyberspace: Territoriality and Infringement*, 68 TUL. L. REV. 1, 38–39 (1993) (predicting that the rise of global computer networks would pose patent enforcement problems and could lead to the extraterritorial enforcement of U.S. patent law).

60. 35 U.S.C. § 271(a) (2012).

61. 418 F.3d 1282 (Fed. Cir. 2005).

62. *Id.* at 1287.

63. *Id.* at 1289–90.

64. *Id.* at 1313.

65. *Id.* at 1317.

RIM's U.S. customers controlled the transmission of information and benefitted from the exchange of information, infringement occurred in the United States.⁶⁶

The Federal Circuit, however, treated NTP's method claims differently. It held that a method is used within the United States only if "each of the steps is performed within this country,"⁶⁷ and concluded that RIM did not infringe NTP's method claims.⁶⁸ Thus, compared to regular claims, the Federal circuit exercises a higher degree of scrutiny for method claims to avoid the extraterritorial application of U.S. patent law. This is important because the claims at issue in the *ClearCorrect* litigation also involves methods.

b. 35 U.S.C. § 271(f)

Section 271(f) of the Patent Act prohibits someone from providing "components of a patented invention" in a manner that induces someone outside the United States. to combine them, where such combination would be infringing had it occurred inside the United States.⁶⁹ This section was meant to address the problem of U.S. companies exporting domestically made components that were then assembled abroad.⁷⁰

In *Microsoft Corp. v. AT&T Corp.*,⁷¹ the Supreme Court held that software, in the abstract, is not a component.⁷² The Court maintained that people buy and sell physical copies of software, not software in the abstract.⁷³ It further noted that courts in general "should 'assume that legislators take account of the legitimate sovereign interests of other nations when they write American laws.'"⁷⁴

This case is interesting because the Supreme Court distinguishes between abstract digital information versus information fixed in a physical device. A similar distinction can be made with regard to the importation of information. Furthermore, the Court emphasizes the need for caution in applying U.S. laws to foreign activity.

66. *Id.*

67. *Id.* at 1318.

68. *Id.*

69. 35 U.S.C. § 271(f) (2012).

70. *See generally* Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 532 (1972).

71. 550 U.S. 437 (2007).

72. *Id.* at 451–52.

73. *Id.* at 452.

74. *Id.* at 455 (quoting *F. Hoffmann–La Roche Ltd. v. Empagran S.A.*, 542 U.S. 155, 164 (2004)).

c. 35 U.S.C. § 271(g)

Section 271(g) of the Patent Act prohibits the importation of products made by a U.S.-patented method. This provision was added under the 1988 Process Patent Amendments Act, which expanded the Patent Act's reach over foreign activity.⁷⁵

In *Bayer AG v. Housey Pharmaceuticals, Inc.*, the Federal Circuit held that § 271(g) “is limited to physical goods that were manufactured and does not include information generated by a patented process.”⁷⁶ The court emphasized the fact that the exceptions to § 271(g) do not make sense for information, and that Congress was solely concerned with protecting physical goods.⁷⁷ Notably, the Federal Circuit stated in dicta that “nothing in [§ 337 of the Tariff Act] suggests coverage of information, in addition to articles.”⁷⁸

Overall, it is clear that the Supreme Court and Federal Circuit are concerned about extraterritorial applications of U.S. patent law, especially with regard to method claims. Moreover, both courts have declined to expand § 271 for methods infringed by intangible information.

2. The Rise of 3D Printing

3D printing technology allows people to create solid objects from a digital model.⁷⁹ Although this technology has existed for some time, it is now quickly becoming affordable and can be used to create everything from windpipes to working guns.⁸⁰ Indeed, even high-end 3D printers

75. See Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 VA. J. INT'L L. 603, 607 (1997) (“The focus of the legislation is upon foreign activity—the use of patented process technology in another country; but, technically, the Process Act has no extraterritorial effect. Infringement arises only if and when someone imports the product into the United States.”).

76. 340 F.3d 1367, 1368 (Fed. Cir. 2003).

77. *Id.* at 1372–73.

78. *Id.* at 1373 n.9; see also *Yangaroo Inc. v. Destiny Media Techs. Inc.*, 720 F. Supp. 2d 1034, 1038 (E.D. Wisc. 2010) (declining to apply § 271(g) to infringement of a method of distributing content, noting that the method at issue did not cover the creation of content). *But see* *Ormco Corp. v. Align Tech., Inc.*, 609 F. Supp. 2d 1057, 1076 (C.D. Cal. 2009) (holding that a 3D model of teeth was “a ‘creation’ produced by ‘practicing each step’ of a patented process”); *CNET Networks, Inc. v. Utilize, Inc.*, 528 F. Supp. 2d 985, 994 (N.D. Cal. 2007) (holding that a digital catalogue created by an infringing process is a product under § 271(g)).

79. See Osborn, *supra* note 6, at 555.

80. See Rob Stein, *Baby Thrives Once 3-D-Printed Windpipe Helps Him Breathe*, NPR (Dec. 23, 2014, 4:20 PM), <http://www.npr.org/blogs/health/2014/12/23/370381866/baby-thrives-once-3d-printed-windpipe-helps-him-breathe/>; Te Halterman, *Activists ‘3D Print’ a Gun in Front of the Texas State Capitol as a Form of Protest*, 3DPRINT.COM (Jan. 14, 2015), <http://3dprint.com/37168/ghost-gunner-texas-open-carry/>; see also Ben Geier, *Local Motors Shows Strati, the World’s First 3D-Printed Car*, FORTUNE (Jan. 13, 2015, 1:14 PM), <http://fortune.com>

cost less than many personal computers of the 1980s.⁸¹

As commentators have observed, 3D printing is positioned to provide major challenges for patent holders.⁸² Teresa Rea, the former Acting Director of the Patent and Trademark Office, has noted that the falling cost of the printing technology means that “we should anticipate that this will be a growing challenge for [IP] right holders and law enforcement.”⁸³ Part of the problem is that the use of digital models and 3D printers blurs the line between the exchange of mere information and the exchange of tools designed for patent infringement.⁸⁴

Patent law is currently not structured to protect patent holders from the distribution of digital models. As Professors Timothy Holbrook and Lucas Osborn have discussed, an indirect infringement theory under current law would be challenging.⁸⁵ An inducement theory under 35 U.S.C. § 271(b) would require showing that the accused infringer intended to induce patent infringement, which would be difficult if the accused infringer knew little about patent law.⁸⁶ Contributory infringement would also be difficult to prove because it requires treating digital models as a “component” of a patented invention.⁸⁷

Professors Holbrook and Osborn optimistically believe that courts may possess enough power to recognize a direct digital patent infringement cause of action whenever someone sells or offers to sell a digital model directed to a claimed invention.⁸⁸ But it is more likely that Congress would have to effectuate such a major change.⁸⁹

/2015/01/13/local-motors-shows-strati-the-worlds-first-3d-printed-car/ (showing that large items, such as 3D cars, are now being created).

81. Cf. Chris Anderson, *The New Makerbot Replicator May Just Change Your World*, WIRED (Sept. 19, 2012, 3:15 PM), <http://www.wired.com/2012/09/how-makerbots-replicator2-will-launch-era-of-desktop-manufacturing/> (comparing the evolution of 3D printers to that of early personal computers).

82. See generally Timothy R. Holbrook & Lucas S. Osborn, *Digital Patent Infringement in an Era of 3D Printing*, 48 U.C. DAVIS L. REV. 1319 (2015) (discussing difficulties in protecting patent rights holders).

83. Heesun Wee, *The ‘Gold Rush’ for 3-D Printing Patents*, CNBC (Aug. 15, 2013, 10:48 AM), <http://www.cnbc.com/id/100942655>.

84. Holbrook & Osborn, *supra* note 82, at 1353.

85. *Id.* at 1327, 1332.

86. *Id.* at 1337–38.

87. *Id.* at 1345, 1347. In *Microsoft Corp. v. AT&T Corp.*, the Supreme Court held that, under 35 U.S.C. § 271(f) (2012), software in the abstract is not a “component.” 550 U.S. 437, 449–52 (2007). This would make it challenging to apply § 271(c) of the Patent Act given that a term is generally given consistent meaning in the same section of a statute.

88. See Holbrook & Osborn, *supra* note 82, at 1356–64. The authors emphasize that a thorough study should first be undertaken to examine the effects of digital manufacturing technology on the patent system. *Id.* at 1373.

89. See Ebrahim, *supra* note 8, at 34 (proposing that the Patent Act be amended to protect patent holders from infringement through 3D printing).

The lack of clear enforcement mechanisms in the Patent Act is important because it affects patent holders' rights in the ITC. Under the Tariff Act, articles must infringe a "valid and enforceable United States patent."⁹⁰ While there is a provision of the Tariff Act preventing more general "[u]nfair methods of competition and unfair acts," that provision has a far stricter domestic industry requirement.⁹¹ Consequently, any proposal that expands the ITC's jurisdiction over digital trade should consider the scope of the Patent Act as well.

3. ClearCorrect *Litigation*

The *ClearCorrect* litigation involves plastic dental appliances, such as invisible braces. Align Technology (Align) has seven patents on a system for repositioning teeth, in which a series of custom-made aligners successively straighten the patient's teeth.⁹² The claims at issue are all for methods of creating dental appliances, digital data sets, and digital treatment plans.⁹³ None of the claims asserted were directed to a tangible product.⁹⁴

a. ITC Proceeding

The dispute dates back to 2006, when Align filed a complaint in the ITC against the OrthoClear companies,⁹⁵ arguing that dental apparatuses imported from Pakistan violated two of Align's patents.⁹⁶ The two parties agreed to a consent order, in which OrthoClear agreed to not import dental appliances that violate Align's patents and trade secrets.⁹⁷ In 2012, Align returned to the ITC, arguing (1) that ClearCorrect violated the consent decree, and (2) that ClearCorrect was a successor, assignee, or agent of OrthoClear.⁹⁸ ClearCorrect was structured as two entities, one Pakistan-based (ClearCorrect Pakistan) and one U.S.-based (ClearCorrect U.S.).⁹⁹

90. 19 U.S.C. § 1337(a)(1)(B)(i) (2012).

91. *See* 19 U.S.C. § 1337(a)(1)(A) (requiring that the "threat or effect" of the unfair competition be "(i) to destroy or substantially injure an industry in the United States; (ii) to prevent the establishment of such an industry; or (iii) to restrain or monopolize trade and commerce in the United States").

92. Certain Digital Models (Final), *supra* note 12, at 7.

93. *Id.* at 1, 16.

94. *See infra* note 105.

95. The name "OrthoClear" refers to three companies: OrthoClear, Inc. of San Francisco, California; OrthoClear Holdings, Inc. of Tortola, British Virgin Islands; and OrthoClear Pakistan Pvt, Ltd. of Lahore, Pakistan. Certain Digital Models (Final), *supra* note 12, at 4 n.3.

96. *Id.* at 1, 16.

97. *Id.* at 4.

98. *Id.* at 5–6.

99. *Id.* at 2.

2012 was the first time that Align complained about the importation of digital information, in the *Certain Digital Models* ITC proceeding.¹⁰⁰ ClearCorrect U.S. uploaded digital scans of patients' teeth to its server, located in Houston.¹⁰¹ ClearCorrect Pakistan then downloaded the information in Lahore, Pakistan, and used it to create digital models of patients' teeth, digital treatment plans, and other data; it uploaded this information to the Houston server.¹⁰² ClearCorrect U.S. finally downloaded the information and used 3D printers in Houston to create physical models of the patients' teeth and then used the models to create the aligners.¹⁰³

Align maintained that these actions constituted the importation of patented articles, thereby violating § 337 of the Tariff Act.¹⁰⁴ It claimed that the electronic data sets are articles, and that importation occurred when ClearCorrect Pakistan uploaded the data sets to the Houston server.¹⁰⁵ The respondents maintained that digital data sets are not articles under § 337 and that uploading data to a server does not constitute importation.¹⁰⁶

The ALJ in *Certain Digital Models* ruled in favor of Align, noting that the ITC previously held that intangible software is an article.¹⁰⁷ A majority of the commissioners affirmed, maintaining that a broad interpretation of "article" was warranted, with Commissioner Johanson dissenting.¹⁰⁸ This case is currently on appeal to the Federal Circuit as *ClearCorrect v. International Trade Commission*.¹⁰⁹

100. *See id.* at 17.

101. *Id.* at 19.

102. *Id.* at 17.

103. *Id.*; *see also* Ricardo Pirroni, *ClearCorrect Scales 3D Printed Digital Orthodontics Capacity by 30%*, 3D PRINTING INDUSTRY (May 10, 2013), <http://3dprintingindustry.com/2013/05/10/clearcorrect-scales-3d-printed-digital-orthodontics-capacity-by-30/> (noting that ClearCorrect Houston utilizes "a large number of ultrafine Objet Eden-line 3D Printing Systems," allowing it to create custom aligners at a lower cost than traditional methods).

104. *Certain Digital Models* (Final), *supra* note 12, at 21–22.

105. *Id.* at 21–22.

106. *Id.* at 24.

107. *Id.* at 21–22; *In re Certain Digital Models, Digital Data, and Treatment Plans for Use in Making Incremental Dental Positioning Adjustment Appliances, the Appliances Made Therefrom, and Methods of Making the Same*, Inv. No. 337-TA-833, USITC Pub. 2013-18437, at 29 (May 6, 2013) (Initial Determination) [hereinafter *Certain Digital Models* (Initial Determination)], available at <http://www.itcblog.com/alj-rogers-issues-public-version-of-initial-determination-in-certain-digital-models-digital-data-and-treatment-plans-for-use-in-making-incremental-dental-positioning-adjustment-appliances-made-ther>.

