



9-15-2019

Enjoining the Cloud: Equity, Irreparability, and Remedies

Hannibal Travis

Follow this and additional works at: <https://digitalcommons.law.villanova.edu/vlr>



Part of the [Internet Law Commons](#)

Recommended Citation

Hannibal Travis, *Enjoining the Cloud: Equity, Irreparability, and Remedies*, 64 Vill. L. Rev. 393 (2019).

Available at: <https://digitalcommons.law.villanova.edu/vlr/vol64/iss3/3>

This Article is brought to you for free and open access by Villanova University Charles Widger School of Law Digital Repository. It has been accepted for inclusion in Villanova Law Review by an authorized editor of Villanova University Charles Widger School of Law Digital Repository. For more information, please contact Benjamin.Carlson@law.villanova.edu.

ENJOINING THE CLOUD:
EQUITY, IRREPARABILITY, AND REMEDIES

HANNIBAL TRAVIS*

ABSTRACT

This article examines the tailoring of remedies in cases involving on-line infringement in particular. When websites communicate copyrighted works to members of the public, or use trademarks unlawfully, domestic requirements of equitable relief come into tension with global enforcement cultures. Courts are sometimes persuaded to enjoin entire websites or to order the defendant and its cloud service providers to end any use of the copyrights or trademarks at issue, while other courts limit their injunctions to the adjudicated conduct and the parties before them. The question sometimes arises whether a site-killing or device-killing order should issue in light of the defendant's infringement and third parties' facilitation of it, or whether the defendant should simply be ordered to desist from the infringing acts (and related parties from facilitating those specific acts). An increasingly prominent alternative is to withhold an injunctive remedy in view of the potential recovery of monetary relief. This article explores why, despite statutory language, case law precedent, and political consensus that website blocking should not occur, the sweeping remedy of site blocking (enjoining any facilitation of site access) continues to be available. It argues that site-blocking and orders to third parties not to index or provide services to a website are in tension with the Supreme Court's decision in *eBay*, the First Amendment demand for narrowly targeted remedies when publishing and digital communication are at stake, the Digital Millennium Copyright Act's limiting language, remedial proportionality doctrine, and the failure of the Stop Online Piracy Act of 2011 in Congress. Remedial inequities are also emerging as between copyright and patent or trademark holders, because the bare loss of control of intellectual property is justifying copyright and trademark injunctions despite patent law cases suggesting that impaired exclusivity and negotiating leverage are not necessarily "irreparable injury."

* Professor of Law, Florida International University. My thanks go to the Association of American Law Schools Section on Remedies for selecting this paper after a call for papers for a presentation on a panel on "Intellectual Property Remedies at the Supreme Court and Worldwide," which was held at the 2019 Annual Meeting of the association. In particular, I thank Alexandra Lahav, Caprice Roberts, John Golden, and the other participants in the 2019 Section on Remedies panel for their comments. In addition, I thank Riquan King for his research assistance, and the FIU College of Law for summer research support.

Keywords: sopa, dmca, first amendment, tailoring, proportionality, adequate remedies, registries, registrars, domain names, search engines, content delivery networks, CDNs, storage, cloud, irreparable injury, injunction, trademark, copyright

TABLE OF CONTENTS

I. Introduction	394
II. Cloud Technologies and <i>eBay v. Mercexchange</i>	401
A. Precisely Drawn Notice vs. “Obey the Law” Injunctions.	401
B. Precision as Final Adjudication	405
C. Precision as Reasonable Detail	411
III. Aiming for Precision About Injury in Complex Cases	421
A. Injury as Liability.	421
B. Complex Irreparability	433
C. Precision About Adequacy of Legal Remedies	436
IV. Equitable Remedies as Proportional and Properly Tailored	441
A. Proportionality as Notice	441
B. Probabilistic Hardships	443
C. The Difference Between Hardships and Public Interests	447
D. The Future of Tailoring in Complex IP Cases	455
V. Conclusion	456

I. INTRODUCTION

CLOUD technologies and services deliver storage, computer processing power, and communications infrastructure; users with diverse purposes and in various locations obtain access to them over the Internet.¹ Cloud providers confront legal and technical difficulties because users of various types and sizes may share not only physical storage space but the same database or database table.² With the Internet of Things, billions of connected devices will be everywhere, producing more than \$5 trillion in

1. See W. Kuan Hon & Christopher Millard, *Cloud Technologies and Services*, in CLOUD COMPUTING LAW (Christopher Millard ed. 2013) (ebook).

2. See *id.* Cloud services are provided across thousands of data centers containing many thousands or millions of gigabytes of information. See, e.g., In re Warrant to Search a Certain E-mail Account Controlled & Maintained by Microsoft Corp., 829 F.3d 197, 202-03 (2d Cir. 2016) (noting that Microsoft claims to “manage [] over one million server computers in [its] datacenters . . . [which] host more than 200 online services, used by over 1 billion customers and over 20 million businesses worldwide”), *vacated*, 138 S. Ct. 1186 (2018) (second alteration in original) (citation and internal quotation marks omitted); *Swarmify, Inc. v. Cloudflare, Inc.*, No. C 17-06957 WHA, 2018 WL 1142204, at *1 (N.D. Cal. Feb. 27, 2018) (noting that Cloudflare, Inc. is “a San Francisco-based corporation that formed in 2009 and uses a network of data centers to offer reverse-proxy and content delivery services to other companies”).

economic activity and threatening intellectual property in ways both old and new.³

Internet service providers (ISPs) find themselves swept up in demands for greater copyright and trademark enforcement online.⁴ The evolving law of streaming and other digital “piracy” remedies features innovations such as device bans, administrative website blocking, and dynamic site blocking injunctions.⁵ The United States faces the same pressures that prompted courts and legislatures in Europe and Canada to consider expanding the scope of intellectual property (IP) remedies.⁶ Broad injunctions could issue against Internet intermediaries, harming the protected speech of their users as well as innocent third parties af-

3. See INTERNET POLICY TASK FORCE & DIG. ECON. LEADERSHIP TEAM, U.S. DEP’T OF COMMERCE, *FOSTERING THE ADVANCEMENT OF THE INTERNET OF THINGS* 3-4, 33-39 (2017), https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf [<https://perma.cc/M9VA-H6Y4>].

4. Internet or online service providers are defined for copyright purposes as “provider[s] of online services or network access, or the operator[s] of facilities therefor . . .” 17 U.S.C. § 512(k)(1)(B) (2018). An emerging distinction in European law may be between information society service providers, a similar concept to Internet service providers, and online content sharing service providers (OCSFs), a narrower one similar to social media, and potentially more strictly regulated. See *Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market*, preamble para. 37 (2016) 593 final (Sept. 14, 2016) https://juliareda.eu/wp-content/uploads/2019/02/Copyright_Final_compromise.pdf [permalink unavailable] (observing that: “Online content sharing services providing access to a large amount of copyright protected content uploaded by their users have become main sources of access to content online”); *id.* at 50, art. 2(3) (defining OCSFs as those that store, organize, and provide access to large quantities of user-uploaded content).

5. See, e.g., *Anti-piracy Group Urges CRTC to Create Website-Blocking System*, CAN. NEWS MEDIA (Jan. 29, 2018), <http://canadanewsmedia.ca/2018/01/29/anti-piracy-group-urges-crtc-to-create-website-blocking-system> [<https://perma.cc/YZ7A-6V8H>] (survey of debate between Barry Sookman in favor of copyright industry groups’ call for more remedies against Internet-based infringement and Michael Geist who argued that freedom of expression and traditional remedy standards should prevail); Michael Geist, “*Bill C-11 is No SOPA*: My Response (Feb. 8, 2012), <http://www.michaelgeist.ca/2012/02/sookman-column-response> [<https://perma.cc/VZ9G-HYMV>] (summarizing Sookman’s arguments and replying); Matthew Rimmer, *Submission to the Senate Legal and Constitutional Affairs Committee on the Copyright Amendment (Online Infringement) Bill 2015 (Cth)*, QUEENSL. UNIV. OF TECH. (Apr. 21, 2015), https://works.bepress.com/matthew_rimmer/233/ [<https://perma.cc/K59T-ELXP>]; Barry Sookman, *Support for Creators: Pirate Streaming and the Value Gap* (Jan. 19, 2018) [hereinafter Sookman, *Streaming*], <http://www.barrysookman.com/2018/01/19/support-for-creators-pirate-streaming-and-the-value-gap-my-op-ed-in-the-globe/> [<https://perma.cc/QLL4-MWPR>].

6. See INTERNET POLICY TASK FORCE, U.S. DEP’T OF COMMERCE, *Green Paper on Copyright Policy, Creativity, and Innovation in the Internet Economy* (July 31, 2013), <https://www.uspto.gov/sites/default/files/news/publications/copyrightgreenpaper.pdf> [<https://perma.cc/A3DK-YBB9>] (last visited June 6, 2019); INTERNET POLICY TASK FORCE, U.S. DEP’T OF COMMERCE, *Multistakeholder Forum on the DMCA Notice and Takedown System* (2014-2015), <https://www.uspto.gov/learning-and-resources/ip-policy/copyright/multistakeholder-forum-dmca-notice-and-takedown-system> [<https://perma.cc/J5X8-PW8W>].

fects by the order, especially when equivalent intermediaries are tough to find.⁷ In order to close the “value gap” when it comes to the communication of copyrighted and branded work on the Internet, there will be demands to enjoin other operations or future acts by the same defendant, and to enjoin nonparties and those otherwise not deemed infringers.⁸ Such orders may sweep in related accounts, noninfringing material, and similar publications.⁹

In Europe, website blocking has joined subscriber termination and content blocking as remedies against intermediaries who are not at fault in terms of intent or even in terms of causation or copying.¹⁰ Blocking remedies may evolve into a new form of Net regulation, alongside direct infringement liability and authorization or indirect liability of various kinds.¹¹ The controversy goes back a decade or longer, as scholars warned

7. See, e.g., *infra* notes 13-15 and accompanying text.

8. See Giancarlo Frosio, *Reforming Intermediary Liability in the Platform Economy: A European Digital Single Market Strategy*, 112 NW. U. L. REV. 19, 19 (2017) [hereinafter Frosio, *Reforming*] (“In an attempt to close a ‘value gap’ between rightholders and online platforms allegedly exploiting protected content, the [European Commission’s upload filtering] proposal would implement filtering obligations for intermediaries Apparently, the European Commission aligns its strategy for online platforms to a globalized, ongoing move towards privatization of enforcement online through algorithmic tools.”); Martin Senftleben, *Adapting EU Trademark Law to New Technologies—Back to Basics?*, in CONSTRUCTING EUROPEAN INTELLECTUAL PROPERTY 137, 176 (Christophe Geiger ed. 2013) [hereinafter Senftleben, *Adapting EU Trademark Law*]; Martin Senftleben, *Breathing Space for Cloud-Based Business Models: Exploring the Matrix of Copyright Limitations, Safe Harbours and Injunctions*, 4 J. INTELL. PROP. INFO. TECH. & E-COMM. L. 87 (2013) [hereinafter Senftleben, *Breathing Space*] (surveying blocking and filtering orders against a variety of intermediaries and raising questions of burden, text-based filtering, safe harbors, freedom of expression, and copyright exceptions for quotations and parodies etc.); Sookman, *supra* note 5; Hannibal Travis, *Myths of the Internet as the Death of Old Media*, 43 AM. INTELL. PROP. L. ASS’N Q.J. 1 (2014) (describing campaigns for filtering and site blocking from Napster and YouTube to Stop Online Piracy Act and U.S. Department of Commerce’s Internet Policy Task Force); *Promoting Investment and Protecting Commerce Online: Legitimate Sites v. Parasites, Part I, Before the Subcomm. on Intell. Prop., Competition, and the Internet*, 112th Cong. (2011) (statement of Maria A. Pallante, Acting Register of Copyrights), <http://www.copyright.gov/docs/regstat031411.html> [<https://perma.cc/D6RU-8BFB>] (making policy-based case for site blocking and intermediary responsibilities in light of rising tide of piracy).

9. See *infra* notes 81-83 and accompanying text; see also *infra* notes 23, 108, 152.

10. See MARTIN HUSOVEC, *INJUNCTIONS AGAINST INTERMEDIARIES IN THE EUROPEAN UNION: ACCOUNTABLE BUT NOT LIABLE?* 3-4, 101, 195-97 (Lionel Bentley et al. eds., 2017); see also Frosio, *Reforming*, *supra* note 8; Senftleben, *Breathing Space*, *supra* note 8. One study mentions direct liability, secondary and “authorisation” liability, joint tortfeasance, and criminal modes of liability (such as aiding and abetting, conspiring, instigating, and inducing) as options. See Pekka Savola, *Blocking Injunctions and Website Operators’ Liability for Copyright Infringement for User-Generated Links*, 36 EUR. INTELL. PROP. REV. 279 (2014).

11. See Husovec, *supra* note 10, at 3-4, 101, 195-97; see also Christina Angelopoulos, *Are Blocking Injunctions Against ISPs Allowed in Europe? Copyright Enforcement in the Post-Telekabel EU Legal Landscape*, 9 J. INTELL. PROP. L. & PRAC. 812 (2014), https://www.researchgate.net/profile/Christina_Angelopoulos/publication/2807

of biased hosts and indexes, conflicts with settled principles of “no monitoring obligations,” and invasions of the freedom of expression.¹² In many cases, hyperlinking does not copy a work or make a commercial use of a trademark in connection with a service; automated content forwarding, reproduction for hosting or caching, and transmission may also avoid liability doctrines.¹³ Hyperlinking liability therefore restrains the legal provision of facts.

62113_Are_blocking_injunctions_against_ISPs_allowed_in_Europe_Copyright_enforcement_in_the_post-Telekabel_EU_legal_landscape/links/56c1c5f808acedba0567a602.pdf?origin=publication_detail [https://perma.cc/K7PK-LAF7] (while under E-Commerce Directive of European Union, freedom to send and receive speech was protected, European Court of Justice in 2014 permitted Internet service providers to be enjoined from providing user access to specific third-party websites subject to certain procedural protections for the providers from contempt-like penalties and for users from excessive invasion of their freedom to access information); Lukas Feiler, *Website Blocking Injunctions Under EU and U.S. Copyright Law—Slow Death of the Global Internet or Emergence of the Rule of National Copyright Law?* (TTLF Working Paper No. 13, 2012), https://law.stanford.edu/wp-content/uploads/sites/default/files/publication/203758/doc/slspublic/feiler_wp13.pdf [https://perma.cc/UPT8-UPZV] (warning of harm to Internet from website blocking injunctions and active monitoring of user behavior); Arno Lodder & Puck Pol, *ISP Blocking and Filtering: On the Shallow Justification in Case Law Regarding Effectiveness of Measures*, 8 EUR. J.L. TECH. (2017), <https://ejlt.org/article/view/517/758/> [https://perma.cc/37KY-76YY] (due to tests for injunctive relief that overlook “impact on lawful users of the internet,” injunctions blocking the availability of websites mean that in Europe, “the role of ISPs is moved further in the direction of policing the internet”); cf. Cory Doctorow, *What’s Next for Europe’s Censorship Plan?*, ELEC. FRONTIER FOUND. (Oct. 7, 2018), <https://www.eff.org/deep-links/2018/10/whats-next-europes-internet-censorship-plan-0> [https://perma.cc/69TN-G3PN] (“Members of the EU Parliament voted to advance the new Copyright Directive, even though it contained . . . Article 13 (‘Censorship Machines’) that would filter everything everyone posts to online platforms to see if matches a crowdsourced database of ‘copyrighted works’ that anyone could add anything to . . .”). See generally Jeremy De Beer & Christopher Clemmer, *Global Trends in Online Copyright Enforcement: A Non-Neutral Role for Network Intermediaries?*, 49 JURIMETRICS J. 375 (2009).

12. See, e.g., Stop Online Piracy Act (SOPA), H.R. 3261, 112th Cong. (2011); De Beer & Clemmer, *supra* note 11, at 400, 402; Giancarlo Frosio, *The Death of ‘No Monitoring Obligations’: A Story of Untameable Monsters*, 8 J. INTEL. PROP. INFO. TECH. & E-COMM. L. 199 (2017); Frosio, *Reforming*, *supra* note 8, at 19; Seth Kreimer, *Censorship by Proxy: The First Amendment, Internet Intermediaries, and the Problem of the Weakest Link*, 115 U. PA. L. REV. 11, 23-24, 87-90 (2006); Mark Lemley, et al., *Don’t Break the Internet*, 64 STAN. L. REV. ONLINE 34 (2011), <https://www.stanfordlawreview.org/online/dont-break-the-internet/> [https://perma.cc/D2AV-QA8X]; Lodder & Pol, *supra* note 11; Felix Wu, *Collateral Censorship and the Limits of Intermediary Immunity*, 87 NOTRE DAME L. REV. 293, 347-49 (2011) (discussing whether copyright liability should be transferrable from direct infringers to intermediaries, as it typically is not under section 230 of the Communications Decency Act with respect to libel or invasion of privacy (citing Joseph P. Liu, *Copyright and Breathing Space*, 30 COLUM. J.L. & ARTS 429, 435-37 (2007))); Laurence Tribe, *The “Stop Online Piracy Act” (SOPA) Violates the First Amendment* (Dec. 6, 2011), <https://www.serendipity.li/cda/tribe-legis-memo-on-SOPA-12-6-11-1.pdf> [https://perma.cc/5EFS-593B].

13. See, e.g., 17 U.S.C. § 512(a) (2018) (safe harbor for Internet conduits); Columbia Pictures Indus., Inc. v. Fung, 710 F.3d 1020, 1034, 1038 (9th Cir. 2013)

A new global culture of rigorous enforcement of legal rights against ISPs and cloud technology providers will face some import barriers before permeating U.S. jurisdictions. In particular, irreparable injury and the other *eBay* factors might prompt courts to reject demands that intermediaries such as search engines cease delivering hyperlinks to websites or apps that communicate infringing material to members of the public.¹⁴ A rote application of certain copyright and trademark precedents could result in the services upon which Internet speech relies being subjected to injunctive relief simply because the service providers could terminate client accounts or content; the affected services might include “neutral” services such as domain name services, content delivery networks (CDNs),

(mere knowledge that a hyperlink, information location tool, or other Internet service may be used to infringe does not result in inducement liability for infringement); *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 380 F.3d 1154 (9th Cir. 2004) (operator of software that creates a content-sharing community may not be liable for aiding and abetting or be vicariously responsible for infringement by the software users/the community, due to lack of knowledge, failure to facilitate particular infringing acts, no right or ability to control user conduct, etc.), *rev'd on other grounds*, 545 U.S. 913 (2005); *Online Policy Grp. v. Diebold, Inc.*, 337 F. Supp. 2d 1195, 1202 n.12 (N.D. Cal. 2004) (hyperlinking to infringing copies is not a distribution of the copies); *Arista Records, Inc. v. MP3Board*, No. 00 CIV. 4660(SHS), 2002 WL 1997918, at *4 (S.D.N.Y. Aug. 29, 2002) (same); Mark Masnick, *Did Homeland Security Make up a Non-Existent Criminal Contributory Infringement Rule in Seizing Domain Names?*, TECHDIRT (Jan. 6, 2011), <http://www.techdirt.com/articles/20110104/12324012513/did-homeland-security-make-up-non-existent-criminal-contributory-infringement-rule-seizing-domain-names.shtml> [https://perma.cc/8AFL-DWX2]; Shane McDougall, *ICE Under Fire: Impropriety of Domain Name Seizures*, SETON HALL UNIV. SCHOOL OF LAW SCHOLARSHIP REPOSITORY (2013), http://scholarship.shu.edu/cgi/viewcontent.cgi?article=1267&context=student_scholarship [https://perma.cc/2HV4-XPQF] (collecting cases). *But see* *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1146, 1172-73 (9th Cir. 2007) (where Google stored thumbnails of plaintiff’s copyrighted images and links to where websites distributed “copies to a worldwide market,” giving “worldwide audience of users . . . access,” it could be liable if on remand the district court determined that it knew infringing images of plaintiff came up on its search engine and failed to take “simple” steps it could have to reduce infringement); *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1022 (9th Cir. 2001) (helping users find location of infringing copies on other users’ hard drives could lead to contributory and vicarious copyright infringement); *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000) (linking to copy protection circumvention software as trafficking in software designed or adapted for circumvention of measures that control access to or copying of work under 17 U.S.C. § 1201); *Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc.*, 75 F. Supp. 2d 1290 (D. Utah 1999) (hyperlinking to infringing copies as contributory copyright infringement); *ALS Scan, Inc. v. Cloudflare, Inc.*, CV 16-5051-GW(AFMx), slip op. at 9-12 (C.D. Cal. Mar. 13, 2018) (citing *Perfect 10*, 508 F.3d at 1170) (knowledge plus server space or other aid in distribution results in contributory liability).

14. These barriers to overextensive remedies are in addition to the major barrier posed by section 230 of the Communications Decency Act, which has been read very broadly, in the view of some commentators too broadly, for example in immunizing certain acts that are leading to or aiding and abetting invasions of privacy. *See, e.g.*, Danielle Keats Citron & Benjamin Wittes, *The Problem Isn’t Just Backpage: Revising Section 230 Immunity*, 2 GEO. L. TECH. REV. 453, 468-69 (2018); Wu, *supra* note 2, at 347-49.

payment processors, search engines, hosting services, and other intermediaries.¹⁵ More nuanced approaches may guide courts away from such outcomes, such as the searching inquiries into irreparable injury and the other *eBay* factors that are familiar in patent law and in other contexts such as libel law.¹⁶

Existing studies have explored the empirical question of how *eBay* shaped the availability of injunctions against infringement.¹⁷ Other scholars have analyzed irreparable harm or due process and related procedural questions when it comes to enjoining intermediaries,¹⁸ and prospective

15. See, e.g., McGraw-Hill Glob. Educ. Holdings, LLC v. Khan, 323 F. Supp. 3d 488, 500 (S.D.N.Y. 2018) (holding that permanent injunction could extend to domain registries acting in active concert and participation with defendants); *ALS Scan, Inc.*, slip op. (issuing order to content delivery network [CDN] and Internet protocol addressing service of infringer(s)); *Tapestry, Inc. v. 2012coachoutlets.com*, No. 17-24561-Civ-Scola, 2018 WL 704864, at *3 (S.D. Fla. Jan. 31, 2018) (issuing order to Microsoft to delist websites from search engines under All Writs Act (citing 28 U.S.C. § 1651(a))); *UMG Recordings, Inc. v. PMD Technologie UG*, No.: 2:16-cv-7210-AB(Ex), 2016 WL 11002377 (C.D. Cal. Oct. 27, 2016) (issuing order to potential domain name registrars or registries of defendant or used by those in active concert or participation with them); *Elsevier Inc. v. Sci-Hub*, No. 15-cv-4282, 2017 WL 3868800 (S.D.N.Y. June 21, 2017) (issuing order to top-level domain registries for infringers); *Arista Records, LLC v. Vasilenko*, No. 1:15-CV-21450, slip op. (S.D. Fla. Mar. 23, 2017) (issuing order to CDN of infringer(s)); *Elsevier, Inc. v. Han*, No. 16 Civ. 1245 (RA), slip op. (S.D.N.Y. July 21, 2016) (in copyright action, ordering domain name registries to transfer names to plaintiffs); *Am. Bridal & Prom Indus. Ass'n v. Affordablebridaldresses.com*, No. 3:14-cv-2311 (AET), slip op. (D.N.J. June 3, 2015) (ordering Google, Bing, and other search engines and marketplaces to delist dozens of domain names, claiming that these third parties are in “privity” with domains’ owners); *Arista Records, LLC v. Tkach*, No. 1:15-CV-03801, slip op. at 1 (S.D.N.Y. preliminary injunction issued June 1, 2015) (issuing order to anyone working in active concert and participation with defendant against linking to its website or owning/controlling its domain name), *subsequent proceedings* at 122 F. Supp. 3d 32 (S.D.N.Y. 2015) (holding that preliminary injunction applied to CDN and that domain name registrar had already complied with it); *Puerto 80 Projects, S.L.U. v. United States*, 11 Civ. 3983 (PAC 4), slip op. (S.D.N.Y. order issued Aug. 4, 2011) (regarding forfeiture of domain names linking to infringement); Defendant’s Supp. Memo. on Motion to Clarify, Certify Interloc. Appeal, & Stay, *ALS Scan, Inc. v. Cloudflare, Inc.*, No. 2:16-cv-05051-GW-AFM (C.D. Cal. Apr. 18, 2018) (challenging *ALS Scan* order); Non-Party Cloudflare, Inc.’s Corrected Reply in Supp. of Rule 60(B) Mot. to Vacate the Court’s March 23, 2017 Order, No. 15-cv-21450 (S.D. Fla. filed Aug. 11, 2017) (seeking to vacate *Arista Records* order); Opening Brief of Petitioner-Appellant Puerto 80 Projects S.L.U. v. United States, No. 11-3390-cv, 2011 WL 4440567 (2d Cir. 2011) (critiquing seizure order in *Puerto 80 Projects*); Anne Edmundson, Paul Schmitt, Nick Feamster & Jennifer Rexford, *OCDN: Oblivious Content Distribution Networks*, arXiv preprint No. arXiv:1711.01478, draft at 1-3, (2017), <https://arxiv.org/pdf/1711.01478.pdf> [<https://perma.cc/9WVW-LS5D>]; see also *infra* notes 15, 101. Compare also *infra* note 109 (collecting cases ordering parties to request removal by search engines).

16. See *infra* notes 101-03 and accompanying text.

17. See *infra* notes 197-198, 202 and accompanying text.

18. See *infra* notes 81-83, 108, 122, 193, 209-10, 226, 238, 262 and accompanying text.

compensation as an alternative to permanent injunctions.¹⁹ Research with somewhat deeper roots pre-*eBay* involves doctrinal and policy-based calls for tailoring injunctive relief carefully to the precise conduct found to be unlawful (and registered, in the case of copyrights and patents), to avoid ambiguity and censorship.²⁰ These bodies of research suggest a variety of reasons why injunctions should not issue against Internet intermediaries such as CDNs or search engines: Rule 65(d)'s requirement of reasonable detail and the avoidance of vague obligations, the plaintiff's licensing of its rights to third parties as evidence of no irreparable injury, the availability of monetary relief as an adequate legal remedy, concerns about overcompensation due to injunctions against complex methods or products, and the hardship to innocent third parties or noninfringing activities beneficial to the public under the remaining factors of *eBay*.²¹

Part II of this Article is devoted to Rule 65(d) and the framing of injunctions, especially those extending to intermediaries' conduct such as the provision of cloud services. Part III argues that the mere loss of control over an intellectual property right or rights should not lead to an inference of irreparable injury, and that courts should be more precise about the mechanisms and actual impact of the illegal injury. Part IV explains how certain forms of injunction against cloud service providers threaten to create new forms of secondary liability without knowledge or veil-piercing, and to violate the free speech rights of the defendant or of the public in general by covering lawful activity.

19. See Tomas Gómez-Arostegui, *Prospective Compensation in Lieu of Final Injunctions in Patent and Copyright Cases*, 78 *FORDHAM L. REV.* 1661, 1664 (2010); George Newcombe et al., *Prospective Relief for Patent Infringement in a Post-eBay World*, 4 *N.Y.U. J.L. & BUS.* 549 (2008); Michael Brandt, Note, *Compulsory Licenses in the Aftermath of eBay v. Mercexchange, L.L.C.: The Courts' Authority to Impose Prospective Compensatory Relief for Patent Infringement*, 17 *FED. CIR. B.J.* 699, 707-09 (2008); Tim Carlton, Note, *The Ongoing Royalty: What Remedy Should a Patent Holder Receive When a Permanent Injunction Is Denied?*, 43 *GA. L. REV.* 543 (2009).

20. See *infra* notes 41, 45, 81-84, 209-10 and accompanying text. See generally *Fourth Estate Pub. Benefit Corp. v. Wall-Street.com, LLC*, 139 S. Ct. 881 (2019) (holding that Copyright Office must register or reject an application for copyright registration with respect to a work before suit may be filed to remedy infringement of that work). See also John Blevins, *Uncertainty as Enforcement Mechanism: The New Expansion of Secondary Copyright Liability to Internet Platforms*, 34 *CARDOZO L. REV.* 1821-1823, 1834-35 (2013) (discussing copyright lawsuit against Veoh, a user-generated content and video-sharing platform that went bankrupt due to litigation costs, after its investors were also sued, although it largely prevailed against infringement charges on grounds of DMCA safe harbor (citing *UMG Recordings, Inc. v. Veoh Networks, Inc.*, 718 F.3d 1006 (9th Cir. 2013))).

21. See *infra* note 135 (irreparable injury); *infra* note 137 (adequate remedy); and *infra* notes 132-133 (balance of hardships and public interest).

