Item #10 SEMINAR IN LAW & ECONOMICS Professors Louis Kaplow and Steven Shavell Tuesday, April 9, 2019 Hauser Hall 102, 5-6:30 PM

UNFAIR DISRUPTION

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Presenting

Unfair Disruption1

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New technologies disrupt existing industries. They always have, and they probably always will. The printing press put quite a few monks out of the manuscript hand-lettering business. Railroads displaced much (though by no means all) of the barge and shipping industry. They were in turn displaced by long-haul truck drivers, who are now at risk of being displaced by self-driving trucks. The Internet and smart phones disrupted any number of industries, from camera makers to travel agents to watchmakers to sellers of keychain flashlights. The sharing economy is disrupting many service industries, from taxis to hotels. And new technologies like 3D printing, robotics, and artificial intelligence (AI) threaten to displace many different workers, including lawyers.

Incumbents don't like their industries to be disrupted. As Niccolo Machiavelli wrote,

It must be considered that there is nothing more difficult to carry out, more perilous to conduct, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the [innovator] has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order, this lukewarmness arising partly from fear of their adversaries, who have the laws in their favour; and partly from the

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Thanks to Eric Goldman, Scott Hemphill, Jake Linford, Joe Miller, Jennifer Rothman, Pam Samuelson, Kathy Strandburg, Rebecca Tushnet, Molly van Houweling, Jim Gibson, Chris Sprigman, and participants at the IP Scholars' Conference, the Santa Clara conference on Antitrust and Silicon Valley, and a workshop at NYU Law School for thoughtful suggestions and Andrew McCreary for excellent research assistance.

incredulity of [hu]mankind, who do not truly believe in anything new until they have had actual experience of it.4

Incumbents frequently want to stop, or at least limit the use of, new technologies. They often claim the entrants make the world worse off.⁵ They are usually wrong about the social value of those technologies. The process of what Joseph Schumpeter called "creative destruction"⁶ has been responsible for many of the most significant advances in the history of capitalism. But even if the world benefits from a disruptive new technology, incumbents often don't.⁷ The new technology frequently shakes up the market, and the winners of the competition tend to be new companies, not old ones. At the least, the old ones must spend time and money rearranging their affairs to account for the new technological reality.

Incumbents, then, have a strong incentive to stop the disruption that accompanies new technology. And they often rely on intellectual property (IP), unfair competition, or related legal doctrines as tools to do so. What that means is that many of the cases in these areas are really

⁴ NICCOLO MACHIAVELLI, THE PRINCE (Luigi Ricci, trans.; E.R.P. Vincent, reviser), reprinted in Jean-Pierre Barricelli, The Prince: Text and Commentary: Presentation and Analysis of the Treatise on Power Politics 52 (1975).

⁵ See, e.g., Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. Telecomms. & High Tech. L. 125 (2011) [hereinafter *Sky Falling*] (chronicling the continuous reinvention of the music business as the player piano, the gramophone, radio, home taping, and internet piracy developed; of the motion pictures business as television, the VCR, and DVRs developed; and of publishing when books first seemed threatened by the photocopier); Barry Ritholtz, *Uber is Blamed for the Mistakes of New York's Leaders*, BLOOMBERG (Aug. 6, 2018 8:31 AM PDT), https://www.bloomberg.com/opinion/articles/2018-08-06/uber-is-blamed-for-the-mistakes-of-new-york-s-leaders (chronicling efforts to rebuff ride-hailing services disrupting the medallion-limited taxis in New York City by introducing, of all things, a fixed number of permitted Uber and Lyft vehicles).

⁶ JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY 82-85 (1975).