108. *Certain Digital Models* (Final), *supra* note 12, at 22; *see infra* Part III.

109. Brief of Appellants ClearCorrect Operating, LLC, ClearCorrect Pakistan, LTD, 2014-1527 (Fed. Cir. Apr. 10, 2015).

4. Other Relevant Cases

Other decisions from the Federal Circuit, ITC, and U.S. Court of International Trade (CIT) have looked at the scope of “articles” or related terms. These decisions have favored giving the ITC broad powers, though none have conducted a detailed examination of the ITC’s legislative authority.

a. Federal Circuit

In 2015, the en banc Federal Circuit decided *Suprema v. International Trade Commission*.¹¹⁰ A majority of the Federal Circuit granted *Chevron* deference¹¹¹ to the ITC’s interpretation of “articles that infringe.”¹¹² The ITC held that “articles that infringe” includes the importation of goods that are later used by the infringer to directly infringe, upon inducement from the seller of the goods.¹¹³

Prior to *Suprema*, the use of *Chevron* deference for patent-related ITC decisions was controversial.¹¹⁴ In *Kinik v. International Trade Commission*, the Federal Circuit, in dicta, granted the ITC *Chevron* deference for its decision that defenses under 35 U.S.C. § 271(g) were not applicable in the ITC.¹¹⁵ The case was so controversial that it led to Senate Hearings.¹¹⁶ Thus, *Suprema* is a significant departure from established Federal Circuit practice.

The decision is furthermore notable because the majority referred to “articles” and “goods” interchangeably.¹¹⁷ As discussed in Section III.C, the contemporaneous legal definition of “goods” refers primarily to tangible property. Consequently, the majority appears to be recognizing a restriction in the scope of “articles.”

Judge Kathleen O’Malley dissented, joined by Chief Judge Sharon Prost, Judge Alan Lourie, and Judge Timothy Dyk. The dissent maintained that “articles that infringe” is unambiguous and that the word “articles” “connotes a physical object.”¹¹⁸ Judge Prost and Judge O’Malley are both on the panel that is currently deciding the

110. 796 F.3d 1338 (Fed. Cir. 2015) (en banc).

111. See *infra* Section III.A.

112. *Suprema*, 796 F.3d at 1352–53 (quoting 19 U.S.C. § 1337 (2012)).

113. *Id.* at 1340.

114. See Kumar, *Expert Court*, *supra* note 9, at 156–68.

115. *Kinik Co. v. Int’l Trade Comm’n*, 362 F.3d 1359 (Fed. Cir. 2004).

116. *Process Patents: Hearing Before the S. Comm. on the Judiciary*, 110th Cong. 86–87 (2007) (statement of Sen. Patrick Leahy) (testifying regarding controversy surrounding ITC’s decision that § 271(g) Patent Act defenses are not available in § 337 proceedings).

117. See generally, *Suprema*, 796 F.3d 1338 (referring to articles as “goods” on numerous occasions).

118. *Id.* at 1355 (O’Malley, J., dissenting).

ClearCorrect appeal, raising the likelihood that the ITC will be reversed.

b. International Trade Commission

In *Certain Hardware Logic*, the ITC held that software is an article and issued a cease-and-desist order prohibiting the importation of software.¹¹⁹ It stated: “We do not think that the legislative history of Section 337 precludes coverage of electronically transmitted software; in fact, we believe that it supports the conclusion that such coverage is proper.”¹²⁰ This case, however, involved software transmitted on a physical medium; no electronic transmission had occurred.¹²¹

In earlier litigation involving some of the same parties and patents from *Certain Digital Models*, the ITC stated that “it has jurisdiction and authority to reach digital data that are electronically transmitted to a recipient in the United States.”¹²² On appeal, the Federal Circuit noted that, for its opinion, it assumed that the ITC had “statutory authority to exclude the importation of digital data that enters the United States through electronic transmission.”¹²³ However, it explicitly stated that it “take[s] no position on whether Section 337 permits the Commission to exclude such importations,” leaving the issue to be settled at a future time.¹²⁴

c. Customs and Court of International Trade

Customs has read other parts of the Tariff Act to apply tariffs to digitally transmitted information. In a ruling letter,¹²⁵ Customs found that “the transmission of software modules and products into the United States from a foreign country via the Internet is an importation of

119. *In re Certain Hardware Logic Emulation Sys. & Components Thereof*, Inv. No. 337-TA-383, USITC Pub. 3089, at 6, 18, 18 n.84 (Dec. 3, 1997) (Permanent Cease and Desist Order) [hereinafter *Certain Hardware Logic Cease and Desist Order*], available at <http://www.usitc.gov/publications/337/pub3089.pdf>.

120. *Id.* at 28.

121. *Id.* at 5.

122. *Align Tech., Inc. v. Int’l Trade Comm’n*, 771 F.3d 1317, 1321 (Fed. Cir. 2014) (quoting *In re Certain Incremental Dental Positioning Adjustment Appliances & Methods of Producing Same*, Inv. No. 337-TA-562, USITC Pub. 2015-11383, at 69 (Jan. 10, 2013) (Final)).

123. *Id.* at 1326 n.8. The panel only had two judges because of Judge Randall Rader’s retirement. *Id.* at 1318.

124. *Id.* at 1326 n.8.

125. A ruling letter constitutes highly informal rulemaking and is eligible for only *Skidmore* deference. *United States v. Mead Corp.*, 533 U.S. 218, 234–35 (2001) (holding that Customs Service letters, which do not go through notice-and-comment rulemaking, merely have the “power to persuade.” (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944))); see also *What Are Ruling Letters?*, U.S. CUSTOMS AND BORDER PROTECTION, <http://www.cbp.gov/trade/rulings/ruling-letters> (last visited Nov. 2, 2015) (detailing the purpose of the letters).

merchandise.”¹²⁶ It stated that “[t]he fact that the importation of the merchandise via the Internet is not effected by a more ‘traditional vehicle’ (e.g., transported on a vessel) does not influence our determination” and that “[t]he essential facts are that merchandise in a foreign country is brought into the United States.”¹²⁷

Former Employees of Computer Sciences Corp. v. United States Secretary of Labor involved a challenge in the U.S. Department of Labor (Labor) by software developers whose jobs had been shifted to India.¹²⁸ Labor held that software not embodied on a physical medium is not an “article” under the Trade Act and that the plaintiffs were not eligible for job assistance, notwithstanding the fact that the software had been transmitted to the United States.¹²⁹

The CIT reversed, and held that substantial evidence did not support Labor’s decision.¹³⁰ The CIT noted that the Harmonized Tariff Schedule of the United States governs the definition of “article” in the Trade Act.¹³¹ Under General Note 1, “All goods provided for in this schedule and imported into . . . the United States . . . are subject to duty or exempt therefrom”¹³² The CIT concluded that electronic software is in the category of “telecommunications transmissions” and is therefore an article.¹³³

II. THE LIMITS OF IN REM JURISDICTION

One of the ITC’s advantages is its use of in rem jurisdiction. This allows an IP holder to block infringing goods even if the importer or seller lacks sufficient contacts with the United States. However, the ITC has

126. Customs Ruling Letter, HQ 114459, Letter from Kamen Lozey, Gen. Manager, Intellectronix LLC, to Jerry Laderberg, Chief of the Entry Procedures and Carriers Branch (Sept. 17, 1998), available at <http://rulings.cbp.gov/hq/1998/114459.doc>.

127. *Id.*

128. *Former Emps. of Computer Scis. Corp. v. U.S. Sec’y of Labor*, 414 F. Supp. 2d 1334, 1336 (Ct. Int’l Trade 2006). The parties refer to 19 U.S.C. §§ 2101–2495 (2000) as the “Trade Act.” See *id.* Both the Trade Act and Tariff Act are from the same Title, Title 19. *Id.*

129. *Id.* at 1338, 1343–46.

130. *Id.* at 1343–46. It is unclear why the “substantial evidence” standard of review would be applicable to Labor’s interpretation of “article.” Statutory interpretations are questions of law and by default are reviewed de novo. *Warshauer v. Solis*, 577 F.3d 1330, 1335 (11th Cir. 2009) (citing *Mead*, 533 U.S. at 235).

131. *Computer Scis. Corp.*, 414 F. Supp. 2d at 1341.

132. U.S. INT’L TRADE COMM’N, *General Notes*, in HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES 3 (2015), available at <http://www.usitc.gov/publications/docs/tata/hts/bychapter/1501gn.pdf>.

133. *Computer Scis. Corp.*, 414 F. Supp. 2d at 1341–42 (quoting U.S. INT’L TRADE COMM’N, *General Notes*, *supra* note 132). This interpretation would force all phone calls and e-mails to become “goods” as well, given that they, too, are also “telecommunications transmissions.” This absurd result calls into question the validity of the CIT’s interpretation.

failed to establish that in rem jurisdiction extends to digital information.¹³⁴

In rem jurisdiction plays an important role in the enforcement of IP rights. In personam jurisdiction exists only if one satisfies the minimum contacts requirement set out in *International Shoe Co. v. Washington*.¹³⁵ But foreign entities that infringe U.S. IP rights do not necessarily have minimum contacts with the United States.¹³⁶ In rem jurisdiction allows a court to determine all claims that anyone has regarding the property at issue,¹³⁷ regardless of whether in personam jurisdiction is met.¹³⁸ The only requirement is that the property itself resides within the court's jurisdictional boundaries;¹³⁹ notice need not be provided to the parties.¹⁴⁰

In a true in rem proceeding, the property the court claims jurisdiction over is subject to a dispute.¹⁴¹ This is the type of jurisdiction that the ITC asserts over articles; it is also used by courts in domain name disputes. By contrast, quasi in rem jurisdiction exists when the property subject to the legal proceeding is used to satisfy an unrelated claim.¹⁴²

This Part looks at existing case law regarding the reach of in rem jurisdiction over tangible property, financial intangible property, and domain names. It maintains that a key attribute of cases where in rem jurisdiction is found is the court's control over the property at issue. It then concludes that digital information cannot be controlled, making in rem jurisdiction over it inappropriate.

134. It is unclear whether in personam jurisdiction alone would be enough to confer the ITC with jurisdiction. The ITC must have in personam jurisdiction to issue cease-and-desist orders.

135. 326 U.S. 310, 316 (1945).

136. See Jane C. Ginsburg, *Copyright Without Borders? Choice of Forum and Choice of Law for Copyright Infringement in Cyberspace*, 15 CARDOZO ARTS & ENT. L.J. 153, 158–63 (1997) (discussing the uncertainty of how this issue would be resolved under existing case law).

137. See RESTATEMENT (SECOND) OF JUDGMENTS § 6 cmt. c (1982); *U.S. v. Grundy*, 7 U.S. 337, 356 n.* (1806) (“The proceeding being *in rem*, all the world become parties to the sentence, as far as the right of property is involved; and of course, all persons any wise interested in the property in question, are admissible to claim and defend their interests.”).

138. See Joseph J. Kalo, *The Meaning of Contact and Minimal National Contacts: Reflections on Admiralty In Rem and Quasi In Rem Jurisdiction*, 59 TUL. L. REV. 24, 25 n.5 (1984).

139. Fletcher R. Andrews, *Situs of Intangibles in Suits Against Nonresident Claimants*, 49 YALE L. J. 241, 241 (1939).

140. Kalo, *supra* note 138, at 25 n.5.

141. See *Shaffer v. Heitner*, 433 U.S. 186, 199 n.17 (1977) (“A judgment *in rem* affects the interests of all persons in designated property. A judgment *quasi in rem* affects the interests of particular persons in designated property.”); *Hanson v. Denckla*, 357 U.S. 235, 246 (1958) (“The basis of the jurisdiction is the presence of the subject property within the territorial jurisdiction of the forum State.”).

142. See *Shaffer*, 433 U.S. at 199 n.17 (“A judgment *quasi in rem* affects the interests of particular persons in designated property.”).

A. *Tangible and Financial Intangible Property*

In rem jurisdiction exists over all tangible property. With regard to land, the court can use in rem jurisdiction to force a sale to pay taxes owed to the state¹⁴³ or to satisfy a private claim.¹⁴⁴ For personal property, in rem jurisdiction shows up in several areas of law. In admiralty law, jurisdiction attaches to the vessel at issue in the dispute.¹⁴⁵ In rem jurisdiction appears in civil forfeiture cases, where goods are used to facilitate criminal activity,¹⁴⁶ and in commercial law, where ownership of goods is in dispute.¹⁴⁷

In rem jurisdiction also extends to some intangible property. For documentary intangible property—such as stock certificates and bills of lading—the property can be “merged” with a physical document in certain circumstances.¹⁴⁸ In such cases, the “situs” or location of the property for legal purposes is the location of the document.¹⁴⁹

But what about intangible property not merged in a document? As Chief Judge Benjamin Cardozo noted, “The situs of intangibles is in truth a legal fiction, but there are times when justice or convenience requires that a legal situs be ascribed to them.”¹⁵⁰ In such cases, the court assigns a fictitious situs based on a variety of factors, a decision that is often controversial.¹⁵¹

143. See, e.g., *United States v. Rodgers*, 461 U.S. 677, 694 (discussing state in rem power to collect delinquent taxes).

144. See, e.g., *Shaffer*, 433 U.S. at 218 (Stevens, J., concurring) (noting that while in rem and quasi in rem jurisdiction arising from the situs of purchased stock may be problematic, if one “visit[s] another State, or acquire[s] real estate or open[s] a bank account in it,” then one “knowingly assume[s] some risk that the State will exercise its power over [the] property”).