II. CLOUD TECHNOLOGIES AND *EBAY V. MERCExchange*

A. *Precisely Drawn Notice vs. “Obey the Law” Injunctions*

Cloud services may be served with injunctions that vary in scope in terms of the conduct proscribed or commanded. The injunction could order a defendant found to be in violation of a law to obey the entire body of law.²² Or it could order the defendant to obey that specific law, or, more restrictively, to obey that law in a specific domain or factual scenario or victim context.²³ Most restrictively, it could order the defendant to desist from or correct the specific practice that violated the law, in a very concrete way perhaps.²⁴ It has long been the practice of copyright and

22. See *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 855 (9th Cir. 2017) (along with narrowing provisions tethered to plaintiffs, noting provision of injunction against “engaging in any other activity that violates, directly or indirectly, 17 U.S.C. §§ 1201(a) or 106”); *SEC v. Savoy Indus., Inc.*, 665 F.2d 1310, 1318-19 (2d Cir. 1981) (district court had enjoined defendant from “nearly any sort of violation of the securities laws” that would defraud a person); *Proactive Dealer Sols., LLC v. Richards*, No. 3:17-cv-00111-FDW, slip op. (W.D.N.C. Mar. 13, 2018) (enjoining defendant from any use of plaintiff’s copyrighted works whether registered or not, and any use of trademark confusingly similar to plaintiff’s registered mark); *Overstock.com, Inc. v. Visocky*, No. 1:17-cv-01331 (LMB/TCB), 2018 WL 5046673 (E.D. Va. Oct. 17, 2018) (adopting permanent injunction against defendant “otherwise infringing plaintiff’s intellectual property rights”); *Hakkasan, LV, LLC v. VIP, Unltd., LLC*, No. 2: 13-cv-01999-JCM-NJK, slip op. (D. Nev. amended preliminary injunction order entered Nov. 18, 2013) (enjoining any use in commerce of any of plaintiff’s marks or something confusingly similar thereto); *WPIX, Inc. v. ivi, Inc.*, 765 F. Supp. 2d 594, 622 (S.D.N.Y. 2011) (defendant enjoined from “infringing by any means” any broadcast television “programming in which any plaintiff owns a copyright”), *aff’d*, 691 F.3d 275 (2d Cir. 2012); *SEC v. Netelkos*, 592 F. Supp. 906, 921-22 (S.D.N.Y. 1984) (enjoining defendant from violating any of the securities laws); *State v. NY Movers Tariff Bur.*, 48 Misc. 2d 225, 256, 265 (N.Y. Sup. Ct., Special Term, N.Y. Cty. 1965) (enjoining defendants from agreeing or conspiring together to “restrict or prevent competition”).

23. See *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 132-33 (1969) (enjoining defendant from conspiring against plaintiff to slow its entry into any foreign market, even though findings focused on Canada); *SEC v. Life Partners Holdings, Inc.*, 854 F.3d 765 (5th Cir. 2017) (district court properly enjoined defendant from future violations of same law, involving reporting financial results in non-misleading way on Form 10-K or 10-Q to SEC, or aiding and abetting such violations); *SEC v. Wash. Inv. Network*, 475 F.3d 392, 392-95, 407 (D.C. Cir. 2007) (district court enjoined defendant from violating the specific securities laws cited in commission’s complaint); *SEC v. Smyth*, 420 F.3d 1225, 1229 (11th Cir. 2005) (same); *Savoy*, 665 F.2d at 1318 (in securities field, injunctions “formulated in language closely paralleling the statute transgressed by the defendant” repeatedly deemed proper) (collecting cases); *Milk & Ice Cream Can Inst. v. FTC*, 152 F.2d 478, 483-84 (7th Cir. 1946) (district court enjoined defendant from committing any violation of law with same effect); *Sega Enters. Ltd. v. Maphia*, 857 F. Supp. 679, 690 (N.D. Cal. 1994) (defendants enjoined from violating any of plaintiffs’ copyrights or trademarks).

24. See *Standard Oil Co. of N.J. v. United Sates*, 221 U.S. 1, 77 (1911) (“It may be conceded that ordinarily where it was found that acts had been done in violation of the statute, adequate measure of relief would result from restraining the doing of such acts in the future.”) (citing *Swift & Co. v. United States*, 196 U.S. 375 (1905)); *United Constr. Prods., Inc. v. Tile Tech, Inc.*, 843 F.3d 1363, 1371 (Fed.

trademark owners, as well as some federal agencies and libel victims, to seek and obtain injunctions of the first type.²⁵ As set forth below, this practice has come into question under the federal rules.

In the intellectual property domain, many decisions go beyond enjoining infringement of the specific assets that have been pled and proven infringed.²⁶ The Supreme Court's *Hartford-Empire* doc-

Cir. 2016)) (holding that "injunctions have satisfactory scope when they prohibit 'infringement of the patent by the adjudicated devices and infringement by devices not more than colorably different from the adjudicated devices'" (quoting *Int'l Rectifier Corp. v. IXYS Corp.*, 383 F.3d 1312 (Fed. Cir. 2004))); *Beastie Boys v. Monster Energy Co.*, 87 F. Supp. 3d 672, 681 (S.D.N.Y. 2015) (enjoining defendant from use of specific infringing video); *HarperCollins Publishers v. Open Road Integrated Media*, 58 F. Supp. 3d 380, 387-88 (S.D.N.Y. 2014) (enjoining defendant from infringing on any other books plaintiff had acquired electronic rights by means of "same" contractual language as used for book on which complaint was based); *Craigslist, Inc. v. Naturemarket, Inc.*, 694 F. Supp. 2d 1039, 1069-70 (N.D. Cal. 2010) (enjoining defendant from copying any protected elements from plaintiff's website or inducing or aiding anyone to do the same, or circumventing technical measures that control access to site, e.g. CAPTCHAs); *see also Savoy*, 665 F.2d at 1317-18 ("As the Court has stated elsewhere, '[a] federal court has broad power to restrain acts which are of the same type or class as unlawful acts which the court has found to have been committed'" (footnote omitted) (quoting *NLRB v. Express Publ'g Co.*, 312 U.S. 426, 435 (1941)); *Meyer v. Brown & Root Constr. Co.*, 661 F.2d 369, 373 (5th Cir. 1981) (injunction ordering defendant not to constructively discharge employees who became pregnant like the plaintiff, under similar circumstances, was appropriate, even though plaintiff was awarded damages and apparently not reinstated); *Wirtz v. Ocala Gas Co.*, 336 F.2d 236, 240 (5th Cir. 1964) ("[When] the activity which gave rise to the litigation has been completed, where there is a likelihood that the violation will be resumed [an injunction] may be sufficiently broad and general to enjoin any practices which would constitute violations of the [Fair Labor Standards] Act's provisions dealing with minimum wages, overtime and the keeping of records." (citing *Hecht Co. v. Bowles*, 321 U.S. 321, 327 (1944))).

25. *See* Dorothy Heyl, "Obey the Law" Injunctions Questioned in Some Courts, N.Y.L.J. (July 10, 2010), <https://www.milbank.com/images/content/9/8/989/072010-NYLJ-DHeyl.pdf> [<https://perma.cc/K3KB-C9EK>].

26. *See, e.g.,* *Walt Disney Co. v. Powell*, 897 F.2d 565, 568 (D.C. Cir. 1990) (enjoining defendant from infringing copyrights on Donald Duck, Goofy, and Pluto even though copyrights in suit involved Mickey Mouse and Minnie Mouse); *Bird-B-Gone Inc. v. Haierc Indus. Co.*, No. 2:18-cv-819-APG, 2018 WL 5816630 (D. Nev. permanent injunction entered Nov. 6, 2018) (enjoining defendant from making, using, offering to sell, selling, or distributing the products found to infringe plaintiff's patents); *Patagonia, Inc. v. Sauls*, No. 2:18-cv-3868-FMO, slip op. (C.D. Cal. final judgment and permanent injunction entered July 30, 2018) (generally enjoining defendant from violating plaintiff's copyrights or using its trademarks or false designation of origin or false or misleading statements of fact about plaintiff); *CoStar Realty Info., Inc. v. Apartment Hunters, Inc.*, No. 8:15-cv-02111-JLS, slip op. at 3 (C.D. Cal. judgment and permanent injunction entered Mar. 27, 2017) (injunction against "infringing, by any means, directly or indirectly, any exclusive rights under the Copyright Act in" any photographs or videos owned or controlled as to at least one exclusive right by plaintiff, or publishing or displaying or otherwise misappropriating under state law plaintiff's property listing data); *Rovio Entm't, Ltd. v. Allstar Vending, Inc.*, 97 F. Supp. 2d 536, 547 (S.D.N.Y. 2015) (defendant "permanently enjoined from further violating the copyrights and trademarks at issue in this case"); *Pods Enters., LLC v. U-Haul Int'l, Inc.*, 126 F. Supp.

trine²⁷ states that an injunction should not reach all possible legal violations; this could be particularly important to ISPs and cloud providers, which have a wide variety of users.²⁸ The doctrine has constitutional as well as procedural implications, for enjoining “any” other infringing acts does not “prevent uncertainty and confusion” as to the scope of the decree, and may create “a decree too vague to be understood.”²⁹ The Supreme Court has warned against a blanket injunction against illegality through new “method[s].”³⁰ A later case explained this doctrine as requiring that each form of illegality by the same actor must be tested and analyzed separately.³¹

3d 1263, 1292 (M.D. Fla. 2015) (defendant enjoined from using any term confusingly similar to or dilutive of plaintiff’s marks); *Teller v. Dodge*, No. 2:12-CV-591 JCM(GWF), 2014 WL 4929413 (D. Nev. Sept. 30, 2014) (enjoining defendant “from infringing on plaintiff’s copyright and trademark,” apparently not all of his copyrights); *WPIX*, 765 F. Supp. 2d at 622 (enjoining defendant from infringing any copyright in plaintiffs’ broadcast programming); *Encyclopaedia Britannica Educ. Corp. v. Crooks*, 542 F. Supp. 1156, 1187 (W.D.N.Y. 1982) (enjoining infringement of any of plaintiff’s existing works and perhaps its “future registered works” as well (internal quotation marks omitted) (quoting Ass’n of Am. Med. Colls. v. Carey, 482 F. Supp. 1358, 1364 n.15 (N.D.N.Y. 1980))); *Orth-O-Vision, Inc. v. Home Box Office*, 474 F. Supp. 672, 685-86 (S.D.N.Y. 1979); *see also Standard Oil*, 221 U.S. at 77-78 (it is “essential” to “forbid the doing in the future of acts like those which we have found to have been done in the past which would be violative of the statute”); *Wash. Inv. Network*, 475 F.3d at 407 (holding that this is type of precision as to likeness of violations that Rule 65(d) requires).

27. *Hartford-Empire Co. v. United States*, 323 U.S. 386, 410 (1945).

28. *See Daniels Health Scis., L.L.C. v. Vascular Health Scis., L.L.C.*, 710 F.3d 579, 587 (5th Cir. 2013) (reciting doctrine in trade secret case); *Anheuser-Busch Inc. v. Stroh Brewery Co.*, 750 F.2d 631, 653 (8th Cir. 1984) (reciting doctrine in trademark case); *Ideal Toy Corp. v. Plawner Toy Mfg. Corp.*, 685 F.2d 78, 83 (3d Cir. 1982) (same); *Savoy*, 665 F.2d at 1318 (explaining doctrine in securities case); *Craigslist, Inc. v. Naturemarket, Inc.*, 694 F. Supp. 2d 1039, 1062 (N.D. Cal. 2010) (reciting doctrine in copyright, computer fraud/abuse, and contract/tort case); *Iconix, Inc. v. Tokuda*, 457 F. Supp. 2d 969, 998 (N.D. Cal. 2006) (reciting doctrine in copyright case); *TC Forum at Carlsbad, LLC v. Thomas Enters., Inc.*, No. 16-cv-2119 DMS, slip op. (S.D. Cal. default judgment entered Aug. 14, 2017) (reciting doctrine in trademark case); *Malibu Media, LLC v. Gonzales*, No. H-16-2406, 2017 WL 2985641 (S.D. Tex. July 13, 2017) (reciting doctrine in copyright case); *Teller v. Dodge*, No. 2:12-CV-591 JCM, slip op. (D. Nev. Sept. 30, 2014) (reciting doctrine in copyright case); *Fairfield Resorts, Inc. v. Fairfield Mountains Prop. Owners Ass’n Inc.*, No. 1:06CV191, slip op. (W.D.N.C. 2007) (reciting doctrine in trademark case).

29. *Schmidt v. Lessard*, 414 U.S. 473, 476 (1974); *see also Ideal Toy Corp.*, 685 F.2d at 83.

30. *See Swift & Co. v. United States*, 196 U.S. 375, 401 (1908) (“The defendants ought to be informed, as accurately as the case permits, what they are forbidden to do. Specific devices are mentioned in the bill, and they stand prohibited.”).

31. *See Milk & Ice Cream Can Inst. v. FTC*, 152 F.2d 478, 483-84 (7th Cir. 1946) (order should not have enjoined perpetrator from “formulating or putting into operation any other practice or plan which has the purpose or effect of” achieving same thing as price-fixing plan found unlawful, because “some other plan of which the Commission might complain should . . . be tested” in the courts first (internal quotation marks omitted)).

Some cases go further and enjoin any infringement of the plaintiff's or plaintiffs' rights, including rights potentially not yet pled or adjudicated.³² This seems to be improper under patent law, because there is no case or controversy as to unasserted claims of a patent, let alone liability, irreparable injury, public interest support, etc.³³ Unasserted claims present different issues and cannot be lumped in with asserted claims.³⁴ Copyright law has been treated differently because registration is not a condition of protection, and some courts hold that an injunction may cover "closely related" copyrights as "infringement of 'a copyright.'"³⁵ Therefore many courts have held that an injunction may reach unregistered copyrights.³⁶ Others have said, either on the basis of outdated law, or on grounds not reached by the courts allowing orders to reach unregistered copyrights, that registration either is jurisdictional or is a required element of an infringement pleading.³⁷ A jurisdictional type of ruling is not viable under *Reed Elsevier v. Muchnick*, but an unregistered copyright may not give rise to a viable claim.³⁸ Like unasserted claims of a patent,

32. See *Walt Disney Co. v. Powell*, 897 F.2d 565, 568 (D.C. Cir. 1990) (plaintiff's other copyrighted characters); *Iconix, Inc.*, 457 F. Supp. 2d at 999-1000 (infringing copyrights in code of any of plaintiff's software).

33. *Sloan Valve Co. v. Zurn Indus. Inc.*, 712 F. Supp. 2d 743, 750-53 (N.D. Ill. 2010) (complaint alleged infringement of seventeen of twenty-five claims, and plaintiff expressed intention not to assert remaining claims, so no case or controversy existed over unasserted claims); *Gammino v. Sprint Commc'ns Co.*, No. 10-2493, 2011 WL 3240830, at *9-10 (E.D. Pa. July 29, 2011) (declining to decide on claims because they presented different issues from asserted claims, which had already been subject of court's decision).

34. See *Fox Grp., Inc. v. Cree, Inc.*, 700 F.3d 1300, 1308 (Fed. Cir. 2012) ("There was no case or controversy with respect to the unasserted claims at the time of the summary judgment motions; therefore the district court did not have jurisdiction over the unasserted claims." (citing *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1284 (Fed. Cir. 2012))); *IPS Grp. Inc. v. Duncan Sols., Inc.*, No. 15-cv-1526-CAB, slip op. (S.D. Cal. Oct. 2, 2017) (where defendants moved for summary judgment of non-infringement of plaintiff's patent by two products, but plaintiff conceded products did not infringe asserted claims, there was no case or controversy as to infringement of unasserted claims); *A Pty Ltd. v. HomeAway, Inc.*, No. 1-15-CV-158 RP, 2015 WL 5883364, at *4 (W.D. Tex. Oct. 8, 2015) ("Federal Circuit has made clear that a court lacks jurisdiction to decide the validity of unasserted claims."); *Gammino*, 2011 WL 3240830, at *9-10 (declining to decide on claims because they presented different issues from asserted claims, which had already been subject of court's decision).

35. *Pac. & S. Co. v. Duncan*, 744 F.2d 1490, 1499 n.17 (11th Cir. 1984) (emphasis in original) (quoting 17 U.S.C. § 502(a)) (citing 17 U.S.C. § 408(a)).

36. See *id.*; see also *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1154 n.1 (9th Cir. 2007); *Olan Mills, Inc. v. Linn Photo Co.*, 23 F.3d 1345, 1349 (8th Cir. 1994); *Tattoo Art, Inc. v. TAT Int'l LLC*, 794 F. Supp. 2d 634, 659-64 (E.D. Va. 2011). See generally *Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154 (2010); *Fourth Estate Pub. Benefit v. Wall-Street.com*, 856 F.3d 1338 (11th Cir. 2017), *cert. granted*, 138 S. Ct. 2707 (2018), *aff'd*, 139 S. Ct. 881 (2019).

37. See *Dowbenko v. Google, Inc.*, 582 F. App'x 801, 805 (11th Cir. 2014) (*per curiam*) (citing *Reed Elsevier*, 559 U.S. at 157).

38. See *id.*; *Adlife Mktg. & Commc'ns Co. v. Best Yet Mkt., Inc.*, No. 2: 17-cv-2978, 2017 WL 4564763, at *3 (E.D.N.Y. Oct. 11, 2017); *Malibu Media, LLC v.*

protection may exist for unregistered or unpled copyrights or trademarks, but liability is not shown, let alone irreparable injury.

Potentially lawful conduct should not be enjoined without confirming that the elements of ownership and infringing acts are met and that *eBay* is satisfied as to each type of infringement. A libel case from 2015 provides an example. The district court's injunction would have required the defendant, found responsible for libel by a jury, to take down the website on which libels had been published. The appellate court reversed, holding that because the district court had not determined that every statement on the website was libelous of the plaintiffs, the site could not be enjoined as a whole. An injunction, it said, must not be overbroad, vague, open-ended, or lacking "support in the jury verdict or, so far as appears, in the district judge's own evaluation of the evidence."³⁹ Enjoining an entire website or other Internet account tends to prohibit legitimate speech.⁴⁰

B. *Precision as Final Adjudication*

The judiciary's primary role might be said to act as a bulwark against Congress in this area, as in other areas involving the Bill of Rights and the separation of powers. In some intellectual property contexts, the Constitution is said to require a final judicial determination of infringement prior to the enjoining of the availability or transmission of a specific communication.⁴¹ The Supreme Court has warned repeatedly that a broad-brush approach is a violation of the First Amendment and due process.⁴² Thus,

Gonzales, No. H-16-2406, 2017 WL 2985641, at *2-3 (S.D. Tex. July 13, 2017); *Tattoo Art*, 794 F. Supp. 2d at 659-64.

39. *McCarthy v. Fuller*, 810 F.3d 456, 462 (7th Cir. 2015).

40. See Caroline Craig, *DMCA "Reform" Harbors Return of SOPA*, INFOWORLD (May 20, 2016), <https://www.infoworld.com/article/3072456/dmca-reform-bill-harbors-return-of-sopa.html> [<https://perma.cc/2FLD-5XCU>].

41. Mark Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 DUKE L.J. 147, 167 (1998).

42. See *Fort Wayne Books, Inc. v. Indiana*, 489 U.S. 46 (1989) (holding that seizure of multiple expressive works due to illegality of some of them is unconstitutional); *Freedman v. Maryland*, 380 U.S. 51, 58 (1965) ("[O]nly a judicial determination in an adversary proceeding ensures the necessary sensitivity to freedom of expression [and] only a procedure requiring a judicial determination suffices to impose a valid final restraint."); *Ctr. for Democracy & Tech. v. Pappert*, 337 F. Supp. 2d 606, 619, 657 (E.D. Pa. 2004) (holdings of Supreme Court mandate that a specific work be adjudged unlawful after adversary hearing before its sale or distribution is prohibited by law); cf. *Auburn Police Union v. Carpenter*, 8 F.3d 886, 903 (1st Cir. 1993); *McDougall*, *supra* note 13, draft at 25-33. See generally *Reno v. ACLU*, 521 U.S. 844, 867 (1997) (distinguishing a backward-looking sanction "by an agency that had been regulating radio stations for decades, targeted a specific broadcast that represented a rather dramatic departure from traditional program content in order to designate when—rather than whether—it would be permissible to air such a program in that particular medium" from forward-looking "categorical prohibitions [that] are not limited to particular times"); *Carroll v. President & Comm'rs of Princess Anne*, 393 U.S. 175, 183 (1968); *Kingsley Books, Inc. v. Brown*, 354 U.S. 436, 437, 445 (1957).

the legality of a specific work should be decided before its illegality is “remedied.”⁴³

Mark Lemley and Eugene Volokh argue that to maintain parity between remedies against libel and intellectual-property infringements, a final adjudication that expressive material is infringing must precede an injunction against it, unless the defendant has agreed not to disclose or use the property, such as a trade secret, amounting to a waiver.⁴⁴ On this issue, two traditions run up against one another. First, there is a trend to grant injunctive relief pending trial on a close factual or legal question that is yet to be resolved. Particularly where property rights are at issue, preservation of the remaining value of the property and prevention of further harm to the plaintiff and the public might require this.⁴⁵ Second, libel and obscenity law pose barriers to restricting speech pending a final decision of a censor or even of a judge, and to lumping works together.⁴⁶

The Supreme Court has on three occasions rejected analogies between copyright or trademark law and obscenity or censorship on national-security grounds, and this may have been the consensus in the courts of appeal even before these decisions.⁴⁷ In the wake of these decisions, it may be that the rule against prior restraints only applies to content-based restraints, which do not neutrally apply via a rule of general

43. See *Sindi v. El-Moslimany*, 896 F.3d 1, 32 (1st Cir. 2018) (holding that an “injunction against speech sometimes may pass constitutional testing if it follows an adjudication that the expression is unprotected, and the injunction itself is narrowly tailored to avoid censoring protected speech” (citing *Pittsburgh Press Co. v. Pittsburgh Comm’n on Human Relations*, 413 U.S. 376, 390 (1973); *Paris Adult Theatre I v. Slaton*, 413 U.S. 49, 55 (1973))); *Pappert*, 337 F. Supp. 2d at 657 (similar).

44. See Lemley & Volokh, *supra* note 41.

45. See *id.* nn.7-27 (citing, inter alia, *Donaldson v. Becket*, 1 Eng. Rep. 837, 17 Parl. Hist. Eng. 953, 989-90 (H.L. 1774)).

46. See *id.* at 171-72 & nn.114-17 (citing, inter alia, *Fort Wayne Books, Inc. v. Indiana*, 489 U.S. 46, 66 (1989); *Freedman v. Maryland*, 380 U.S. 51, 57-61 (1965)); see also *id.* at 170 (citing, inter alia, *Pittsburgh Press Co. v. Pittsburgh Comm’n on Human Relations*, 413 U.S. 376, 390 (1973); *Kingsley Books, Inc. v. Brown*, 354 U.S. 436 (1957)).

47. See *Eldred v. Ashcroft*, 537 U.S. 186, 218-21 (2003) (rejecting “uncommonly strict” or “heightened” scrutiny of copyright legislation under First Amendment (citing *S.F. Arts & Athletics v. U.S. Olympic Comm.*, 483 U.S. 522 (1987); *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 560 (1985))); Lemley & Volokh, *supra* note 41 at 166-67 nn.91-98, 169 n.104, 182 n.163, 187 n.191, 218 n.312 (citing *Harper & Row Publishers*, 471 U.S. at 558; *S.F. Arts & Athletics*, 483 U.S. at 532; *Dall. Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd.*, 604 F.2d 1184, 1188 (2d Cir. 1979); *Walt Disney Prods. v. Air Pirates*, 581 F.2d 751, 758-59 (9th Cir. 1978)); see also *S.F. Arts & Athletics*, 483 U.S. at 536-37 (rejecting dissenting Justice Brennan’s analogy of law restricting use of term “Olympics” on amateur athletic events to other overbroad content-based laws); *Dall. Cowboys Cheerleaders*, 604 F.2d at 1188; *Walt Disney Prods.*, 581 F.2d at 758-59 (citing *Zacchini v. Scripps-Howard Broad. Co.*, 433 U.S. 562, 577 (1977)). For pre-*Zacchini* case law, see Melville B. Nimmer, *Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?*, 17 UCLA L. REV. 1180 (1970); Melville B. Nimmer, *Copyright vs. the First Amendment*, 17 BULL. COPYRIGHT SOC’Y U.S.A. 255 (1970).

application.⁴⁸ Intermediate scrutiny may apply even to content-neutral prior restraints, or there may be no First Amendment scrutiny or only rational basis review once a law is deemed to pass intermediate scrutiny, for example copyright law or the law of the Olympic symbol.⁴⁹

Courts have taken some care to tailor relief in copyright cases to what their actual adjudication with due process covers, despite case law suggesting that these concerns are adequately handled by the idea-expression dichotomy, the restriction of trademark infringement doctrines to commercial speech, and fair use in copyright. For example, in *Suntrust Bank v. Houghton Mifflin Co.*, the court held it to be improper to enjoin the publication of a book due to the use of the same characters and plot, albeit to criticize or parody the author and original work, “as a prior restraint on speech because the public had not had access to Randall’s ideas or viewpoint in the form of expression that she chose.”⁵⁰ Similarly, in another case, the defendant was found liable for infringing photographs from plaintiff’s real estate listings database, but the plaintiff sought an injunction against infringement of any “copyrighted content” from the database, which the court rejected as “not sufficiently specific,” from the standpoint of both ownership and infringing acts.⁵¹ In still other cases, the courts allowed a defendant to continue to operate without infringing a plaintiff’s rights.⁵²

48. See, e.g., *Universal City Studios v. Corley*, 273 F.3d 429, 449-53 (2d Cir. 2001); *United States v. Elcom Ltd.*, 203 F. Supp. 2d 1111, 1126-27 (N.D. Cal. 2002); *DVD Copy Control Ass’n v. Bunner*, 75 P.3d 1, 17 (Cal. 2003); cf. *Eldred*, 537 U.S. at 218-21 (suggesting that retrospective copyright term extension was content-neutral, although petitioners’ argument was being characterized in passage); *Sindi*, 896 F.3d at 30-34 (noting that injunction against defamatory statements was content-based, after calling it a prior restraint, because it was based on words used); *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257, 1277 (11th Cir. 2001) (raising First Amendment issue with injunction that affected alleged infringer’s ability to convey “ideas or viewpoint in the form of expression that she [originally] chose”). See generally *Reno*, 521 U.S. at 868-69 (distinguishing direct impact of speech from its secondary effects or incidental impact: “‘Listeners’ reaction to speech is not a content-neutral basis for regulation” (internal quotation marks omitted) (quoting *Forsyth Cty. v. Nationalist Movement*, 505 U.S. 123, 134 (1992))).

49. Compare, e.g., *Turner Broad. Sys., Inc. v. FEC*, 520 U.S. 180 (1997) (intermediate scrutiny of must-carry provisions of cable law, which might restrain cable operator’s choice to add more channels with objective of forcing them to preserve broadcast channels by carrying them), with *Eldred*, 537 U.S. at 221 (suggesting rational basis review once court confirms that a reform to Copyright Act does not alter traditional features of copyright, such as idea-expression dichotomy, fair use, and terms that are limited by some metric (citing *S.F. Arts & Athletics*, 483 U.S. 522)).

50. 268 F.3d 1257, 1277 (11th Cir. 2001).

51. *Metro. Reg’l Info. Sys., Inc. v. Am. Home Realty Network, Inc.*, 904 F. Supp. 2d 530, 533 (D. Md. 2012).

52. See *infra* notes 13, 81, 83, 105-106, 109, 122-123, 189, 237 and accompanying text; see also *Exec. Home Care Franchising LLC v. Marshall Health Corp.*, 642 F. App’x 181, 183 (3d Cir. 2016) (even though franchisee violated trademark licensing and franchising agreement, surrender of trademarked “marketing materi-

Decisions as to whether to narrowly tailor trademark injunctions seem to be all over the map. As William McGeeveran and Mark McKenna explain, while some courts have urged a laser-like focus on confusing uses of a mark, others have adopted a blunderbuss approach to grant an injunction against using any similar mark in the context of the defendant's business.⁵³ McGeeveran and McKenna criticize this move as enjoining noninfringing conduct and even conduct that hopes to dispel the confusion or explain what led to the linkage of the parties in the view of the public or of the courts.⁵⁴ Notably, two cases that narrowly tailored injunctions post-dated *eBay*, and two on the other side seem to reflect the knee-jerk approach that prevailed in copyright and trademark pre-*eBay*.⁵⁵

In First Amendment law, there are two or more forms of narrow tailoring. The most onerous is a least-restrictive-means requirement, in which, even though the governmental interest meets the applicable First Amendment standard (significant, substantial, or compelling), the law will not pass muster if the interest could be achieved with a narrower law or other restriction on speech.⁵⁶ A less onerous requirement examines whether the law is more effective than it would be if it were narrower, even though it would achieve the governmental interest to some degree once

als" and franchise premises meant that no injunction was justifiable); *Danone, US, LLC v. Chobani, LLC*, No. 1:18-CV-11702, 2019 WL 760040, at *12-14 (S.D.N.Y. Jan. 23, 2019) (inevitable sale-through or disposal of perishable foodstuffs with false or misleading labels meant that injury was not irreparable); *HarperCollins Publishers LLC v. Open Road Integrated Media, LLP*, 58 F. Supp. 3d 380, 386-87 (S.D.N.Y. 2014) (continuing to allow defendant to operate by selling e-books that might infringe authors' copyright assignments of electronic rights to print publisher, although court enjoined sale, publication, or claim of authorization to publish certain e-books that print publisher obtained rights to using a particular form of contract language); Anne Gilson LaLonde & Jerome Gilson, *Adios! to the Irreparable Harm Presumption in Trademark Law*, 107 TRADEMARK REP. 913, 948 (2017) (operating under different trade name and logos may mean that confusion with former affiliate is not irreparable).