⁷ See, e.g., Reihan Salam, *Taxi-Driver Suicides Are a Warning*, The Atlantic (Jun. 5, 2018), https://www.theatlantic.com/ideas/archive/2018/06/taxi-driver-suicides-are-a-warning/561926/ (reporting on taxi drivers committing suicide as Uber, Lyft, and other services threaten their livelihoods).

about whether competition from new players can force incumbents to change their business models, generally to the advantage of particular players and the detriment of others. These cases are, in an important sense, all unfair competition cases; they are about the ways in which the law permits new entrants to compete with incumbents.⁸

Unfortunately, we lack any comprehensive way of thinking about market disruption in these settings. As a result, courts react quite differently to disruptive technology or business models in different cases. As one example, consider intellectual property (IP) cases brought against new technologies. Sometimes courts find the disruptive technology to infringe existing IP rights. New technology might fit within the legal definition of a prior invention, appropriately construed. Sometimes the technology might not itself infringe any prior invention, but makes it easier for third parties to infringe IP rights and is deemed illegal for that reason. One notable example in the copyright context involves digital media technology, much of which was held illegal because early uses frequently infringed copyright. In other cases, courts reject attempts

⁸ Cf. Sara K. Stadler, Copyright as Trade Regulation, 155 U. PENN. L. REV. 899 (2007).

⁹ E.g., Laser Alignment, Inc. v. Woodruff & Sons, Inc., 491 F.2d 866, 869-70, 873-74 (7th Cir. 1974) (holding contractors using a laser level for laying sewer pipe had infringed upon a patented method for using a collimated beam of light for laying sewer pipe).

¹⁰ See, e.g., Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 200, 202, 223 (1980) (interpreting 35 U.S.C. § 271 as codifying a common law compromise to enable "patentees to exercise control over nonstaple articles used in their inventions" but not over staple articles, and applying this rule to find no patent misuse where the holder of a patent for a weed-killing process brought suit against manufacturers of a chemical used therein having no other known use). But see Husky Injection Molding Syst. v. R & D Tool Eng'g, 291 F.3d 780, 782-83, 789 (Fed. Cir. 2002) (holding that the maker of unpatented molds and carrier plates with no other use than serving as replacements in a patented apparatus had not contributorily infringed).

¹¹ Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 919 (2005) (holding that "one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties"). Disclosure: Mark Lemley represented Grokster in that case. *But cf.* Sony Corp. v. Univ. City Studios, Inc., 464 U.S. 417, 445, 456 (1984) ("Sony's sale of [the Betamax] to the general public does not

to use IP or other rights to prevent market disruption, either by interpreting legal rights in ways that render the new technology non-infringing or by using doctrinal release valves like fair use.¹²

Other areas of law reflect similarly mixed feelings about market disruption. Business tort claims like unjust enrichment—and even nominally procompetitive laws like antitrust—are often asserted by companies with a vested interest in restricting a competitor's new technology. We have seen similar variability in antitrust, unfair competition, and business tort cases. Antitrust and unfair competition cases are brought against incumbents that try to prevent competition, but they are also brought by incumbents upset that their markets are being disrupted. Whether those laws encourage or inhibit market disruption depends critically on what kinds of competition courts deem "unfair."

One reason courts are all over the map in responding to disruptive technologies is that market disruption plays a very different role in different cases. Sometimes market disruption is expressly entangled with doctrine. For example, courts deciding copyright fair use cases must consider the effect of the defendant's use on the plaintiff's market.¹⁴ Trademark courts consider

constitute contributory infringement of respondent's copyrights" because it is "capable of substantial noninfringing uses," such as copying *Mr. Roger's Neighborhood* for later viewing).

¹² See, e.g., Sony Corp., 464 U.S. at 456 (refusing to find Sony secondarily liable for its sales of the Betamax because of it was capable of substantial non-infringing uses, including private time-shifting, which was fair use); Cartoon Network LP, LLLP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008) (finding cable company's remote storage DVR system did not violate the reproduction or public performance rights of copyright owner).

¹³ See infra sections I & II.A.