145. See, e.g., *Hilton v. Guyot*, 159 U.S. 113, 167 (1894) (“A judgment *in rem*, adjudicating the title to a ship or other movable property within the custody of the court, is treated as valid everywhere.”).

146. See, e.g., *Austin v. United States*, 509 U.S. 602, 622 (1993) (limiting excessive civil forfeiture).

147. See, e.g., *Evergreen Marine Corp. v. Six Consignments of Frozen Scallops*, 4 F.3d 90, 93 (1st Cir. 1993) (discussing admiralty law in a dispute involving a negotiable bill of lading).

148. Merger occurs when by law “the right to the immediate possession of a chattel and the power to acquire such possession is represented by a document” such that the “document is regarded as equivalent to the chattel itself.” RESTATEMENT (SECOND) OF TORTS § 242 cmt. a (1965).

149. See *Hanson v. Denckla*, 357 U.S. 235, 247 n.16 (1958) (“Properly speaking such assets are intangibles that have no ‘physical’ location. But their embodiment in documents treated for most purposes as the assets themselves makes them partake of the nature of tangibles.”); see also Anthony Bagnuola, Note, “*Show Me the Money*,” *State v. Western Union Financial Services and the Jurisdictional Significance of Electronic Debts*, 85 ST. JOHN’S L. REV. 797, 800–01 (2011) (exploring the issues associated with wire transfers and the need for updated precedent to accommodate these modern issues).

150. *Severnoe Sec. Corp. v. London & Lancashire Ins. Co.*, 174 N.E. 299, 300 (1931).

151. See *Hanson*, 357 U.S. at 246–47 (citing *Andrews*, *supra* note 139).

For intangible property of a financial nature, courts apply a variety of rules in determining whether in rem jurisdiction exists. In *United States v. Daccarett*, a civil forfeiture case, a Columbian drug cartel used banks in the United States to store and move narcotic proceeds.¹⁵² The U.S. Court of Appeals for the Second Circuit found in rem jurisdiction over the funds, which had entered an intermediary New York bank through interbank electronic fund transfers.¹⁵³ In a subsequent decision, the Second Circuit noted that in rem jurisdiction exists regardless of the fact that the bank owns the electronic fund transfer.¹⁵⁴

By contrast, the Arizona Supreme Court rejected quasi in rem jurisdiction over wire transfers from Western Union, where the transferor and transferee were both located out of state.¹⁵⁵ Notably, the court found that Arizona's in personam jurisdiction over Western Union was insufficient to confer in rem jurisdiction over the wire transfers.¹⁵⁶

The U.S. Supreme Court has provided guidance in the context of quasi in rem jurisdiction. In *Shaffer v. Heitner*, a Delaware court asserted quasi in rem jurisdiction based on Heitner's purchase of one share of stock in Greyhound, which was incorporated in Delaware.¹⁵⁷ The Supreme Court reversed, holding that in the interest of fairness, "all assertions of state-court jurisdiction must be evaluated according to the standards set forth in *International Shoe* and its progeny."¹⁵⁸ However, in a subsequent decision, a Supreme Court plurality declined to extend the decision beyond quasi in rem jurisdiction.¹⁵⁹ Consequently, minimum contacts need not be established for in rem cases in the ITC.

B. Domain Names

Until recently, the only pure intangible property subject to in rem jurisdiction was that relating to financial assets. But the creation of the World Wide Web and use of domain names led several scholars to argue that domain names should be treated as property and should be subject to

152. 6 F.3d 37, 43 (2d Cir. 1993).

153. *Id.* at 44.

154. *Shipping Corp. of India v. Jaldhi Overseas PTE Ltd.*, 585 F.3d 58, 69 (2d Cir. 2009) (noting that "[t]o be eligible for forfeiture, the EFTs needed only to be traceable to the illegal activities," and that the ownership of the EFTs was wholly irrelevant).

155. *State v. W. Union Fin. Servs.*, 208 P.3d 218, 219, 226 (Ariz. 2009). The State argued that "electronic credits" to the wired money were "debts" that existed wherever Western Union was subject to jurisdiction. *Id.* at 223.

156. *Id.* at 223. This is in contrast to the 1905 Supreme Court decision *Harris v. Balk*, where the Court held that a party's physical presence in Maryland gave Maryland jurisdiction over the party's debt. 198 U.S. 215, 222–23 (1905).

157. 433 U.S. 186, 194 (1976).

158. *Id.* at 212.

159. *Burnham v. Superior Court*, 495 U.S. 604, 620 (1990).

in rem jurisdiction.¹⁶⁰ This Section examines the use of in rem jurisdiction over domain names, both by federal legislation and under the common law.

1. Federal Statutes

Congress has made domain names property.¹⁶¹ Under the Anticybersquatting Consumer Protection Act (ACPA), a U.S. trademark owner can petition a court to transfer a domain name from a foreign national to the U.S. owner.¹⁶² Such suits, however, are limited in reach because the trademark owner can only file “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.”¹⁶³

The Prioritizing Resources and Organization for Intellectual Property Act of 2008 (PRO-IP Act) increased civil and criminal enforcement of IP laws.¹⁶⁴ Section 2323(a)(1)(A) of the PRO-IP Act states that “[a]ny article, the making or trafficking of which is, prohibited” under several statutory provisions is property subject to forfeiture.¹⁶⁵ As Professor Annemarie Bridy has observed, this provision has been used to seize

160. See, e.g., Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715, 771 (2003) (“[D]omain names are better understood as a new form of property arising in the Information Age.”); Thomas R. Lee, *In Rem Jurisdiction in Cyberspace*, 75 WASH. L. REV. 97, 145 (2000) (arguing that in rem jurisdiction should be available “in the district in which the domain name is registered”). Other scholars have taken a more critical approach to internet property. See, e.g., Greg Lastowka, *Decoding Cyberproperty*, 40 IND. L. REV. 23, 50–56 (2007) (discussing the popular view of “cyberproperty” and arguing that significant differences exist between computer resources and real and chattel property).

161. As the Eastern District of Virginia noted: “There is no prohibition on a legislative body making something property. Even if a domain name is no more than data, Congress can make data property and assign its place of registration as its situs.” *Caesars World, Inc. v. Caesars-Palace.com*, 112 F. Supp. 2d 502, 504 (E.D. Va. 2000).

162. See 15 U.S.C. § 1125(d)(2)(C) (2012) (stating the situs of a domain name action in rem shall be “in the judicial district in which—(i) the domain name registrar, registry, or other domain name authority that registered or assigned the domain name is located; or (ii) documents sufficient to establish control and authority regarding the disposition of the registration and use of the domain name are deposited with the court”); see also Lastowka, *supra* note 160, at 51 (“The ACPA allowed for plaintiffs to proceed ‘in rem’ to recover domain names, legislatively reifying the notion that domain names were a form of virtual property.”).

163. 15 U.S.C. § 1125(d)(2)(A); see also *Mattel, Inc. v. Barbie-Club.com*, 310 F.3d 293, 299–300 (2d Cir. 2002) (ruling that 15 U.S.C. § 1125(d)(2)(A) did not allow Mattel to file suit in a judicial district of its choosing and then relocate the domain name’s legal situs to support that filing).

164. Prioritizing Resources and Organization for Intellectual Property (PRO-IP) Act of 2008, Pub. L. No. 110-403, § 206, 122 Stat. 4256, 4262–63 (2008) (codified as amended at 18 U.S.C. § 2323 (2012)). See Bridy, *supra* note 44, at 709–10 (discussing the passage of the PRO-IP Act and the expansion of civil forfeiture law to online activity).

165. 18 U.S.C. § 2323(a)(1)(A) (2012).

thousands of domain names under the legal theory that the domain names were being used for counterfeiting and criminal copyright infringement.¹⁶⁶

2. Common Law

States have taken a variety of approaches in how they classify domain names.¹⁶⁷ In *Kremen v. Cohen*, the U.S. Court of Appeals for the Ninth Circuit held that domain names are intangible property under California state law.¹⁶⁸ The court noted that domain names meet California's three-part test for property rights: "First, there must be an interest capable of precise definition; second, it must be capable of exclusive possession or control; and third, the putative owner must have established a legitimate claim to exclusivity."¹⁶⁹ With regard to exclusivity, the court noted that "[r]egistering a domain name is like staking a claim to a plot of land at the title office" because the registration "informs others that the domain name is the registrant's and no one else's."¹⁷⁰

In the bankruptcy case *In re Alexandria Surveys International*, a federal district court held that domain names are contractual rights—not property rights—under Virginia state law.¹⁷¹ The district court based its decision on a prior Virginia Supreme Court decision, *Network Solutions v. Umbro International*,¹⁷² in which that court held that "a domain name registrant acquires the contractual right to use a unique domain name for a specified period of time" and is "not subject to garnishment."¹⁷³ The

166. Bridy, *supra* note 44, at 711.

167. For a detailed discussion of state regulation of domain names, see generally Frederick M. Abbot, *On the Duality of Internet Domain Names: Propertization and Its Discontents*, 3 N.Y.U. J. INTELL. PROP. & ENT. L. 1 (2013).

168. *Kremen v. Cohen*, 337 F.3d 1024, 1030 (9th Cir. 2003) (holding, in the context of a domain name dispute, that the plaintiff had an intangible property right in his domain name and that a jury could find that the domain name was "wrongful[ly] dispos[ed] of").

169. *Id.*; see also Howard Beck, *Bosh Wins a Legal Ruling in a Case on Domain Names*, N.Y. TIMES, Oct. 15, 2009, at B17, available at http://www.nytimes.com/2009/10/15/sports/basketball/15bosh.html?_r=0 (discussing a California court decision that ordered the turnover of domain names to satisfy an outstanding judgment).

170. *Kremen*, 337 F.3d at 1030.

171. *In re Alexandria Surveys Int'l*, 500 B.R. 817, 822 (E.D. Va. 2013); see also Venkat Balasubramani, *Federal Court in Virginia Court Says Domain Names Are Not Property, but Contractual Rights*, TECH. & MKTG. BLOG (Jan. 14, 2014), available at <http://blog.ericgoldman.org/archives/2014/01/federal-court-in-virginia-court-says-domain-names-are-not-property-but-contractual-rights.htm> (discussing *Alexandria Surveys Int'l*).

172. *Alexandria Surveys Int'l*, 500 B.R. at 822 (citing *Network Solutions, Inc. v. Umbro Int'l, Inc.*, 529 S.E.2d 80, 86–87 (Va. 2000)).

173. *Network Solutions*, 529 S.E.2d at 86; see also Daniel Hancock, Note, *You Can Have It, but Can You Hold It?: Treating Domain Names as Tangible Property*, 99 KY. L.J. 185, 191 (2011)

Virginia Supreme Court had expressed apprehension in expanding the reach of the garnishment statute in light of new technology.¹⁷⁴

Finally, in *In re Paige*, a bankruptcy court applying Utah law found domain names to be tangible property.¹⁷⁵ The court noted that the Utah Supreme Court had held that “software is tangible personal property for tax purposes.”¹⁷⁶ It further observed that a district court applying the Utah decision had held that web pages are also property due to having “a physical presence” and can therefore be subject to conversion actions.¹⁷⁷ The court concluded that “like web pages and software, domain names can be perceived by the senses and access to them can be physically restricted by the use of passwords and other security measures,” making domain names tangible property.¹⁷⁸

There are some useful conclusions that can be drawn from the above cases. For the states that recognize domain names as property, the courts emphasize that the ability to exclude or control the domain is key.¹⁷⁹ Furthermore, under Virginia state law, the courts exercise judicial modesty, declining to read new technology into the statute and noting that such changes must come from the legislature.¹⁸⁰ Finally, under Utah law, the court focuses on whether the electronic information has a physical presence.¹⁸¹

C. Digital Information

Beyond the boundaries of traditional property lies uncertainty. Although many scholars claim that various IP rights are analogous to real property,¹⁸² extending in rem jurisdiction to intellectual property has been

(discussing how a minority of jurisdictions, including Virginia, view domain names as contract rights).

174. *Network Solutions*, 529 S.E.2d at 87 (“Without statutory changes, we are not willing to allow such results in Virginia simply because in today’s case we are dealing with ‘a unique and wholly new medium of worldwide human communication’ known as the Internet.” (quoting *Reno v. ACLU*, 521 U.S. 844, 850 (1997))).

175. *In re Paige*, 413 B.R. 882, 918 (Bankr. D. Utah 2012).

176. *Id.* (quoting *S. Cent. Utah Tele. Ass’n, Inc. v. Auditing Div. of the Utah State Tax Comm’n*, 951 P.2d 218, 223–24 (Utah 1997)) (internal quotation marks omitted).

177. *Id.* (quoting *Margae, Inc. v. Clear Link Techs., LLC*, 620 F. Supp. 2d 1284, 1288 (D. Utah 2009)) (internal quotation marks omitted).

178. *Id.* at 918.

179. *See id.*; *Kremen v. Cohen*, 337 F.3d 1024, 1030 (9th Cir. 2003).

180. *Network Solutions, Inc. v. Umbro Int’l, Inc.*, 529 S.E.2d 80, 87–88 (Va. 2000).

181. *Paige*, 413 B.R. at 917–18.