53. William McGeeveran & Mark McKenna, *Confusion Isn't Everything*, 89 NOTRE DAME L. REV. 253, 312-15 nn.278, 287-90, 294 (2013) (citing *Voice of the Arab World, Inc. v. MDTV Med. News Now, Inc.*, 645 F.3d 26, 33 (1st Cir. 2011); *Toyota Motor Sales, U.S.A., Inc. v. Tabari*, 610 F.3d 1171, 1176 (9th Cir. 2010); *Westchester Media v. PRL USA Holdings, Inc.*, 214 F.3d 658, 671 (5th Cir. 2000); *CPC Int'l, Inc. v. Skippy Inc.*, 214 F.3d 456, 459-61, 463 (4th Cir. 2000); *Forschner Grp., Inc. v. Arrow Trading Co.*, 124 F.3d 402, 406 (2d Cir. 1997); *E. & J. Gallo Winery v. Gallo Cattle Co.*, 967 F.2d 1280, 1297 (9th Cir. 1992); *Perfect Fit Indus., Inc. v. Acme Quilting Co.*, 646 F.2d 800, 806 (2d Cir. 1981)).

54. *See id.* at 312-15.

55. *See id.* at 314, nn.288, 290 (contrasting *Voice of the Arab World*, 645 F.3d at 33; *Toyota Motor Sales*, 610 F.3d at 1176; *Westchester Media*, 214 F.3d at 671; *Forschner*, 124 F.3d at 406).

56. *See Ward v. Rock Against Racism*, 491 U.S. 781, 798-99 & 789 n.6 (1989) (discussing the distinction, and calling this form of tailoring "out of place" when it comes to scrutiny of content-neutral laws restricting the time, place, or manner of speech under *United States v. O'Brien*, 391 U.S. 367 (1968)).

narrowed.⁵⁷ This “reasonable fit” standard, however, could converge with the former standard once case law is considered stating that there is no reasonable fit if the government could achieve its interests by restricting less speech, even though the restriction serves its interests.⁵⁸

Intellectual property injunctions might be narrowly tailored under one sense of that term or phrase and overbroad under another. For example, many injunctions including future works of the plaintiff, infringements of the same type, or other violations of the same body of law are not narrowly tailored compared to an injunction focused on the particular factual scenario that gave rise to the infringement finding, under a least-restrictive-means conception of narrowly tailored. On the other hand, more copious injunctive language could be narrowly tailored in the sense of being more effective in promoting the congressional or public interest in reducing the overall amount of infringement and closing the “value gaps” between owners and users or infringers.

Scholars of “prophylactic” and “universal” injunctions are deeply divided on the question of tailoring. According to David Schoenbrod, followed by Michael Morley, prospective and especially prospective prophylactic injunctions—those reaching similar but lawful conduct—either unnecessarily duplicate statutory prohibitions or undermine statutory frameworks by prohibiting conduct that Congress (or the constitutional framers) decided to permit.⁵⁹ Similarly, Lemley and Volokh urge courts in trademark cases to tailor injunctive relief to the advertising impact of commercial speech specifically to tease out the commercial and noncommercial aspects of a defendant’s speech or conduct.⁶⁰ In that, they anticipated the Ninth Circuit’s jurisprudence on Internet domain names, which allows an infringer or diluter of a trademark to continue to use the trademark on parts of a website that criticize the mark owner or give the history of the trademark dispute.⁶¹

57. See *id.*; *Pom Wonderful, LLC v. FTC*, 777 F.3d 478, 502 (D.C. Cir. 2015) (identifying standard “short of a least-restrictive-means standard” as “a ‘reasonable fit’ between the particular means chosen and the government interest pursued” (internal quotation marks omitted) (quoting *Board of Trs. v. Fox*, 492 U.S. 469, 477, 480 (1989))).

58. See *Thompson v. W. States Med. Ctr.*, 535 U.S. 357, 358 (2002).

59. Michael T. Morley, *Enforcing Equality: Statutory Injunctions, Equitable Balancing Under eBay, and the Civil Rights Act of 1964*, 2014 U. CHI. LEGAL F. 177, 207, 217-21 (citing David Schoenbrod, *The Measure of an Injunction: A Principle to Replace Balancing the Equities and Tailoring the Remedy*, 72 MINN. L. REV. 627, 629, 647-48 (1988))).

60. See Lemley & Volokh, *supra* note 41, at n.272.

61. See *Toyota Motor Sales, U.S.A., Inc. v. Tabari*, 610 F.3d 1171 (9th Cir. 2010) (limiting relief in Internet infringement case to advertising impact); *Nissan Motor Co. v. Nissan Comput. Corp.*, 378 F.3d 1002 (9th Cir. 2004) (defendant should have been restricted from advertising cars on the like using domain name based on his surname, nissan.com, but should not have been enjoined from criticizing Nissan Motor, or engaging in non-confusing use of it).

It has been said that a court may “permanently enjoin the future infringement of works owned by the plaintiff but not in suit.”⁶² Even the infringement of as-yet unregistered works has been justified under “equity,” without further elaboration.⁶³ The cases announcing this rule involved regularly published works of the same type, such as the Medical College Admission Test (MCAT) and studies thereof, educational videos intended for television broadcasts, movies or shows on HBO, or telephone books.⁶⁴ Another case often cited for the proposition is *Wainright Securities*; it referred generally to infringement and protecting the plaintiff’s property, but it did not specifically analyze the registration issue.⁶⁵

The line of cases allowing an injunction as to after-arising works and similar infringements rests on an unstable and collapsing foundation after *eBay*. While one might have been able to say, pre-*eBay*, that an injunction should be granted as a matter of course and irreparable injury presumed for any copyright infringement, these assumptions may no longer be viable.⁶⁶ When an injunction against the adjudicated infringement repairs the plaintiff’s injury, further recourse to the extraordinary remedy of an injunction is improper.⁶⁷ Also, the ability of the plaintiff to seek a contempt citation for future conduct occurring in another judicial district undermines due process.⁶⁸ There may not even be a case or controversy

62. *Walt Disney Co. v. Powell*, 897 F.2d 565, 568 (D.C. Cir. 1990) (citing *Encyclopaedia Britannica Educ. Corp. v. Crooks*, 542 F. Supp. 1156, 1187 (W.D.N.Y. 1982)).

63. *Encyclopaedia Britannica Educ. Corp.*, 542 F. Supp. at 1187 (internal quotation marks omitted) (quoting *Ass’n of Am. Med. Colls. v. Carey*, 482 F. Supp. 1358, 1364 n.15 (N.D.N.Y. 1980) (citing *Wainright Secs., Inc. v. Wall St. Transcript Corp.*, 418 F. Supp. 620 (S.D.N.Y. 1976), *aff’d on other grounds*, 558 F.2d 91 (2d Cir. 1977), *cert. denied*, 434 U.S. 1014 (1978); *Orth-O-Vision, Inc. v. Home Box Office*, 474 F. Supp. 672 (S.D.N.Y. 1979)).

64. *Ass’n of Am. Med. Colls.*, 482 F. Supp. 1358 (MCAT); *Encyclopaedia Britannica Educ. Corp.*, 542 F. Supp. at 1160-66 (educational videos); *Orth-O-Vision*, 474 F. Supp. at 675-79 (HBO); *Sw. Bell Tel. Co. v. Nationwide Indep. Directory Serv., Inc.*, 371 F. Supp. 900, 911 (W.D. Ark. 1974) (directory); *S. Bell Tel. & Tel. Co. v. Donnelly*, 35 F. Supp. 425, 429 (S.D. Fla. 1940) (directory).

65. *Wainright Secs.*, 418 F. Supp. 620.

66. *Compare, e.g., Winter v. Nat. Res. Def. Council*, 555 U.S. 7, 32 (2008) (injunction should not follow from liability finding “as a matter of course” (citing *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 313 (1982))), and *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 158 (2010) (court should not ask itself, why *not* grant an injunction?), and *eBay, Inc. v. MercExchange, LLC*, 547 US 388, 394 (2006) (disagreeing with Federal Circuit that injunctions against patent infringement should be the norm absent “exceptional” or “rare” facts), with *Sony BMG Music Entm’t v. Tenenbaum*, 93 U.S.P.Q.2d 1867 (D. Mass. Dec. 1, 2009) (continuing to presume irreparable injury after finding of infringement post-*eBay*); *Lennon v. Premise Media Corp., L.P.*, 556 F. Supp. 2d 310, 319-20 (S.D.N.Y. 2008) (similar).

67. See *Monsanto*, 561 U.S. at 165-66; *Morley, supra* note 59, at 185-86, nn.37-50 (collecting cases).

68. See *SEC v. Smyth*, 420 F. 3d 1225, 1233 n.14 (11th Cir. 2005) (in addition to violating Rule 65(d), an injunction against engaging in any fraudulent or misleading sales or transaction practices in future would deny defendant right of jury

under Article III regarding different aspects of the same intellectual property asset—such as unasserted claims of a patent—let alone a different asset.⁶⁹ Many of the cases on future-registered copyrights being included in an injunction against infringing the copyrights in suit predated the Supreme Court’s decision in 1983 that a party lacks standing to seek an injunction against conduct in the future that may be dissimilar to the conduct that caused that party injury in the past, where that precise scenario may not recur.⁷⁰ Although the *Walt Disney v. Powell* decision post-dated that, it was premised in part upon the automatic injunction rule in the Ninth Circuit pre-*eBay*.⁷¹ Even before *eBay*, this rule rested on a shaky foundation because it creates unconstitutional quasi-copyrights.⁷² After *eBay*, it suffers the additional defect of grouping together injuries that have distinct elements and varying degrees of irreparability depending on context.

C. Precision as Reasonable Detail

Every injunction shall state in reasonable detail what is being prohibited or mandated, and not by incorporating another document’s claims by reference.⁷³ This serves the due process requirement of “explicit notice” before a punishment is handed down, and the administrability objective of

trial in district in which contempt citation was brought, and would undermine statutory and constitutional entitlement to due process that would exist in new enforcement proceeding); Heyl, *supra* note 25, at 1.

69. See *infra* notes 33-34 and accompanying text.

70. See *City of Los Angeles v. Lyons*, 461 U.S. 95, 108 (1983) (involving police chokeholds without probable cause, which may be different than those preceded by probable cause).

71. 897 F.2d 555, 567-68 (D.C. Cir. 1990) (citing *Universal City Studios v. Sony Corp. of Am.*, 659 F.2d 963, 976 (9th Cir. 1981), *rev’d on other grounds*, 464 U.S. 417 (1984); 3 MELVILLE NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 14.06[B], at 14-55 to -56 (1989)). It was also premised on the pre-*eBay* district court decisions on future infringements, largely from the Second Circuit.

72. See Kristina Rosette, *Back to the Future: How Federal Courts Create a Federal Common-Law Copyright Through Permanent Injunctions Protecting Future Works*, 2 J. INTEL. PROP. L. 325, 349-56, 359 n.203 (1994) (noting that such after-arising works may lack originality, fixation, and limited time requirements of U.S. CONST., art. I, § 8, cl. 8, the fixation requirement of 17 U.S.C. § 102, the registration requirement of 17 U.S.C. § 411(a)-(b), and the law’s other purportedly “carefully defined” and “exact protections” (internal quotation marks omitted) (quoting *Dowling v. United States*, 473 U.S. 207, 216 (1985))).

73. See Fed. R. Civ. P. 65; *Digital Equip. Corp. v. Emulex Corp.*, 805 F.2d 380, 381-83 (Fed. Cir. 1986) (after citing Fed. R. Civ. P. 65(a), holding that it would be overbroad to enjoin defendant in trade secret action from designing or making any product that implements any portion of plaintiff’s software protocols or specifications); *H.K. Porter Co., Inc. v. Nat. Friction Prods. Corp.*, 568 F. 2d 24, 27 (7th Cir. 1977) (in trade secrets action, holding that incorporating another document into order was serious error); *cf. Reno Air Racing Ass’n, Inc. v. McCord*, 452 F.3d 1126, 1133 (9th Cir. 2006) (noting in trademark action that while on occasion a document that specifies prohibited acts may be annexed to an order, “incorporation by reference should be the rare exception rather than the rule, and district courts should be particularly cautious where the injunctive order is issued at the

making interpretation simpler in enforcement.⁷⁴ Merely implicit notice, based on the factual background, the arguments in the pleadings, or the statements of the court at the hearing, is not sufficient.⁷⁵

Enjoining similar infringements should not be found to satisfy Rule 65(d) unless what sorts of infringements will be similar is well-defined. In the patent context, “specific terms” in the injunctive order for the infringing acts are required by Rule 65(d) to prevent unnecessary contempt motions.⁷⁶ There are many cases in the context of civil rights holding that blanket orders not to commit similar violations in the future violate the detail requirement of Rule 65(d).⁷⁷ The conduct enjoined should be ade-

outset of litigation, before the receiving party has acquired a context for understanding the referenced document and the subject matter of the dispute”).

74. *Schmidt v. Lessard*, 414 U.S. 473, 476-77 (1974) (styling due process requirement as “basic fairness” and avoidance of vagueness); *Regions Bank v. Kaplan*, 8:16-cv-2867-T-23AAS, 2017 WL 3446914, at *4 (M.D. Fla. Aug. 11, 2017) (explaining administrability issue); *see also Schmidt*, 414 U.S. at 477 (precision facilitates appellate review); *id.* at 476 n.2 (“The judicial contempt power is a potent weapon. When it is founded upon a decree too vague to be understood, it can be a deadly one. Congress responded to that danger by requiring that . . . those who must obey [court orders] will know what the court . . . means to forbid.” (internal quotation marks omitted) (quoting *Int’l Longshoremen’s Assn. v. Phila. Marine Trade Ass’n*, 389 U.S. 64, 76 (1967))).

75. *See Schmidt*, 414 U.S. at 473-76, *vacating Lessard v. Schmidt*, 349 F. Supp. 1078 (E.D. Wis. 1972).

76. *See Additive Controls & Measurement Sys. Inc. v. Flowdata Inc.*, 986 F.2d 476, 479-80 (Fed. Cir. 1993) (citing *NLRB v. Express Publ’g Co.*, 312 U.S. 426, 435-36 (1941)); John Golden, *Injunctions as More (or Less) than “Off Switches”: Patent-Infringement Injunctions’ Scope*, 90 TEX. L. REV. 1399, 1422-23 (2012) (suggesting that specific terms means specific products/services or “colorable imitations” thereof).

77. *See, e.g., Burton v. City of Belle Glade*, 178 F.3d 1175, 1201 (11th Cir. 1999) (injunction against city “discriminating on the basis of race in its [municipal boundary] annexation decisions”); *Payne v. Travenol Labs., Inc.*, 565 F.2d 895, 897 (5th Cir. 1978) (injunction against “discriminating on the basis of color, race, or sex in employment practices or conditions of employment . . .”). *Compare In re Rodriguez*, 695 F.3d 360, 366-69 (5th Cir. 2012) (affirming certification of injunctive relief class where defendant had a policy that could be illegal under chapter 13 of the Bankruptcy Code, because “injunctions that order a defendant to obey a specific law” may be appropriate if they “simultaneously indicate what law the defendant needs to obey” under Rule 65(d)), *with Meyer v. Brown & Root Constr. Co.*, 661 F.2d 369, 373 (5th Cir. 1981) (injunction ordering defendant not to engage in this discriminatory practice in future “provided the specificity necessary to comply with Rule 65(d)” because it was focused on constructively discharging workers who became pregnant rather than giving them option of light or limited work that other workers experiencing temporary conditions enjoyed (citing *Int’l Longshoremen’s Assoc.*, 389 U.S. at 76))).

quately described in terms of the case's context.⁷⁸ This has been called the “‘sufficiently specific to the underlying action’ standard.”⁷⁹

Writing on both IP and non-IP cases, Lemley and Volokh argued—despite some law on the other side—that any prior restraint on speech, including a preliminary or permanent injunction, should be tailored to the remedial purpose.⁸⁰ Injunctions against search engines and multinational publications may be likely to sweep in lawful conduct in a way that does not pass muster under *eBay*.⁸¹ When injunctions extend to intermediaries like Google or software providers, the plaintiff may obtain undue bargaining leverage by threatening lawful domestic aspects of the intermediaries' services and banning conduct that is lawful overseas, while imposing costs on the intermediaries and the public that outweigh the

78. See *United States v. Philip Morris USA Inc.*, 566 F.3d 1095, 1137 (D.C. Cir. 2009) (holding, in racketeering case, that Rule 65(d) requires identification of specific statutory violation, and factual “descriptor[s] of the forbidden conduct,” with adequately defined terms, which may be made clear by “the circumstances of the case”); *Union Pac. R.R. Co. v. Mower*, 219 F.3d 1069, 1076-77 (9th Cir. 2000) (in breach of contract/privilege case, injunction against defendant disclosing plaintiff's confidential or privileged information did not adequately specify which information could not be disclosed); *Thomas v. Cty. of Los Angeles*, 978 F.2d 504, 506, 509 (9th Cir. 1992) (in constitutional use of police force case, injunction requiring the sheriff's department to obey its own policies and guidelines to prevent excessive force or unreasonable searches was not specific enough); *FEC v. Furgatch*, 869 F.2d 1256, 1263-64 (9th Cir. 1989) (in elections law case, defendant could not be ordered to obey the law, or not to commit to “similar violations” unless district court first defined what was similar); *Gulf Oil Corp. v. Brock*, 778 F.2d 834, 843 (D.C. Cir. 1985) (in labor case, injunction against “substantially similar” conduct vacated because “similar” not defined by district court); *Common Cause v. Nuclear Regulatory Comm'n*, 674 F.2d 921, 926-27 (D.C. Cir. 1982) (similar to *Gulf Oil*, in environmental/nuclear regulatory case); *SEC v. Smyth*, 420 F.3d 1225, 1233-34 n.14 (11th Cir. 2005) (securities case); see also *GoTo.com, Inc. v. Walt Disney Co.*, 202 F.3d 1199, 1210-11 (9th Cir. 2000) (“[T]he party enjoined should ‘receive fair and precisely drawn notice of what the injunction actually prohibits’” (quoting *Granny Goose Foods, Inc. v. Bhd. of Teamsters & Auto Truck Drivers*, 415 U.S. 423, 444 (1974))); cf. *Fla. Ass'n of Rehab. Facilities, Inc. v. Fla. Dep't of Health and Rehab. Servs.*, 225 F.3d 1208, 1210-12, 1222-23 (11th Cir. 2000) (injunction not to inadequately reimburse intermediate care facilities under Medicaid).

79. *Daniels Health Scis., L.L.C. v. Vascular Health Scis., L.L.C.*, 710 F.3d 579, 586 (5th Cir. 2013).

80. See Lemley & Volokh, *supra* note 41, at 210, 244 nn.272, 332; see also *id.* at 209, 224-25 nn.271, 333-35 (noting case law suggesting that limits on prior restraints may not apply to copyright or trademark injunctions, or to commercial speech more broadly/narrowly).

81. Mark Lemley & Phil Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 785-87, 793-96, 799, 800-04 (2007) (citing *Perfect 10 v. Google, Inc.*, 416 F. Supp. 2d 828 (C.D. Cal. 2006); *Metro-Goldwyn Mayer Studios, Inc. v. Grokster, Ltd.*, 454 F. Supp. 2d 966 (C.D. Cal. 2006)).

remedy's benefits.⁸² Courts may tailor such relief to balance the interests of the parties and members of the public, and limit collateral damage.⁸³

In the trademark context, Stacey Dogan and Mark McKenna have already written of the need to enjoin the precise conduct found to be unlawful and use discretion to tailor injunctive relief narrowly.⁸⁴ For example, injunctions could be tailored geographically,⁸⁵ limited to a disclaimer of affiliation or sponsorship,⁸⁶ or aimed at the small percentage of consum-

82. See *id.* at 800-04 (noting that a search engine may automatically copy and link to a plaintiff's works that it did not upload or decide to feature, and there may be no practical way of filtering them out without affecting lawful links/copies that website owners and Google users desire to have included in the index, and that peer-to-peer file-sharing software could be enjoined under U.S. law and forced to shut down even though it was legal in foreign countries such as the Netherlands (citing HR 19 december 2003, NJ 186 m.nt., (ann. JMH) (Buma/KaZaA) (Neth.) (Supreme Court of the Netherlands))).

83. Lemley and Weiser point out that in the Google Images case, the court did not enjoin all infringement by Google of the plaintiff's images, but preliminarily enjoined it from failing to take down certain links or files brought to its attention by the plaintiff in a consultative process. See *id.* at 801-04 (citing Perfect 10 v. Google, Inc., No. CV 04-9484AHM (C.D. Cal. preliminary injunction entered May 8, 2006)). In a file-sharing case, a judge in the same district where the Google Images case was decided declined to enjoin all infringement via the defendants' software, and did not insist that the defendant cease distributing the software (which defendants had induced members of the public to use to infringe plaintiffs' copyrights); the defendants were ordered to filter out the availability of the plaintiffs' works, presumably in the United States although given the software's capabilities it probably was not possible to preserve foreign availability. See *Grokster, Ltd.*, 454 F. Supp. 2d at 983-84, 989-92; *Metro-Goldwyn Mayer Studios, Inc. v. Grokster, Ltd.*, No. CV 01-8541-SVW, slip op. at 9 (C.D. Cal. Feb. 16, 2007)); Lemley & Weiser, *supra* note 81, at 801-04; David O. Blood & Kee-Min Ngiam, *A Focus on Filters: Latest Developments in MGM v. Grokster*, 20 INTELL. PROP. & TECH. L. J. 2 (2007). The court ultimately ordered the defendant to utilize available technologies that promised to be maximally effective to curtail infringement on the file-sharing system created by the software and its users, while not barring noninfringing uses if they could practically coexist with the implementation of filtering or other tools. See *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d 1197, 1241 (C.D. Cal. 2007).

84. See Stacey Dogan, *Trademark Remedies and Online Intermediaries*, 14 LEWIS & CLARK L. REV. 467, 486-89 (2010); Mark McKenna, *Back to the Future: Rediscovering Equitable Discretion in Trademark Cases*, 14 LEWIS & CLARK L. REV. 537, 537-45 (2010).

85. McKenna, *supra* note 84, at 547-48 (citing Nat'l Ass'n for Healthcare Commc'n, Inc. v. Cent. Ark. Area Agency on Aging, Inc., 257 F.3d 732, 737 (8th Cir. 2001) (order limited to six counties in Arkansas)).

86. See *id.* at 546 (citing Nat'l Football League v. Governor of Del., 435 F. Supp. 1372 (D. Del. 1977) (disclaimer of association or authorization ordered, but use could continue); see also *Am. Soc. for Testing & Materials v. Public.Resource.Org, Inc.* 896 F.3d 437, 46-58 (D.C. Cir. 2018) (disclaimer might cure digital confusion); *LFP IP, LLC v. Hustler Cincinnati, Inc.*, 810 F.3d 424, 425-26 (6th Cir. 2016) (affirming district court's order allowing defendant to use allegedly confusing trademarks unless accompanied by other words in store signage or by conspicuous disclaimer of affiliation with plaintiff in other areas). But see *CFE Racing Prods., Inc. v. BMF Wheels, Inc.*, 793 F.3d 571, 596 (6th Cir. 2015) (disclaimer proposed would not be sufficient to avoid injunction unless it could be shown to be effective (citing, *inter alia*, *Weight Watchers Int'l, Inc. v. Luigino's, Inc.*, 423 F.3d 137, 144 (2d Cir. 2005))).

ers who evidence confusion in surveys.⁸⁷ Several Supreme Court cases and numerous circuit cases recognize this possibility of narrow relief in some way.⁸⁸

In the patent context, John Golden suggests broad “safe haven” alongside a wide enough injunctive scope to reach the specific features that the court construed to infringe, as well as perhaps “colorable differences,” or minor variations.⁸⁹ In appropriate circumstances, courts could order corrective measures to restore a plaintiff’s rights or to identify practices from which a defendant should desist to protect those rights.⁹⁰ He argued that “obey the law” injunctions are contrary to Federal Circuit precedent, because the first decision on the topic held that enjoining any infringement of a patent was too broad and improperly tethered to potentially undefined terms in another document, even though later decisions revealed a split among panels on the propriety of such orders.⁹¹ He also notes the judicial practice of phasing in orders to give infringers time to adapt.⁹²

87. See McKenna, *supra* note 84, at 112-13 (citing *Grotirian, Helfferich Schulz, Etc. v. Steinway & Sons*, 365 F. Supp. 707, 716 (S.D.N.Y. 1973) (involving only 8.5% confusion) *rev’d on other grounds*, 523 F.2d 1331 (2d Cir. 1975); *Coca-Cola Co. v. Tropicana Prods., Inc.*, 690 F.2d 312, 317-18 (2d Cir. 1982) (holding that confusion was sufficient for likelihood of success on injunction motion), *rev’g* *Coca-Cola Co. v. Tropicana Prods., Inc.*, 538 F. Supp. 1091, 1096 (S.D.N.Y.) (7.5% confusion, “significantly below 15%”); *James Burroughs Ltd. v. Sign of the Beefeater, Inc.*, 540 F.2d 266, 279 (7th Cir. 1976) (15% confusion “evidences a likelihood of confusion.”); *Goya Foods, Inc. v. Condal Distribs., Inc.*, 732 F. Supp. 453, 457-58 n.7 (S.D.N.Y. 1990) (9-10% confusion may be “meaningful evidence of actual confusion” so court “conclude[d] that an appreciable number of ordinary consumers are likely to be confused as to the source of the . . . rice packages”); see also Daniel Gervais & Julie M. Latsko, *Who Cares about the 85 Percent-Reconsidering Survey Evidence of Online Confusion in Trademark Cases*, 96 J. PAT. & TRADEMARK OFF. SOC’Y 265 (2014).

88. See *supra* notes 29, 42, 46, 70, 74-75, 78 and accompanying text (citing *Fort Wayne Books v. Indiana*, 489 U.S. 46 (1989); *City of Los Angeles v. Lyons*, 461 U.S. 95, 108 (1983); *Schmidt v. Lessard*, 414 U.S. 473, 471 (1974); *Granny Goose Foods v. Bhd. of Teamsters & Auto Truck Drivers*, 415 U.S. 423, 444 (1974)); *Freedman v. Maryland*, 380 U.S. 51, 58 (1965); *NLRB v. Express Publ’g Co.*, 312 U.S. 426, 435-36 (1941)).

89. See Golden, *supra* note 76 at 1452-56, 1462, 1472.

90. See *id.* at 1472.

91. See *id.* at 1420-25 (citing, inter alia, *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1293 (Fed. Cir. 2012) (explaining district court permissibly enjoined “otherwise infringing” plaintiff’s claims); *Forest Labs., Inc. v. Ivax Pharm., Inc.*, 501 F.3d 1263, 1271-72 (Fed. Cir. 2007) (district court should not have enjoined “any products that infringe”); *Int’l Rectifier Corp. v. IXYS Corp.*, 383 F.3d 1312, 1316 (Fed. Cir. 2004) (district court should not enjoin “‘any device’ . . . [of defendant] that is within the scope of the patent claims”); *Signtech USA, Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1359 (Fed. Cir. 1999) (holding that injunction against “any further infringement” was error, albeit harmless due to trial and order records)).

92. See *id.* at 1461 nn.261-62 (collecting cases).

Drafting an injunction often calls for balancing the movants' interest in complete relief that eradicates all illegality and its effects and the non-movants' interests in reasonable detail and due process especially for non-parties. First, the non-party has not had a chance to be served with the complaint, contest the allegations, provide context and discovery, and fully brief the violation being enjoined.⁹³ This threatens the notice function of Rule 65(d) relating to punishment for contempt, and the specificity function relating to simplifying or avoiding contempt motion practice.⁹⁴

Second, some courts have rightly questioned whether there is any authority for binding to an injunction a third party that is not controlling (or under the control of) an infringer, or for ordering the third party to hand over a domain name or content, for example.⁹⁵ Even successors or assigns of a party may not be bound by a judgment, so why should non-parties who are not co-conspirators etc. be so bound?⁹⁶ Rule 65's reach to those in active concert or participation requires more than an arm's length transaction such as those with cybersecurity, domain name, search engine listing, or cloud storage providers.⁹⁷ Independent action at arm's length

93. See *Zepeda v. U.S. Immigration & Naturalization Servs.*, 753 F.2d 719, 727 (9th Cir. 1984) (non-parties/their rights "not before the court").