¹⁴ 17 U.S.C. § 107(4) (2012); *Sony Corp.*, 464 U.S. at 450-51; *see also* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 591 (1994) (reasoning that, because "[a] parody and the original usually serve different market functions," the parody entailed a fair use); Harper & Row Publishers, Inc. v. Nation Enterprises, 471 U.S. 539, 549, 566 (1985) (calling the potential effect on the market for the original the "single most important element of fair use").

whether the plaintiff and defendant are actual or likely competitors when deciding whether consumers are likely to be confused. Lost profit damages in patent cases may be calculated not only to account for lost sales, but also for the ways the defendant's conduct altered the market for the patented invention. These cases openly engage with the effects of the defendant's conduct because market disruption is relevant to the doctrinal rules.

In other cases, market disruption arguments shape results indirectly. Courts, for example, are sometimes persuaded to define legal rights in ways that are skewed by impulses about effects of new technologies on the parties to the case. Those legal definitions are often justified in "free riding" and "unfair competition" terms. 17 Some of those cases are characterized by courts' negative reactions to parties designing business models to formally comply with existing law while still disrupting the plaintiff's market. Because those attempts strike courts as evasive or somehow abusive, they redefine legal rights to capture the conduct. 18 And even when the conduct falls far enough outside defined legal rights that they cannot identify any clear violation, courts sometimes recognize ill-defined penumbral claims relying on broad concepts of misappropriation or unfair competition.

¹⁵ See, e.g., AMF Inc. v. Sleekcraft Boats, 599 F.2d 341, 348-49 (9th Cir. 1979) (setting out eight factors for evaluating trademark infringement, including "proximity of the good," "marketing channels," and "likelihood of expansion of the product lines"); Hancock v. Am. Steel & Wire Co. of N.J., 203 F.2d 737, 741-42 (C.C.P.A. 1953) (holding the mark "Tornado" infringed upon "Cyclone," both for wire fencing, in a case where Tornado had "entered the field considerably later" and spent less than one-hundredth as much on advertising).

¹⁶ For example, patentees can recover lost profits due to price erosion if the presence of the infringing products lowered the price for the patented goods. We also allow for lost convoyed sales of unpatented goods. *See, e.g.,* King Instruments v. Perego, 72 F.3d 855 (Fed. Cir. 1995).

¹⁷ See Mark Lemley & Mark McKenna, Owning Mark(et)s, 109 MICH. L. REV. 137 (2010).

¹⁸ American Broadcasting Companies, Inc. v. Aereo, Inc., 134 S. Ct. 2498 (2014); Metro-Goldwyn-Mayer Studios Inc. v. Grokster Ltd., 545 U.S. 912 (2005).

Our goal in this paper is to address the broader question of when competition by market disruption is "unfair." We begin from the premise that the market generally is better suited than are courts to determining which industry structure will have greater social value. That doesn't mean courts should *never* intervene to prevent development or deployment of new technology, but it does mean that they should regard that intervention as extraordinary and requiring justification in the purpose of the law being employed. In our view, courts are often overly receptive to market disruption arguments because they have the opposite inclination—they tend to be concerned about upsetting the status quo and affecting the settled expectations of market players, particularly when presented with arguments that some new technology will radically alter the industry. Market disruption arguments may be particularly powerful in the IP context, because claims that the disruption will fundamentally affect innovative or creative output sound like they are connected to the central purposes of IP. Caution, to courts, counsels against change.

But long experience demonstrates that arguments about the costs of disruptive new technologies to innovation and creativity are nearly always wrong, or at least overstated. ¹⁹ The VCR didn't kill the movie industry, and streaming is almost certainly not going to kill the music industry. That doesn't mean disruptive technologies or business models won't significantly affect particular incumbents. Digital music technology might have significant social value and even grow the pie with respect to music generally while at the same time shuttering thousands of Virgin Records stores. ²⁰ Rather than giving credence to claims that the sky is falling, courts need to

¹⁹ See, e.g., Lemley, Sky Falling, supra note 5.

²⁰ See, e.g., Alana Semuels, Virgin Megastore to Shut Doors, L.A. TIMES (Dec. 27, 2007), http://articles.latimes.com/2007/dec/27/business/fi-virgin27 ("Sales of compact discs were down 23%

understand market disruption arguments for what they are: claims about the effects of disruption on particular parties, not the world at large.