182. *See, e.g.*, Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1665 (2003) (“Patent rights are exclusive rights that fit the classic formulation of a ‘property rule.’”); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 970–71 (1990) (maintaining that copyright law is a species of property law); Glynn S. Lunney, Jr., *Trademark Monopolies*, 48 EMORY L.J. 367, 372 (1999) (critically analyzing the shift by courts and commentators to viewing

somewhat controversial.¹⁸³ The ALJ and Commission opinions in *Certain Digital Models* do not provide any guidance.¹⁸⁴

The primary difficulty is that in rem jurisdiction does not attach to all forms of property. Consider a copyrighted song that has been fixed in a tangible media. Someone later infringes the copyright by singing the song in public. As the U.S. District Court for the District of Utah noted, the song that is in the infringer's mind is "truly intangible,"¹⁸⁵ and "[o]nce the song is in a person's mind, there is no way that someone else could 'deprive' that person's 'use and possession' of the song."¹⁸⁶ In other words, there is nothing for in rem jurisdiction to attach to.

In this regard, digital information is distinguishable from financial intangible property. For U.S. stocks, bank accounts, and the like, in rem jurisdiction exists somewhere in the United States. No matter what legal fiction the court adopts, money in a U.S. bank account can be controlled by some U.S. court. Thus, while the financial instruments might be purely intangible, something ultimately tangible is at stake.

Likewise, digital information is distinguishable from domain names. Only one party can be in control of a domain name at a time, and courts are capable of seizing control over the domain names that are the subject of litigation inside the United States.¹⁸⁷ Indeed, for the states that characterized domain names as property, a key point in the courts' analysis was the ability to exclude others and to control the domain name.¹⁸⁸

In other words, unlike financial accounts or domain names, digital information can exist in a purely intangible state within the United States. For example, if a foreign company e-mails a dental treatment plan to the United States, the information is purely intangible until it is downloaded to a U.S. computer. And although a court or agency can control a computer with digital information, it cannot control the information itself—a key requirement for having in rem jurisdiction. Moreover,

trademarks as property); Adam Mossoff, *Patents as Constitutional Private Property: The Historical Protection of Patents Under the Takings Clause*, 87 B.U. L. REV. 689, 691 (2007) (arguing that patents are property and are protected under the Takings Clause).

183. See, e.g., Nguyen, *supra* note 5, at 486 (arguing that the ACPA allows U.S. trademark law to have extraterritorial reach).

184. The ALJ in *Certain Digital Models* concluded that in rem jurisdiction existed over the electronic information but ignored the underlying question of whether in rem jurisdiction could extend to digital information. *Certain Digital Models* (Initial Determination), *supra* note 107, at *11–14, *18. The Commission opinion assumes that jurisdiction exists. *Certain Digital Models* (Final), *supra* note 12, at 22.

185. *Margae, Inc. v. Clear Link Techs., LLC*, 620 F. Supp. 2d 1284, 1288 (D. Utah 2009)).

186. *Id.*

187. See, e.g., *In re Paige*, 413 B.R. 882, 918 (Bankr. D. Utah 2012).

188. See *supra* Subsection II.B.2.

unlike with domain names, electronic information can exist in multiple places at once.¹⁸⁹

The purely intangible nature of digital information also raises a concern regarding extraterritorial enforcement of U.S. law through the use of in rem jurisdiction. As Justice Oliver Wendell Holmes once noted when dealing with extraterritoriality, “The general and almost universal rule is that the character of an act as lawful or unlawful must be determined wholly by the law of the country where the act is done.”¹⁹⁰ Although this presumption has weakened over time,¹⁹¹ it is still strong in some areas of IP law, such as patent law.¹⁹² Any expansion of U.S. law to digital information raises the risk of applying U.S. law beyond the national borders.

Related to this issue is determining when digital information is in the United States and thus subject to in rem jurisdiction, as well as to U.S. IP and trade laws. As Professor Elizabeth Winston observed, to understand the territorial limitations of IP law, one first must understand the boundaries of the United States.¹⁹³ One could argue that entry occurs as early as when the packets of information are routed through a U.S. server or as late as when the U.S. end user receives the information.¹⁹⁴ Although interest groups such as the MPAA aspire to have a digital border, one does not currently exist, making it impossible to determine when information enters the country.¹⁹⁵

189. For example, the dental diagrams at issue in *Certain Digital Models* existed in both Pakistan and the United States.

190. *Am. Banana Co. v. United Fruit Co.*, 213 U.S. 347, 356 (1909).

191. See William S. Dodge, *Understanding the Presumption Against Extraterritoriality*, 16 BERKELEY J. INT’L L. 85, 85–86 (1998) (discussing how the presumption has waned over the past century).

192. See *supra* Subsection I.B.i, see, e.g., Timothy R. Holbrook, *Extraterritoriality in U.S. Patent Law*, 49 WM. & MARY L. REV. 2119, 2129–31 (2008) (discussing the Supreme Court’s strict enforcement of territorial limitations for patents). Arguably, however, the presumption has been significantly weakened in trademark law. Nguyen, *supra* note 5, at 486 (arguing that the ACPA allows U.S. trademark law to have extraterritorial reach).

193. Elizabeth I. Winston, *Patent Boundaries*, TEMPLE L. REV. (forthcoming 2015) (manuscript at 3–4), available at SSRN: <http://ssrn.com/abstract=2411142> (observing that to understand U.S. patent law and its territorial limits, one must understand the meaning of the ambiguous terms “United States” and “this country”).

194. This approach could be problematic. Routing can be manipulated to cause electronically transmitted information to enter into countries that neither the sender nor the recipient intended. See Axel Arnbak & Sharon Goldberg, *Loopholes for Circumventing the Constitution: Unrestrained Bulk Surveillance on Americans by Collecting Network Traffic Abroad*, 21 MICH. TELECOMM. & TECH. L. REV. 317, 323, 343 (2015) (discussing how internet traffic between two U.S. entities can be deliberately routed through other countries to circumvent Fourth Amendment protection).

195. See Eric Goldman, *The OPEN Act: Significantly Flawed but More Salvageable Than SOPA/PROTECT-IP*, TECH & MKTG. BLOG (Dec. 10, 2011), available at

An argument can be made that nationwide in personam jurisdiction alone arguably confers the ITC with jurisdiction over digital information. Although the ITC's core jurisdiction is in rem, it does explicitly have nationwide in personam jurisdiction under § 337(f) for cease-and-desist orders.¹⁹⁶

The problem with that position, however, is that it substantially alters the ITC's powers. Congress designed the ITC to have control over tangible goods, with in personam jurisdiction added in 1974 to augment it.¹⁹⁷ There is no evidence that Congress intended to expand the ITC's jurisdiction to include intangible imports when it added § 337(f). Moreover, without in rem jurisdiction, the ITC largely duplicates what litigation can already achieve under the various IP statutes and adds little to trade law. For these reasons, reviewing courts should be skeptical of the ITC's attempt to expand its jurisdiction.

III. WHAT IS AN ARTICLE?

Section 337(a)(1)(B) of the Tariff Act prohibits importation, sale for importation, and sale after importation of “articles that infringe a valid and enforceable patent.”¹⁹⁸ The ITC's decision in *Certain Digital Models* turns on what “articles” means, with the ITC defining the term as “imported items that are bought and sold in commerce.”¹⁹⁹ Because the ITC interpreted the term in formal adjudication, it is potentially eligible for strong deference under *Chevron U.S.A. v. Natural Resources Defense Council*.²⁰⁰

The ITC's statutory interpretation, however, is full of errors and misstatements. The agency takes legislative history out of context and, on one occasion, misquotes it in a way that serves the agency's position. It interprets dictionary definitions far more broadly than the text supports, and it tries to make analogies to statutes and to cases that are neither contemporaneous nor are relevant. These errors allow the ITC to choose an overly broad definition of “articles” that legislative history does not support.

http://blog.ericgoldman.org/archives/2011/12/the_open_act_de.htm (discussing how legislation seeking to expand ITC jurisdiction over digital information has a “Fortress USA” mentality that “makes zero sense for digital bits zinging around the borderless network”).

196. 19 U.S.C. § 1337(f) (2012).

197. The ITC concedes in its *ClearCorrect* brief that the cease-and-desist order provision was a “lesser remedy” when it was enacted in 1974, though it claims that “subsequent amendments have changed its character.” Brief of Appellee International Trade Commission at 29, *ClearCorrect Operating LLC v. Int'l Trade Comm'n*, No. 2014-1527 (Fed. Cir. Feb. 18, 2015).

198. 19 U.S.C. § 1337(a)(1)(B). For a discussion of what constitutes a valid and enforceable patent, see Kumar, *Expert Court*, *supra* note 9, at 1562–85.

199. *Certain Digital Models* (Final), *supra* note 12, at 40.

200. 467 U.S. 837 (1984); *see infra* Section III.A.

This Part reviews the ITC's statutory interpretation in *Certain Digital Models*. Section III.A discusses why the *Chevron* framework is appropriate. Section III.B looks at the plain meaning of "articles." Section III.C examines the early and late legislative history of the Tariff Act and it concludes that the broadest definition it supports is for personal property, which excludes pure digital information. Section III.D agrees with the ITC that the Tariff Act should not be read together with other IP statutes. It further maintains that the ITC's reliance on the 1994 Driver's Privacy Protection Act is inappropriate. Section III.E argues that the ITC's interpretation is contrary to Congress's clear intent and is also unreasonable, therefore failing both steps of *Chevron*. It concludes that the Federal Circuit should reverse the ITC.

A. *Chevron Framework Is Applicable*

The Supreme Court's decision in *Chevron* applies to the Federal Circuit's review of the ITC's interpretation of "articles."²⁰¹ In *Chevron*, the Court created a two-step framework for reviewing an agency's interpretation of its organic statute. For Step One, the reviewing court first considers "whether Congress has directly spoken to the precise question at issue."²⁰² If the court finds that Congress's intent is clear, the court "must give effect to the unambiguously expressed intent of Congress."²⁰³ However, if Congress's intent is not clear, the court moves to Step Two, where it asks "whether the agency's answer is based on a permissible construction of the statute."²⁰⁴

The ITC interpreted "articles" through formal adjudication, in accordance with §§ 556 and 557 of the Administrative Procedure Act.²⁰⁵ Consequently, the *Chevron* framework is applicable.²⁰⁶

The *Chevron* framework is far from monolithic. In Step One, some courts emphasize plain meaning, others emphasize legislative history,

201. Before applying the *Chevron* test, one must engage in a "step zero" analysis, asking whether the *Chevron* framework is appropriate. See Cass R. Sunstein, *Chevron Step Zero*, 92 VA. L. REV. 187, 191 (2006).

202. *Chevron*, 467 U.S. at 842.

203. *Id.* at 842–43.

204. *Id.* at 843.

205. See 19 U.S.C. § 1337(c) (2012) ("Each determination under subsection (d) or (e) of this section shall be made on the record after notice and opportunity for a hearing in conformity with the provisions of subchapter II of chapter 5 of title 5.").

206. See *Suprema, Inc. v. Int'l Trade Comm'n*, 796 F.3d 1138, 1345–46 (Fed. Cir. 2015) (en banc) (holding that the *Chevron* framework is appropriate for reviewing the ITC's interpretation of Section 337); see also Kumar, *Expert*, *supra* note 9, at 1568–75 (discussing at length why the *Chevron* framework is applicable to the ITC). In the *ClearCorrect v. International Trade Commission* appeal, the ITC sought *Chevron* deference. Brief of Appellee, *supra* note 197, at 18–19.

and some look to all of the traditional tools of statutory interpretation.²⁰⁷ Resolving which approach to *Chevron* is correct is beyond the scope of this Article. Consequently, this Part examines the ITC's analysis from several angles: plain meaning, legislative history, canons of construction, and statutory context.

The most coherent version of Step Two comes from the D.C. Circuit, which applies the same standard used in review of policy questions.²⁰⁸ The D.C. Circuit considers “whether the agency’s interpretation of its statutory directive is a reasonable one.”²⁰⁹ The court will “defer to the agency’s permissible interpretation, but only if the agency has offered a reasoned explanation for why it chose that interpretation.”²¹⁰ To determine whether an agency’s interpretation is “rationally related to the goals of the statute,” the court again uses the traditional tools of statutory interpretation, while considering the rationales that the agency provided in its decision.²¹¹ The Supreme Court has recently signaled that it supports this type of approach, noting that they will not “disturb an agency rule unless it is arbitrary or capricious in substance.”²¹²

The Federal Circuit appears to have adopted the D.C. Circuit’s version of Step Two in *Suprema v. International Trade Commission*.²¹³ In this case, the en banc Federal Circuit examined whether the ITC’s interpretation was “consistent with the statutory text, policy, and legislative history of Section 337.”²¹⁴ It then performed a detailed review of the Tariff Act, the legislative history, and the policy goals of Congress, and concluded that the agency’s interpretation was reasonable.²¹⁵

207. See, e.g., Jack M. Beermann, *End the Failed Chevron Experiment Now: How Chevron Has Failed and Why It Can and Should Be Overruled*, 42 CONN. L. REV. 779, 817 (2010) (discussing *Chevron*’s multiple meanings, including “traditional tools *Chevron*” and “plain meaning *Chevron*” (internal quotation marks omitted)).

208. M. Elizabeth Magill, *Step Two of Chevron v. Natural Resources Defense Council*, in A GUIDE TO JUDICIAL AND POLITICAL REVIEW OF FEDERAL AGENCIES 85, 93–94 (John Fitzgerald Duffy & Michael Herz, eds. 2005).

209. *Consumer Fed’n of Am. v. U.S. Dep’t of Health & Human Servs.*, 83 F.3d 1497, 1506 (D.C. Cir. 1996).

210. *Village of Barrington, Ill. v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011).

211. *Id.* (internal quotations omitted). The D.C. Circuit’s approach to Step Two is very similar to the “hard look” approach to arbitrary and capricious review. Magill, *supra* note 208, at 95–96.