94. See *Patriot Homes, Inc. v. Forest River Hous., Inc.*, 512 F.3d 412, 415 (7th Cir. 2008).

95. See, e.g., *Overstock.com, Inc. v. Visocky*, No. 1:17-cv-01331(LMB/TCB), 2018 WL 5046673, at *3 (E.D. Va. Oct. 17, 2018) (declining to issue injunction against domain names as alter egos of named defendants); *True Mfg. Co. v. Boys*, No. 6:16-cv-634, 2016 WL 11028258, at *7 (M.D. Fla. Dec. 2, 2016) (declining to order Amazon.com or GoDaddy to "cancel, park, deactivate, and suspend" domain name and Amazon store front page, despite finding domain name was used for cybersquatting, trademark infringement, and false designation of origin/unfair competition); *Wilens v. Doe Def. No. 1*, No.14-cv-02419-LB, 2015 WL 5121379, at *2 (N.D. Cal. partially granting request to modify default judgment Aug. 28, 2015) (court could not order transfer of other websites containing plaintiff's trademarks despite default judgment against defendant for cybersquatting and perhaps defamation, because other domains using marks might not be used for actionable conduct); cf. *Vizer v. Vizernews.com*, 869 F. Supp. 2d 75, 84 (D.D.C. 2012) (court lacked jurisdiction to order Internet Corporation for Assigned Names and Numbers to assign domain name to plaintiff on grounds it contained plaintiff's name and displayed website containing plaintiff's photograph and news about plaintiff, on cybersquatting theory). But see *infra* note 15 and *supra* note 101. The court has the authority under 17 U.S.C. § 503(b) to order the destruction of infringing products, and the authority to enjoin infringement under 17 U.S.C. § 502, but a domain name itself does not infringe.

96. See *Season's Pizza Franchisor, Inc. v. 4 Seasons Pizza & Subs*, No. WDQ. 15-739, 2015 WL 9304539, at *3 (D. Md. Dec. 21, 2015) (declining to bind successors or assigns where their roles had not been fully aired, noting: "Action as an alter ego, or in collusion, is required to find concert or participation under [R]ule 65(d)" (internal quotation marks omitted) (quoting *Thaxton v. Vaughan*, 321 F.2d 474, 478 (4th Cir. 1963))).

97. See *id.*; see also Fed. R. Civ. P. 65(d)(2)(A)-(C) (injunction generally "binds only the following who receive actual notice of it by personal service or otherwise: [] the parties; [] the parties' officers, agents, servants, employees, and attorneys; and [] other persons who are in active concert or participation with [the afore-

does not satisfy the joint participation or action requirement of Rule 65(d).⁹⁸

Third, the balance of hardships may swing towards denial of injunction against non-parties where an order for the direct infringer to comply with the law makes it unnecessary and disproportionately costly to order third parties to act.⁹⁹ This may be particularly true when the injunction may have effects in other federal judicial circuits.¹⁰⁰

Fourth, transferring domain names is not a copyright remedy.¹⁰¹ Dynamically blocking sites' access to CDNs or search engines adds remedies

mentioned persons"). The principles of interpretation *ejusdem generis* and *noscitur a sociis* would suggest that others "in active concert or participation" should be like servants or agents, which arm's length service providers might not be. *Id.*; see *Norwalk & W. Ry. Co. v. Train Dispatchers*, 499 U.S. 117, 129 (1999) (*ejusdem generis*); *United States v. Williams*, 553 U.S. 285 (2008) (*noscitur a sociis*); *Neal v. Clark*, 95 U.S. 704, 709 (1878) (both *ejusdem generis* and *noscitur a sociis*); see also *Lynott v. Luckovich*, No. C14-503RSL, 2015 WL 135882 (W.D. Wash. Apr. 24, 2015) (utilizing this principle to interpret a federal rule). There is no fiduciary duty—a principle linked to an agency—in some service provider/customer relationships, like some film distributor/film owner relationships. See *Song Fi, Inc. v. Google, Inc.*, No. C 14-5080 CW, 2016 WL 1298999, at *7-9, *8 n.7 (N.D. Cal. Apr. 4, 2016) (citing *Recorded Picture Co. v. Nelson Entm't, Inc.*, 53 Cal. App. 4th 350, 370 (Cal. Ct. App. 1997)). An agent is often a fiduciary. See *Nelson Entm't, Inc.*, 53 Cal. App. 4th at 369-70.

98. See *Merial Ltd. v. Cipla Ltd.*, 681 F.3d 1283, 1304-05 (Fed. Cir. 2012).

99. See *Califano v. Yamasaki*, 442 U.S. 682, 702 (1979) (injunction should go only so far as relief needed by plaintiff); *California v. Azar*, 911 F.3d 558 582-85 (9th Cir. Dec. 13, 2018) (same); *Va. Soc. for Human Life v. FEC*, 263 F.3d 379, 392-94 (4th Cir. 2001) (same); cf. *Thompson v. Sessions*, No. 16-3 (RDM), 2018 WL 4680201, at *4-5 (D.D.C. Sept. 27, 2018) (where plaintiff is not threatened with continuing injury from defendant's conduct, there would be no basis for court to enjoin defendant from harming the rights of other injured potential plaintiffs).

100. See *United States v. Mendoza*, 464 U.S. 154, 160 (1984); *Azar*, 911 F.3d at 582-85; *Va. Soc. for Human Life*, 263 F.3d at 393-94.

101. See *infra* note 103 (citing *Netcom*); *Overstock.com, Inc. v. Visocky*, No. 1:17-cv-01331 (LMB/TCB), 2018 WL 5046673, at *3 (E.D. Va. Oct. 17, 2018) (on default judgment in copyright and trademark case involving e-commerce clone phishing sites, court could order persons not to use domain names to host infringing material, but could not issue order against domain name as entity); *Righthaven, LLC v. DiBiase*, No. 2:10-cv-01343-RLH, 2011 WL 1458778, at *2 (D. Nev. Apr. 15, 2011) (declining to transfer domain name used to infringe plaintiff's copyright as issue for Congress (citing *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 431 (1984))). But see *McGraw-Hill Glob. Educ. Holdings, L.L.C. v. Khan*, 323 F. Supp. 3d 488, 500 (S.D.N.Y. 2018) ("[A] number of courts have found that a transfer of domain names is an appropriate remedy to prevent further infringement of a copyright holder's rights." (emphasis added)); *Paramount Pictures Corp. v. Does*, No. 15-CV-5819, 2015 WL 10013786, at *4 (S.D.N.Y. Nov. 24, 2015) (citing 17 U.S.C. § 502(a) and inherent equitable powers to enjoin those other than defendants/their employees who were in active concert or participation with them, including domain name registries and/or registrars listing the domain names to transfer names to plaintiffs); *Elsevier, Inc. v. Han*, No. 1:16-CV1245-RA, slip op. (S.D.N.Y. July 21, 2016) (on default judgment, entering permanent injunction including mandate that domain name registries transfer domain names to plaintiffs); cf. *Cengage Learning, Inc. v. Shi*, No. 13 Civ. 7772 (VSB), 2017 WL 1063463, at *6 (S.D.N.Y. Mar. 21, 2017); *BWP Media USA Inc. v. NV Media Grp.*,

onto the Copyright Act (and sometimes to the Lanham Act) that Congress did not provide.¹⁰² This additional remedy also threatens the freedom of speech by causing Internet posts to be prescreened and possibly filtered, leading to disproportionately broad relief.¹⁰³

In general, injunctions should not issue against cloud technologies or other ISPs unless applicable liability standards are met. Like IP's secondary liability standards, Rule 65(d) requires "alter ego, collusion, or identity of interest."¹⁰⁴ Substantive law is impermissibly changed by allowing a plaintiff to enjoin a cloud service without fulfilling the traditional requirements of a joint enterprise, pierced corporate veil, or indirect liability standards such as solicitation or control of the direct infringer's actions, disregard of corporate separateness that would operate as a fraud, knowledge of specific infringing acts and continued facilitation thereof, direct profit from the infringement with the ability to control the specific form the infringement takes, or active encouragement or advertising designed

Inc., No. 13-CV-8866 (DAB), 2015 WL 2152679, at *3 (S.D.N.Y. May 6, 2015); *Gucci Am., Inc. v. Tyrrell-Miller*, 678 F. Supp. 2d 117, 123-24 (S.D.N.Y. 2008).

102. In passing the Anti-Cybersquatting Consumer Protection Act, Congress created a remedy of transfer or cancellation of a domain name registered by someone that is cybersquatting a famous and registered trademark, but did not do this for other trademark violations or for copyright violations. *See* 15 U.S.C. § 1125(d)(2)(D)(i) (2018); *Am. Online v. Aol.Org*, 259 F. Supp. 2d 449, 454 (E.D. Va. 2003). The use of differing language by Congress should have some effect on remedial options. *See Wis. Cent. Ltd. v. United States*, 138 S. Ct. 2067, 2071 (2018) ("We usually 'presume differences in [statutory] language [across different acts of Congress] convey differences in meaning.'" (quoting *Henson v. Santander Consumer USA Inc.*, 137 S. Ct. 1718, 1723 (2017))); *cf. Russello v. United States*, 464 U.S. 16, 23 (1983) ("[W]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." (internal quotation marks omitted) (citing *United States v. Wong Kim Bo*, 472 F.2d 720, 722 (5th Cir. 1972))). Congress knows how to draft specific remedies against things. *See Porsche Cars N. Am., Inc. v. Porsch.Com*, 51 F. Supp. 2d 707, 712 (E.D. Va. 1999), *vacated and remanded*, 215 F.3d 1320 (4th Cir. 2000), *aff'd in part, vacated in part*, 302 F.3d 248 (4th Cir. 2002).

103. *See Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc.*, 907 F. Supp. 1361, 1382-83 (N.D. Cal. 1995) (noting, where plaintiff sought injunctive relief against Internet service providers of defendant who had already been enjoined from infringing its works, that they "play a vital role in the speech of their users. Requiring them to prescreen postings for possible infringement would chill their users' speech").

104. *Reliance Ins. Co. v. Mast Constr. Co.*, 84 F.3d 372, 377 (10th Cir. 1996) (internal quotation marks omitted) (quoting Appellant's Append. II at 674, 676, *Reliance Ins. Co. v. Mast Constr. Co.*, 84 F.3d 372 (10th Cir. 1996) (No. 95-4054)); *see also In re Skyport Glob. Commc'ns, Inc.*, 661 F. App'x 835, 843 (5th Cir. 2016); *NBA Props., Inc. v. Gold*, 895 F.2d 30, 33 (1st Cir. 1990). Identity of interest has been called privity. *See Nat'l Spiritual Assembly of Baha'is of U.S. Under Hereditary Guardianship, Inc. v. Nat'l Spiritual Assembly of Baha'is of U.S., Inc.*, 628 F.3d 837, 849 (7th Cir. 2010); *Barrow v. Shearing*, No. 3:14-CV-800-NJR-DGW, 2017 WL 3866818 (S.D. Ill. Sept. 5, 2017).

to increase the amount of infringement.¹⁰⁵ Like IP's direct liability standards, Rule 65(c) requires specificity about which actions are illegal.¹⁰⁶

105. See *Astornet Techs. Inc. v. BAE Sys., Inc.*, 802 F.3d 1271, 1278-80 (Fed. Cir. 2015) (either veil-piercing or some form of conduct justifying imposition of indirect liability for infringement is required to hold parent corporation liable for sales by its subsidiary); *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1023 (Fed. Cir. 2015) (en banc) (for joint patent infringement, party that does not carry out all infringing elements must be either vicariously liable or liable for purposefully agreeing with, soliciting, or contracting with an agent or contractor to commit infringing acts as joint enterprise); *Columbia Pictures Indus. v. Fung*, 710 F.3d 1020, 1034-39 (9th Cir. 2013) (something more than provision of a neutral service at arm's length, such as active encouragement or advertising that causes more infringement, is required for inducement liability); *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006, 1030 (9th Cir. 2013) (something more than ability to terminate the account is required to hold service provider liable for vicarious liability in copyright); *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 35 (2d Cir. 2012) (knowledge or willful blindness as to infringing acts is required for contributory liability on part of service provider); *Perfect 10, Inc. v. Amazon.com, Inc.*, 487 F.3d 701, 730-31 (ability to control continuation of infringement on original website, and not merely contents of search index or graph, is required for imposition of vicarious liability on search engine); *Ellison v. Robertson*, 357 F.3d 1072, 1078-79 (9th Cir. 2004) (infringement must cause additional financial benefit to defendant for vicarious liability, a general financial benefit accruing to defendant from its customers' activity being insufficient); *A & M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1020-23 (9th Cir. 2001) (similar to *Viacom* on knowledge and to *Ellison* on benefit); *Joint Stock Co. "Channel One Russ. Worldwide" v. Russian TV Co.*, No. 18 Civ. 2318(LGS), 2019 WL 804506, at *2-3 (S.D.N.Y. Feb. 21, 2019) (refusing to hold affiliated business liable for defendant's conduct simply because it advertised main defendant's streaming service, shared offices and executives with it, and was lumped together with it in complaint); *Johnson v. Metro-Goldwyn-Mayer Studios, Inc.*, No. C17-541 RSM, 2017 WL 3313963, at *5-7 (W.D. Wash. Aug. 3, 2017) (refusing to hold corporate parents of motion picture studio liable for infringing James Bond box set without allegation of their distinct roles); *Wolk v. Kodak Imaging Network, Inc.*, 840 F. Supp. 2d 724, 749-51 (S.D.N.Y. 2012) (service that allowed consumers to upload and share photos would not be liable for infringing photos under vicarious theory because it did not control original infringement, although it did control the storage and sharing features of its service); cf. *Fujitsu, Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1326 (Fed. Cir. 2010) (contributory patent infringement). But see *Cricket Wireless L.L.C. v. Maz Wireless, LLC*, No. 18-CV-13375-SRC-CLW (D.N.J. Mar. 5, 2019) (lumping together parents, affiliates, and subsidiaries in same injunction against defendant LLC); *UMG Recordings, Inc. v. PMD Technologie UG*, No. 2:16-cv-07210-AB-E (C.D. Cal. Sept. 5, 2017) (lumping together parents and subsidiaries of defendant in copyright injunction against it); *Pokémon Co. Int'l, Inc. v. Sahagian*, No. 2:15-cv-00866 TSZ (W.D. Wash. Sept. 8, 2015) (lumping together parents and subsidiaries on both sides as parties to copyright injunction); *IP Power Holdings Limited, LTD. v. Bam Brokerage*, No. SACV 11-1234 JVS (C.D. Cal. Oct. 9, 2014) (lumping together parents and subsidiaries of defendant into patent infringement injunction); *Wincan Am., Inc. v. Envirosight, LLC*, No. 3:09CV-103-S, 2011 WL 3042561, at *1 (W.D. Ky. July 25, 2011) (describing "parent corporations, subsidiaries, and all persons in active concert or participation with it or any of them" as part of "usual lityny" of targets of trademark infringement injunction) (internal quotation marks omitted). But see also *supra* note 15 and *infra* note 226.

106. See Fed. R. Civ. P. 65(c); cf. *Venegas-Hernandez v. Asociacion De Compositores, Editores De Musica Latinoamericana*, 424 F.3d 50, 57-58 (1st Cir. 2005)

While the Digital Millennium Copyright Act (DMCA), the All Writs Act, and inherent equitable powers are cited in favor of broader injunctions than might be justified under the IP laws and Rule 65 themselves, these powers are also limited.¹⁰⁷ Specifically, the All Writs Act does not make other laws moot, and the DMCA injunction provision does not create copyright liability where none existed, or require a defendant to search for and remove infringements itself.¹⁰⁸

Some courts have used a much less restrictive and extraordinary measure than enjoining a neutral third party from doing something that increases the infringement in some way. They have ordered, for example, the defendant to request that its own content or advertising campaigns get removed from a search engine such as Bing or Google.¹⁰⁹ This is similar

(a “listed infringing act” is required for copyright liability under 17 U.S.C. § 106); *Best v. AT&T Mobility, LLC*, No. 1:12-cv-564, 2015 WL 1125539, at *7 (S.D. Ohio Mar. 10, 2015) (plaintiff must plead facts triggering a specific prong of Lanham Act to avoid dismissal for failure to state a claim); *Atlantic Recording Corp. v. Howell*, 554 F. Supp. 2d 976, 983 (D. Az. 2008) (Copyright Act “plainly requires” specific forms of conduct for direct liability (internal quotation marks omitted) (quoting *London-Sire Records, Inc. v. Doe 1*, 542 F. Supp. 2d 153, 168 (D. Mass. 2008))).

107. 17 U.S.C. § 512(j)(1)(A)(i) (2018) (rightsholder may obtain injunction restraining ISP “from providing access to infringing material”); *id.* § 512(j)(1)(A)(ii) (injunction prohibiting ISP “from providing access to a subscriber or account holder . . . who is engaging in infringing activity . . . by terminating the accounts of the subscriber or account holder”); *id.* § 512(j)(1)(A)(iii) (allowing other injunctions that are not burdensome and “prevent or restrain infringement of copyrighted material specified in the order of the court at a particular online location”); *Not in My Backyard: Blocking Infringement at the Real and Virtual Border*, ABA, SECTION OF IP LAW ANNUAL MEETING CONCURRENT PROGRAM (Mar. 31, 2017), https://www.americanbar.org/content/dam/aba/administrative/intellectual_property_law/new-notinmybackyard-availabil-v22.pdf [https://perma.cc/583M-3LAN].

108. *See In re Apple, Inc.*, 149 F. Supp. 3d 341, 353 (E.D.N.Y. 2016) (citing *Pa. Bureau of Corr. v. U.S. Marshals Serv.*, 474 U.S. 34, 40 (1985) (All Writs Act)); *Mon Cheri Bridals, LLC v. P’ships*, No. 3:15-cv-00021-FDW-DCK, 2015 WL 3509259, at *8 (W.D.N.C. June 4, 2015) (All Writs Act); *Wolk v. Kodak Imaging Network, Inc.*, No. 10 Civ. 4135 (RWS), 2011 WL 940056, at *1-8 (S.D.N.Y. Mar. 17, 2011) (proposed injunction requiring party defendant to search for and prevent or restrain infringements was not permissible under DMCA, 17 U.S.C. § 512(j)(1)(A)(iii)); H.R. REP. NO. 105-796, at 75-76 (1998) (Conf. Rep.), <https://www.congress.gov/105/crpt/hrpt796/CRPT-105hrpt796.pdf> [https://perma.cc/4EPH-7UWB] (512 does not create new liability); Annemarie Bridy, *Three Notice Failures in Copyright Law*, 96 B.U. L. REV. 777, 829 (2016) (512(j) assumes ISP has shown eligibility for safe harbor of 512(a)-(d), which presumes filing an answer and making a motion or filing a brief, and requires notice); *cf. In re Life Inv’rs Ins. Co. of Am.*, 589 F.3d 319, 330 (6th Cir. 2009) (substantive statutes limit seemingly broad power under All Writs Act).

109. *See, e.g., Real Spirit USA, Inc. v. Waterionizerscams*, No. 3:16-CV-00322, slip op. (D. Nev. Mar. 3, 2017) (ordering the parties to request that Bing, Google, and Yahoo! remove a Uniform Resource Locator (URL) from their indexes); *Selec Corp. v. McDanel Advanced Ceramic Techs., LLC*, Civil Case No. 1:15-cv-00129-MR, slip op. (W.D.N.C. Nov. 23, 2016) (order required “the sending of a registered letter (with a copy to Plaintiff) to all internet search engines, including but not

to instances in which courts required defendants who created a false impression to contact consumers through television or in record stores to fix it.¹¹⁰ By contrast, ordering a non-conspiratorial search engine or CDN to prevent the infringement would be like issuing an order to the television or record player manufacturer to correct the misimpression left by an over-the-air advertisement or faulty album cover.

III. AIMING FOR PRECISION ABOUT INJURY IN COMPLEX CASES

A. *Injury as Liability*

Before *eBay*, the presumption of irreparable injury from the main forms of IP infringement was a formal presumption.¹¹¹ This has purportedly been abandoned as in direct conflict with the holding of *eBay*.¹¹²

After *eBay*, however, a new version of the presumption crops up. It arises when courts treat facts central to a likelihood of success on copy-

limited to, Google, Bing, and Yahoo!, requesting that (i) any and all of Defendant's keyword advertising and sponsored advertisements containing the terms [etc.] be removed or replaced with a non-infringing alternative"); Nat'l Grange of the Order of Patrons of Husbandry v. Ca. State Grange, 182 F. Supp. 3d 1065, 1081-82 (E.D. Cal. 2016) (where defendant's address and telephone number came up on Google Maps in response to searches for "California State Grange," ordering "defendant to remove the word 'Grange' from all public telephone and business directory listings, on the internet and otherwise, to the extent it can do so"); Diaz v. Bautista, No.2:10-cv-04690-MFW (JCx), slip op. (C.D. Cal. Nov. 7, 2012) ("Prada shall upload and/or transmit, or cause to be uploaded and/or transmitted, to www.google.com, www.bing.com and any other search engine websites a copy of this injunction along with instructions informing Google, Bing, and any other search engine operators that for any search [including certain terms, certain sites should not be shown]."); cf. Google Inc. v. Local Lighthouse Corp., No. 4: 15-cv-04219, slip op. ¶ 12 (N.D. Cal. July 15, 2016) (ordering defendant to serve copy of injunction on all "contractors who are conducting marketing activities on behalf of Defendant").

110. See, e.g., Frisch's Restaurants, Inc. v. Elby's Big Boy, Inc., 670 F.2d 642, 650-51 (6th Cir. 1982) (affirming district court's order of corrective advertising, presumably on television where part of misleading advertising aired), *cert. denied*, 459 U.S. 916 (1982) (citing, *inter alia*, CBS, Inc. v. Gusto Records, Inc., 403 F. Supp. 447 (M.D. Tenn. 1974), in which court ordered a decal designed to cure confusion to be affixed to an album); see also *Selee Corp.*, 2017 WL 3122565 (ordering defendant to place corrective advertising on its website); cf. Gilliam v. Am. Broad. Cos., 538 F.2d 14, 14-15, 19 (2d Cir. 1976) (although Second Circuit ordered a simpler prohibitory injunction to be issued, district court ordered television station to disclose that comedy actors, writers and producers did not want to be affiliated with edited version of television show they had produced and licensed on certain conditions to defendant).

111. See *In re Microsoft Corp. Antitrust Litig.*, 333 F.3d 517, 536 (4th Cir. 2003), *abrogated in part as stated in Bethesda Softworks, L.L.C. v. Interplay Entm't Corp.*, 452 F. App'x 351 (4th Cir. 2011), and *in Volvo Group North America, LLC v. Truck Enterprises, Inc.*, 2018 WL 4704047, at *4 (W.D. Va. Sept. 30, 2018); *Bourne Co. v. Tower Records, Inc.*, 976 F.2d 99, 101 (2d Cir. 1992), *abrogated as stated in Salinger v. Colting*, 607 F.3d 68, 79-80 (2d Cir. 2010); *Apple Computer, Inc. v. Formula Int'l, Inc.*, 725 F.2d 521, 525-26 (9th Cir. 1984), *abrogated in part as stated in VidAngel*, 869 F.3d 848.

112. See *infra* note 111.

right or trademark merits questions—notably facts associated with the loss of control of a copyright or trademark—as leading to an injunction.¹¹³ There are also some cases formally presuming irreparable injury—although not an injunction itself—when a copyright is infringed.¹¹⁴ It may be meaningful that the copyright statute, unlike the Patent Act and the Lanham Act, does not subject the court’s power to restrain infringement upon such terms as it may deem reasonable to “principles of equity.”¹¹⁵ The Copyright Act used to refer explicitly to equity in reference to injunctions, but it no longer refers to equity, incorporating a standard of “reasonable” prevention or restraint of infringement instead.¹¹⁶ Does this mean that the requirement of irreparable injury went away? Courts have so far resisted formalizing this conclusion, but their practice suggests some sympathy with it.

Copyright cases are departing greatly from the trends in patent law to rigorously police the irreparable injury requirement and apply it harshly against NPEs. For example, in *Disney Enterprises, Inc. v. VidAngel, Inc.*,¹¹⁷ the plaintiff movie studios alleged copyright infringement and circumvention of copyright protection measures and sought a preliminary injunction against a service that basically censored and rented out Blu-ray discs and DVDs by copying them and streaming filtered versions.¹¹⁸ The defendant pointed out that the plaintiffs delayed suing for about a year and actively licensed their works to multiple third parties including Apple iTunes, Google Play, HBO, Hulu, and Netflix, none of which had complained about the defendant’s filtered rentals.¹¹⁹ Except for the longer delay and perhaps greater notice of potential infringement, the situation therefore resembled *eBay*, in which eBay argued that because the plaintiff was willing to license out its patents, it lacked irreparable harm from infringement.¹²⁰ Remarkably, the Ninth Circuit concluded that irreparable harm existed

113. See *infra* notes 118-121, 138-143, 159-160, 162 and accompanying text.

114. See *Microsoft Corp. v. McGee*, 490 F. Supp. 2d 874, 882 (S.D. Ohio 2007) (citing *Capitol Records, Inc. v. Zahn*, No. 3:06-0212, 2007 WL 542816, at *4 (M.D. Tenn. Feb. 16, 2007)); *Sony BMG Music Entm’t. v. Tenenbaum*, 93 U.S.P.Q.2d 1867, 1868 (D. Mass. Dec. 7, 2009); *UMG Recordings, Inc. v. Blake*, No. 5:06-CV-00120-BR, 2007 WL 1853956, at *6-7 (E.D.N.C. Jun. 26, 2007); Andrew Spillane, *The Continuing Vitality of the Presumption of Irreparable Harm in Copyright Cases*, 15 MARQ. INTELL. PROP. L. REV. 257, 259, 281-83 (2011); cf. *Christopher Phelps & Assocs., LLC v. Galloway*, 492 F.3d 532, 544 (4th Cir. 2007) (“Irreparable injury often derives from the nature of copyright violations, which deprive the copyright holder of intangible exclusive rights.” (emphasis added)).

115. 17 U.S.C. § 502 (2018). Compare *Herb Reed Enters. v. Fla. Entm’t Mgmt.*, 736 F.3d 1239, 1249 (9th Cir. 2013) (citing 15 U.S.C. § 1116(a); 35 U.S.C. § 283).

116. See 17 U.S.C. § 502(a) (2018); Gómez-Arostegui, *supra* note 19, at 1682-83.

117. 869 F.3d 848 (9th Cir. 2017).

118. See *id.* at 848-57 (citing 17 U.S.C. § 106(1); 17 U.S.C. § 1201(a)(1)).

119. See *id.* at 865-66.

120. See *MercExchange, LLC v. eBay, Inc.*, 401 F. Supp. 2d 1323, 1339 (Fed. Cir. 2005), *rev’d*, 547 U.S. 388.

because the defendant's infringement threatened the plaintiff's "negotiating position," even though it has cited the desire to use untrammelled IP rights to negotiate a larger licensing fee from third party licensees as inadequate evidence of irreparable harm post-*eBay*.¹²¹

The Ninth Circuit in *VidAngel* also adopted a relaxed approach to the requirement that the irreparable harm be caused by the party to be enjoined rather than other infringers or factors. In *Perfect 10, Inc. v. Google, Inc.*, it held that a subscription-based content provider had not shown irreparable harm under *eBay* where it had shown that it was suffering from infringement and "threatened . . . with financial ruin," but it could not tie this "ruin" to the defendant's acts as opposed to other search engines or websites.¹²² Like the plaintiffs in *VidAngel*, Perfect 10 had no evidence that any specific licensee had terminated an agreement because of the defendant's infringement.¹²³

The bare "loss of control" associated with invasion of the right to exclude others from using IP, found inadequate in *eBay*, is proving to be critical in copyright injunction decisions. In *VidAngel*, the Ninth Circuit surveyed the law in this area, which recognized that a loss of control over goodwill and business reputation could be difficult to repair and that unauthorized streaming in particular could damage business models based on different windows for video content, at a relatively high price in the movie theater, followed by the on-demand sale period, the on-demand rental-only period, and finally sale and rental of physical copies, pay-per-view and premium cable transmission, and over-the-air broadcast and subscription streaming. Streaming illegally is "likely" to harm this model and associated "goodwill" and "leverage" because some licensees may observe or mention the unauthorized streams in offering less money for licenses, or none at all.¹²⁴ However, this proposition does not have the support of a cited case arising out of a situation in which the plaintiff was losing out due to illegal streams, let alone due directly to the defendants' own streams.¹²⁵ In cases of streaming apps for connected televisions or other devices, it has been said: "Unauthorized and uncompensated internet streaming that competes directly with the television programming of a copyright owner and its authorized licensees causes harm that is 'neither

121. *VidAngel*, 869 F.3d at 865 (quoting district court) (internal quotation marks omitted). Compare *id.*, with *Fox Broad. Co., v. Dish Network LLC*, 583 F. App'x 618 (9th Cir. 2014).

122. 653 F.3d 976, 978-79, 981-82 (9th Cir. 2011); see also Christina Bohannon, *Copyright Harm and Injunctions*, 30 CARDOZO ARTS & ENT. L.J. 11, 17-20 (2012).

123. *Perfect 10 v. Google, Inc.*, 653 F.3d 976 981-82 (9th Cir. 2011).

124. *VidAngel*, 869 F.3d at 866.