Those claims are profoundly anti-market and anti-innovation. They ask courts to circumvent market outcomes in order to protect the parties who benefit from the status quo. Courts should be reluctant to do so, particularly in the name of IP laws that are supposed to promote innovation. More specifically, courts should intervene to prevent market disruption only when they have very good reasons—reasons connected to the fundamental policy concerns of the legal systems called upon to prevent the disruption. To achieve that goal, we must know what the legitimate ends of the asserted law are. Sometimes the legal doctrine used to prevent market disruption is one like unjust enrichment, interference with economic advantage, or unfair competition that doesn't have a clear animating principle. We think those doctrines should be disfavored, and courts should employ them only when they are tied to some independent metric for deciding whether the defendant's conduct is unfair or unjust. Other doctrines, like antitrust and IP, have clearer purposes. There, we can evaluate legal challenges to market disruption by testing the fit between the goals of the statute and its use in a particular case.²¹

Courts in many types of cases have recognized this problem and begun to develop tools for dealing with them. But IP law has lagged behind, rarely even recognizing that what seem to be cases of infringement are really challenges to market disruption. We suggest a test that helps

last week from the same period in 2006, Billboard reported, as people continue to turn to the Internet for music.").

²¹ We recognize that new technologies often raise legal questions beyond those on which we have focused. Some disruptive technologies, for example, thrive in the market because of the way they enable data collection, and those technologies can raise serious privacy concerns. We do not suggest that those concerns do not justify judicial or regulatory response, only that any such response should likewise be justified in terms of the goals of the legal regime invoked.

separate legitimate cases of IP infringement from cases of pure market disruption. Drawn from the antitrust injury doctrine, ²² our test would treat market disruption as relevant to an IP case only if the disruption is traceable to the act of infringement itself. If the plaintiff would suffer the same injury from a market intervention that is not infringing, that injury cannot be evidence of IP infringement. ²³ Requiring a unique causal connection between the infringing nature of the defendant's work and the disruption of the market will allow us to separate cases in which infringement interferes with the purposes of the law from those in which the incumbent just uses

In *Rambus*, for example, a technology company participated in a standard-setting process while failing to disclose its IP interests in technologies that became the basis for a standard; this nondisclosure likely violated the organization's rules and enabled Rambus to later charge higher prices than it could have charged but for the deception. *Id.* at 463-64. Yet, the court held, given that the facts showed that

in the world that would have existed but for Rambus's deception, [the standard-setting organization] would have standardized the very same technologies, Rambus's alleged deception cannot be said to have had an effect on competition in violation of the antitrust laws; [and thus, the organization's] loss of an opportunity to seek favorable licensing terms is not as such an antitrust harm.

Id. at 466-67. We are skeptical that the court was right about its assessment of the facts in *Rambus*, see 1 HERBERT HOVENKAMP ET AL., IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW § 35.05 (3d ed. 2018), but the principle that actionable harm must be harm to competition and not merely disadvantage to a particular competitor is right.

²² An antitrust injury is one that harms not merely the competitor but the competitive process. *See* Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 489 (1977) ("Plaintiffs must prove antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful."); Rambus Inc. v. F.T.C., 522 F.3d 456, 464 (D.C. Cir. 2008) ("Even an act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws." (quoting Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 213 (1993))).

²³ Christina Bohannan and Herbert Hovenkamp have made a similar proposal, albeit for different reasons. *See* Christina Bohannan & Herbert Hovenkamp, Creation Without Restraint: Promoting Liberty and Rivalry IN Innovation, xiv, 365 (2011) (suggesting improving the IP regimes through a judge-made IP injury requirement); Christina Bohannan & Herbert Hovenkamp, *IP and Antitrust: Reformation and Harm*, 51 B.C. L. Rev. 905, 979 (2010) ("In IP law, provable harm should relate to the incentive to innovate, just as in antitrust provable harm relates to the incentive to compete."); *see also* Paul R. Gugliuzza, *IP Injury and the Institutions of Patent Law*, 98 IOWA L. Rev. 747 (2012) (reviewing Christina Bohannan & Herbert Hovenkamp, Creation Without Restraint: Promoting Liberty and Rivalry in Innovation (2012)).