212. *Mayo Found. for Med. Educ. & Research v. United States*, 562 U.S. 44, 53 (2011); see also *Judulang v. Holder*, 132 S. Ct. 476, 483 n.7 (2011) (noting, in dicta, that “under *Chevron* step two, we ask whether an agency interpretation is ““arbitrary or capricious in substance””) (quoting *Mayo*, 562 U.S. at 53).

213. 796 F.3d 1338, 1349 (Fed. Cir. 2015) (en banc).

214. *Id.*

215. *Id.* at 1349–52

B. Plain Meaning

When applying *Chevron* Step One, courts will generally look to the plain meaning of the text.²¹⁶ This textualist approach typically utilizes dictionary definitions to help ascertain ordinary meaning.²¹⁷ Although the Supreme Court has taken conflicting positions on the use of plain meaning,²¹⁸ it is clear that it plays an important role in a *Chevron* analysis.²¹⁹

The Tariff Act does not define the term “articles.”²²⁰ Nor does the legal dictionary definition of “article” help shed light on the term’s meaning. As the ITC noted, the second edition of Black’s Law Dictionary is contemporaneous with the passage of the original 1922 Tariff Act.²²¹ That dictionary, however, only defines the term with regard to written documents, not with regard to trade.²²²

The ITC attempted to discern the plain meaning of “articles” using regular dictionary definitions. It noted that a 1924 edition of Webster’s Dictionary defines the term as “[s]omething considered by itself and as apart from other things of the same kind or from the whole of which it forms a part; also, a thing of a particular class or kind; as, an article of

216. See U.S. Dep’t of Hous. & Urban Dev. v. Rucker, 535 U.S. 125, 131 (2002) (using plain meaning to interpret a housing statute); Thomas J. Miles & Cass R. Sunstein, *Do Judges Make Regulatory Policy? An Empirical Investigation of Chevron*, 73 U. CHI. L. REV. 823, 828 (2006) (discussing how “a prominent approach” for courts is to rely upon plain meaning of the statutory text).

217. See Thomas W. Merrill, *Textualism and the Future of the Chevron Doctrine*, 72 WASH. U. L.Q. 351, 356–57 (1994) (noting that “it is probably fair to say that the textualist method, with its search for the ordinary meaning ascribed to words by the contemporaneous reader, probably leads to the dictionary more often than does the approach that frames the inquiry in terms of legislative intent”).

218. For example, in *Housing & Urban Development v. Rucker*, the Supreme Court relied solely on the plain language of the statute, looking at the meaning of the word “or.” 535 U.S. 125, 131 (2002). By contrast, in *General Dynamics Land Systems, Inc. v. Cline*, the Supreme Court looked to legislative history and the purpose of the statute, notwithstanding a contrary clear reading of the text. 540 U.S. 581, 586–87 (2004).

219. See Thomas J. Miles and Cass R. Sunstein, *Do Judges Make Regulatory Policy? An Empirical Investigation of Chevron*, 73 CHI. L. REV. 823, 829 (2006) (discussing how “a prominent approach” to the *Chevron* 2-step test “has relied on the ‘plain meaning’ as reflected in the statutory text”).

220. The only related discussion appears in 19 U.S.C. § 1332, which states that “[t]he term ‘article’ includes any commodity, whether grown, produced, fabricated, manipulated, or manufactured.” 19 U.S.C. § 1332(e)(1) (2012).

221. Certain Digital Models (Final), *supra* note 12, at 43.

222. BLACK’S LAW DICTIONARY 90 (2d. ed. 1910) (defining “[a]rticle” as “[a] separate and distinct part of an instrument or writing comprising two or more particulars; one of several things presented as connected or forming a whole”).

merchandise; salt is a necessary article.”²²³ Looking to several other definitions, the ITC conceded that “an ‘article’ was understood to include something material,” yet concluded that “the term was also understood to embrace a broader meaning that describes something that is traded in commerce.”²²⁴

The ITC used the secondary definition of “article”—a piece of writing—to support its argument that the term’s meaning is broad. It noted that newspaper articles and stock quotes that were transmitted “electronically” in the early 1900s gave rise to unfair competition actions.²²⁵ The ITC’s reliance on telegraph cases is perplexing, given that the cases cited to were based on in personam jurisdiction, not in rem. Moreover, although the word “article” describes both stories appearing in newspapers as well as objects subject to trade, it does not mean that the cases for one kind of article can be used as a source of law for another. Overall, the ITC’s discussion of dictionary definitions makes little sense.

C. Legislative History

There are two points in history where the legislative history of the Tariff Act might provide us with guidance. The first is the period of time when “articles” appeared in § 337 of the Tariff Act of 1930, and its predecessor, § 316 of the 1922 Tariff Act.²²⁶ The second is the legislative history from 1988, which was when the Tariff Act was expanded to explicitly cover IP infringement.²²⁷ Looking at the House and Senate reports from these time periods shows that Congress intended for “articles” to be a narrow term.

1. Early Legislative History

The ITC in *Certain Digital Models* maintained that the legislative history of the original Tariff Act, coupled with contemporaneous dictionary definitions, supported its conclusion that “articles” is a broad term that includes any item “traded in commerce, regardless of form or type.”²²⁸ It claimed that “articles” are “synonymous with goods, commodities, and merchandise.” The ITC also maintained that those

223. *Certain Digital Models* (Final), *supra* note 12, at 39 (quoting WILLIAM TORREY HARRIS, WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE UNABRIDGED 1712 (1924)).

224. *Id.* at 39 n.20.

225. *Id.* at 40 (citing *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 234 (1918); *Nat’l Tel. News Co. v. W. Union Tel. Co.*, 119 F. 294 (7th Cir. 1902)).

226. *Id.* at 37.

227. *See infra* note 256 and accompanying text.

228. *Certain Digital Models* (Final), *supra* note 12, at 43–45 (citing S. REP. NO. 67-595, at 3 (1922); H.R. REP. NO. 71-7, at 3 (1929); 71 CONG. REC. S. 3872, 4640 (1929)).

terms “do not provide any particular limitations as to specific categories of articles[.]” and that they would “encompass within their meaning various types and forms of products that are bought and sold in commerce.”²²⁹ However, a close inspection of the early legislative history and the contemporaneous Black’s Law Dictionary reveals that the term “articles” is far more restricted.

a. 1922 Legislative History

The Senate Report for the 1922 Act proposed amendments to the House Bill to “prohibit *the importation of particular goods* for the purpose of preventing unfair methods of competition *in the importation of goods*.”²³⁰ The Report noted: “The provision relating to unfair methods of competition *in the importation of goods* is broad enough to prevent every type and form of unfair practice.”²³¹

The Report’s focus on preventing all unfair practices with respect to *goods* is notable because it significantly restricts the scope of § 337. The Second Edition of Black’s Law Dictionary, which the ITC used in its opinion, states that “[g]oods” in the context of contracts “is not so wide as ‘chattels,’ for it applies to inanimate objects, and does not include animals or chattels real.”²³² For the related phrase “[g]oods and chattels,” Black’s notes that the phrase “is a general denomination of personal property, as distinguished from real property.”²³³ Personal property in 1910 fell into two categories: “(1) corporeal personal property, which includes movable and tangible things,” and “(2) incorporeal personal property, which consists of *such rights* as personal annuities, stocks, shares, patents, and copyrights.”²³⁴ Because information is neither corporeal nor a right, it cannot be a good, and is therefore outside the scope of what Congress intended for § 337.

Indeed, in *Dastar Corp. v. Twentieth Century Fox Film Corp.*, the Supreme Court had to determine what “origin” of “goods” refers to under the Lanham Act, which was passed in 1946.²³⁵ There, the Court held that the phrase was limited to tangible products,²³⁶ emphasizing that the Lanham Act’s common law foundations “were *not* designed to protect

229. *Id.* at 43.

230. S. REP. NO. 67-595, at 3 (emphasis added).

231. *Id.* (emphasis added).

232. BLACK’S LAW DICTIONARY 544 (2d. ed. 1910).

233. *Id.*

234. *Id.* at 956 (emphasis added).

235. 539 U.S. 23, 24 (2003).

236. *Id.* at 31–32 (holding that “the most natural understanding of the ‘origin’ of ‘goods’—the source of wares—is the producer of the tangible product sold in the marketplace” and holding that “‘origin of goods’ is in our view incapable of connoting the person or entity that originated the ideas or communications that ‘goods’ embody or contain”).

originality or creativity.”²³⁷ This further illustrates that “goods” is a narrow term.

The limitation to “goods” in the Senate Report is also notable because the ITC omitted it in the Commission opinion. It stated that “[t]he central purpose of Section 337, since the enactment of the original statute in 1922, has been to prevent *every type of unfair act or practice in import trade that harms U.S. industries.*”²³⁸ The ITC then quoted the Senate Report, omitting the limiting phrase “in the importation of goods” and failed to indicate the deletion.²³⁹ This omission, while likely inadvertent, is nevertheless highly misleading.

b. 1929 Legislative History

While the 1929 Senate Report consistently used the term “articles” in the context of unfair competition,²⁴⁰ the 1929 House Report used “articles” and “products” interchangeably.²⁴¹ For example, the House Report noted that “[i]mported articles are sold [in the United States] at whatever prices may be obtained, irrespective of the cost of producing such products abroad.”²⁴² However, the term “product” is not defined in the second edition of Black’s Law Dictionary.²⁴³

The House Report also used the phrase “goods, wares, and commodities.”²⁴⁴ Black’s definition for a similar phrase, “[g]oods, wares, and merchandise,” states that the term is “[a] general and comprehensive

237. *Id.* at 37.

238. Certain Digital Models (Final), *supra* note 12, at 45 (emphasis added).

239. *Id.* During oral arguments for *ClearCorrect Operating, LLC v. International Trade Commission*, Chief Judge Prost and Judge O’Malley verified that my finding was correct, and questioned the ITC about whether the misquote undercuts their argument that Congress intended “articles” to be a broad term. Oral Argument at 24:30, *ClearCorrect Operating, LLC v. Int’l Trade Comm’n*, Fed. Cir. Nov. 10, 2015 (No. 2014-1527), available at <http://oralarguments.caafc.uscourts.gov/default.aspx?fl=2014-1527.mp3> (at 24:30).

240. See S. REP. NO. 71-37, at 59–68 (1929). The Senate Report uses the term “merchandise” when referring to §§ 340, 402, 483, and 526. *Id.* at 68–75.

241. See, e.g., H.R. REP. NO. 71-7, at 3 (1929) (noting that “many new products have entered the markets since 1922” and discussing the need for updating the tariff schedule).

242. *Id.* at 4.

243. See BLACK’S LAW DICTIONARY 951 (2d ed. 1910). If one resorts to using general dictionaries, one argument can be made to support the ITC’s broad definition of “article.” In a 1924 dictionary that the ITC used in its opinion, the definition of “product” is very broad, covering “[a]nything produced, as by generation, growth, labor, or thought,” with the example “the products of the brain” given. HARRIS, *supra* note 223, at 1712; see also Certain Digital Models (Final), *supra* note 12, at 39 (citing to HARRIS, *supra* to define “article”). However, general dictionaries are usually not a good indicator of the legal meaning of terms, and it is unclear whether other contemporaneous dictionaries have the same definition.

244. H.R. REP. NO. 71-7, at 3, 9 (noting that “the duties on some goods, wares, and commodities . . . were placed too low” and that “[f]oreign competitors have an uncanny aptitude for discovering what goods, wares, and commodities are [i]nsufficiently protected”).

designation of such chattels as are ordinarily the subject of traffic and sale.”²⁴⁵ The term “chattel,” however, is primarily limited to personal property.²⁴⁶ Black’s defines the term as “[a]n article of personal property; any species of property not amounting to a freehold or fee in land.”²⁴⁷ Although the second part of this definition could be construed broadly, Black’s further notes that “chattel” is “[t]he name given to things which in law are deemed personal property.”²⁴⁸ As discussed above, the only type of intangible personal property is rights, such as stocks or patent rights.²⁴⁹

Consequently, the broadest definition for “articles” that the legislative history supports is “personal property,” which does not include information. For reasons discussed below, even this definition is likely overly broad and should be restricted further to tangible personal property.

2. Late Legislative History

The ITC attempted to use non-contemporaneous legislative history to further support its claim that “articles” includes digital information. It emphasized the fact that in the 1987 Senate Report, “the will of Congress” was to block any U.S. sale of a product covered by an IP right because “[t]he importation of *any infringing merchandise* derogates from the statutory right, diminishes the value of the intellectual property, and thus indirectly harms the public interest.”²⁵⁰ The ITC, however, neglected to mention that the contemporaneous definition of “[m]erchandise” is restricted to “[a]ll goods which merchants usually buy and sell,”²⁵¹ and that “[g]oods” is generally limited to a subset of tangible property.²⁵²

Moreover, no explicit support exists in the recent legislative history

245. BLACK’S LAW DICTIONARY 544 (2d. ed. 1910). While clearly the phrase in Black’s differs from that used by Congress, the term “commodities” is defined as “[g]oods, wares, and merchandise of any kind; movables; article of trade or commerce.” *Id.* at 225. “Merchandise” is defined as “[a]ll commodities which merchants usually buy and sell.” *Id.* at 773.

246. *See id.* at 194.

247. *Id.*

248. *Id.*

249. *See supra* note 234 and accompanying text.