125. See *id.* (citing *Herb Reed Enters., LLC v. Fla. Entm't Mgmt., Inc.*, 736 F.3d 1239, 1250 (9th Cir. 2013); *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 285-86 (2d Cir. 2012); *Fox Television Stations, Inc. v. FilmOn X LLC*, 966 F. Supp. 2d 30, 50 (D.D.C. 2013)).

easily calculable, nor easily compensable.’”¹²⁶ Similarly, in *American Society for Testing and Materials v. Public.Resource.Org, Inc.*,¹²⁷ the plaintiffs alleged that their standards for public safety, training, testing, and the like, which had been incorporated into federal regulations by reference, had been posted to the defendant’s legal archive.¹²⁸ The court enjoined the archive from infringing the copyright in the standards or the trademarks of the plaintiff organizations simply because plaintiffs might lose revenue and reputational benefits and therefore the ability to generate further standards using those revenues and benefits.¹²⁹

The indifference of copyright courts to potential legal remedies is longstanding. In *Rogers v. Koons*, the court stood ready pre-*eBay* to issue an equitable order requiring the surrender of defendant’s infringing derivative work alongside a defendant’s profits award in the tens or hundreds of thousands of dollars, even though the methodology used to calculate the lost profits remedy could have been employed for future exhibitions etc.¹³⁰ The photographer could have been called an NPE under a patent law framework, insofar as he licensed his photograph to a company that manufactured postcards from it, but had not licensed it to date to a sculptor like the defendant.¹³¹ In *Christopher Phelps & Associates v. Galloway*,¹³² the Fourth Circuit rejected the argument that the jury’s verdict of \$20,000 in damages meant that there was no irreparable injury because the award—like a fee for services—would compensate plaintiff for the continuing use of its architectural design for the defendant’s house, based presumably on testimony of the plaintiff that this was how much it would have charged defendant for the design in dispute.¹³³ This seems to disregard

126. *China Cent. Tel. v. Create New Tech. (HK) Ltd.*, No. 15-01869, 2015 WL 3649187, at *12 (C.D. Cal. June 11, 2015) (quoting *Fox Tel. Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F. Supp. 2d 1138, 1147 (C.D. Cal. 2012)) (citing *Fox Television Stations, Inc. v. Filmon X LLC*, 966 F. Supp. 2d 30, 49-51 (D.D.C. 2013)); *Warner Bros. Entm’t v. WTV Sys., Inc.*, 824 F. Supp. 2d 1003, 1012-13 (C.D. Cal. 2011); *Twentieth Century Fox Film Corp. v. iCraveTV*, No. Civ.A. 00-121, Civ.A. 00-120, 2000 WL 255989, at *8 (W.D. Pa. Feb. 8, 2000)).

127. No. 13-cv-1215(TSC), 2017 WL 473822 (D.D.C. Feb. 2, 2017), *rev’d on other grounds*, 896 F.3d 437 (D.C. Cir. 2018).

128. *See id.* at *1-5.

129. *See id.* at *24.

130. *See Rogers v. Koons*, 751 F. Supp. 474, 480-81 (S.D.N.Y. 1990), *amended by* 777 F. Supp. 1 (S.D.N.Y. 1991), *aff’d*, 960 F.2d 301 (2d Cir. 1992); Paul Edward Geller, *Hiroshige vs. Van Gogh: Resolving the Dilemma of Copyright Scope in Remediating Infringement*, 46 J. COPYRIGHT SOC’Y U.S.A. 39, 69-70 (1998).

131. *Rogers v. Koons*, 960 F.2d 301, 303-04 (2d Cir. 1992); *see also* FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 8 (2003) (defining NPE to include those who develop and transfer rights in intellectual property).

132. 492 F.3d 532 (4th Cir. 2007).

133. *See id.* at 535-41, 544. The court did, as explained below, use the concept of a forced judicial sale to find that the balance of hardships and public interest did not favor equitable relief.

the fact that the license would have exhausted the copyright and that architects do not typically get paid when houses are resold.¹³⁴

In patent law, neither intangible harm to the right to exclude nor the pursuit of bargaining leverage in licensing negotiations is sufficient to show irreparable injury.¹³⁵ Similarly, in cases involving trade secrets, the loss of leverage in forming new business relationships due to misappropriation is not necessarily irreparable injury.¹³⁶ Despite the uniqueness—even sacredness—of persons' privacy and reputation, courts have repeatedly held that the destruction thereof is not always an irreparable injury.¹³⁷

Courts are short-circuiting analyses in trademark cases by finding irreparable injury and other *eBay* factors to be present whenever a trademark has been violated.¹³⁸ This is particularly troublesome in trademark

134. See Pamela Samuelson, *Freedom to Tinker*, 17 THEORETICAL INQUIRIES L. 562, 572-73 (2016).

135. See *High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc.*, 49 F.3d 1551, 1557 (Fed. Cir. 1995) (willingness to license a patent “is ‘incompatible with the emphasis on the right to exclude that is the basis for the presumption [of irreparable injury] in a proper case’” (quoting *T.J. Smith & Nephew Ltd. v. Consol. Med. Equip., Inc.*, 821 F.2d 646, 648 (Fed. Cir. 1987))); *Finjan, Inc. v. Blue Coat Sys., LLC*, No. 15-cv-03295, 2016 WL 6873541, at *5-8 (N.D. Cal. Nov. 22, 2016) (similar); *Telcordia Tech., Inc. v. Cisco Sys.*, 592 F. Supp. 2d 727, 747-48, 748 n.10 (D. Del. 2009) (indifference of potential licensees to licensing opportunities due to unavailability of injunction would not be irreparable harm, unlike lost sales, which would; “Telcordia’s willingness to license its patents also suggests that its injury is compensable in monetary damages, which is inconsistent with the right to exclude.” (citing *IMX, Inc. v. Lending-Tree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007))); *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1840 (2006), *aff’d in part, vacated in part, and remanded*, 612 F.3d 1365 (Fed. Cir. 2010); see also *PGP, LLC v. TPII*, 734 F. App’x 330, 334-35 (6th Cir. 2018) (seeking leverage in negotiating licensing agreement is not necessarily irreparable injury on part of trademark owner); *Gilson LaLonde & Gilson, supra* note 52, at 956 (“Courts in other contexts have also found lost sales compensable in damages, such as suits to enforce a non-compete clause or for the theft of trade secrets.”) (collecting cases). *But see Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1363 (Fed. Cir. 2013) (patentee may be entitled to seek injunction for purposes of obtaining “competitive leverage” justified by scope of patent).

136. See *H&R Block Tax Servs. LLC v. Acevedo-Lopez*, 742 F.3d 1074, 1078 (8th Cir. 2014); *Capital Tool & Mfg. Co., Inc. v. Maschinenfabrik Herkules*, 837 F.2d 171, 171-73 (4th Cir. 1988); *Founder Starcoin, Inc. v. Launch Labs, Inc.*, No. 18-CV-972, 2018 WL 3343790, at *1-3, *12-14 (S.D. Cal. July 9, 2018).

137. See *Gubala v. Time Warner Cable, Inc.*, 846 F.3d 909 (7th Cir. 2017) (affirming district court order that invasion of cable subscriber’s privacy interest in viewing records might not be enjoinable, due to adequate remedy at law, although appellate court emphasized lack of “concrete injury” instead); *Ventura v. Kyle*, 825 F.3d 876, 878-79, 886-87 (8th Cir. 2016) (suggesting that former governor might have adequate remedy at law for harm to his reputation in bestselling book and then-popular cable television show); *Kazal v. Price*, No. 8:17-cv-2945, 2017 WL 6270086 (M.D. Fla. Dec. 8, 2017) (suggesting there might not be irreparable injury from libels, or at least it was not shown from derogatory nature of them on their face).

138. See, e.g., *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 627 (5th Cir. 2013); *Lorillard Tobacco Co. v. Amouri’s Grand Foods, Inc.*, 453 F.3d 377, 382

law because a trademark is not intended to be as much of a property right, in federal statutory terms, as a copyright or patent, and because trademark liability may be found when most consumers—and the reasonable shopper—are not and would not be confused or led astray by the defendant's use.¹³⁹ An injunction is extraordinary relief that requires a strong case, according to recent authority.¹⁴⁰ Irreparable injury is often harm that is

(6th Cir. 2006); *Crossfit, Inc. v. Quinnie*, 232 F. Supp. 3d 1295, 1316-17 (N.D. Ga. 2017); *Jones v. Am. Council on Exercise*, 245 F. Supp. 3d 853, 867 (S.D. Tex. 2017); *Choice Hotels Int'l, Inc. v. Zeal, LLC*, 135 F. Supp. 3d 451, 470-71 (D.S.C. 2015); *Am. Bridal & Prom Indus. Ass'n v. Affordablebridaldresses.com*, No. 3:14-cv-2311 (AET), slip op. (D.N.J. June 3, 2015); *Reynolds Consumer Prods., Inc. v. Handi-Foil Corp.*, 1:13-CV-214, 2014 WL 3615853, at *12 (E.D. Va. July 18, 2014) (citing examples), *appeal dismissed* (Dec. 19, 2014)); *Diamonds Direct USA, Inc. v. BFJ Holdings, Inc.*, 895 F. Supp. 2d 752, 761-63 (E.D. Va. 2012); *Tiramisu Int'l LLC v. Clever Imps. LLC*, 741 F. Supp. 2d 1279, 1288 (S.D. Fla. 2010) (citing, *inter alia*, *N. Am. Med. Corp. v. Axiom Worldwide, Inc.*, 522 F.3d 1211, 1227 (11th Cir. 2008)); *Gilson LaLonde & Gilson*, *supra* note 52, at 929 (“Even a decade after *eBay*, the lower courts—in fact most of them—are *still* relying on the presumption of irreparable harm in trademark cases.” (emphasis in original)); *see id.* at 929-30. Although an assumption of irreparable harm was not made in *Herb Reed Enterprises*, that was because the district court made no findings and cited no evidence as to harm whatsoever, citing mere “platitudes.” 736 F.3d at 1249-50; *see also* *Gilson LaLonde & Gilson*, *supra* note 52 at 924 (presumption of irreparable harm is dying in trademark cases due to decisions like *Herb Reed Enterprises*, *Ferring Pharm., Inc. v. Watson Pharm., Inc.*, 765 F.3d 205, 219-20 (3d Cir. 2014), and *Commodores Entm't Corp. v. McClary*, 648 F. App'x 771 (11th Cir. 2016) (per curiam)).

139. *See Dastar Corp. v. Twentieth-Century Fox Film Corp.*, 539 U.S. 23, 34 (2003) (“Federal trademark law . . . by preventing competitors from copying ‘a source-identifying mark,’ ‘reduce[s] the customer’s costs of . . . making purchasing decisions,’ and ‘helps assure a producer that it (and not an imitating competitor) will reap the financial, reputation-related rewards associated with a desirable product’” (second alteration in original) (internal quotation marks and citations omitted)); 6 THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION 32:185 (5th ed.); *see also* *Two Pesos v. Taco Cabana*, 505 U.S. 763, 782 n.15 (1992) (Stevens, J., concurring) (one of two rationales for federal trademark infringement suits is “protect the public from deceit,” while the other is only partially property-related, to protect “investment from its misappropriation by pirates and cheats” (internal quotation marks omitted) (quoting S. REP. NO. 79-1333, at 3 (1946))); *Barton Beebe, A Defense of the New Federal Trademark Antidilution Law*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1143, 1149 (2004) (trademark law was initially focused on consumer protection, not property rights, and even addition of anti-dilution protection to 15 U.S.C. § 1125(c) did not provide “the absolute, ‘in gross,’ and formal” property right against trademark blurring that some litigants seek); *Barton Beebe, An Empirical Study of the Multifactor Tests for Trademark Infringement*, 94 CAL. L. REV. 1581, 1582-86 (2006) (most courts do not have survey evidence suggesting that most consumers are confused, in cases in which preliminary injunction against trademark infringement is sought). *See generally* Michael Pulos, *A Semiotic Solution to the Propertyization Problem of Trademark*, 53 UCLA L. REV. 833, 839 (2006).

140. *See Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008) (“[I]njunctive relief [is] an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief.” (citing *Mazurek v. Armstrong*, 520 U.S. 968, 972 (1997))); *Adidas Am., Inc. v. Skechers USA, Inc.*, 890 F.3d 747, 760-61 (9th Cir. 2018) (plaintiff's theory of loss of control of reputation for quality or premium price point due to post-sale confusion with defendant's

uncertain in extent or intolerable from the standpoint of the legal system.¹⁴¹ To presume irreparable harm from a loss of goodwill, which may occur in any trademark case, is to eviscerate this important factor.¹⁴² If the loss to goodwill is unquantifiable, it may very well be speculative.¹⁴³

If, on the other hand, a loss to goodwill is quantifiable, it may be adequately remedied by monetary relief.¹⁴⁴ The goodwill value of a pat-

products required evidence that consumers did or would associate low quality or price point of defendant with plaintiff's products, which was lacking); Gilson LaLonde & Gilson, *supra* note 52, at 941 (where consumers had a positive experience with alleged infringer of plaintiff's trademark, injunctive relief was not warranted (citing Miguel Pure Foods Co. v. Ramar Int'l Corp., 625 F. App'x 322 (9th Cir. 2015))). *But see* 2Die4Kourt v. Hillair Capital Mgmt., LLC, 692 F. App'x 366, 369 (9th Cir. 2017) (it was enough, at "early" preliminary injunction stage, to argue that plaintiffs will "likely will lose some measure of control over their business reputation in the absence of injunctive relief"); Gilson LaLonde & Gilson, *supra* note 52, at 941 (where plaintiff's trademark was placed at "risk" by defendant, fact that no poor-quality goods were sold under it did not justify denying injunction (citing Zino Davidoff SA v. CVS Corp., 571 F.3d 238, 243 (2d Cir. 2009))).

141. *See* Salinger v. Colting, 607 F.3d 68, 81 (2d Cir. 2010); Bonaparte v. Camden & Amboy R.R. Co., 3 F. Cas. 821 (C.C.D.N.J. 1830) (No. 1,617), *quoted in* 3 JOSEPH STORY & MELVILLE BIGELOW, COMMENTARIES ON EQUITY JURISPRUDENCE: AS ADMINISTERED IN ENGLAND AND AMERICA 264, n.1 (2000) (remedy of injunction is withheld unless injury to party seeking it will be irreparable, for it will inflict irreparable injury on the enjoined party); 2 JOSEPH STORY, COMMENTARIES ON EQUITY JURISPRUDENCE: AS ADMINISTERED IN ENGLAND AND AMERICA 62 (10th ed. 1870) (equity has its "origin in the fact [sic], that [in some cases] there is either no remedy at all, or the remedy is imperfect and inadequate") (collecting sources); *id.* at 121 (justifying injunctions against copyright and patent infringement by stating that "extent of the injury" is unknowable); DOUGLAS LAYCOCK, THE DEATH OF THE IRREPARABLE INJURY RULE 70-71 (1991) (irreparable injury exists because a "dollar value cannot easily be assigned to a company's loss of clientele, goodwill, marketing techniques, office stability, etc.").

142. *Cf.* Rent-A-Center, Inc. v. Canyon Television & Appliance Rental, Inc., 944 F.2d 597, 603 (9th Cir. 1991) (loss of goodwill is irreparable as difficult to measure); Microsoft Corp. v. Motorola, Inc., 871 F. Supp. 2d 1089, 1103 (same); Gilson LaLonde & Gilson, *supra* note 52, at 938 (sale of hamburgers by a fine dining establishment, which was former franchisee of trademark holder, could affect franchisor's goodwill in ways difficult to measure (citing Benihana, Inc. v. Benihana of Tokyo, LLC, 784 F.3d 887 (2d Cir. 2015))).

143. *See* Fox Broad. Co. v. Dish Network LLC, 583 F. App'x 618, 619 (9th Cir. 2014) (holding that "the district court did not commit legal error by characterizing the irreparable harm forecasts of Fox's executive as speculative"); *see also* In re Excel Innovations, Inc., 502 F.3d 1086, 1098 (9th Cir. 2007) ("Speculative injury cannot be the basis for a finding of irreparable harm." (citing Goldie's Bookstore, Inc. v. Superior Court, 739 F.2d 446, 472 (9th Cir. 1984))); VHT, Inc. v. Zillow Grp., Inc., No. C15-1096JLR, 2017 WL 2654583, at *22-24 (W.D. Wash. June 20, 2017) (same).

144. *See* Fox Broad., 583 F. App'x at 620 (holding that "record also supports the district court's conclusion that any concessions Fox makes in contractual negotiations with other distributors that result directly from Dish Network's contested technologies may be monetized"); Danone, US, LLC v. Chobani, LLC, No. 18 Civ. 11702 (CM), 2019 WL 760040 (S.D.N.Y. Jan. 23, 2019) (lost sales due to misleading labels on dairy products could be estimated in damages phase, so irreparable injury was questionable); Wolk v. Kodak Imaging Network, Inc., No. 10 Civ. 4135, 2011 WL 940056, at *8 (S.D.N.Y. Mar. 17, 2011) (although plaintiff's visual art was

ent or a trademark could be quantified in at least three ways: replacement cost in terms of the investments required to replicate or regenerate the competitive advantage produced by the asset, fair market value in terms of a lump-sum royalty or projected running royalty income, and income valuation in terms of increased profitability for not paying royalties to other rightsholders or in terms of dividing the income from total business operations among various assets.¹⁴⁵

Trademark counterfeiting is a notable class of cases in which monetary relief may be compensatory or even a windfall. Congress made available statutory damages for counterfeiting ranging up to \$200,000 per type of good or service of the defendant, or \$2 million for willful use of a counterfeit mark.¹⁴⁶ Unauthorized streaming or competition with a streaming service, however, would not appear to qualify as counterfeiting unless the defendant used the trademark of another in the domain name or other way.¹⁴⁷

There are many court orders transferring or cancelling domain name registrations.¹⁴⁸ This would be a little odd if *eBay* applied, because the

uploaded by unspecified users to defendant's photo uploading and sharing service Photobucket, injury was not irreparable because artist had not explained how copyright damages would not compensate her); *see also* Gilson LaLonde & Gilson, *supra* note 52, at 958 (collecting cases).

145. *See* John Elmore, *The Valuation of Trademark-Related Intangible Property*, INTANGIBLE PROP. TRANSFER PRICE INSIGHTS, Winter 2015, at 66-79; Robert Reilly, *Presentation to the American Institute of CPAs: Practical Applications of Patent Valuation Approaches and Methods* (Nov. 7, 2011), http://www.willamette.com/pubs/presentations/reilly_patent_valuation_methods_aicpa_110711.pdf [<https://perma.cc/JB6G-6Y73>].

146. 15 U.S.C. § 1117(c) (2018) (making statutory damages available to persons injured by use of a counterfeit mark); 15 U.S.C. § 1116(d)(1)(B) (2018) (defining counterfeit mark for statutory damages purposes as "a counterfeited mark that is registered on the principal register in the United States Patent and Trademark Office for such goods or services sold, offered for sale, or distributed and that is in use, whether or not the person against whom relief is sought knew such mark was so registered . . .").

147. *See* Rebecca Tushnet, *Selling Copyright-Infringing Content Isn't Trademark Infringement or False Advertising*, THE 43(B)LOG (Feb. 25, 2019), <http://tushnet.blogspot.com/2019/02/selling-copyright-infringing-content.html> [<https://perma.cc/T2N8-FRKY>] (citing *Joint Stock Co. "Channel One Russia Worldwide" v. Russian TV Co.*, No. 18 Civ. 2318, 2019 WL 804506 (S.D.N.Y. Feb. 21, 2019)); *see also* *Am. Soc'y For Testing & Materials v. Public.Resource.Org*, 896 F.3d 437, 455-58 (D.C. Cir. 2018) (trademark could be violated if defendant used it on a website to distribute materially inferior digital versions of tangible goods); *Phx. Entm't Partners v. Rumsey*, 829 F.3d 817, 822-31 (7th Cir. 2016) (collecting cases, including *Dastar Corp. v. Twentieth-Century Fox Film Corp.*, 539 U.S. 23, 37 (2003), requiring marketing of "a tangible good" under trademark theories); *Lions Gate Entm't, Inc. v. TD Ameritrade Servs.*, 170 F. Supp. 3d 1249, 1255-56 (C.D. Cal. 2016) (plagiarism of content in online video ads not actionable under trademark theory due to *Dastar*).

148. *See* *Tapestry, Inc. v. 2012coachoutlets.com*, No. 17-24561-Civ-Scola, 2018 WL 704864, at *4-7 (S.D. Fla. Jan. 31, 2018) (in apparent in rem action against dozens of domain names, ordering domain name registrars for defendants' infringing domain names to transfer them into holding accounts at registrar of

ample statutory damages for copyright infringement or trademark counterfeiting could ensure adequate monetary compensation (and probably overcompensation, given the probable small stakes of some of these obscure-website cases).¹⁴⁹ Under *eBay*, the structural resemblance of the Lanham Act and the Patent Act on injunctions should have resulted in trademark and anti-counterfeiting lawsuits being rigorously policed for irreparable injury.¹⁵⁰ The provisions regarding transfer or cancellation of domain names on trademark grounds do not refer to equity, however.¹⁵¹ In rem seizures of domain names and other assets used in counterfeiting also present unique remedial issues.¹⁵²

In patent law, it has long been assumed that the loss of goodwill to a patent owner already (and still) practicing its patent could be irreparable injury.¹⁵³ If goodwill is defined in connection with the loss of customer accounts, this harm is often not truly irreparable.¹⁵⁴ When the patent owner loses accounts due to an infringer's lower prices, that fits squarely

plaintiffs' choosing); *ABS-CBN Corp. v. Does*, No. 2:16-cv-08031-PSG-JEM, slip op. (C.D. Cal. July 5, 2017) (in trademark case, ordering domain name registries to cancel or place holds on domain names on a schedule); *Las Vegas Sands Corp. v. Li*, No. 2: 15-cv-02340-GMN-VCF, slip op. (D. Nev. Apr. 13, 2017) (similar); *cf. also infra* note 15 and *supra* note 101 (citing *Paramount*, *Elsevier*, *UMG Recordings*, etc.); *McGraw-Hill Glob. Educ. Holdings, LLC v. Khan*, 323 F. Supp. 3d 488, 500 (S.D.N.Y. 2018) ("[A] number of courts have found that a transfer of domain names is an appropriate remedy to prevent further infringement of a *copyright* holder's rights." (emphasis added)).

149. 15 U.S.C. § 1117(c) (2018) (statutory damages available to persons injured by use of a counterfeit mark); 15 U.S.C. § 1116(d)(1)(B) (2018) (defining counterfeit mark); 17 U.S.C. § 504(c) (2018) (copyright statutory damages of up to \$150,000 per work infringed by defendant, assuming willful infringement).

150. *See* N. Am. Med. Corp. v. Axiom Worldwide, 522 F.3d 1211, 1228 (11th Cir. 2008) ("Similar to the Patent Act, the Lanham Act grants federal courts the 'power to grant injunctions, according to the principles of equity and upon such terms as the court may deem reasonable.' . . . Because [of this similarity] . . . the Supreme Court's *eBay* case is applicable to the instant case." (quoting 15 U.S.C. § 1116(a) (2006))).

151. 17 U.S.C. § 1125(d)(1)(C) (2018).

152. *See, e.g., id.* § 1125(d)(2)(A); *Lucent Techs., Inc. v. lucentucks.com*, 95 F. Supp. 2d 528, 532 (E.D. Va. 2000) (recognizing authority to transfer, but refusing to apply it); Steven Baker & Matthew Lee Fesak, *Who Cares about the Counterfeiters: How the Fight Against Counterfeiting Has Become an In Rem Process*, 83 ST. JOHN'S L. REV. 735 (2009); *see also* Blevins, *supra* note 23, at 1885 (arguing that seizure power is being exercised in criminal IP cases when statute does not contemplate it, and that sites should be able to restore access quickly). There are similar issues that arise in copyright. *See infra* note 210 and accompanying text.

153. *See* *Bio-Tech. Gen. Corp. v. Genentech*, 80 F.3d 1553, 1566 (Fed. Cir. 1996); *Tate Access Floors v. Interface Architectural Res., Inc.*, 132 F. Supp. 2d 365, 375-76 (D. Md. 2001) (citing *Bio-Tech. Gen.*, 80 F.3d at 1566); *see also* *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 861 (Fed. Cir. 2010); Sara Wasserman Rajec, *Tailoring Remedies to Spur Innovation*, 61 AM. U. L. REV. 733, 751-53 (2012)).

154. *Cf. Dugan v. Dugan*, 457 A.2d 1, 92 N.J. 423 (1983) ("Often referred to as 'the most "intangible" of the intangibles,' . . . goodwill is essentially reputation that will probably generate future business." (quoting D. KIESO & J. WEYGANDT, *INTERMEDIATE ACCOUNTING* 570 (3d ed. 1980))).

within the lost profits remedy. When the patent owner is in decline due to a reputational blow, a combination of lower prices—compensable by damages on a “price erosion” theory—and increased advertising, quality-promotion, and marketing expenditures—potentially compensable by damages on a lost profits theory on an increased costs approach—might restore the reputation for value in the long term.¹⁵⁵ This makes it reductive to say that a “potential loss of market share” qualifies as irreparable harm.¹⁵⁶ After all, if brand name recognition goes along with rising sales and advertising expenditures, it appears to be linked to inquiries central to the lost profits analysis.¹⁵⁷ Thus, it seems wrong to assume that a decline in goodwill must be irreparable injury.¹⁵⁸

Mark Lemley agrees with the courts finding loss of goodwill to be irreparable, because it is difficult to quantify. He adds that the infringer’s sales might have been made anyway regardless of the infringement, making damages hard to estimate. Consumers, moreover, may be confused without even realizing it. Thus, he endorses the Eleventh Circuit’s rule in *Commodores Entertainment Corp. v. McClary* that likelihood of confusion evidence also satisfies the irreparable injury requirement, rather than the Ninth Circuit ruling in 2013 that something else also should be shown.¹⁵⁹

It is probably contrary to *eBay* to equate a mere *likelihood* of confusion and the attendant lost sales and possible brand damage with irreparable injury.¹⁶⁰ Numerous cases have rejected efforts post-*eBay* to equate liabil-

155. See *Minco, Inc. v. Combustion Eng’g, Inc.*, 95 F.3d 1109, 1118 (Fed. Cir. 1996) (“This court has clarified that adequate damages can include lost profits due to diverted sales, price erosion, and increased expenditures caused by infringement.” (quoting *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983) (collecting cases))); BLAKE INGLISH, *ECONOMIC DAMAGES IN INTELLECTUAL PROPERTY: A HANDS-ON GUIDE TO LITIGATION* 231, 239 (2006) (applying the theory to trademark infringement).

156. See *Canon Comput. Sys., Inc. v. Nu-Kote Int’l*, 134 F.3d 1085, 1090 (Fed. Cir. 1998); *Tate Access Floors*, 132 F. Supp. 2d at 377; Inghish, *supra* note 155, at 238-39 (corrective advertising theory of damages in trademark).

157. See *Minco*, 95 F.3d at 1118 (“In awarding both lost profits and a reasonable royalty, the trial court used the sale of fused silica as the baseline for measuring damages. . . . [T]he patent holder may recover for an injury caused by” diverted sales of commercial embodiment or *other* reasonably foreseeable lost sales); *Verinata Health, Inc. v. Ariosa Diagnostics*, 329 F. Supp. 3d 1070, 1093-1107 (N.D. Cal. 2018) (plaintiff can recover any lost profits for which there is causal nexus, including convoyed sales and certain foreign sales).

158. See *i4i*, 598 F.3d at 861.

159. Mark Lemley, *Did eBay Irreparably Injure Trademark Law?*, 92 NOTRE DAME L. REV. 1795, 1803-05 (2016) [hereinafter Lemley, *Did eBay*] (citing *Commodores Entm’t Corp. v. McClary*, 648 F. App’x 771 (11th Cir. 2016); *Herb Reed Enters.* 736 F.3d at 1250)); see also Gilson LaLonde & Gilson, *supra* note 52, at 944-49 (making similar arguments).

160. See *Microsoft Corp. v. McGee*, 490 F. Supp. 2d 874, 882 (S.D. Ohio 2007); cf. *Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp. 2d 1089, 1102-03 (W.D. Wash. 2012) (“[L]oss of market share, customers, and access to potential customers [qualifies as] irreparable harm.” (citing *Conceptus, Inc. v. Hologic, Inc.*, No. C

ity and irreparable injury.¹⁶¹ A likelihood of confusion is often established without evidence of actual confusion or harm. The “practical effect” of citing anecdotal evidence of confusion or other evidence highlighting its likelihood “is to reinsert the now-rejected presumption of irreparable harm based solely on a strong case of trademark infringement.”¹⁶²

Trademark law itself is concerned with goodwill and market share flowing from brand equity and recognition, so to find irreparable injury based on these factors is to presume it from the finding of liability itself.¹⁶³ As an empirical matter, actual impairment of well-known marks’ goodwill—defined in some verifiable way rather than as non-infringement *simpliciter*—is a difficult effect to find in surveys or other consumer instruments. Attempts to find reduced recognition or significant loss of positive image often fail.¹⁶⁴ This may be, however, because there was no lost goodwill. To say that because trademark law is about goodwill, any infringement should be presumed enjoined unless the defendant or

09–02280 WHA, 2012 WL 44064, at *2 (N.D. Cal. Jan. 9, 2012), *aff’d*, 696 F.3d 872 (9th Cir. 2012)).

161. See, e.g., *Fox Broad. Co. v. Dish Network LLC*, 583 F. App’x 618 (9th Cir. 2014) (denying injunctive relief where irreparable harm forecasts were speculative); *Apple, Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1333 (Fed. Cir. 2014) (no injunction despite infringement where defendant licensed numerous other potential infringers for money), *overruled* by *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015); *Herb Reed Enters.*, 736 F.3d at 1250 (likelihood of confusion not the same as irreparable injury to reputation).