IP as a tool to protect its market. It will, in other words, give us a metric by which to decide when disruption is unfair.

That metric will be hard to apply in practice.²⁴ And it will be particularly difficult in cases in which the issue in the case is precisely whether the relevant legal rights should be defined in a way that considers the defendant's conduct infringing. But we think the concept of a causal connection is latent in some cases and tractable in others, and focusing courts' attention on the connection between the disruption and fundamental policy concerns is better than not having a guiding principle at all.

In Part I we discuss the various ways IP and other tort cases are really about market disruption and the efforts of incumbents to prevent competition. In Part II we discuss how different legal doctrines have responded to those claims (and how IP law mostly has not). Finally, in Part III we offer some ideas for how to assess when disruption is unfair, and what to do if it is.\

I. Market Disruption

A. Legal Regulation of Market Disruption

1. Price and Entry Regulation

Incumbents often use regulation to insulate themselves from competition. A long literature discusses the history of how regulation, often originally intended to check the power of incumbents, may be turned into a tool protecting those incumbents against disruptive entry.²⁵

²⁴ We discuss some applications *infra* sections .

²⁵ See generally David P. Baron, Strategy Beyond Markets: A Step Back and a Look Forward, in Strategy Beyond Markets: A Step Back and a Look Forward, in Strategy Beyond Markets 1 (John M. Figueiredo et al., eds., 2016) (summarizing state of literature on "nonmarket" business strategy that uses politics and policy for competitive advantage, and applying the literature's lessons to understand contemporary cases like Uber); G. RICHARD SHELL, MAKE THE RULES OR YOUR RIVALS WILL

Sometimes that protection is explicit. Government prevented companies from entering the telephone business for most of the 20th century, reasoning that because telephony was a network good²⁶ the market was most efficient as a regulated monopoly.²⁷ Many states still treat electric power²⁸ and natural gas the same way.²⁹ And various professional licensing groups control entry into their fields.³⁰ And once the government controls entry, it generally also needs to control price. Ostensibly that's to prevent the monopoly from gouging its consumers, since the

^{(2004) (}collecting for a business audience examples of businesses successfully using regulatory processes and legal actions to cut down their competition and entrench their own market positions); ROBERT A. LEONE, WHO PROFITS: WINNERS, LOSERS, AND GOVERNMENT REGULATIONS 4 (1986) (explaining and illustrating nonmarket business strategies, including by recounting one regulatory waiver that created \$5 billion of value for a single firm); CHARLES E. LINDBLOM, POLITICS AND MARKETS: THE WORLD'S POLITICAL ECONOMIC SYSTEMS 170-188 (1977) (characterizing political and economic systems as symbiotic, and yet also as opposed, with business people opportunistically seeking to lobby politicians and regulators to extract rents).

²⁶ See Carl Shapiro & Hal R. Varian, Information Rules: A Strategic Guide to the Network Economy 212-14 (1999) (describing AT&T's use of network effects to consolidate the market, which regulators accepted in exchange for AT&T's provision of universal service); Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 Calif. L. Rev. 479, 549-551 (1998).

²⁷ See Lemley & McGowan, supra note 107, at 549 & nn. 294-95 ("If done right, regulation would, in theory, set the minimum efficient price necessary for the monopolist to recover its operating costs and a reasonable return on its capital investment."); see also In re Policy and Rule Concerning Rates for Dominant Carriers, 4 F.C.C.R. 2873, 2882-88 (1989) (reviewing history of telephony regulation); JERRY KANG & ALAN BUTLER, COMMUNICATIONS LAW AND POLICY: CASES AND MATERIALS 290-97 (5th ed. 2016) (reviewing history of AT&T from inception to break-up); Glen O. Robinson, The Titanic Remembered: AT&T and the Changing World of Communications, 5 YALE J. REG. 517 (1988) (book review) (same).