250. Certain Digital Models (Final), *supra* note 12, at 48 (quoting S. REP. NO. 100-71, at 128–29 (1987)).

251. BLACK’S LAW DICTIONARY 890 (5th ed. 1979).

252. *Id.* at 624 (noting that the term “[g]oods” is one of “variable content and meaning” that is as broad as “every species of personal property” or much more restricted). It ultimately defines the term: “Items of merchandise, supplies, raw materials, or finished goods. Sometimes the meaning of ‘goods’ is extended to include all tangible items.” *Id.* Indeed, beginning in 2004, Black’s definition of “merchandise” states that “this definition generally excludes . . . intangibles such as software.” BLACK’S LAW DICTIONARY 1008 (8th ed. 2004).

for “articles” including digital information. The last major amendment to § 337 was in 1988—one year before the invention of the World Wide Web²⁵³ and at a time when 9600 baud modems were considered to be a “blazing” transmission speed.²⁵⁴ Congress did not appear to foresee the day when complex models of patented goods could be electronically transmitted, and when copyrighted songs and movies could easily be downloaded.

The ITC’s analysis, moreover, is based on the false claim that one of the overarching goals of the Tariff Act was to protect U.S. IP rights. As the dissent noted, “Section 337 is not the international extension of our patent, copyright, and trademark laws, but has restrictions that stem from the fact that it is, first and foremost, a trade law.”²⁵⁵ When the Tariff Act was revised in 1974 and the modern ITC was created, its purpose was to appease protectionists opposed to trade liberalization, not IP attorneys.²⁵⁶

In 1988, the IP lobby did finally succeed in amending the Tariff Act to add explicit provisions covering importation and post-importation sale of “articles” that infringe valid and enforceable patents, copyrights, and trademarks.²⁵⁷ But at no point did Congress express an intent to alter what “articles” are, or to make the Tariff Act a statute that evolves with technological advances. The ITC in *Certain Digital Models* claimed that “each time the statute has been amended, the legislative history has stated that the legislative purpose is . . . to strengthen protection of intellectual property.”²⁵⁸ Yet, despite numerous amendments to the Tariff Act over the years, only the 1988 amendment explicitly strengthened IP rights. Moreover, a subsequent amendment in 1994 weakened IP rights by allowing respondents to stay parallel litigation in federal court.²⁵⁹

The ITC argued that “[t]he fact that Congress did not place express restrictions limiting the scope of ‘articles’ to any particular type or form is instructive as to the meaning of this term.”²⁶⁰ However, this disregards

253. Jay P. Kesan & Rajiv C. Shah, *Deconstructing Code*, 6 YALE J. L. & TECH. 277, 290 (2003–2004). The World Wide Web was invented in 1989 by Tim Berners-Lee and did not enter the public domain until 1993. CERN, *The Birth of the Web*, <http://home.cern/topics/birth-web> (last visited Nov. 2, 2015).

254. John H. Humphrey & Gary S. Smock, *High-Speed Modems*, BYTE, June 1, 1988, at 102. (“A new crop of modems take transmission rates to a blazing 9600 bps and beyond.”) Such modems cost \$900 to \$2000. *Id.*

255. *Certain Digital Models* (Final), *supra* note 12, at 1–2 (Comm’r Johanson, dissenting).

256. *Id.* at 544 (“The final bill . . . reflected the compromise made between free trade supporters and protectionists.”).

257. *Id.* at 548.

258. *Certain Digital Models* (Final), *supra* note 12, at 37.

259. Kumar, *Other Patent Agency*, *supra* note 10, at 539. The Tariff Act was amended in 1994 to fix a violation of the General Agreement on Tariffs and Trade (GATT). *Id.* at 539 n.59.

260. *Certain Digital Models* (Final), *supra* note 12, at 37.

the fact that Congress implicitly restricted the scope of the term by using terms of art such as “goods” and “merchandise” in the legislative history. This is sufficient to show that Congress spoke clearly regarding the meaning of “article” and that a Step One failure has occurred.

D. *Canons of Construction*

Canons are part of the traditional tools of statutory interpretation that are used in a *Chevron* Step One analysis. This Section uses three of those canons—*in pari materia*, statutory context, and the presumption of consistent usage—to interpret the meaning of “articles” in § 337.

1. *In Pari Materia*

The canon of *in pari materia* (“upon the same subject”) allows one statute to be interpreted in light of other sources of law that have a common purpose.²⁶¹ During the *ClearCorrect* litigation, the MPAA argued that the Patent Act and other IP statutes have been interpreted expansively and so should the Tariff Act.²⁶² For example, in *Bilski v. Kappos*, the majority of the Supreme Court held that § 101 encompasses business method patents, notwithstanding the fact that such methods were not subject to patent law at the time the Patent Act was passed.²⁶³

The ITC was correct in rejecting the MPAA’s reading. The Patent Act and the Tariff Act do not completely overlap with regard to the range of patented inventions covered. For example, in *Bayer AG v. Housey Pharmaceuticals, Inc.*, the Federal Circuit stated:

We recognize that § 337 covers both articles that were ‘made’ and articles that were ‘produced, processed, or mined.’ While this language in § 337 perhaps suggests a broader scope for § 337 than for section 271(g) [of the Patent Act], nothing in § 337 suggests coverage of information, in addition to articles, under section 271(g).²⁶⁴

This statement illustrates that the Patent Act is not the same in scope as the Tariff Act.

Moreover, a strong argument can be made that it is not appropriate to read nontechnical terms in the Tariff Act in light of the Patent Act.²⁶⁵ The

261. *Erlenbaugh v. United States*, 409 U.S. 239, 243–45 (1972).

262. The MPAA commits this fallacy, citing to *Diamond v. Chakrabarty*, 447 U.S. 303, 315–16 (1980), for the proposition that a statute’s silence cannot be interpreted as lack of coverage. *Certain Digital Models* (Final), *supra* note 12, at 30.

263. *Bilski v. Kappos*, 130 S. Ct. 3218, 3228 (2010).

264. 340 F.3d 1367, 1374 n.9 (Fed. Cir. 2003).

265. In *Certain Digital Models*, the ITC acknowledges that “‘articles that infringe’ is not simply limited to patents, but also applies to trademarks and copyrights, as well as other unfair

Patent Act was explicitly passed in accordance with Article I, Section 8 of the Constitution; the Tariff Act was constructed to promote trade and later rewritten to secure support of protectionist congressmen for trade liberalization. No matter how broad or narrow patentable subject matter is under the Patent Act, it does not change the meaning of terms appearing in the Tariff Act.²⁶⁶

2. Statutory Context

In its analysis, the ITC maintained that “[t]he meaning of ‘articles’ must also be interpreted in the context in which it appears in the statute.”²⁶⁷ It observed that “articles” appears with the terms “importation” and “sale,” and claimed that “articles subject to the statute are imported items that are bought and sold in commerce.”²⁶⁸

The ITC then discussed two more recent cases where the Supreme Court and U.S. Court of Appeals for the Seventh Circuit found the term “articles of commerce” to include information.²⁶⁹ Both of these cases involve the Driver’s Privacy Protection Act (DPPA), a statute that regulates driver information.²⁷⁰ The courts in these cases looked at whether information could be regulated as an “article of commerce” under the Constitution’s Commerce Clause.²⁷¹ The term “article of commerce,” however, appeared neither in the DPPA nor in the Constitution, making it wholly irrelevant to determining Congress’s intent.

The ITC also observed that the term “importation” consists of “bringing an article into a country from the outside” and that “[i]f there be an actual bringing in[,] it is importation regardless of the mode by which it is effected.”²⁷² The ITC then claimed that “based on the juxtaposition of the term ‘articles’ in relation to ‘importation’ and ‘sale’” in § 337, that “the intended meaning of ‘articles’ encompasses such items

acts and methods of competition in connection with importation and sale of articles.” Certain Digital Models (Final), *supra* note 12, at 54.

266. The use of “article” in patent law is narrower than the ITC’s definition. In *In re Nuijten*, the Federal Circuit held that the term “article” in the phrase “‘articles’ of ‘manufacture’” refers to “tangible articles or commodities,” and not “[a] transient electric or electromagnetic transmission.” 500 F.3d 1346, 1356 (Fed. Cir. 2007). In that case, the Federal Circuit concluded that a transitory, propagating signal is not patentable subject matter. *Id.* at 1357.

267. Certain Digital Models (Final), *supra* note 12, at 40.

268. *Id.*

269. *Id.* at 40–41 (discussing *Reno v. Condon*, 528 U.S. 141, 148 (2000) and *Senne v. Vill. of Palatine*, 695 F.3d 617, 620 (7th Cir. 2012)).

270. 18 U.S.C. § 2721(a) (1994).

271. *Reno*, 528 U.S. at 148; *Senne*, 695 F.3d at 620–21.

272. Certain Digital Models (Final), *supra* note 12, at 41 (quoting *Cunard S.S. Co. v. Mellon*, 262 U.S. 100, 122 (1923)) (internal quotation marks omitted).

as are bought and sold in commerce and that are imported into the United States, regardless of the mode of importation.”²⁷³

There are several problems with this line of analysis. The ITC’s broad definition of “articles” would render the term “importation” superfluous in § 337(a)(1)(B). Furthermore, the ITC failed to explain why “importation” having a broad meaning implies that “articles” does as well. Finally, the agency fails to explain how a statute passed in 1994 sheds light on Congress’s intent more than 60 years earlier.

3. Presumption of Consistent Usage

In interpreting ambiguous statutes, the Supreme Court has repeatedly acknowledged a “normal rule of statutory construction that identical words used in different parts of the same act are intended to have the same meaning.”²⁷⁴ As the *Certain Digital Models* dissent observes, the term “articles” appears throughout § 337, not just for the provision discussing IP infringement.²⁷⁵ Under §§ 337(d) and (e), the ITC noted that articles may be excluded.²⁷⁶ Yet, everything within these provisions necessarily refers only to tangible property given that is the limit of Customs’ authority.²⁷⁷ Consequently, the broad definition of “articles” does not make sense in the context of § 337 as a whole.²⁷⁸

E. Analysis of the ITC’s Definition

Several problems exist with defining “articles” as being “imported items that are bought and sold in commerce.”²⁷⁹ If Congress truly intended for the ITC to stop every act of unfair competition, then why did it limit Customs’ jurisdiction under the Tariff Act to only goods arriving at a port? If Congress intended for “article” to be unbounded, then it presumably would have left Customs’ jurisdiction open as well.

273. *Id.* The ITC tries a similar tactic with regard to the word “infringe,” noting that digital distributions of copyrighted songs constitute infringement, and because § 337 uses the phrase “articles that infringe,” that “articles” must also refer to digital information. *Id.* at 41–42. Again, the agency fails to account for why statutory changes to what constitutes infringement that occurred *after* the last amendment to the Tariff Act should be relevant to its analysis.

274. *See Sullivan v. Stroop*, 496 U.S. 478, 484 (1990) (quoting *Sorenson v. Sec’y of Treasury*, 475 U.S. 851, 860 (1986)) (internal quotation marks omitted).

275. *Certain Digital Models* (Final), *supra* note 12, at 6–7 (Comm’r Johanson, dissenting).

276. *Id.* at 6 (Comm’r Johanson, dissenting); U.S. INT’L TRADE COMM’N, *supra* note 132, at 8.

277. *Certain Digital Models* (Final), *supra* note 12, at 6 (Comm’r Johanson, dissenting).

278. *See id.* at 7–8. “Article” is also used in many other provisions in the Tariff Act. For example, in § 1982(b), the Act refers to the President’s authority “governing the entry or withdrawal from warehouse of the . . . article” covered by a marketing agreement. 19 U.S.C. § 1982(b) (2012). The author is not familiar enough with the entirety of the Tariff Act to make judgments based on the history of the Tariff Act as a whole.

279. *Certain Digital Models* (Final), *supra* note 12, at 40.

Another issue is what else the ITC's broad definition would have to include. Rights in stocks, bonds, and negotiable instruments are all forms of intangible personal property that can be bought or sold in commerce but have never been subject to the ITC's jurisdiction. For example, suppose that a company in the United States purchases foreign financial instruments and then uses proceeds of its investment to engage in unfair competition. Under the ITC's definition of "articles," in rem jurisdiction would attach to the financial instruments.

It is also troubling that the ITC lacks in rem jurisdiction over digital information. While the ITC can utilize in personam jurisdiction over parties that import digital information, it is unclear how the ITC has authority to commence its investigation without in rem jurisdiction.

In a *Chevron* analysis, the reviewing court should find a Step One failure if Congress's intent is clear.²⁸⁰ Here, it is clear that Congress intended "article" to be no broader than personal property. The ITC failed to offer any meaningful support for its proposition that "article" includes pure digital information. The plain meaning of the statute, the legislative history of the Tariff Act, and canons of construction support a narrow reading of the term. Consequently, the Federal Circuit should reverse the ITC.

Even if the Federal Circuit finds that Step One is met, the ITC's interpretation of "articles" is not reasonable under Step Two. The ITC chose the broadest interpretation of "articles" that was possible, one that dramatically expands its jurisdiction. But Congress could not have intended to give the ITC jurisdiction over intangible property in 1930, because Congress failed to give Customs authority to seize intangible property. In other words, the ITC would not have been able to offer any remedy to redress the unfair importation of intangible property until Congress granted it the ability to issue cease-and-desist orders more than 40 years after the Tariff Act's passage.

The ITC's opinion is a poor example of statutory interpretation. It misquotes the legislative history, makes comparisons to a Supreme Court decision involving newspaper articles, and uses non-contemporaneous (and often non-relevant) statutes in an attempt to justify its expansive definition.²⁸¹ Under both steps of *Chevron*, the ITC's interpretation of "articles" should not be granted deference. The Federal Circuit should, instead, define "articles" to mean "tangible personal property."

280. See *Chevron U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837, 842–43 (1984).

281. The *Certain Digital Goods* decision raises the question whether agencies that are not trusted with substantive rulemaking authority should be entitled to *Chevron* deference.