162. *Herb Reed Enters.*, 736 F.3d at 1250.

163. See *N.Y. Stock Exch., Inc. v. N.Y.C., N.Y., Hotel, LLC*, 293 F.3d 559 (2d Cir. 2002); Case 1/81, *Pfizer v. Eurim-Pharm*, 1981 E.C.J. para. 8; Martin Senftleben, *The Trademark Tower of Babel—Dilution Concepts in International, US and EC Trademark Law*, in *EUROPEAN TRADEMARK LAW: COMMUNITY TRADEMARK LAW AND HARMONIZED NATIONAL TRADEMARK LAW* 46-47, 55-56 (Tobias Jehoram, Constantinus van Nispen & Tony Huydecoper eds., 2010).

164. See Barton Beebe, Roy Germano, Christopher Jon Sprigman & Joel H. Stecke, *Testing for Trademark Dilution in Court and in the Lab* (forthcoming 2019), <https://ssrn.com/abstract=2960082> [<https://perma.cc/DK6S-EES9>] (providing empirical evidence that strong brands do not get impaired much by dilution); Maureen Morrin & Jacob Jacoby, *Trademark Dilution: Empirical Measures for an Elusive Concept*, 19 J. PUB. POL’Y & MKTG. 265, 274 (2000) (noting that some strong brands may be very difficult to dilute because their links in the brain to specific qualities or experiences are hard to break); *Part C Dilution: A Review of Recent Developments*, in 10 *INTELLECTUAL PROPERTY LAW AND PRACTICE* 574 (Hugh Hansen ed., 2008) (Jacob Jacoby and Maureen Morrin provided “strong evidence . . . that the strongest marks are impervious to blurring”); see also Barton Beebe, *A Defense of the New Federal Trademark Antidilution Law*, 16 *FORDHAM INTELL. PROP. MEDIA & ENT. L.J.* 1143, 1150 (2004) (strong trademarks like *FORD* not harmed much by coexisting with other persons and companies with that name); Ralph Brown, *Advertising and the Public Interest: The Legal Protection of Trade Symbols*, 57 *YALE L.J.* 1165, 1191 (1948) (impossible to measure trademark-related desire in brain); Ramsi Woodcock, *The Obsolescence of Advertising in the Information Age*, 127 *YALE L.J.* 2270, 2286 (2017) (brand recognition and preferences may be irrational); Senftleben, *Trademark Tower*, *supra* note 163, at 69 (questioning aspects of European dilution law as lacking foundation).

public will be disproportionately injured, is to say something a lot like the Federal Circuit did in *eBay* before the Supreme Court decision.¹⁶⁵

Some scholars contend that it is more difficult to assess damages in a case of one-on-one trademark infringement such as passing off than it is in a patent case.¹⁶⁶ The trademark owner might have preferred that the trademark be inviolate, rather than that it be compensated for some confusion, if it was not seeking a licensing fee in the first place.¹⁶⁷ The same, however, might be true of NPEs who would love to dominate an industry that they feel they invented in a university lab or center, only to see some big company run away with the money.¹⁶⁸ Their only option, in many cases, is to sell their patents to an aggregator that can enforce it, just as a songwriter or composer may sell the publishing to a monolith like Sony/ATV.¹⁶⁹ Other patentees do practice their patents, and, like Apple in its battle with Samsung, might also prefer to exclude infringers rather than to be paid by them.¹⁷⁰ Even if these entities find it easier to generate admissible damages theories than do NPEs, they may still suffer the same types of purportedly irreparable injury as trademark owners: “ecosystem effects,” involving sales of other or future products that may follow from the sales that the patent owner obtains a monetary award for (such as upgrades, replacement devices, accessories, services, etc.) and “network effects,” involving the post-sale promotional effect of a lost sale (word-of-mouth ad-

165. See TIM DORNIS, TRADEMARK AND UNFAIR COMPETITION CONFLICTS: HISTORICAL-COMPARATIVE, DOCTRINAL, AND ECONOMIC PERSPECTIVES 87 (2017) (citing Oliver Mitchell, *Unfair Competition*, 10 HARV. L. REV. 275, 280-81 (1986)) (trademarks and trade secrets are simply part of goodwill); *id.* at 86 (citing Weinstock, Lubin & Co. v. Marks, 42 P. 142, 145 (Cal. 1895); Sartor v. Schaden, 101 N.W. 511, 513 (Iowa 1904)) (goodwill under California common law of nineteenth century was a means for equity to provide a remedy for theft of goodwill generated by investing a common word or phrase with secondary meaning or construction by spending money and selling good products); *id.* at 76 (“concept of goodwill has governed . . . substantive trademark law” since 1800s); see also CAE, Inc. v. Clean Air Eng’g, Inc., 267 F.3d 660, 672 (7th Cir. 2001) (Lanham Act about goodwill).

166. See Lemley, *Did eBay*, *supra* note 159, at 1803 (citing other scholars).

167. See *id.* at 1802-03.

168. An example is David Gelernter, whose story I briefly describe in HANNIBAL TRAVIS, COPYRIGHT CLASS STRUGGLE: CREATIVE ECONOMIES IN A SOCIAL MEDIA AGE 80-81 (2018).

169. See *id.* at 85-86 (citing James McDonough III, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L.J. 189, 199-201 (2006)).

170. See *Apple vs. Samsung: The Clash of the Smartphones - KWHS*, KNOWLEDGE@WHARTON HIGH SCHOOL (Aug. 13, 2012), <http://kwhs.wharton.upenn.edu/2012/08/apple-vs-samsung-the-clash-of-the-smartphones> [https://perma.cc/AM68-93DT] (relating how Apple co-founder Steve Jobs thought iPhone was being stolen by Google and implementers of its Android operating system like Samsung, and vowed to “go thermonuclear war” over the iPhone “theft,” which observer thought could mean that Apple could gain monopoly on smartphones and tablets by winning lawsuits).

vertising, display of the purchase as a status symbol, raising applications barriers to entry, etc.).¹⁷¹

B. *Complex Irreparability*

The post-*eBay* emphasis on goodwill/market share is pronounced. In *i4i Ltd. Partnership v. Microsoft Corp.*, the Federal Circuit relied upon “strong circumstantial evidence” that Microsoft’s infringement resulted in a loss of “market share,” which could have reduced goodwill and name recognition in ways that were “particularly difficult to quantify” as damages.¹⁷² It also mentioned that the plaintiff had to “change its business strategy to survive.”¹⁷³ In *Apple v. Samsung*, the Federal Circuit reiterated that “[w]here two companies are in competition against one another, the patentee suffers the harm—often irreparable—of being forced to compete against products that incorporate and infringe its own patented inventions”¹⁷⁴

Patent law’s new focus on goodwill is also perverse in some ways. Between competitors, it is difficult to imagine a form of patent infringement that would be worth filing a lawsuit over, but which does not affect market share, reputation with lost customers, or “access to potential customers.”¹⁷⁵ Satisfying this requirement involves showing little more than that patent infringement has occurred and a competitor is to blame.¹⁷⁶ Perhaps more importantly, utility patent infringement does not require a likelihood of confusion, passing off, or other theft of goodwill.¹⁷⁷

The emphasis on goodwill systematically favors competitors who are seeking injunctions in order to perpetuate or recreate a monopoly-like position. The Federal Circuit has considered status as a practitioner of the patent under three of the four *eBay* factors.¹⁷⁸ An NPE that simply wants

171. *Apple, Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 640-41, 645 (Fed. Cir. 2015) (internal quotation marks omitted).

172. *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed. Cir. 2010).

173. *Id.*

174. *Apple*, 809 F.3d at 641 (alteration in original) (quoting *Apple, Inc. v. Samsung Elecs. Co.*, No.: 12-CV-00630-LHK, 2014 WL 7496140, at *11 (N.D. Ca. Aug. 27, 2014)).

175. *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1151-52 (Fed. Cir. 2011); see also *Payless Shoesource, Inc. v. Reebok Int’l, Inc.*, 998 F.2d 985, 991 (Fed. Cir. 1993) (“Moreover, the court, in concluding that the public interest favored keeping Payless’ lower priced shoes on the market [erred] Were that to be a justification for patent infringement, most injunctions would be denied because copiers universally price their products lower than innovators.”).

176. *Cf. Wasserman Rajec*, *supra* note 153, at 733, 759.

177. *Cf. Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1161 (9th Cir. 2007) (noting that “the Copyright Act, unlike the Trademark Act, does not protect a copyright holder against acts that cause consumer confusion”).

178. See *i4i P’ship v. Microsoft Corp.*, 598 F.3d 831, 861-64 (Fed. Cir. 2010) (plaintiff’s practice of patent and products considered in support of affirming finding of irreparable injury, no adequate remedies as law, and balance of hardships).

to be paid some approximation of the value added by its invention, as measured by the cost that an infringer would incur to design around the invention and that it is willing to pay as a settlement instead, may not present a risk of monopoly.¹⁷⁹ Yet it is typically denied an injunction despite presenting less of a threat to the public interest. Not only is this in tension with *eBay*'s public-interest factor, as described below, it undermines the other three factors as well. An NPE may have a severe injury because, as the Federal Trade Commission observed, a university or technology incubator/"design house" may have to tear up its plan to make and license new inventions rather than marketing or retailing older ones.¹⁸⁰ By having to fundamentally alter its strategy and perhaps its workforce, it may suffer more hardship than patentees with large revenue streams and many available damages theories.

Preferring active competitors' motions for injunctive relief undermines the requirement of irreparable injury. Practicing rightsholders are more likely to have lost profits or higher reasonable royalties.¹⁸¹ NPEs may lack evidence of sales, profits, costs, market structure, manufacturing capability, and the like that support a compensatory damages award.¹⁸²

179. *Cf.* *Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002) ("The economic relationship between the patented method and non-infringing alternative methods, of necessity, would limit the hypothetical negotiation [of a reasonable royalty].").

180. FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 229 (2003).

181. *See* *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1285 (Fed. Cir. 2017) (lost profits frequently unavailable under *Panduit*); *Oracle Corp. v. SAP AG*, 765 F.3d 1081, 1088-90 (9th Cir. 2014) ("cost to the seller" may provide lower bound to reasonable royalty, as "benefit to the buyer" may influence upper bound); *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978) (without proof of patentee's profit levels and "manufacturing and marketing capability to exploit the demand" for its patented product, patentee may not recover lost profits award); Mark Glick & David Mangum, *The Economics of Reasonable Royalty Damages: The Limited, Proper Role of the So-Called "Analytical Method"*, 49 J. MARSHALL L. REV. 1, 27-28, n.131 (2015) (noting that "minimum [royalty] could be quite low—at or near zero" if a formerly practicing or never-practicing entity does not "operate" (quoting Gregory Leonard & Lauren Stiroh, *A Practical Guide to Damages, in* ECONOMIC APPROACHES TO INTELLECTUAL PROPERTY, LITIGATION AND MANAGEMENT 27, 53 (Gregory Leonard & Lauren Stiroh eds., 2005))); *cf.* *Microsoft, Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1041-42 (9th Cir. 2015) (court accepted argument that Google, a "'sophisticated, substantial technology firm[] with [a] vast array[] of technologically complex products,' would obtain more value" than "an independent entity," and noted that unless defendant has agreed otherwise by contract, one reasonable royalty factor is excluding competitors and preserving its monopoly (alteration in original) (citing *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970))).

182. *See* *Meridian Mfg., Inc. v. C&B Mfg., Inc.*, 340 F. Supp. 3d 808, 848-50 (N.D. Iowa 2018); *Sonos, Inc. v. D&M Holdings Inc.*, Civil Action No. 14-1330, 2017 WL 5633204 (D. Del. Nov. 21, 2017); *Chico's Fas, Inc. v. Clair*, No. 2:13-cv-729, 2015 WL 3496003, at *4 (M.D. Fla. June 3, 2015); *Atlas IP, LLC v. Medtronic, Inc.*, No. 12-cv-23309, 2014 WL 5741870, at *6 (S.D. Fla. Oct. 6, 2014); *IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687, 691 (E.D. Tex. 2010). *But see* *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015) (jury

The difficulty persuading potential infringers to take a license, given no realistic threat of an injunction, may mean that the existing licenses reflect a royalty rate of zero, which some judges may take to mean that the reasonable royalty overall is zero, other evidence not being present.¹⁸³ The lack of an established royalty may be fatal to actual damages in copyright and trademark law, although not to statutory damages.¹⁸⁴

Achieving more clarity about whether injury is “irreparable” may involve evidence of at least four types. First, all of the evidence that supports the request for monetary relief in the case, if any, will tend to show whether the harm may be repaid in damages. If there is no plea for damages, the court could order production of sales, profitability, projected launch date, forecasting, goodwill, valuation, and other data, and decide whether experts might have used such evidence to estimate lost profits or a reasonable royalty, had such relief been sought. In copyright and trademark cases, the statutory damages thresholds may need to be compared to the quantum of remaining harm that could not be recovered as actual damages. Second, the comparability of established licenses and offers to license could be examined for evidence as to whether there is no good benchmark for minimum monetary relief in the case. Third, the nexus

may decide whether reasonable methodology is correct); *Eidos Display, LLC v. Chi Mei Innolux Corp.*, No. 6: 11-CV-00201-JRG, slip op. (E.D. Tex. motion to exclude expert opinions denied Mar. 22, 2017), <https://cases.justia.com/federal/district-courts/texas/txedce/6:2011cv00201/129808/722/0.pdf> [<https://perma.cc/AZ5G-8CQG>] (where plaintiff’s damages expert opined on advantages of patented technology, whether opinion failed to account for complexity of technology was for the factfinder, so court did not exclude opinions under *Ericsson* or *VirmetX*); *MAZ Encryption Techs. LLC v. BlackBerry Corp.*, CA No. 13-304, 2016 WL 4490706 (D. Del. Aug. 25, 2016) (declining to exclude opinion as to licenses to patents other than those in suit, holding that criticisms went to weight of testimony, not admissibility).

183. See *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1334-35 (Fed. Cir. 2009) (suggesting that jury is entitled to find reasonable royalty rate is 0% if that was within range of what defendant suggested, or if plaintiff did not object); *Interwoven, Inc. v. Vertical Comput. Sys.*, No. CV 10-04645, 2014 WL 490996, at *45 (N.D. Cal. Feb. 4, 2014) (reasonable royalty of zero may result); *Sonos*, 2017 WL 5633204 (excluding plaintiff’s evidence of reasonable royalty where product contained noninfringing features, expert did not analyze how demand for device is driven exclusively by infringing features, and expert did not analyze value of specific infringing features in context of many other features device offered); J. Gregory Sidak, *Apportionment, FRAND Royalties, and Comparable Licenses After Ericsson v. D-Link*, 2016 U. ILL. L. REV. 1809 (2016) (observing that patents declared to be standards-essential and encumbered with obligations to be licensed on fair, reasonable, and nondiscriminatory terms may have an incremental impact on the price of a patent portfolio that approaches zero if minor patents are bundled with “pioneering” ones). There could be other evidence supporting a royalty above zero under *Georgia-Pacific*. 318 F. Supp. at 1120; see also *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1350 (Fed. Cir. 2000).

184. See, e.g., *Dash v. Mayweather*, 731 F.3d 303, 317-25 (4th Cir. 2013) (where there was no licensing agreement or royalty rate on point between the parties, damages based on speculative rate would be improper in copyright); *Sands, Taylor & Wood Co. v. Quaker Oats Co.*, 978 F.2d 947 (7th Cir. 1992) (similar, under trademark).

between the defendant's particular infringing features and the plaintiff's allegedly difficult-to-measure damages should be proven.¹⁸⁵ Finally, any evidence that the defendant will not be able to pay an award, should it be calculable, would tend to show that the injury is irreparable.

C. Precision About Adequacy of Legal Remedies

Under some variants of irreparable injury analysis, an injury that would not be completely or promptly repaired via a legal remedy is irreparable.¹⁸⁶ This is an exception that arguably threatens to swallow the rule that irreparable injury is required, insofar as injury is frequently difficult to estimate and, once estimated, to cure rapidly and fully. Only perhaps in cases of massive overcompensation due to statutory damages or irrationally high royalties would the plaintiff be assured of being made completely whole.

Adequate remedies at law as a prong sometimes does not add much to the analysis of whether injury is irreparable.¹⁸⁷ Some opinions suggest that a potential for future harm means that no legal remedy is adequate. This collapses the inquiry into one relating to liability along with, at times, mootness and temporality.¹⁸⁸ It is particularly reductive in indirect infringement cases, in which continued infringement with notice of the cop-

185. See *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1363 (Fed. Cir. 2013); *Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1324 (Fed. Cir. 2012). Under recent authority, this nexus standard may be satisfied if the infringing feature is one of several that drives consumer demand, not necessarily the only one. See *Genband US LLC v. Metaswitch Networks Corp.*, 861 F.3d 1378, 1383 (Fed. Cir. 2017) (citing *Apple, Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 644 (Fed. Cir. 2015)).

186. See *North v. Peters*, 138 U.S. 271, 281 (1891) ("adequate, and complete remedy at law" should be "as complete, prompt and efficient a remedy for" illegal act or acts); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d, 1197, 1220 (C.D. Cal. 2007) (legal remedy inadequate if plaintiff would have to approach court again or file new suit for additional infringing acts, and if some consequences of infringement might escape measurement); see also *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 866 (9th Cir. 2017) (damages based on lost licensing fees would not be complete relief as to "goodwill, negotiating leverage, and non-monetary terms in the Studios' licenses" with streaming services).

187. See *VidAngel*, 869 F.3d at 865-66 (not devoting a separate analysis to adequate remedy at law); *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 861-63 (Fed. Cir. 2010) (considering plaintiff's status as practicing its patent under both factors, as well as its need to change its business strategy, reduced market share and brand equity, and harm to goodwill); *hiQ Labs, Inc. v. LinkedIn Corp.*, 273 F. Supp. 3d 1099, 1105-06 (N.D. Cal. 2017) (threat plaintiff will have to "shutter its operations" is irreparable harm (collecting cases) (internal quotation marks omitted)).

188. See *Microsoft Corp. v. McGee*, 490 F. Supp. 2d 874, 882 (S.D. Ohio 2007) ("With regard to the second factor, the Sixth Circuit has explained that where there is potential for future harm from infringement, there is no adequate remedy at law." (citing *Audi v. D'Amato*, 469 F.3d 534, 550 (6th Cir. 2006))).

right holder's objections or the unauthorized nature of the act is part of the liability analysis.¹⁸⁹

One way to make this factor meaningful would be to relate it to the question of whether and to what extent others have agreed to license the right at issue from the plaintiff; if they have, these licenses would provide benchmarks that would support a reasonable royalty award under a hypothetical negotiation standard.¹⁹⁰ Another way to avoid this factor's redundancy is to distinguish cases in which the market is mature, and losses more measurable, and the market is more incipient or unformed, in which case losses may be nearly impossible to estimate.¹⁹¹ A third way is to distinguish between infringers who cannot afford to pay a judgment and those that can.¹⁹² A fourth is to inquire whether statutory damages are available—as with registered trademarks that are counterfeited or cybersquatted upon and copyrights that are timely registered—regardless of difficulties estimating lost profits due to reduced goodwill or share or changes in negotiating positions.¹⁹³

189. See *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1146, 1172 (9th Cir. 2007); *China Cent. Tel. v. Create New Tech. (HK) Ltd.*, No. 15-01869, 2015 WL 3649187, at *11-12 (C.D. Cal. June 11, 2015) (holding that plaintiffs were likely to succeed on merits because defendant continued to allow specific infringing material to be made available on its computer system, and that injury was irreparable because continuing infringement was threatened (citing, *inter alia*, *Stuhlbarg Int'l Sales Co. v. John D. Brush & Co.*, 240 F.3d 832, 841 (9th Cir. 2001), as stating: "Evidence of threatened loss of prospective customers or goodwill certainly supports a finding of the possibility of irreparable harm.")).

190. See *Oracle Corp. v. SAP AG*, 765 F.3d 1081, 1093 (9th Cir. 2014) (holding that where plaintiff "has no history of granting similar licenses," and offered no "evidence of 'benchmark' licenses in the industry approximating the hypothetical license in question here," it had insufficient evidence of the amount of a hypothetical license to support the damage award); *Whitserve, LLC v. Comput. Packages, Inc.*, 694 F.3d 10, 30 (Fed. Cir. 2012) (seemingly agreeing with infringer that reasonable royalty must be based on comparable marketplace royalties); *cf.* *Microsoft, Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1043-44 (9th Cir. 2015) (holding that trial court may "reject the past licenses as too contextually dissimilar to be useful to the [reasonable and nondiscriminatory royalty] rate calculation").

191. See *Waymo LLC v. Uber Techs., Inc.*, No. C 17-00939, 2017 WL 2123560, at *11 (N.D. Cal. May 11, 2017) (misappropriation of trade secrets relating to self-driving car technology involved a technology that had yet to be included in a business model of any kind, so that failure to preserve a competitive advantage would result in irreparable harm); *Callaway Golf Co. v. Acushnet Co.*, 585 F. Supp. 2d 600, 621 (D. Del. 2008) (emphasizing that plaintiff's industry was at a crucial juncture), *aff'd in part, rev'd in part*, 576 F.3d 1331 (Fed. Cir. 2009).

192. See *SAS Inst., Inc. v. World Programming Ltd.*, 874 F.3d 370, 387 (4th Cir. 2017) ("Injunctions have also sometimes been deemed appropriate based on barriers to collectability after judgment."); *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 286 (2d Cir. 2012) (irreparable harm finding supported by low chance defendant could afford to pay judgment (citing *Omega Importing Corp. v. Petri-Kline Camera Corp.*, 451 F.2d 1190, 1195 (2d Cir. 1971))); *China Cent. Television.*, 2015 WL 3649187, at *13 (citing *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d 1197, 1217 (C.D. Cal. 2007)).

193. See *Lemley & Weiser*, *supra* note 81, at 803 n.98 (noting that copyright, unlike patent, offers "statutory damages that can far exceed that necessary to com-

Uncertainty in calculating damages seems to have drastically different effects across bodies of IP law. If a “substantial amount of speculation and guesswork” is enough to show that damages are an inadequate remedy in copyright cases, the question arises why the speculation involved in NPEs obtaining a “reasonable royalty” when they have no sales, and the guesswork of that inquiry itself, do not make that remedy inadequate in many patent law cases.¹⁹⁴ The answer seems to be that in some ways, the decision on remand in *eBay* seems to be more authoritative than the Supreme Court decision.¹⁹⁵

While the Supreme Court decision in *eBay* was even-handed and largely historical, and therefore not inconsistent in principle with NPEs obtaining injunctive relief because they have no lost sales or market share, the concurrence was more economic in orientation and focused on disfavoring NPEs. The idea that NPEs are different and should not obtain injunctive relief attracted only three votes in *eBay*.¹⁹⁶ Nevertheless, it has become the consensus view that this difference is nearly dispositive. In 2009-2012, as the dust was settling on *eBay*'s implications, the percentage of all patent cases that was made up of NPEs obtaining permanent injunctions against infringement was only 0.00% to 0.17%, or between zero and

pensate plaintiffs,” but rejecting idea that injunctions should be denied to copyright plaintiffs on this ground, although seemingly because—as explained later—excessive statutory damages would continue to overdetter and deliver a windfall, and not because excessive statutory damages do not qualify as adequate remedy at law); see also Trademark Counterfeiting Act of 1984, Public Law 98-473 (October 12, 1984), *codified in pertinent part at* 15 U.S.C. § 1117(b)-(c); Anticybersquatting Consumer Prot. Act of 1996, Pub. L. 104-153 (July 2, 1996), *codified in pertinent part at* 15 U.S.C. § 1117(d), 1125(d); Lemley, *Did eBay*, *supra* note 159, at 1807 (describing standards of lost sales with actual confusion, or defendant's profits with willfulness, in Second, Ninth, and other circuits) (collecting cases).

194. Christopher Phelps & Assocs., LLC v. Galloway, 492 F.3d 532, 545 (4th Cir. 2007); accord *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 866 (9th Cir. 2017) (injury in copyright is irreparable when it “cannot readily be remedied with damages”); *China Cent. Television.*, 2015 WL 3649187, at *12 (“Unauthorized and uncompensated internet streaming that competes directly with the television programming of a copyright owner and its authorized licensees causes harm that is ‘neither easily calculable, nor easily compensable.’” (quoting *Fox Television Stations, Inc. v. Barrydriller Content Sys., PLC*, 915 F. Supp. 2d 1138, 1147 (C.D. Cal. 2012))); *Fox Television Stations, Inc. v. FilmOn X LLC*, 966 F. Supp. 2d 30, 50 (D.D.C. 2013) (“The damages Plaintiffs face are ‘neither easily calculable, nor easily compensable’” (quoting *Barrydriller*, 915 F. Supp. 2d at 1147))). For criticisms of patent law's uncertainties as to the amount of royalties, see Eli Fink, *The New Measure of Damages in Patent Cases*, 29 J. PAT. OFF. SOC'Y 822 (1947); Michael Risch, *(Un)Reasonable Royalties*, 98 B.U. L. REV. 187 (2018); Roy Weinstein, Ken Romig, & Frank Stabile, *Taming Complex Intellectual Property Compensation Problems*, 22 FED. CIR. B.J. 547 (2011); Bo Zeng, *Lucent v. Gateway: Putting the Reasonable Back into Reasonable Royalties*, 26 BERKELEY TECH. L.J. 329 (2011). Reasonable royalties range from less than 1% to 33% or more of the sales price, from less than \$1 to more than \$30 per unit, etc. See JOHN SKENYON, CHRISTOPHER MARCHESE, & JOHN LAND, *PATENT DAMAGES LAW & PRACTICE* § 3.40 (2012).

195. *MercExchange, L.L.C. v. eBay Inc.*, 500 F. Supp. 2d 556 (E.D. Va. 2007).

196. See *eBay*, 547 U.S. at 396 (Kennedy, J., concurring).

about two cases per 1,000 filed.¹⁹⁷ Other studies suggest that an NPE's chance of obtaining a permanent injunction ranges from 75% lower than the chance an operating company would have, to an almost negligible chance due to a virtual "per se" prohibition of their receiving injunctions.¹⁹⁸ According to LexMachina, in 2012-2015, there were 782 permanent injunctions issued on cases filed anytime from 2005-2015, even though more than 36,000 cases were filed, 2007-2015.¹⁹⁹ In 2012, preliminary injunctions were obtained in 0.27% of patent cases, compared with 2.9% in 2000 and 2.47% in 2006.²⁰⁰ If, in 2008, the problem was that patents were enforced like real property without having the clear bounda-

197. See Kirti Gupta & Jay Kesan, *Studying the Impact of eBay on Injunctive Relief in Patent Cases*, HOOVER INSTITUTION AT STANFORD UNIVERSITY IP² WORKING PAPER NO. 17004/RESEARCHGATE (July 10, 2015), draft at 27, https://www.researchgate.net/publication/315447307_Studying_the_Impact_of_eBay_on_Injunctive_Relief_in_Patent_Cases [<https://perma.cc/996E-MUW6>].

198. See Christopher Seaman & Ryan Holte, *Patent Injunctions on Appeal: An Empirical Study of the Federal Circuit's Application of eBay*, 92 WASH. L. REV. 145, 147 (2017) (noting that "studies have found that after eBay, district courts 'appear to have adopted a de facto rule against injunctive relief' for non-practicing patentees and other patent owners 'who do not directly compete . . . against an infringer' in a product market." (quoting Christopher Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 IOWA L. REV. 1949, 1953 (2016); Colleen Chien & Mark Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 11 (2012); Karen Sandrik, *Reframing Patent Remedies*, 67 U. MIAMI L. REV. 95, 111 (2012))); *id.* (citing Seaman, *supra*, at 1983 fig. 1, 1988 fig. 3 for nearly fourfold difference in chances to obtain an injunction, 16% to 72%); *id.* at 162-63 (operating companies receive permanent injunctions most of the time, about 72-80% of time based on sample, post-eBay, while NPEs whose requests for injunction are opposed receive one only about 7% of time (citing Chien & Lemley, *supra*, at 9-10, 9 n.46; Ernest Grumbles III et al., *The Three Year Anniversary of eBay v. MercExchange: A Statistical Analysis of Permanent Injunctions*, INTELL. PROP. TODAY, Nov. 2009, at 25); see also Ryan Holte, *The Misinterpretation of eBay v. MercExchange and Why: An Analysis of the Case History, Precedent, and Parties*, 18 CHAP. L. REV. 677 (2015). These authors refer to patent assertion entities rather than NPEs, the former term should probably be avoided, both because it rests upon assumptions about an entity's intentions or business model that may be difficult to verify in light of prototypes or joint venture/consulting agreements being trade secrets in many cases, and because it is a more pejorative connotation that may be unfair to individual inventors or those making a market that benefits individual inventors. See Seaman & Holte, *supra*, at 147, 163 (definition of patent assertion entities is based on business strategy and failing to commercialize); *cf.* Christopher Cotropia, *The Individual Inventor Motif in the Age of the Patent Troll*, 12 YALE J.L. & TECH. 52 (2009) (individual inventors may be unfairly tarnished with term "troll" based on "patent assertion"). Compare Gupta & Kesan, *supra* note 197, draft at 1-2 (noting that for empirical purposes, it may make sense to distinguish, based on U.S. PTO assignment records, between operating companies and NPEs including individual inventors, patent holding companies, and technology development companies, and warning that some individual inventors may look like patent assertion entities simply by limiting their own liability).