²⁸ See, e.g., Severin Borenstein & James Bushnell, *Restructuring*, 7 Ann. Rev. Econ. 437, 443 & fig.2 (2015) (showing states by share of output provided by nonregulated electric companies versus public utilities).

²⁹ See, e.g., Nicholas Apergis, Nicholas Bowden, & James E. Payne, *Downstream Integration of Natural Gas Prices Across U.S. States: Evidence from Deregulation Regime Shifts*, 49 ENERGY ECONS. 82, 83 (2015) (discussing federal and state deregulation of natural gas, with over 10% of U.S. customers now having multiple natural gas providers to choose from).

³⁰ See, e.g., State Bd. of Dental Examiners v. F.T.C., 135 S. Ct. 1101, 1107-8, 1117 (2015) (holding state board comprising six state-certified dentists and two other members did not enjoy state-action immunity from antitrust violations when, without clear statutory or other state supervision, it acted to exclude non-dentists from practicing the general trade of teeth-whitening); see generally MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 137 (1965) ("Many organizations representing prosperous and prestigious professions like the law and medicine have also reached for the forbidden fruits of compulsory membership.").

government has mandated that it face no competition. But over time those price controls can easily become floors rather than ceilings, discouraging the incumbents from investing in cost-saving technology or from passing those savings on to customers if they do.³¹

Regulations in those industries and others prevented entry by innovative challengers for years. Telephone technology improved by leaps and bounds once competitors could challenge AT&T's monopoly.³² The story for electric power is a bit more mixed, but allowing competitive electricity providers has spurred at least some innovation in the supply of electric power.³³

More recently, the sharing economy has offered a variety of new challenges by disruptive incumbents to entrenched industries. Cities and states that regulated hotels and taxis as quasipublic franchises resisted (and still resist!) the idea of opening those markets to competition by

³¹ See, e.g., KANG & BUTLER, supra note **Error! Bookmark not defined.**, at 165-73 (discussing methods and unintended consequences of rate regulation in the context of telephony); Harvey Leibenstein, *Allocative Efficiency vs. X-Efficiency*, 56 AM. ECON. REV. 392 (1966) (showing that the rate-regulated firm lacks incentive to reduce costs); Harvey Averch & Leland L. Johnson, *Behavior of the Firm Under Regulatory Constraints*, 52 AM. ECON. REV. 1052 (1962) (noting that the rate-regulated firm can gold-plate its projects if regulators overestimate the cost of capital).

³² See Rosemary Batt & Owen Darbishire, Reregulation and Restructuring in Telecommunications Services in the United States and Germany, in LABOR, BUSINESS, AND CHANGE IN GERMANY AND THE UNITED STATES 17, 18 (Kirsten S. Wever, ed. 2001) (citing, in the United States, "significant cost reductions in equipment and long-distance service; dramatic improvements in response time, quality, and speed of transmission; and diversity of product offerings").

³³ See Borenstein & Bushnell, supra note 109, at 437 (describing mixed results). But see Marianna Marino, Pierpaolo Parrotta, & Giacomo Valletta, Electricity (De)regulation and Innovation 1 (BETA, Woking Paper No. 2017-33, 2017) (finding in some cases inverse correlation between deregulation and rate of patent filings in electricity sector).

the likes of Uber, Lyft, and Airbnb.³⁴ In some countries those services are still banned.³⁵ But as those once-closed markets have opened to competition, the result has been disruption, but generally disruption in a positive direction for consumers.³⁶ Uber, Lyft, and Airbnb present challenges for the larger economy and the legal system,³⁷ but it's hard to argue we would be better off returning to a regulated taxi monopoly or forbidding owners from renting their homes. The same turns out to be true of other regulations that controlled entry and prices in markets ranging from optometrists to title insurers to dentists to civil engineers.³⁸