IV. EXPANDING THE REGULATION OF DIGITAL TRADE

There is a growing concern that current IP and trade laws are inadequate for protecting rights holders from digital trade. The increasing availability of 3D printing, for example, has made it difficult for inventors to protect their patents against infringement from imported digital models. It is clear that legislators will need to revise IP statutes to provide better protection.

At first glance, the ITC expanding its jurisdiction over digital trade appears limited in effect. The ITC cannot police electronic goods at the border and is currently limited to issuing cease-and-desist orders against U.S. entities. Moreover, if a patent merely claims a physical device, then importing a digital model would not actually infringe the patent.²⁸² Rather, infringement would occur only when an end user prints the device.

Interest groups, however, are trying to use the problem of digital trade to implement widespread blocking of content on the Internet. Indeed, attempts have already been made to expand the ITC's jurisdiction to allow it to "exclude" infringing online content. And a memorandum recently leaked in the Sony hack shows that the MPAA is looking to use the *Certain Digital Models* decision to have websites with infringing content blocked.²⁸³

This Part argues that Congress should exercise caution before expanding the ITC's powers. Section IV.A discusses how third parties are attempting to expand the ITC's jurisdiction over digital trade. Section IV.B discusses the risks of doing so, observing that the ITC champions strong IP rights at the expense of the public interest, and that it appears to lack substantive rulemaking and enforcement powers that it needs.

A. Attempts to Expand the ITC's Jurisdiction

Industry groups are attempting to further expand the ITC's jurisdiction. They have already made several attempts to use the ITC to regulate the transmission of information on the Internet.²⁸⁴

282. *Certain Digital Models* (Final), *supra* note 12, at 7 n.9.

283. *See* source cited *infra* note 294.

284. *See, e.g.*, The Digital Trade Act of 2013, S. 1788, 113th Cong. § 2 (2013) (seeking to have agencies "staffed with experts and leaders to fulfill the mission of promoting an open, global Internet that facilitates commerce and digital trade," as well as to facilitate dialogue with the private sector); Online Protection and Enforcement of Digital Trade Act, H.R. 3782, 112th Cong. (2012); S. 2029, 112th Cong. (2011).

1. Online Protection and Enforcement of Digital Trade Act

In 2011, members of Congress introduced the Online Protection and Enforcement of Digital Trade Act (OPEN).²⁸⁵ OPEN would have amended the Tariff Act to formally confer the ITC with jurisdiction over digital importation.²⁸⁶ It would have allowed the ITC to issue cease-and-desist orders against entities that assisted in digital infringement, allowing the agency to shut down websites that facilitate infringement²⁸⁷ and to stop advertisers and financial transaction services from facilitating digital infringement.²⁸⁸ Websites that had existing take-down mechanisms would have been excluded.²⁸⁹

This proposed legislation had the broad support of many technology companies, including Google, Mozilla, and Facebook; the legislation was considered by many to be superior to PIPA and SOPA.²⁹⁰ Professor Eric Goldman noted that “[u]nlike SOPA’s disgustingly blatant rent-seeking, . . . OPEN provides a useful starting point for a sensible conversation that could actually lead to acceptable compromises.”²⁹¹ However, Professor Goldman pointed out that a fortress-like mentality for digital goods does not make sense, given that networks do not have borders.²⁹² He further noted that the ITC is a peculiar choice of venue, given that it is an agency with procedural differences from a court, which could lead to dual litigation.²⁹³

2. Subsequent Legal Efforts

Although OPEN failed to pass, the MPAA was not deterred. After the Sony hack, a memorandum from August 2014 (MPAA Memo) emerged

285. H.R. 3782; S. 2029; *see also* Yafit Lev-Aretz, *Copyright Lawmaking and Public Choice: From Legislative Battles to Private Ordering*, 27 HARV. J.L. & TECH. 203, 244 (2013) (discussing OPEN).

286. *See* S. 2029 § 337A(b) (amending the Tariff Act to make it unlawful “for an Internet site dedicated to infringing activity to facilitate imports into the United States”).

287. *Id.* § 337A(f)(1)(A) (granting the ITC power to “issue an order to cease and desist the infringing activity of the Internet site against the Internet site and to the owner and the operator of the Internet site”).

288. *Id.* § 337A(g) (stating that if the ITC “reasonably believes that a financial transaction provider or an Internet advertising service . . . supplies services to the Internet site” subject to § 337A, the ITC can require them to take measures to prohibit payment processing or advertising for such websites).

289. *Id.* § 337A(a)(8)(C)(i).

290. Gary Shapiro, *Congress Must Keep the Internet OPEN*, DAILY CALLER (Jan. 23, 2012, 11:12 AM), <http://dailycaller.com/2012/01/23/congress-must-keep-the-internet-open/>.

291. Eric Goldman, *The OPEN Act: Significantly Flawed, but More Salvageable than SOPA/PROTECT-IP*, ARS TECHNICA (Dec. 12, 2011), <http://arstechnica.com/tech-policy/2011/12/the-open-act-significantly-flawed-but-more-salvageable-than-sopaprotect-ip/>.

292. *Id.*

293. *Id.*

from two law firms.²⁹⁴ The MPAA Memo responds to the MPAA's request that the firms investigate a strategy of seeking an order from the ITC requiring internet service providers (ISPs) to block traffic from foreign websites.

The MPAA Memo first considers "transit ISPs," which are ISPs that carry data across U.S. borders.²⁹⁵ It maintains that transit ISPs can be characterized as importers of data, which it claims is an infringing "article."²⁹⁶ However, the MPAA Memo recognizes that a site-blocking order is not technologically feasible, given that it would require monitoring of inbound internet traffic and would rely upon IP address blocking.²⁹⁷ It notes that the firms' technology experts confirmed that identifying responsible transit ISPs would be "daunting."²⁹⁸

The MPAA Memo alternatively suggests that domestic network access ISPs are engaged in the "sale" of imported articles, by virtue of providing infringing imported data to subscribers, or are more generally engaged in "unfair acts."²⁹⁹ If one of these theories sticks, the MPAA could seek a cease-and-desist order requiring the network ISPs to block subscriber access to certain websites. It acknowledges that whether an order can require an ISP to affirmatively block websites is a question of first impression, "especially when the order would effectively require blocking of *outbound* requests from users rather than *inbound* (*i.e.*, "imported") traffic from the pirate site."³⁰⁰ Nevertheless, the lawyers who authored the memo "believe there is a reasonable basis for the ITC's authority to do so."³⁰¹

B. *Expanding the ITC's Jurisdiction*

Congress should exercise caution when evaluating whether to expand the ITC's jurisdiction under the Tariff Act. Admittedly, the Tariff Act is overdue for revision, given that it has not received a major overhaul in more than twenty-five years.³⁰² Since that time, numerous ITC concerns

294. See Memorandum from Jenner & Block LLP and Adduci, Mastriani & Schaumberg, LLP to the Motion Picture Ass'n of Am. (Aug. 15, 2014), available at <https://s3.amazonaws.com/s3.documentcloud.org/documents/1389047/250191712-use-of-the-itc-to-block-foreign-pirate.pdf>.

295. *Id.* at 2.

296. *Id.* at 4.

297. *Id.* at 2–3. Site blocking in Europe relies on monitoring outbound traffic from consumers seeking the contraband information. *Id.* at 3.

298. *Id.* at 3.

299. *Id.* at 5.

300. *Id.*

301. *Id.*

302. Some changes were made to the Tariff Act under the Uruguay Round Agreements Act of 1994, which limited the scope of general exclusion orders, removed ITC time limits for § 337 actions, permitted counterclaims, and provided the respondent with the power to stay a parallel

have arisen beyond just digital infringement, such as whether exclusion orders are too vague,³⁰³ whether patent trolls should be utilizing the ITC,³⁰⁴ and whether protectionism still has a place in U.S. trade policy.³⁰⁵ However, in revisiting the Tariff Act, Congress should also consider whether the ITC is the best institution to protect IP rights holders from digital infringement.

1. General Concerns

Allowing IP rights holders to have websites blocked raises major concerns regarding censorship. These are the same issues that arose under the failed SOPA and PIPA legislation.³⁰⁶ First, true website blocking would require creating a digital net around the United States, routing all

district court proceeding. Uruguay Round Agreements Act § 321, Pub. L. No. 103-465, 108 Stat. 4809, 4943-4944 (1994). However, the focus of this legislation was quite narrow: to remedy a decision from the GATT reporting that § 337 violated Article III of the GATT. *See* Kumar, *Expert*, *supra* note 9, at 1561 (citing Report of the Panel, *United States—Section 337 of the Tariff Act of 1930*, Nov. 7, 1989, GATT B.I.S.D. (36th Supp.), at 345-54 (1990)).

303. *See* Ryan Davis, *ITC Import Bans in IP Cases Need Overhaul*, *White House Told*, LAW 360 (July 23, 2013), <http://www.law360.com/articles/458994/itc-import-bans-in-ip-cases-need-overhaul-white-house-told> (discussing the IP community's concern about overly vague exclusion orders, forcing Customs to determine whether imported products infringe patent claims).

304. *See* Jared A. Favole & Brett Kendall, *Obama Plans to Take Action Against Patent-Holding Firms*, WALL ST. J. (June 4, 2013, 11:56 PM), <http://www.wsj.com/articles/SB10001424127887324563004578524182593163220> (noting that President Obama “is looking to rein in the growing use” of the ITC for patent disputes and observing that patent trolls “have increasingly filed infringement claims at the ITC”).

305. Several countries have complained about the protectionist policies surrounding § 337, including South Korea and China. *See* Chris O'Brien, *White House Veto Raises Stakes in Apple-Samsung Patent Dispute*, L.A. TIMES (Aug. 5, 2013), <http://articles.latimes.com/2013/aug/05/business/la-fi-0806-apple-patent-war-20130806> (showing that the South Korea Ministry of Trade, Industry, and Energy was concerned “about the negative impact that such a decision would have on the protection of patent rights”); David Gray, *China Says U.S. Solar Ruling Smacks of Protectionism*, REUTERS (Dec. 3, 2011, 10:18 PM), <http://www.reuters.com/article/2011/12/04/us-china-solar-idUSTRE7B302X20111204#vGzGZpOd12xDjsYU.97> (“China said it was ‘deeply concerned’ about a preliminary ruling by a U.S. trade body that trade practices by Chinese solar makers are hurting U.S. producers and said the decision underscored a U.S. ‘inclination to trade protectionism.’”). *But see* Colleen Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & MARY L. REV. 63, 94-95 (2008) (noting that “while ITC respondents often include foreign companies, as intended by Congress, they are also increasingly including domestic companies and public companies”).

306. *See, e.g., Net Founders Fight Piracy Law with ‘Censorship’ Claim*, BBC NEWS (Mar. 8, 2012), <http://www.bbc.com/news/technology-16195344> (noting that “[SOPA] aims to stop online ad networks and payment processors from doing business with foreign websites accused of enabling or facilitating copyright infringement,” and could block search engines from linking to infringing websites, force domain name registrars to take down websites, and require ISPs to block access to infringing websites).

internet traffic through fixed points.³⁰⁷ Even if the ITC did not misuse the power, the potential for abuse by the government is immense. A number of IP commentators have discussed these concerns at length.³⁰⁸

Another general problem is the difficulty in determining when information enters the country. As Professor Winston has noted, while patent law is territorial, technology is not.³⁰⁹ Before Congress can allow the ITC to go after information entering into the United States, it must have a firmer idea of when information becomes subject to U.S. law.

Related to the problem of boundaries is determining how the ITC would treat internet traffic that inadvertently routes through the United States. If the ITC had the ability to seize imported electronic information, it could do so for content not intended for a U.S. recipient.³¹⁰ For example, suppose that a company in London performs a method described in a U.S. patent but is unprotected elsewhere. The London company then sends resulting data to a customer in Mexico City. Because underwater fiber optic cable links London to North America via the East Coast,³¹¹ that traffic would pass through the United States and would potentially be subject to ITC jurisdiction. The ITC needs to clarify its position to prevent inadvertent U.S. importation from becoming actionable.

2. Institutional Design Concerns

Even if Congress decides that website blocking is desirable, it is not clear that the ITC is the best institution to implement it. The ITC is known for promoting strong IP rights at the expensive of the public welfare. It also lacks powers that it needs to be effective.

307. See Goldman, *supra* note 195 (“OPEN still contemplates reestablishing a Fortress USA. Fortress USA marginally makes sense regarding the shipment of physical goods across geographic borders. It makes zero sense for digital bits zinging around the borderless network.”).

308. See, e.g., Michael A. Carrier, *Copyright and Innovation: The Untold Story*, 2012 Wis. L. REV. 891, 891 (discussing the reaction to SOPA and PIPA); David S. Levine, *Bring in the Nerds: Secrecy, National Security, and the Creation of International Intellectual Property*, 30 CARDOZO ARTS & ENT. L.J. 105, 126 (2012) (discussing SOPA and PIPA, and observing how the arguments in that debate apply in a trade context).

309. Winston, *supra* note 193, at 1.

310. Cf. Nicholas Weaver, *Our Government Has Weaponized the Internet*, WIRED (Nov. 13, 2013), <http://www.wired.com/2013/11/this-is-how-the-internet-backbone-has-been-turned-into-a-weapon> (discussing the means by which governments can seize electronic information that passes through their respective countries). Internet traffic can also be deliberately rerouted, a practice that is known as “traffic interception.” Jim Cowie, *The New Threat: Targeted Internet Traffic Misdirection*, DYN RESEARCH (Nov. 19, 2013), <http://www.renesys.com/2013/11/mitm-internet-hijacking/>. One would hope that artificial attempts to gain U.S. jurisdiction would fail in a court or agency.