199. Lex Machina—Patent Litigation Year in Review 2015, at 1, 25, <http://pages.lexmachina.com/rs/098-SHZ-498/images/2015%20Patent%20Litigation%20Year%20in%20Review.pdf> [<https://perma.cc/4FWL-KTT8>].

200. See Gupta & Kesan, *supra* note 197, at 10 fig. 4; see also Andrew Beckerman-Rodau, *The Supreme Court Engages in Judicial Activism in Interpreting the Patent*

ries it has, the problem now may be that many patents are barely enforceable but it costs millions of dollars to define their boundaries anyway.²⁰¹

These numbers may overstate the impact of *eBay* on NPEs. One regression analysis finds that they experienced a similar reduction in chances of obtaining an injunction as operating companies, but had simply started with a lower chance.²⁰² On the other hand, the numbers understate the impact, because NPEs could read the writing on the wall post-*eBay*, and filed for injunctions up to 45% less often.²⁰³ Much of the impact of the *eBay* concurrence, its adoption on remand, and the general culture of *eBay* is probably felt before complaints or even patents are even filed.

Are these dramatic effects justified by *eBay*'s holding? The opinion of the Court in *eBay* did not fully accept Justice Kennedy's concurrence, which dismissed the notion that NPEs could have any possible entitlement to injunctive relief against patent infringement.²⁰⁴ On the other hand, the decision of the district court on remand created a strict dichotomy between patentees using injunctions as a "shield" for "goodwill" or "market share," and others using them to "extract money," who are never enti-

Law in eBay, Inc. v. MercExchange, L.L.C., 10 TUL. J. OF TECH. & INTELL. PROP. 165, 192 (2007); Holte, *supra* note 198, at 679, 719.

201. See JAMES BESSEN & MICHAEL MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS AND LAWYERS PUT INNOVATORS AT RISK 46-72 (2008); CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION, at xvi (2011); Erin Coe, *USPTO Director Wants to Oversee a PTAB Case*, LAW360 (May 3, 2016), <https://www.law360.com/articles/791561/exclusive-uspto-director-wants-to-oversee-a-ptab-case> (noting that "average costs are \$334,000 through a PTAB hearing and \$469,000 through appeal, whereas in patent litigation, average costs are significantly higher per party: \$873,000 when less than \$1 million [is at issue]" and more than \$873,000 in cases in which \$1+ million is at issue).

202. See Gupta & Kesan, *supra* note 197, draft at 38. NPEs had a much lower chance of winning a permanent injunction motion even in 2003-2004, obtaining one a little more than a third as often as operating companies in 2003, or one NPE injunction in about every 250 patent cases filed by an NPE in 2003, and a little more than half as often as operating companies in 2004, or one NPE injunction in about every 125 cases filed. See *id.* at 27. There are two ways that this study might have controlled for factors that disproportionately confront NPEs in ways that eliminated an adverse effect on them that *eBay* did have. First, it controlled for the length of the case, which may be longer for failed operating companies due to some firms' scorched-earth approach to their patents, which drags out case pendency times. Second, it included failed startups in the definition of NPE, because failed startups are more likely to obtain preliminary injunctive relief, which washes out the trend that patent holding companies are less likely to obtain it. See *id.* at 32-35; Christopher Cotropia, Jay Kesan & David Schwartz, *Heterogeneity Among Patent Plaintiffs: An Empirical Analysis of Patent Case Progression, Settlement, and Adjudication*, 15 J. EMP. LEG. STUD. 80, 103-11 (2018).

203. See Gupta & Kesan, *supra* note 197, draft at 23 (NPEs filed for permanent injunctions 45% less often post-*eBay*, although pre-*eBay* column in table seems to be mislabeled in draft).

204. *eBay*, 547 U.S. at 394 (warning against "categorical" or "broad" standards granting or denying injunctions to groupings of entities).

bled to injunctive relief.²⁰⁵ Thus, one of the most powerful effects of *eBay* seems to be at odds with the decision of the *eBay* Court to reject Justice Kennedy's view.²⁰⁶

In this emerging post-*eBay* consensus view, only those who already have money are entitled to use the courts to extract even more money from competitors. To take a phrase from the Book of Matthew, "to those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away."²⁰⁷ The greater the market share of the plaintiff, the more likely an injunction may issue; best of all for the plaintiff's chances is being part of a duopoly, it seems.²⁰⁸

Being more precise about adequate remedies at law should involve distinguishing between causes of action that allow damages to be awarded in a way that is untethered to the vagaries of the marketplace, therefore guaranteeing an adequate remedy at law. Courts could also be more sophisticated about whether those who only license out their rights in the context of patents have no adequate remedy when there are no takers or admissible royalty agreements and therefore no clear lost profits or reasonable royalties. Market maturity and structure may also shape the adequacy of legal remedies by establishing a connection between past performance and potential future scenarios. Unformed or complex markets may experience more uncertainty (and irreparability or inadequacy of damages) than those with mature players and established patterns.²⁰⁹

IV. PRECISION ABOUT PROPORTIONALITY

A. *Proportionality as Notice*

Annemarie Bridy conceptualizes injunctions against nonparty ISPs and cloud providers, like forfeitures and seizures affecting third parties and initiatives like SOPA, as notice failures.²¹⁰ Christina Bohannon and Herbert Hovenkamp argue that notice should be at or near the center of a court's decision about whether to issue an injunction in a patent case.

205. *MercExchange, L.L.C. v. eBay Inc.*, 500 F. Supp. 2d 556 (E.D. Va. 2007).

206. See John M. Golden, "Patent Trolls" and Patent Remedies, 85 TEX. L. REV. 2111, 2113-14 (2007) (observing that emerging de facto rule is in tension with *eBay's* opinion of the Court). *But cf.* Gupta & Kesan, *supra* note 197, draft at 1 (suggesting that unanimous Court considered "lack of commercial activity" and "willingness to license" on part of plaintiff in holding plaintiff not automatically entitled to injunction).

207. *Matthew* 25:29.

208. See Wasserman Rajec, *supra* note 153.

209. See Lemley & Weiser, *supra* note 81, at 820 (noting that injunctions may deserve to be withheld in favor of liability rules when "market-based benchmark arrangements provide a reliable guide for the appropriate price").

210. Bridy, *supra* note 108, at 777-81, 798-818; see also Andy Sellars, *The In Rem Forfeiture of Copyright-Infringing Domain Names*, SSRN (2011), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1835604 [<https://perma.cc/JH5R-7Z9B>]; *Not in My Backyard*, *supra* note 107.

The main justification for *eBay*, they suggest, is that NPEs do not place alleged infringers on notice of their rights by entering the market with embodiments of their patents.²¹¹ Clear, particularized, and prompt communications as to the ownership and scope of property rights prevent sunk costs by developers and innovators unaware of the right(s).²¹² Submarine tactics and abstruse claims threaten to increase the social cost of the patent system in a particular case or area, overwhelming its social benefit.²¹³

When implementers of patented technologies have invested vast sums on a device or a process, only to have broad or undiscoverable patents thrust upon them, they may be “held up” for excessive royalties.²¹⁴ On the other hand, once notice has been provided, the courts should be attuned to concerns that patentees will be undercompensated by the difficulty of calculating damages.²¹⁵ Thus, one possible theory of the balance of hardships under *eBay* (or at least *eBay* on remand and the resulting myth or trope of *eBay*) could relate primarily to the unforeseeability of infringement claims by NPEs.

The drawback with a notice-based approach to *eBay* as a whole is that the opinion did not use notice in its reasoning, which was based on statutory text, history, and precedent rather than the economics of notice and surprise leading to holdup.²¹⁶ Even Justice Kennedy’s concurring opinion was primarily concerned about overcharges on negotiated royalties due to the injunction’s use as “leverage” and “a bargaining tool,” not notice.²¹⁷ Although this has some roots in notions of equity as substantial justice untainted by formalities, it is in conflict with Justice Kennedy’s own jurisprudence on fair prices, which sets rather strict parameters for antitrust lawsuits based on hard bargains or high prices.²¹⁸ That jurisprudence,

211. See BOHANNAN & HOVENKAMP, *supra* note 201, at 78-81; see also *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 397 (2006) (Kennedy, J., concurring) (“The potential vagueness and suspect validity of some of these [business method] patents may affect the calculus under the four-factor test.”).

212. See BOHANNAN & HOVENKAMP, *supra* note 201, at 78-81.

213. *Cf. id.*

214. See *id.* at 81.

215. See *id.* at 81-82.

216. See *eBay*, 547 U.S. at 391; see also *id.* at 395 (Roberts, C.J., concurring).

217. See *id.* at 396; see also FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 216 (2003).

218. See *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 209-10, 225 (1993) (holding that scheme allegedly intended to punish generic cigarette manufacturer for its low prices and to induce it to join pricing strategies of major branded tobacco companies was not actionable unless there is proof of “a likelihood that the predatory scheme alleged would cause a rise in prices above a competitive level that would be sufficient to compensate for the amounts expended on the predation”); see also *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 891 (2007) (although considered to be a per se illegal form of price fixing for nearly a century, minimum resale price maintenance scheme is not actionable if “it may be beneficial” under circumstances); *cf. California v. S. Pac. Co.*, 157 US 229, 248-49 (1895) (referring to justice over technicalities in court’s

although grounded in competition law concerns, does not regard high prices or bargaining leverage as automatically illegal or sanctionable.²¹⁹

Notice is not everything, I should add. A nonmovant may be notified well in advance of the plaintiff's IP or the court entertaining an overly broad injunction, but that will not cure all defects from such an order, as set forth below.

B. *Probabilistic Hardships*

The metaphor of a “balance” of hardships implies a somewhat probabilistic inquiry.²²⁰ A judge might adopt an estimate of damage to each side, discount it by its improbability of occurring or capacity for mitigation, and balance the two estimates.²²¹ Or a decision could focus on the hardship to the IP owner in light of its business strategy, and downplay the effects on the defendant and its business partners as being meaningless in equity.²²² The sliding scale analysis of balance of hardships and likelihood of success uses a threat of severe injury to permit an injunction despite

use of equity); STORY, *supra* note 141, at 147 (equity is about “justice and fair dealing” unrestricted by “technicalities”); *id.* at 2 (equity is “conscience” of the judge); *id.* at 60 (injunctions about “conscience”).

219. See Raphaël De Coninck, *Excessive Prices: An Overview of the EU and National Case Law*, E-COMPETITIONS ANTITRUST CASE L. BULL. (June 21, 2018), <https://ecp.crai.com/wp-content/uploads/2018/06/Excessive-Pricing-R.-de-Coninck-e-Competitions-2018.pdf> [<https://perma.cc/JR2F-M8W5>] (arguing that “the mere charging of monopoly prices is not unlawful under US antitrust law, which recognizes high prices as an important element of the free-market system that rewards innovation”); Michael Gal, *Monopoly Pricing as an Antitrust Offense in the US and the EC: Two Systems of Belief About Monopoly*, 49 ANTITRUST BULL. 343 (2004) (observing already, pre-*Leegin*, that U.S. law might be less hostile to excessive pricing than European competition law).

220. See Mark Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSPS. 275 (2005), 2004 draft at 22-23, 32, http://ssrn.com/abstract_id=567883 [<https://perma.cc/WT59-3LUL>] (defining patents as probabilistic if their validity and scope is dependent on judicial enforcement, or perhaps private settlements); Ted Sichelman, *Innovation Factors for Reasonable Royalties*, 25 TEX. INTELL. PROP. 277 (2017), draft at 34-36 https://static1.squarespace.com/static/54c31bf9e4b02f4c0b4203e6/t/5859a0a3414fb5294a5a89eb/1482268840230/Sichelman_Draft.pdf [permalink unavailable] (arguing that probabilistic enforcement will be more efficient than 100% enforcement, even if enforcement costs are low, because it may prevent wasteful races to invent and patent the same things).

221. *Cf.* Transcontinental Gas Pipeline Co. v. 6.04 Acres, More or Less, Over, Situated in Land Lot 1049, No. 16-17503, slip op. at § III.C. (11th Cir. Dec. 6, 2018) (citing *Texas v. Seatrains Int'l, S.A.*, 518 F.2d 175, 179 (5th Cir. 1975)); *Christopher Phelps & Assocs., LLC v. Galloway*, 492 F.3d 532, 544-45 (4th Cir. 2007); *Dennis v. United States*, 341 U.S. 494, 510 (1951) (noting, that in hearing First Amendment challenges to laws or government actions that censor speech on a matter of public controversy, Court was adopting words of “Chief Judge Learned Hand, writing for the majority below, [who] interpreted the phrase [clear and present danger] as follows: ‘In each case [courts] must ask whether the gravity of the “evil,” discounted by its improbability, justifies invasion of freedom of speech in order to avoid the danger’” (brackets added)).

222. See *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 866-67 (9th Cir. 2017); *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 862-63 (Fed. Cir. 2010).

only substantial evidence (or a serious question) as to the merits, rather than a predominance of the evidence (or facts showing that the movant is more likely than not right on the merits).²²³ The outcome of one balancing inquiry therefore feeds into another, potentially compounding uncertainty.

One way to simplify the injunctive inquiry would be to do away with freewheeling consideration of the costs and benefits of equitable relief in statutory cases, in which the court is not so much generating a right as administering one.²²⁴ A more automatic injunction might downplay the relative hardships prong, especially hardships disfavored in IP law, such as the sunk costs of an infringer into a business model that tends to infringe.²²⁵ Such a simplification would be contrary to *eBay*, however.²²⁶

Existing law arguably locks courts in to a degree of cost-benefit analysis under the balance of hardships factor.²²⁷ Judges will decline to protect the plaintiff from harm if their order will impose excessive costs on the defendant.²²⁸ The requirement of causation or a “nexus” between the defendant’s conduct and the plaintiff’s harm is part of the irreparable injury analysis in patent cases.²²⁹ Some opinions, however, suggest that such a requirement has a place in the balance of hardships in other types of cases as well, to prevent undue hardship from befalling the infringer.²³⁰ An

223. See *All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1132 (9th Cir. 2011); *Salinger v. Colting*, 607 F.3d 68, 79-80 (2d Cir. 2010); *hiQ Labs, Inc. v. LinkedIn Corp.*, 273 F. Supp. 3d 1099, 1117-18 (N.D. Cal. 2017); *Pathak v. Yahoo! Inc.*, No.: 2:16-cv-02124-GMN-NJK, 2016 WL 4940311, at *1 (D. Nev. Sept. 13, 2016).

224. See Douglas Laycock, *The Neglected Defense of Undue Hardship (and the Doctrinal Train Wreck in Boomer v. Atlantic Cement)*, 4 J. TORT LAW, Article 3 (2012), draft at 1-2, <http://ssrn.com/abstract=2040896> [<https://perma.cc/ZQP4-XXAQ>] (citing *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978); Jared A. Goldstein, *Equitable Balancing in the Age of Statutes*, 96 VA. L. REV. 485 (2010)).

225. See *VidAngel*, 869 F.3d at 866-67; *i4i*, 598 F.3d at 862-63; *Apple, Inc. v. Samsung Elecs. Co.*, 909 F. Supp. 2d 1147, 1161-62 (N.D. Cal. 2012), *rev’d*, 727 F.3d 1214 (Fed. Cir. 2013); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d 1197 (C.D. Cal. 2007).

226. See *SAS Inst., Inc. v. World Programming Ltd.*, 874 F.3d 370, 388 (4th Cir. 2017) (where plaintiff urged that hardship to infringer being ignored as of moment, court rejected contention, holding it improper under *eBay*, which “directed that, even in cases involving clear wrongdoing, such as ongoing patent infringement, courts must ‘consider[] the balance of hardships between the plaintiff and defendant’” (quoting *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006))).

227. See *infra* notes 83, 114, 132-33, 194, 221 and *supra* notes 232-233 and accompanying text (citing *Christopher Phelps, Abend*, and *Grokster*).

228. See Laycock, *The Neglected Defense*, *supra* note 224, draft at 35; *cf. Lemley, Did eBay, supra* note 159, at 1812 (high-cost hypothetical involving ongoing ad campaign of infringer).

229. See *Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1324 (Fed. Cir. 2012).

230. See *Christopher Phelps & Assocs., LLC v. Galloway*, 492 F.3d 532, 545-55 (4th Cir. 2007) (although irreparable harm balance of hardships counseled against selling house built with infringing plans, because that would be “punitive”

equitable adjustment of the parties' interests in the withholding or modification of the requested relief might be especially appropriate where the plaintiff may obtain lost profits, a benchmarked reasonable royalty, or generous statutory damages, blessing the infringer's continued use of the IP as a forced judicial sale.²³¹

Complex works throw a wrench into the machinery of equity. In *Abend v. MCA, Inc.*,²³² for example, the court denied an injunction against a film that infringed a short story that had been properly cleared for the film during its initial copyright term, but which reverted to the author for the renewal term.²³³ Presumably, the initial deal could have provided some basis on which to award damages, and the court could have avoided questions of hardship altogether. Faced with precedent suggesting that an injunction should be near-automatic unless "great public injury" would result, the court focused on the hardship to the defendant resulting from being restrained from exploiting its own copyrightable contributions to a derivative work based on the story.²³⁴ However, it also noted that the plaintiff could be compensated by receiving the profits attributable to the story in the renewal term, or his actual damages in terms of licensing.²³⁵

In a variety of software and streaming cases, the courts are dispensing with the precise analysis of *Abend*. Perhaps out of a desire to be punitive, they are not always assessing with much care whether damage models could compensate the plaintiff, or whether parties other than the infringer might lose access to information or entertaining content.²³⁶ Nor are they analyzing in some cases whether there is a causal nexus between

in that "it would encumber a great deal of property unrelated to the infringement," including materials of house, "the swimming pool, the fence, and other non-infringing features, as well as the land underneath the house"); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d 1197, 1220 (C.D. Cal. 2007) (noting that court crafted injunction to alleviate concerns it would "wipe out" non-infringing features); *Nerney v. New York & N.Y., N.H. & H.R. Co.*, 83 F.2d 409, 411 (2d Cir. 1936); *Lemley & Weiser*, *supra* note 81, at 799.

231. See *Christopher Phelps & Assocs.*, 492 F.3d at 545 (collecting cases).

232. 863 F.2d 1465 (9th Cir. 1988).

233. *Id.* at 1479, *aff'd*, 495 U.S. 207, 236 (1990).

234. See *id.*

235. See *id.* at 1479-80.

236. See *Fox News Network, LLC v. TVEyes, Inc.*, 883 F.3d 169, 172-75, 180-82 (2d Cir. 2018) (instructing district court to enjoin service that allowed clients of text-searchable news and entertainment television programming archive and perform clips that respond to their keywords from defendant's server, after having noted that plaintiff might have a viable business model doing this itself, and therefore lost profits); *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 866 (9th Cir. 2017) (noting that plaintiffs' loss of "goodwill, negotiating leverage, and non-monetary terms in the Studios' licenses cannot readily be remedied with damages," but not explaining why, and citing a case in which presence of some of these factors were arguably present, yet no irreparable injury was found (citing *Herb Reed Enters., LLC v. Fla. Entm't Mgmt., Inc.*, 736 F.3d 1239, 1250) (2017))); *Lions Gate Films Inc. v. John Does 1-10*, No. 2:14-cv-06033, 2014 WL 3895240 (C.D. Cal. preliminary injunction granted Aug. 8, 2014); *Bridy*, *supra* note 108, at 816-18 (describing *Escape Media* and *Lions Gate* cases).

the harm and the act to be enjoined or whether the defendant could afford to pay a royalty or lost profits award on all infringing files or streams if found to be liable.²³⁷ Their opinions could use shoring up. Often, there is a manifest failure to consider hardship to the defendant and to those providing it with dual-use, often lawful services such as domain names and CDNs.²³⁸ In some of these cases, the service may have few or no assets; in others, as with Google or a CDN, the assets of a nonparty included in the order could pay for any damage to the plaintiff from ongoing infringement without any difficulty.

In trademark cases, courts have discounted hardship to the alleged infringer when it sells fewer products or services under the mark, has low or easily calculated costs of compliance, has multifaceted business operations of which the infringement is a small part, knew of or recklessly disregarded the possibility of trademark infringement, or invested a lot less in the trademark than the plaintiff or movant.²³⁹ In trademark- and

237. See *TVEyes*, 883 F.3d at 180-82 (not mentioning these facts); *VidAngel*, at 865-66 (same); *Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1034, 1039 (9th Cir. 2013) (declining to decide on significance of fact that defendant linked to infringing files that had originated on other sites, because precise damage calculations are not required for injunctions); *Arista Records, LLC v. Tkach*, 122 F. Supp. 3d 32 (S.D.N.Y. 2015) (finding CDN provider to be bound to preliminary injunction against website, without mentioning availability of damages, causal nexus to irreparable harm, or provider's ability to pay damages, where website was found direct and secondarily liable for copyright infringement, and had used provider to move to new domain names via provider's domain name server and reverse proxy service); *Capitol Records, LLC v. Escape Media Grp., Inc.*, No. 12-CV-6646 (AJN), 2015 WL 1402049 (S.D.N.Y. Mar. 25, 2015) (containing no finding as to irreparable injury); *Lions Gate*, 2014 WL 3895240 (granting default preliminary injunction against streaming site played.to, torrent sites, and apparent cyber-locker billionuploads.com without assessing causation of irreparable injury); *Dish Network LLC v. Dillion*, No. 12cv157, 2012 WL 368214, at *5-6 (S.D. Cal. Feb. 3, 2012) (enjoining CDN from providing "website services made in connection with the MFN domains" without finding that infringement of plaintiff's rights under DMCA did anything other than cause plaintiff to lose subscriptions and some reputation). *But see* *Am. Soc'y for Testing & Materials v. Public.Resource.org, Inc.*, No. 13-cv-1215(TSC), 2017 WL 473822, at *25 (D.D.C. Feb. 2, 2017) (carefully considering defendant's net assets); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 518 F. Supp. 2d 1197, 1219-20 (C.D. Cal. 2007) ("Damages are no remedy at all if they cannot be collected, and most courts sensibly conclude that a damage judgment against an insolvent defendant is an inadequate remedy." (internal quotation marks omitted) (quoting Douglas Laycock, *The Death of the Irreparable Injury Rule*, 103 HARV. L. REV. 687, 716 (1990))).

238. See *Bridy*, *supra* note 108, at 819-20 (arguing that this violates due process against the service provider such as the CDN, which has neither been found to be in active concert with the defendant prior to being named in the injunction, nor found in active concert so as to be a contemnor); *see also id.* at 824 (although one case found CDN to be in active concert, it did so without specific evidence (citing *Tkach*, 122 F. Supp. 3d at 33)).

239. *Amped & Collection, Inc. v. Hinton*, No. 18-cv-6094, 2018 WL 5284912 (S.D.N.Y. Sept. 10, 2018) (low or calculable infringer harm); *Rhino Metals, Inc. v. Kodiak Safe Co.*, No.: 1:16-285-EJL-REB, 2017 WL 2903339 (D. Idaho Mar. 25, 2017) (defendant not reliant on market affected by injunction); *NYP Holdings v. N.Y. Post Publ'g Inc.*, 63 F. Supp. 3d 328 (S.D.N.Y. 2014) (plaintiff's investment in

franchise-type disputes, however, speculative harms will not support an injunction.²⁴⁰

The balance of hardships may also weigh against issuing an injunction when the parties are competitors. A practicing entity and vigorous competitor defendant will be less likely to be left without any income at all and to confront insolvency and closure than an NPE that relies on licensing to survive. Absent some non-trivial chance of excluding an infringer from the market, an NPE licensing firm or former practitioner may be unable to pursue litigation to the point of judgment and post-judgment motions and therefore to be made somewhat whole. An infringer may, in addition, be less likely to be aware of an NPE, so that infringement will not be subject to a similar likelihood of enhanced damages or attorney's fees to compensate the patentee for the uncertainties involved in pleading, proving, and remedying all the infringements. And, as set forth below, a competitor patentee may threaten the public interest with market power.²⁴¹

C. *The Difference Between Hardships and Public Interests*

The balance of hardships (or of equities) is “strongly associated with the court’s power (and duty) to tailor equitable relief to the circumstances

mark); *T-Mobile US, Inc. v. Aio Wireless L.L.C.*, 991 F. Supp. 2d 888, 929 (S.D. Tex. 2014) (plaintiff’s greater length of use and investment); *Starbucks Corp. v. Heller*, No. CV 14-1383-MMM, 2014 WL 6685662, at *13 (C.D. Cal. Nov. 26, 2014) (comparative length of use); *Halo Optical Prods. v. Liberty Sports, Inc.*, 6:14-cv-282 (MAD/TWD), 2014 WL 3670664 (N.D.N.Y. June 24, 2014) (no major harm to alleged infringer, which could go on without mark); *7-Eleven, Inc. v. Upadhyaya*, 926 F. Supp. 2d 614 (E.D. Pa. 2013) (alleged infringer’s risk of creating confusion); *Rovio Entm’t, Ltd. v. Royal Plush Toys, Inc.*, No. C 12-5543 SBA, 2012 WL 5936214 (N.D. Cal. Nov. 27, 2012) (alleged infringer’s multifaceted business operations); *Estate of Ellington ex rel. Ellington v. Harbrew Imps. Ltd.*, 812 F. Supp. 2d 186, 195-96 (E.D.N.Y. 2011) (defendant could prevent harm to itself from injunction by rebranding its trademark violating product); *All. Bank v. New Century Bank*, 742 F. Supp. 2d 532 (E.D. Pa. 2010) (risk or knowledge); *Petro Franchise Sys., LLC v. All Am. Props., Inc.*, 607 F. Supp. 2d 781 (W.D. Tex. 2009) (calculable infringer harm).

240. See *McCall Weddings, LLC v. McCall Wedding & Event Dir.*, No. 1:14-cv-315-REB, 2015 WL 3867962, at *2 (D. Idaho Jan. 9, 2015) (noting that after trademark owner obtains discovery into customers lost to defendant due to infringement, it can begin to “quantify any related business losses,” and that: “What is left is only the possibility that some harm may be missed, or otherwise not fully accounted for, and that possibility is not enough to support a temporary restraining order” (citing *Winter v. Nat. Defense Council, Inc.*, 555 U.S. 7, 22 (2008))); *Tutor Time*, slip op. at II.b.1. (no irreparable harm found on motion for preliminary injunction to enforce non-compete agreement where it was speculative whether plaintiff would have made a sale to defendant’s customers); see also *Gilson Lalonde & Gilson*, *supra* note 52, at 924, 941, 956 (collecting cases); cf. *People’s Club Int’l, Inc. v. People’s Club of Nigeria Int’l-N.Y. Branch, Inc.*, No. 3: 18-CV-1144, 2018 WL 3581697, at *1-3 (D. Conn. July 25, 2018) (speculative harm in breach of contract dispute).

241. See *infra* note 276 and accompanying text.

of the case.”²⁴² While apparently important, it is obscure. It is not, apparently, a cost-benefit analysis, like $\text{burden} < \text{probability of loss}$.²⁴³ In some contexts, it has to do with the defendant’s clean hands, or equitable posture.²⁴⁴ The Supreme Court has called it a balancing of the “effect on each party” of the injunction as well as of “claims of injury.”²⁴⁵

A balance of equities (or of hardships) balances somewhat incommensurable phenomena: the past injury to the plaintiff, the future effect on the defendant, and the future injury to the plaintiff and effect of the injunction on that. The effect on the defendant is often not mentioned, however, by the courts. It may be unquantifiable, and it may have little to do with injury to the plaintiff. Moreover, that effect is often discounted if it flows from ceasing infringement, there being no right to continue it.²⁴⁶ Other factors may be considered, however, including intent, the public interest, etc.²⁴⁷

Some of the impetus for *eBay* seems to be about hardship to the infringer when the patentee tries to gouge it, at least for the three justices joining the concurrence.²⁴⁸ Thomas Cotter argues for a presumption in favor of an injunction unless there is evidence of holdup or the like, indicating a harm to the public.²⁴⁹ Douglas Laycock observes that hardship to the nonmovant and the public may be doing the real work in many injunction decisions, because injuries that may otherwise be regarded as irreparable may be recast as having an adequate damages remedy if hardship is feared.²⁵⁰ While he does not mention it, this happened in *Abend*, for example.

One example of a controversy about relative hardships was *The Wind Done Gone* case, or *Suntrust Bank v. Houghton Mifflin Co.*²⁵¹ The district

242. Samuel Bray, *What Is the Balance of Equities?*, THE VOLOKH CONSPIRACY (July 2, 2017), <https://reason.com/volokh/2017/07/02/what-is-the-balance-of-equitie> [https://perma.cc/VL4Q-46WC].

243. *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947). There was an echo of this kind of analysis in one prominent post-*eBay* decision of the Court. See *Winter v. Nat. Res. Def. Council*, 555 U.S. 7 (2008) (in vacating preliminary injunction and indicating that a similar permanent injunction would be unwarranted, weighing burden of injunction on defendant and availability of less restrictive alternatives against alleged injury to interests alleged to exist by plaintiffs).

244. See Bray, *supra* note 242.

245. *Winter*, 555 U.S. at 24.