Many of the entry-preventing regulations seemed like a good idea when they were implemented. They served social goals. AT&T's monopoly stopped the development of

³⁴ See, e.g., Aaron Short, The Sharing Economy Is New York's Hottest Political War Right Now: City And State Officials Are Duking It Out Over Uber And Airbnb, CITY & STATE N.Y. (May 15, 2018), https://www.cityandstateny.com/articles/policy/policy/sharing-economy-new-yorks-hottest-political-war-right-now.html (describing how, in "New York's economy, like much of the rest of the country's, [new services are] upending long-standing economic arrangements in housing, travel, transportation and recreation," and thereby "taking business away from politically-entrenched interests that enjoyed near-monopolies on the market for hotel rooms and taxis"—prompting a "fierce" reaction).

³⁵ See, e.g., Ryan Cragg, Where Uber is Banned Around the World, TRAVELER (Apr. 20, 2017), https://www.cntraveler.com/story/where-uber-is-banned-around-the-world (collecting articles on countries, provinces, and localities where Uber (and presumably also Lyft) was banned as of April 2017, including Denmark and Italy); Katharine LaGrave, 13 Places Cracking Down on Airbnb, TRAVELER (Dec. 13, 2018), https://www.cntraveler.com/galleries/2016-06-22/places-with-strict-airbnb-laws (same for Airbnb at the local level).

³⁶ See Brishen Rogers, The Social Costs of Uber, 82 UNIV. CHI. L. REV. DIAG. 85, 86, 88 (2015) (arguing Uber has improved consumer welfare by increasing the efficiency of the car-hire market, including by virtually eliminating search costs, while noting that this "[c]reative [d]estruction" has left the legacy taxi industry less-well off in the immediate term and poses challenges for labor, public transportation, and other areas).

³⁷ See Winnie Hu, Your Uber Car Creates Congestion. Should You Pay a Fee to Ride?, N.Y. TIMES (Dec. 26, 2017), https://www.nytimes.com/2017/12/26/nyregion/uber-car-congestion-pricing-nyc.html (summarizing studies showing Uber increases congestion and discussing cities' responses).

³⁸ See, e.g., North Carolina Bd. of Dental Examiners v. United States, 135 S. Ct. 1101 (2015); FTC v. Ticor Title, 504 U.S. 621 (1992); National Society of Professional Engineers v. United States, 435 U.S. 679 (1978).

incompatible telephone networks that couldn't communicate with each other.³⁹ Power company monopolies were thought necessary to spur investment in a wide electric grid.⁴⁰ And taxi regulations theoretically served public safety by preventing unscrupulous people from robbing customers—and unscrupulous customers from robbing cabbies.⁴¹ But in each case they also reduced consumer choice, reduced the incentive to invest in quality, and prevented full price competition.⁴² Worse, they discouraged innovations that would have (and eventually did) make those technologies cheaper and better.

If it wasn't possible to reap the benefits of entry and price regulations without incurring those costs, we'd have a difficult policy dilemma. But experience has shown that there were ways to achieve those goals (interoperable standards in telephony, for instance) that didn't require the

³⁹ See Kang & Butler, supra note 108, at 293 (describing how even "customer premises equipment" makers, once they finally won the right to connect to AT&T's network with their own handheld phones, initially had to use a "Protective Connection Arrangement" device in order to ensure the network survived).

⁴⁰ See Paul L. Joskow & Richard Schmalensee, *Incentive Regulation For Electric Utilities*, 4 YALE J. REG. 1, 3-5 (1986) (recounting traditional rationale for monopoly regulation).

⁴¹ See Graham Russell Gao Hodges, Taxi!: A Social History of the New York City Cabdriver 130-35 (2007) (describing incremental increases in regulation to combat crime, discrimination, and other issues in New York City).