311. See *Trans-Atlantic*, SUBMARINE CABLE NETWORKS, <http://submarinenetworks.com/systems/trans-atlantic> (last visited Nov. 2, 2015).

a. Public Welfare Considerations

As a federal agency, the ITC can issue injunctive-like relief without meeting the same high standards that a court must meet. In *eBay v. MercExchange, L.L.C.*, the Supreme Court held that a court cannot issue an injunction in a patent case unless the plaintiff can show “(1) that it has suffered an irreparable injury; (2) that remedies available at law . . . are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.”³¹² *eBay* does not, however, apply to orders issued by the ITC because the ITC is an agency that is instead bound by its organic statute.³¹³ Consequently, if Congress allows digital trade cases into the ITC, this will allow the ITC to issue more quasi-injunctive relief compared to a federal court.³¹⁴

Section 337 does require the ITC to consider the public welfare prior to issuing an exclusion order or cease-and-desist order.³¹⁵ But in practice, the public welfare requirement rarely prevents it from granting relief.³¹⁶ The ITC has not denied an exclusion order on public policy grounds in more than thirty years.³¹⁷ The three occasions in which an exclusion order was denied involved a special hospital bed which kept burn patients alive,³¹⁸ devices needed for nuclear weapon development,³¹⁹ and auto parts needed during the 1979 energy crisis.³²⁰

312. 547 U.S. 388, 391 (2006).

313. *See* Spansion, Inc. v. Int’l Trade Comm’n, 629 F.3d 1331, 1358 (Fed. Cir. 2010) (holding that *eBay* does not apply to ITC determinations under § 337 because exclusion orders are based on the criteria set forth in the Tariff Act and not on traditional equitable considerations).

314. Professor Colleen Chien has shown that the ITC grants injunctions at a far greater rate than district courts. *See* Chien, *supra* note 305, at 63.

315. Sections 337 (d), (e), and (g) (pertaining to exclusion orders) and § 337(f) (pertaining to cease-and-desist orders) contain language stating that the ITC must consider the effect of the remedy “upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers.”

316. *See* Kumar, *Other Patent Agency*, *supra* note 10, at 567–70 (discussing how the ITC has not denied an exclusion order on public policy grounds since 1984, though conceding that the ITC does sometimes narrow exclusion orders for public policy reasons).

317. *In re* Certain Foam Masking Tape, Inv. No. 337-TA-528, USITC Pub. 3968, at *8 n.7 (Dec. 2007) (observing that the ITC “has declined to issue a remedy based on the public interest in only three investigations”).

318. *See In re* Fluidized Supporting Apparatus, Inv. No. 337-TA-182/188, USITC Pub. 1667, at *1–2 (Oct. 1984) (denying an exclusion order for hospital beds for burn victims where the beds were in short supply and were superior to other beds on the market).

319. *In re* Certain Inclined-Field Acceleration Tubes and Components Thereof, Inv. No. 337-TA-67, USITC Pub. 1119, at *10 (Dec. 1980) (denying an exclusion order for devices used in nuclear weapon development where no suitable alternative existed).

320. *In re* Automatic Crankpin Grinders, Inv. No. 337-TA-60, USITC Pub. 1022, at *11 (Dec. 1979) (denying exclusion order for a patented auto part that was needed to improve fuel efficiency during the 1979 energy crisis).

In a typical public interest analysis, the commissioners note how rare it is for permanent relief to be denied, citing to the three investigations discussed above.³²¹ Unless there is a life or death situation or a national emergency, no public interest is sufficient to outweigh the rights of the IP holder.

On the surface, it might appear that the ITC cares more about the rights of the patent holders than the public. The agency noted that “exclusionary relief should only be denied when the adverse effect on the public interest factors would be greater than the interest in protecting the patent holder.”³²² But it also believes that the public interest is generally advanced by the strong protection of patent rights. In considering the public interest requirement under § 337, the ITC has quoted legislative history stating that “a public interest in the enforcement of protected intellectual property rights” exists and that the importation of infringing merchandise “indirectly harms the public interest.”³²³ The Federal Circuit generally accepts the ITC’s argument,³²⁴ although some scholars reject it.³²⁵

321. See, e.g., *In re Certain Home Vacuum Packaging Prods.*, Inv. No. 337-TA-496, USITC Pub. 3681, at *5 (Jan. 2004) (“The Commission has, in rare instances, declined to issue permanent relief when the adverse effect on the public interest was greater than the interest in protecting rights secured by valid patents.”); *In re Certain Pers. Data & Mobile Comm’n Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. 2011-32869, at *42 (Dec. 2011) (“With respect to public health and welfare, the Commission has historically examined whether ‘an exclusion order would deprive the public of products necessary for some important health or welfare need: energy efficient automobiles, basic scientific research, or hospital equipment.’” (quoting *Spansion, Inc. v. Int’l Trade Comm’n*, 629 F.3d 1331, 1360 (Fed. Cir. 2010))).

322. *In re Certain Optoelectric Devices for Fiber Optic Comm’n, Components Thereof, and Products Containing the Same*, Inv. No. 337-TA-860, USITC Pub. 2013-30250, at *130 (Dec. 2013) (Initial Determination) [hereinafter *Certain Optoelectric Devices*].

323. *In re Certain Baseband Processor Chips & Chipsets, Transmitter, and Receiver (Radio) Chips, Power Control Chips, & Products Containing the Same, Including Cellular Telephone Handsets*, Inv. No. 337-TA-543, USITC Pub. No. 4258, at *32 (Oct. 2011) (Final) (quoting S. Rep. 100-71, at 128 (1987)). The commissioner’s view of strong patent rights is not shared by all of the administrative law judges. See, e.g., *id.* at *46, *46 n. 355 (noting that the ALJ found that the third EPROM factor weighs against awarding a broad exclusion order to the patent holder).

324. See *San Huan New Materials High Tech, Inc. v. Int’l Trade Comm’n*, 161 F.3d 1347, 1363 (Fed. Cir. 1998) (affirming the ITC, noting that in “addressing the ‘public interest’ factor, the Commission determined that the public interest favors the protection of intellectual property rights and weighs in favor of a ‘significant penalty’”). Even if the Federal Circuit disagreed, the ITC is entitled to *Chevron* deference for its interpretation of its organic statute.

325. For example, the enforcement of patents held by patent trolls have been found to harm the public welfare, including in the ITC. See, e.g., Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 23–24 (2012) (discussing how the ITC Commissioners have “regularly rejected public interest arguments when it finds either that alternative suppliers can’t provide comparable products or that the products aren’t critical to public health and welfare,” including in cases where there were “[s]ignificant public health interests”); Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113

The ITC has shown some signs of softening its approach. In recent years, several exclusion orders have been narrowed based on public policy concerns.³²⁶ The ITC has also begun to scrutinize complaints brought by patent trolls.

Nevertheless, Congress and the courts should think carefully before expanding the ITC's jurisdiction. So long as § 337 lacks adequate safeguards to protect the public welfare and is grounded in outdated protectionist principles, it will continue to overuse exclusion orders and cease-and-desist orders, and allow patent holders to continue to circumvent the more onerous equitable balancing test used by federal courts.³²⁷

b. ITC Powers

For website blocking, the ITC is a weaker institution than a court. First, it is unclear that the ITC has substantive rulemaking authority. Although § 1335 of the Tariff Act states that it “is authorized to adopt such reasonable procedures and rules and regulations as it deems necessary to carry out its functions and duties,”³²⁸ there is debate as to whether that provision refers to merely non-substantive rules.³²⁹ Prior to 1980, the ITC never attempted to promulgate a substantive rule.³³⁰

The ITC's one attempt to issue a substantive rule was with regard to the labeling of steel wire rope.³³¹ Some members of Congress objected,

COLUM. L. REV. 2117, 2124 (2013) (discussing how patent trolls harm innovation and provide little social benefit, yet can utilize the ITC).

326. See *Certain Optoelectric Devices*, *supra* note 322, at *130. See also K. William Watson, *Anti-Patent Troll Bill Must Not Sidestep ITC Reform*, Cato (Oct. 25, 2013), available at <http://www.cato.org/blog/anti-patent-troll-bill-must-not-sidestep-itc-reform> (acknowledging the problem of patent trolls using the ITC, but arguing that increased protectionism is not the solution).

327. There is clear historical precedent for IP interest groups expanding the ITC's jurisdiction to suit their needs. See *supra* Part I.A.

328. 19 U.S.C. § 1335 (2012).

329. See Hearing before the Subcommittee on Int'l Trade of the Committee on Finance U.S. Senate, 96th Cong., at 28 (1980) (noting that the ITC was considering the use of substantive rulemaking to assist with § 337 actions).

330. See Proposed Rule Requiring Country-of-Origin Marking of Imported Steel Wire Rope, 45 Fed. Reg. 12835, 12835–12836 (proposed Feb. 27, 1980) (“Although substantive rulemaking is no longer a novelty in the practice of administrative law, this Commission has not previously employed it.”).

331. See *id.*; *International Trade Commission: Substantive Rule on Steel Wire Rope Withdrawn, Issue of Rulemaking Authority Not Addressed*, BNA NEWS & COMMENT, Dec. 3, 1980, at A1 available at <http://digitalcollections.library.cmu.edu/awweb/awarchive?type=file&item=499870>; Congressional Memorandum from Bill to H. John Heinz III, available at <http://doi.library.cmu.edu/10.1184/pmc/heinz/box00133/fld00025/bdl0007/doc0001> (noting ITC rulemaking procedures for steel wire rope was an issue to be addressed at a Congressional hearing).

maintaining that the ITC lacks substantive rulemaking authority.³³² The ITC was ultimately forced to withdraw the rule, failing to directly address the issue of what its rulemaking authority entails.³³³

The bigger question of whether the ITC has substantive rulemaking authority does not appear to have ever been resolved.³³⁴ Such power would allow the ITC to clarify the meaning of ambiguous terms in § 337 while receiving valuable public input. It would be especially useful given how infrequently Congress amends the Tariff Act.

Second, the ITC lacks direct enforcement authority over exclusion orders and cease-and-desist orders. The ITC can conduct formal enforcement proceedings to modify or revoke an earlier order.³³⁵ However, to enforce any of its orders, the ITC must bring a civil action in a federal district court.³³⁶ Given how weak the ITC is, it raises the question of whether a court or even another agency might be better suited for dealing with website blocking.³³⁷

CONCLUSION

The ITC's jurisdiction does not appear to extend to digital information. The defining characteristic of property subject to in rem jurisdiction is that one person or entity can control it. A court or agency can seize control over tangible property, such as land, and even some intangible property, such as domain names. But nobody can seize pure information. This limitation of the ITC's jurisdiction makes sense, given that Customs can only seize physical goods at the border under the Tariff

332. Proposed Rule Requiring Country-of-Origin Marking of Imported Steel Wire Rope, 45 Fed. Reg. at 12836 (discussing the disagreement between members of Congress on whether the ITC has substantive rulemaking authority); Letter from John Danforth and John Heinz to the Hon. Catherine Bedell (May 19, 1980) (maintaining that § 1335 grants the ITC substantive rulemaking authority), available at <http://digitalcollections.library.cmu.edu/awweb/awarchive?type=file&item=499872>.

333. *Id.*

334. A search of the Federal Register reveals that since 1980, the ITC has not proposed any substantive rules. But that alone does not tell us whether the ITC does or doesn't have substantive rulemaking authority.

335. 19 C.F.R. § 210.75(c) (2015).

336. *Id.* § 210.75(b)(4)(ii).

337. The Federal Communications Commission (FCC) is a potential candidate. It recently approved a plan reclassifying broadband Internet as a utility, giving the FCC greater regulatory power over it. Dave Boyer, *Split FCC Approves "Net Neutrality" Plan; Dissenters Decry Obama "Power Grab,"* WASH. TIMES (Feb. 26, 2015), www.washingtontimes.com/news/2015/feb/26/fcc-approves-net-neutrality-plan/. However, the fact that the FCC historically had little power might warrant caution on any further expansion of its power. See Brendan Sasso, *Net Neutrality Has Sparked an Interagency Squabble over Internet Privacy*, NAT'L J. (Mar. 9, 2015), <http://www.nationaljournal.com/tech/the-future-of-broadband/net-neutrality-has-sparked-an-interagency-squabble-over-internet-privacy-20150309> (discussing how the FCC's newly asserted power might be overstepping the jurisdiction of the Federal Trade Commission).

Act. Because the ITC's in personam jurisdiction is secondary, it is not clear that the ITC has jurisdiction to investigate cases involving digital trade.

The ITC's statutory authority under the Tariff Act is also narrow. The legislative history of the statute shows that Congress intended to limit the term "articles" to personal property. Moreover, the ITC's statutory analysis supporting its expansive definition of "article" is at best sloppy and at worst grossly misleading. The ITC misquotes legislative history, cites to statutes passed decades after the Tariff Act, and relies on a Supreme Court decision regarding newspaper articles in an attempt to support its interpretation. Under no standard of review could the ITC's interpretation survive.

Attempts by the ITC to further expand its jurisdiction should be scrutinized. Although the *Certain Digital Models* decision is somewhat narrow, IP rights holders are seeking to extend the ITC's power to exclude information at a nonexistent digital border. The MPAA Memo shows how attractive this idea is to the pro-copyright lobby, notwithstanding the detrimental effect that it could have on consumers. The courts and Congress should not lose sight of the fact that the Tariff Act is grounded in protectionism, and is not designed to promote innovation.