246. See *Disney Enters., Inc. v. VidAngel, Inc.*, 869 F.3d 848, 867-68 (9th Cir. 2017) (holding that “lost profits from an activity which has been shown likely to be infringing . . . merit[] little equitable consideration” (alteration in original) (quoting *Triad Sys. Corp. v. Se. Express Co.*, 64 F.3d 1330, 1338 (9th Cir. 1995))).

247. See Laycock, *The Neglected Defense*, *supra* note 213, at 3.

248. See *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring).

249. See THOMAS COTTER, *COMPARATIVE PATENT REMEDIES: A LEGAL & ECONOMIC ANALYSIS* 105 (2013).

250. See Laycock, *The Neglected Defense*, *supra* note 224.

251. 136 F. Supp. 2d 1357 (N.D. Ga. 2001).

court found “potential damage” to the plaintiff in a large extent if the defendant was allowed to publish a critical and parodic retelling of *Gone with the Wind*, with the same plot and many of the same characters, but with further events in the narrative cast by the court as a “sequel.”²⁵² This damage to plaintiff was of “far greater magnitude” than the defendant’s inability to enhance its reputation for quality literature.²⁵³ The Eleventh Circuit Court of Appeals disagreed, with one panel concluding that the “prior restraint” of the publishers’ expression, which is a form of hardship.²⁵⁴ A fuller opinion focused on fair use and lack of irreparable injury, but included the reference to prior restraints.²⁵⁵

C. Edwin Baker argues that copyright remedies must give way to the First Amendment right to publish when dissidents or semiotic rebels make new meanings from existing works, i.e. engage in “transformative uses.”²⁵⁶ Other cases have protected publishers against injunctions even when based on statutory causes of action and judicial orders, rather than the standardless prepublication review of a censor or film board.²⁵⁷ These decisions seem to be focused on maximizing the reservoir of facts and accounts from which the public may draw in making conclusions on public issues, rather than maintaining or intensifying the diversity of opinions as Baker’s theory does.²⁵⁸

Restraining an alleged infringer’s speech on a matter of public concern, at least when the speech is somewhat transformative, is both a hard-

252. *Id.* at 1375-77, 1380-84.

253. *See id.* at 1383-84.

254. *Suntrust Bank v. Houghton Mifflin Co.*, 252 F.3d 1165 (11th Cir. 2001); *see, e.g.*, C. Edwin Baker, *First Amendment Limits on Copyright*, 55 VAND. L. REV. 891, 942 (2002); Peter Johnson, *Can You Quote Donald Duck?: Intellectual Property in Cyberculture*, 13 YALE J. L. & HUMAN. 451 (2001).

255. *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257 (11th Cir. 2001).

256. Baker, *supra* note 243, at 942.

257. *See id.* at 944-45 (citing *Bartnicki v. Vopper*, 532 U.S. 514 (2001); *Fla. Star v. B.J.F.*, 491 U.S. 524, 530 (1989); *Neb. Press Ass’n v. Stuart*, 427 U.S. 539 (1976)). A pre-*Nebraska*, pre-*Bartnicki* concept of prior restraint is still in use by some courts, and focuses on the lack of “narrow, objective, and definite standards to guide the licensing authority,” which is a concept more difficult to apply to IP remedies. *Shuttlesworth v. City of Birmingham, Ala.*, 394 U.S. 147, 150-51 (1969). The People’s Republic of China, and other countries still have such boards for video games, and China for books and films. *See* Nicholas Kristof, *China Bans One of Its Own Films; Cannes Festival Gave It Top Prize*, N.Y. TIMES, Aug. 4, 1993, www.nytimes.com [<https://perma.cc/UD8Z-VFN8>]; Kevin Webb, *China Crackdown on Video Games Is Costing Publishing Giants Billions in Profit*, BUS. INSIDER UK (Oct 25, 2018), <http://uk.businessinsider.com/china-video-games-crackdown-costing-billions-2018-10> [<https://perma.cc/24YU-SZRU>]; *cf.* Jeremiah Steinfeld, *Game On: Trump Has Jumped on the Ban Video Games Bandwagon. The Hysteria Is Increasing, and Potentially Unjustified*, 47 INDEX ON CENSORSHIP 106 (2018).

258. *Cf.* *First Nat’l Bank of Bos. v. Bellotti*, 435 US 765, 783 (1978) (“[T]he First Amendment goes beyond protection of the press and the self-expression of individuals to prohibit government from limiting the stock of information from which members of the public may draw.”); *Glik v. Cunniffe*, 655 F.3d 78, 82 (1st Cir. 2011) (same).

ship to the speaker and contrary to the public interests in speaker autonomy and diversity of expressed opinions. A 2015 study prepared for the Secretary General of the Council of Europe states that legal regimes aimed at targeting the Internet for regulation can threaten overreactions on the part of service providers who receive notices of claimed infringement.²⁵⁹ Two international experts on freedom of expression as a human right opine that no restriction should be made without an adversarial process and a judge's order.²⁶⁰ Prohibiting platforms from facilitating the publication online of documents unless their authors or owners consent in advance would restrict a lot of legitimate journalism and public discourse based on leaks such as the Pentagon Papers.²⁶¹ Annemarie Bridy concludes that a federal campaign to seize Internet domain names in 2010-2012 violated the First Amendment as well as due process for the third parties whose lawful content such as websites got caught up in seizures.²⁶²

While most discourse on the property-liability distinction to date has involved Coasean concerns about efficient bargaining, holdup, and over-compensation,²⁶³ injury to the intangible interests of the defendant and its business partners in publishing documents should also be considered. A focus on this interest could introduce more precision about what precisely an injunction covers, in terms of existing pages of a website found to infringe and the like as opposed to any content or data taken from the plaintiff, etc.

Baker urged the courts to overcome their reticence to applying First Amendment limits to copyright, as the *Wind Done Gone* court had and as the Supreme Court had in libel and obscenity with *New York Times v. Sullivan* and *Roth v. United States*.²⁶⁴ An example of what such limits look like came recently with the First Circuit's decision on an injunction against online libels, including in Facebook pages and the comments section of

259. See Institut suisse de droit comparé, *Blocking, Filtering and Take-Down of Illegal Internet Content*, at iii-iv, (Dec. 20, 2015), <https://www.coe.int/en/web/free-dom-expression/study-filtering-blocking-and-take-down-of-illegal-content-on-the-internet> [<https://perma.cc/3YC2-NPBC>].

260. Michael Geist, *The Case Against the Bell Coalition's Website Blocking Plan* (Mar. 8, 2018), <http://www.michaelgeist.ca/2018/03/caseagainstsiteblockingfinale/> [<https://perma.cc/2QAJ-4WM9>].

261. See Swatch Grp. Mgmt. Servs., Ltd. v. Bloomberg L.P., 756 F.3d 73, 83-84 (2d Cir. 2014); Brave New Films v. Weiner, 626 F. Supp. 2d 1013 (N.D. Cal. 2009); Online Policy Grp. v. Diebold, Inc., 337 F. Supp. 2d 1195 (N.D. Cal. 2004).

262. See Bridy, *supra* note 108, at 810-13, 832.

263. Richard A. Epstein, *A Clear View of the Cathedral: The Dominance of Property Rules*, 106 YALE L.J. 2091, 2101-02 (1997); Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972). In the interests of space and time, I do not discuss the economics or international law implications of *eBay* or Rule 65, or most of the theories that emanate in some way from the Calabresi and Melamed article. Nor do I discuss many important issues of infringement, fair or nominative use, and secondary liability that may intertwine with remedies.

264. See Baker, *supra* note 243, at 893 (citing *N.Y. Times Co. v. Sullivan*, 376 U.S. 254 (1964); *Roth v. U.S.*, 354 U.S. 476 (1957)).

thewashingtonpost.com.²⁶⁵ The court held that the injunction must be examined carefully and framed so as to be as narrow as needed to meet the objective of the relief.²⁶⁶ Even though the six most egregious statements that were enjoined (out of considerably more than that) had been made with the requisite actual malice under *Sullivan*, the court held that an “injunction that prevents in perpetuity the utterance of particular words and phrases after a defamation trial” is overly broad and does not use the least-restrictive means of advancing the state’s interest in remedying libels.²⁶⁷

Barring future statements in particular imposes a prior restraint (“a judicial permission slip to engage in truthful speech”) and “fails the First Amendment requirement that it be ‘tailored as precisely as possible to the exact needs of the case.’”²⁶⁸ In both respects, it can be said to be contrary to the public interest. Courts have therefore taken some care in copyright and trademark cases to avoid these defects in an injunction.²⁶⁹ As one court stated: “While enjoining copyright violations may not itself violate the First Amendment, the risk of overbroad injunctions and the Constitution’s clear concern for expressive freedom recommend prudence in this area.”²⁷⁰

On the other hand, the public interest indicates that the rule of thumb granting injunctions to patent plaintiffs who are competitors of the defendant, and denying it to others, may not always promote the public interest. Assuming that the only relevant public interest under *eBay* is the promotion of science and the useful arts, in the constitutional phrase, it

265. See *Sindi v. El-Moslimany*, 896 F.3d 1, 11-12, 15 (noting 132 allegedly defamatory statements, damages verdict of \$720,000, including libels in “myriad web postings,” such as on Facebook and thewashingtonpost.com).

266. See *id.* at 29-30 (citing *Madsen v. Women’s Health Ctr.*, 512 U.S. 753, 764-65 (1994)).

267. See *id.* at 30-34.

268. *Id.* at 34 (quoting *Carroll v. President & Comm’rs of Princess Annej*, 393 U.S. 175, 184 (1968)); see also *Baker v. Joseph*, 938 F. Supp. 2d 1265, 1270 (S.D. Fla. 2013) (collecting cases).

269. See, e.g., *Nissan Motor Co. v. Nissan Comput. Corp.*, 378 F.3d 1002, 1015-17 (9th Cir. 2004) (holding that permanent injunction against trademark dilution should not have extended to placing hyperlinks to disparaging/negative commentary about plaintiff); *supra* notes 15, 24, 26, 101, 251, 255; see also *Kuper Indus., LLC v. Reid*, 89 F. Supp. 3d 1005, 1014 (D. Neb. 2015) (declining to enjoin defendant from allowing its customers to use the trademark in connection with defendant’s business, even though court enjoined defendant from using the trademark, as an unlawful prior restraint); *Renaissance Learning, Inc. v. IntraData, Inc.*, No. 14-cv-738-jdp, 2015 WL 2185599 (W.D. Wis. May 11, 2015) (“The court will not enjoin IntraData from *all* use or reference to ‘ATOS,’ as IntraData is entitled to make fair use or non-trademark use of Renaissance’s marks for such purposes as honest comparative advertising.”); *Infogroup, Inc. v. DatabaseLLC.*, 95 F. Supp. 3d 1170, 1192 (D. Neb. Mar. 30, 2015) (holding that without “persuasive evidence of actual confusion, there is also no persuasive evidence of injury to [Lanham Act plaintiff]”).

270. *SAS Inst., Inc. v. World Programming Ltd.*, 874 F.3d 370, 385 (4th Cir. 2017).

still may not make sense to prioritize injunctive relief for integrated competitors who develop and as well as market products. One of the main ways that famous authors and inventors have financed their continuing work, or expanding the scope of their efforts, is by selling their works or patents.²⁷¹ Patents tend to be worth considerably more to these persons as a right to exclude, as opposed to a right to seek a reasonable licensing fee. A reasonable royalty presents potential developers of others' inventions with a tempting question: why not take a chance by infringing and dragging out any resulting litigation, if the worst-case scenario is simply to pay an approximation of what the inventor would have demanded to "sell out"?²⁷²

A conglomerate or integrated corporation is not left as desperate as a solo inventor when the market to sell patents dries up as a result of such calculations.²⁷³ It will be able to invest its existing profits, which may not be based on patents so much as first-mover advantages, know-how, trade secrets, network effects, political corruption, etc.²⁷⁴ In addition, the public may be less likely to pay an overcharge relating to the patent where the patentee does not have market power in a product market. In a competitive market, a licensee would be a "price-taker" and incur the cost of any

271. See William Drennan, *Changing Invention Economics by Encouraging Corporate Inventors to Sell Patents*, 58 U. MAIMI L. REV. 1045, 1123-28 (2004); Adam Gunderson, *Protecting the Environment by Addressing Market Failure in Intellectual Property Law: Why Compulsory Licensing of Green Technologies Might Make Sense in the United States: A Balancing Approach*, 2014 BYU L. REV. 671, 685 (specialization on new inventions in lieu of marketing existing ones may be more efficient and good for society); Wasserman Rajec, *supra* note 153 (similar).

272. See *Hebert v. Lisle Corp.*, 99 F.3d 1109, 1120 (Fed. Cir. 1996) ("nothing to lose" by paying reasonable royalty after trial (quoting *Stickle v. Heublein*, 716 F.2d 1150, 1563 (Fed. Cir. 1983)) (internal quotation marks omitted)); *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1109 (Fed. Cir. 1996) (could be the "profitable, can't-lose course" to infringe and pay royalties in losing cases (internal quotation marks omitted) (quoting *Fromson v. W. Litho Plate & Supply Co.*, 853 F.2d 1568, 1575 (Fed. Cir. 1988))).

273. See Jeffrey R. Williams, Betty Lynn Paez & Leonard Sanders, *Conglomerates Revisited*, 9 STRATEGIC MGMT. J. 403 (1988) (observing that conglomerates parlay core competencies into ever-expanding markets); cf. also Elvir Causevic and Ian McClure, *Effectively Discharging Fiduciary Duties in IP-Rich M&A Transactions*, 14 BERKELEY BUS. L.J. 87, 91 (2017) (tech conglomerates offer varied services, often bought from others); Frank Pasquale, *The Automated Public Sphere, in THE POLITICS & POLICIES OF BIG DATA: BIG DATA, BIG BROTHER?* (Ann Rudinow Sætnan, Ingrid Schneider & Nicola Green eds., 2017) (tech conglomerates are growing enormous and regulating economic possibilities of others who use the Internet).

274. See Michael Abramowicz & John Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1633, 1666-67 (2010); Yeolan Lee, Caron St. John, Eric A. Fong & Yongchuan Bao, *Flexible New Product Development Processes and Appropriability: Intellectual Property and First-Mover*, 22 INT'L J. INNOV. MGMT. 1850002 (2018); Roger Kerin, P. Rajan Varadarajan & Robert Peterson, *First-Mover Advantage: A Synthesis, Conceptual Framework, and Research Propositions*, 56 MKTG. 33 (1992); Robert Merges, *Uncertainty and the Standard of Patentability*, 7 HIGH TECH. L.J. 1 (1992).

license fee due to an inability to raise prices to pass the royalty along.²⁷⁵ In markets where injunctions are more likely to issue under *eBay* as sometimes construed, however, there may be substantial overcharges due to the patentee becoming a giant operating company.

The public interest is probably more often threatened by injunctions between competitors, than by injunctions sought by those seeking a monetary payout only. In numerous reported cases, practicing competitors' insistence on their property interests in patented improvements has served to suppress those improvements and slow progress.²⁷⁶ In addition, larger market shares possessed by operating companies increase the danger of overcompensation that underlies some defenses of the *eBay* decision.²⁷⁷ An NPE may have less of an ability to drive a more efficient way of practic-

275. See *Aqua Shield v. Inter Pool Cover Team*, 774 F.3d 766, 772-73 (Fed. Cir. 2014) (citing *Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002)).

276. See *Va. Panel Corp. v. MAC Panel Co.*, 133 F.3d 860, 871 (Fed. Cir. 1997) (jury and district court found that, in two-player market, patentee had monopolized and attempted to monopolize the market for certain high-performance devices, although Federal Circuit reversed, holding that antitrust law does not protect competitors); FED. TRADE COMM'N, *FTC Charges Qualcomm with Monopolizing Key Semiconductor Device Used in Cell Phones* (Jan. 17, 2017), <https://www.ftc.gov/news-events/press-releases/2017/01/ftc-charges-qualcomm-monopolizing-key-semiconductor-device-used> [<https://perma.cc/WY8G-XE3L>] (Qualcomm leveraged patent-related dominance in chips into deals that foreclosed competition with it contractually, FTC alleged in 2017); Complaint, ¶¶ 2-11, 16-56, *Ward v. Apple, Inc.*, No. 4:12-cv-5404 (N.D. Cal. complaint filed Oct. 19, 2012) (plaintiff alleged that patent owner, facing limited competition with its smartphone at first, locked the carrier down by manipulating SIM cards, harming consumers); Complaint, ¶¶ 10-59, *Advanced Micro Devices, Inc. v. Intel Corp.*, No. 05-441 (D. Del. June 27, 2005) (Intel gained market power, in part by using patents, and then offered rebates not to deal with main competitor AMD, "foreclosing" it from a substantial portion of the market); Cheryl Lee Johnson, *CIPRO's \$400 Million Pay for Delay: How California Law and Courts Can Make a Difference in Reverse Payment Challenges*, 67 RUTGERS U.L. REV. 721, 742-49 (2015) (arguing that patent owners that manufacture generic pharmaceuticals can conspire with leading generic manufacturers and, by making a reverse payment from patentee to infringer when the patent is at risk due to litigation, maintain a monopoly in the drug); Mark Lemley, *Antitrust Counterclaims in Patent and Copyright Infringement Cases*, 3 TEX. INTELL. PROP. L.J. 1 (1994) (describing monopolization issues in IP); Kurt Saunders & Linda Levine, *Better, Faster, Cheaper-Later: What Happens When Technologies Are Suppressed*, 11 MICH. TELECOMM. TECH. L. REV. 23, 29, 38-40, 52-62 (2004) (collecting cases on suppression of technology and competition by dominant firms); *id.* at 69 (problem happens "many" times); Jordan Robertson, *Intel Settles AMD Claims But Isn't off the Hook*, ASSOCIATED PRESS/PHYS.ORG (Nov. 12, 2009), <https://phys.org/pdf177247607.pdf> [<https://perma.cc/U3YX-K96N>] (Europe fined Intel more than \$1.5 billion for abusing dominance, while State of New York made similar allegations, Intel settled AMD suit for \$1.25 billion, and FTC was also investigating).

277. In a bilateral monopoly situation as between the patentee and the implementer, the implementer may have no other viable technology to use, and suffer an overcharge. See *BMI, Inc. v. CBS, Inc.*, 441 U.S. 1, 36-37 (1979); *Intercollegiate Broad. Sys., Inc. v. Copyright Royalty Bd.*, 684 F.3d 1332, 1339 (D.C. Cir. 2012); BOHANNAN & HOVENKAMP, *supra* note 201, at 80-82. Technically, it is not clear that there is a bilateral monopoly situation when the rightsholder has other potential licensees with whom to deal. See *Bitler Inv. Venture II, LLC v. Marathon Petro-*

ing the patent out of the marketplace, as with AT&T and certain methods of communicating over packet-switched networks, Microsoft and various applications that it bundled into Windows, or Apple and Samsung's lower cost open-source Android devices with rounded edges and icons.²⁷⁸ In Joseph Schumpeter's phrase, when a profitable operating company eliminates some or all of the competition in order to preserve its profits above a level needed to ensure adequate production in its field, its "business strategy of keeping [its abnormal profits] alive is inimical to the growth of total output."²⁷⁹ In some antitrust cases, a dominant incumbent acquired patents, sued others, and gained power in other markets.²⁸⁰

In the streaming media area, evidence surrounding intermediary liability in Europe and the United States indicates that imposing monitoring and blocking obligations on intermediaries will disadvantage startups and mature small- and medium-sized enterprises. They may lack the capital to maintain the "(trust and) safety units" and technical infrastructure that will be needed.²⁸¹ This suggests that some forms of third-party blocking, filtering, and monitoring injunctions may be against the public interest as

leum Co. LP, 741 F.3d 832, 836-37 (7th Cir. 2014); *Intercollegiate Broad. Sys.*, 684 F.3d at 1339.

278. See, e.g., WALTER ISAACSON, *THE INNOVATORS: HOW A GROUP OF HACKERS, GENIUSES, & GEEKS CREATED THE DIGITAL REVOLUTION* 241 (2014) (describing how AT&T told a developer of packet-switched network technology, Paul Baran, that it did not want to create a competitor to its common carrier network); Matt Burns, *The Decline of Android Foretells the Rise of a Total Apple Monopoly*, TECHCRUNCH (Apr. 26, 2012), <https://techcrunch.com/2012/04/26/apple-will-one-day-rule-the-world/> [<https://perma.cc/9KJV-GDV8>] (describing fears that, with Samsung and Motorola struggling to retain smartphone market share, iPhone could win a monopoly); Zack Whitaker, *Apple Wins "Device Destroying" Injunction Against Motorola*, ZDNET (Mar. 2, 2012), <https://www.zdnet.com/article/apple-wins-device-destroy-ing-injunction-against-motorola/> [<https://perma.cc/BX3L-FA98>].

279. JOSEPH SCHUMPETER, *CAPITALISM, SOCIALISM, & DEMOCRACY* 105 (1950); see also Wasserman Rajec, *supra* note 153, at 766-67.

280. See *Kobe, Inc. v. Dempsey Pump Co.*, 198 F.2d 416, 424 (10th Cir. 1952) (patentee used patents as part of unlawful scheme to maintain a monopoly by publicizing the patent, sometimes filing baseless infringement suits, acquiring more patents, etc.); *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 422-25, 431, 438-39 (2d Cir. 1945) (patentee became dominant early on with patents, and maintained position by preempting each new opportunity); Ann Bartow, *Separating Marketing Innovation from Actual Invention: A Proposal for a New, Improved, Lighter and Better-Tasting Form of Patent Protection*, 4 J. SMALL & EMERGING BUS. L. 1 (2000) (arguing that when patent portfolios of big companies grow vast, they can be used as a weapon to snuff out competition); cf. *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683 (Fed. Cir. 2008) (competitor of defendant alleged that latter, using patents, attempted to expand a monopoly from one technology to another).

281. See Senftleben, *Breathing Space*, *supra* note 8, at para. 52 (noting that startups might have difficulty complying with monitoring obligations imposed hosting services like Rapidshare in Germany, or on larger cloud services like Apple if—for example—they were to offer a version of Apple's iCloud service that scans user hard drives to find song files and unlock streaming versions of the songs in iCloud (citing Brian Leary, *Safe Harbor Startups: Liability Rulemaking Under the DMCA*, 87 N.Y.U. L. REV. 1134, 1167-69 (2012))).

applied to smaller platforms, even when such an order would be warranted in cases involving giant platforms.²⁸²

D. *The Future of Tailoring in Complex IP Cases*

As other scholars have argued, injunctions could be better tailored in the future by limiting them to specific illegal conduct, which the court has adjudicated to infringe, and which the court has found to cause irreparable harm that damages will not remedy. This sort of tailoring would vindicate the notice and administrability concerns of Rule 65, and the statutory interpretation ruling of *eBay* as to the use by Congress of the term “equity.”

Other forms of tailoring would involve, as Annemarie Bridy persuasively argues, careful attention to whether a third party has aided and abetted or acted in concert with the main defendant(s) before addressing it with an injunction or requiring it to enforce one. Thus, the Supreme Court has held that an absent corporation, alleged to be a shell with respect to the defendant, should not be enjoined until the alter ego analysis is done.²⁸³ The standard for active concert and participation is variously styled as knowing participation or purposive joinder in the activity.²⁸⁴ Independent action at arm’s length seems to be insufficient to find privity or concert and bind a nonparty to an injunction.²⁸⁵

In copyright and trademark law, courts could tailor relief closely to the added value brought to the defendant’s work from the infringement, or the value destroyed by the infringement.²⁸⁶ This, as noted previously, characterizes only some post-*eBay* decisions. Others do not attempt to causally link the harm to particular provisions. This threatens to penalize legitimate authorship or inventorship, as well as to bestow a windfall on a few fortunate IP holders that Congress may not have intended.

There is a vital interest other than the constitutional basis of copyrights and patents, namely the protection of the freedoms of speech and of the press from invasions. As discussed in some cases, the public interest is disserved by injunctions that impact freedoms of speech or association. Enjoining those who act in knowing concert with infringers may overdeter violations of IP regimes because creators and publishers whose content is wrongly suspected or accused of infringing may be removed in error.²⁸⁷

282. See, e.g., Danny O’Brien & Jerry Malcolm, *70+ Internet Luminaries Ring the Alarm on EU Copyright Filtering Proposal*, THE VERGE (June 12, 2018), <https://www.eff.org/deeplinks/2018/06/internet-luminaries-ring-alarm-eu-copyright-filtering-proposal> [<https://perma.cc/KB49-NV9Y>].

283. See Bridy, *supra* note 108, at 819 (citing *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 112 (1969)).

284. See *id.* at 820 (collecting cases).

285. See *id.* at 830 (collecting cases).

286. Geller, *supra* note 130, at 62 (suggesting that copyright remedies be tailored, as in *Kepner-Tregoe, Inc. v. Carabio*, 203 U.S.P.Q. 124 (E.D. Mich. 1979), to permit distribution of infringing work with infringing portions redacted).

287. Assaf Hamdani, *Who’s Liable for Cyberwrongs?*, 87 CORNELL L. REV. 901, 932-33 (2002); see also Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to*

Depending on the terms of the injunction, it may be even more costly to comply with than a reasonable royalty award would have been to pay. Some injunctions against Internet companies and seizures of Internet intermediary assets such as domain names threaten third parties' legitimate content.²⁸⁸

Assuming that a defendant is not judgment-proof, courts could also be more willing to grant injunctions in cases of unregistered trademark infringement, trademark infringement without actual confusion or willfulness/counterfeiting, or copyright infringement without a timely registration prior to infringement or shortly after publication.²⁸⁹ In those cases, statutory damages will be unavailable and other monetary relief should be examined for whether it too will fall short of being adequate.²⁹⁰ In cases of willful copyright infringement, the U.S. Code and international principles may endorse overcompensation of the plaintiff as a routine matter, based on a deterrence policy.²⁹¹ The same may be true of trademark counterfeiting and cybersquatting, and some cases of willful trademark infringement or dilution without counterfeiting.²⁹² Counterfeiters also have a lesser speech interest, misleading commercial activity not being protected.²⁹³

V. CONCLUSION

The purpose of this Article was to emphasize the need for precision when proposing or entering injunctive relief for infringement of intellectual property rights, especially against an entire category of content such as a website or an Internet account. Some injunctions stray into imprecision when they are focused on the type of violation found rather than the infringing elements of the accused products or materials. Other injunctions attempt to sweep in third parties or unrelated infringement assertions in ways that conflict with the Federal Rules of Civil Procedure and

Allow Free Peer-to-Peer File Sharing, 17 HARV. J.L. & TECH. 1, 13 n.30 (2003); Ronan Perry & Tal Zarsky, *Who Should Be Liable for Online Anonymous Defamation?*, 82 U. CHI. L. REV. ONLINE 162, 189 (2015).

288. See Lemley, et al., *Don't Break the Internet*, *supra* note 12.

289. See *Sara Lee Corp. v. Bags of N.Y., Inc.*, 36 F. Supp. 2d 161, 166 (S.D.N.Y. 1999) ("The Copyright Act is . . . identical [to Lanham Act] in much of its statutory damages language. Both authorize determinations within a broad range 'as the court considers just,' 15 U.S.C. § 1117(c)(1),(2); 17 U.S.C. § 504(c)(1),(2), with the maximum increasing for 'willful' infringements, 15 U.S.C. § 1117(c)(2); 17 U.S.C. § 504(c)(2).").

290. Blake Bertagna, *Poaching Profits: An Examination of the Ability of a Trademark Owner to Recover an Infringer's Profits under the Lanham Act as Amended in 1999*, 16 TEX. INTELL. PROP. L.J. 257 (2007); Lemley, *Did eBay*, *supra* note 159, at 1796 (warning of situation in which trademark owner wins case but has no remedy).

291. See Geller, *supra* note 130, at 64.

292. See *Sara Lee*, 36 F. Supp. 2d at 166-70 (noting that deterrence and willfulness may drive these awards, resulting in award in case at bar of three times of a reasonable compensatory award or what it would be).

293. See *In re R.M.J.*, 455 U.S. 191, 203-04 (1982).

certain statutes as well. Each of these types of court order may threaten to rewrite statutes, impose a prior restraint on protected speech, or chill the speech of those caught up in the crossfire.

Scholars opining on *eBay*'s legacy have raised doubts about whether the requirements of equity relating to injunctive relief in federal cases are intended seriously, or merely rationalize outcome-driven arbitrariness.²⁹⁴ This Article has argued that some of the worst disparities could be avoided by applying similar concepts and definitions across case types, primarily irreparable injury, adequate remedy, and the public interest. More rigorously analyzing the factual support for some proposed injunctive language could achieve the aims of substantive law while harming fewer innocent third parties.

294. Steve Tensmeyer, *Constitutionalizing Equity: Consequences of Broadly Interpreting the Modern Rule of Injunctions Against Defamation*, 43 NYU ANN. SURV. AM. L. 72, 89 (2017); see also the comments on outcome-driven equity at the Supreme Court during the discussion section of the Section on Remedies panel at the Association of American Law Schools 2016 Annual Meeting, entitled "Equity in the Federal Courts." AALS, Recordings (2018), <https://memberaccess.aals.org/eweb/DynamicPage.aspx?Site=AALS&WebKey=75b8e4cc-2dd1-4905-be92-469210b54826> [<https://perma.cc/7672-43ZE>].