⁴² For telephony, see Nicholas Economides, Katja Seim, & V. Brian Viard, Quantifying the Benefits of Entry into Local Phone Service, 39 RAND J. ECONS. 699 (2008) (finding welfare gains from firm differentiation and choice, though not from retail price). For taxis and Uber, theory strongly suggests Uber's entry would reduce cost, as foregone compliance costs and increased supply should act to reduce cost and price, but compare Vsevolod Salnikov et al., OpenStreetCab: Exploiting Taxi Mobility Patterns in New York City to Reduce Commuter Costs (Mar. 10, 2015) (unpublished manuscript) (available at Cornell University's arXiv.org), https://arxiv.org/abs/1503.03021 (suggesting Uber may only be cheaper in NYC for trips that would otherwise cost more than \$35 by cab). For electricity sectors, see Paul L. Joskow, Deregulation and Regulatory Reform in the U.S. Electric Power Sector 119, 121 (MIT Center for Energy and Environmental Research, Working Paper 00-003. https://dspace.mit.edu/bitstream/handle/1721.1/44967/2000-003.pdf (finding deregulation led to "retail price reductions in states that have already implemented reforms," yet noting these price reductions so far have been achieved less by market forces than by regulators managing the transition towards competition--and enjoying a strong bargaining position as a result).

elimination of competition. We will likely find the same to be true in the markets where regulation still prevents entry (legal services and pharmaceuticals, for instance). In evaluating entry regulation, society needs to consider the harm it does by preventing disruptive innovation.

2. Costs and Behavior Regulation

Regulation doesn't need to forbid entry—or even to focus on it—in order to discourage it. Many regulations that govern how companies operate, even if well-intentioned, raise the cost of participating in the market. And that cost burden falls disproportionately on small entrants rather than large incumbents. A requirement that Internet companies detect and block certain types of content automatically, for instance, might require the development and training of a complex AI system at a cost of over \$100 million. Google can afford to make that investment, but a mom-and-pop startup can't. Other regulations require cars to be sold through a network of independent dealers—fine if you're an established car company who already has such a network, but not so great if you want to get into the car market.

As with more overt entry regulations like bans or licensing, these regulations are often set up with the best of intentions and can serve legitimate purposes. We want to keep bad stuff off the Internet. And car dealerships were designed to ensure that customers had a ready source

⁴³ See Cedric Manara, Head of Copyright, Google, *Protecting What We Love About the Internet: Our Efforts to Stop Online Piracy* (Nov. 7, 2018), https://www.blog.google/outreach-initiatives/public-policy/protecting-what-we-love-about-internet-our-efforts-stop-online-piracy/.

⁴⁴ Laws prevent Tesla from selling directly to consumers in four states including Connecticut, Texas, and Utah. In Massachusetts, Tesla prevailed in a state-court suit enjoining a similar law there; and in Michigan, it has filed a federal suit challenging a measure. *See* Ryan Felton, *Tesla Fights Back as Michigan Goes to New Lengths to Shut Company Out*, GUARDIAN (Oct. 9, 2016 06:00 EDT), https://www.theguardian.com/usnews/2016/oct/09/tesla-michigan-ban-detroit-lawsuit; *see also* Complaint, Tesla Motors, Inc. v. Johnson et al, No. 1:16-cv-01158, at 19-22 (W.D. Mich. filed Sept. 22, 2016) (asserting grounds for relief under Due Process, Equal Protection, and Dormant Commerce Clause principles).

of parts and service nearby. But they often outlive their usefulness, as the car dealership rule did once independent repair shops became common. And by imposing costs on new entrants that incumbents have already paid, they raise the cost of entry and therefore discourage disruptive innovation.

As with regulations that directly control entry, we need to weigh the costs of behavioral regulation alongside its benefits. But unlike entry bans, which are rarely good for society, behavioral regulation on entrants and incumbents can sometimes do good. The challenge is assessing which behavioral regulations serve a legitimate health and safety or market-enhancing purpose and which ones just raise rivals' costs and entrench incumbents. We shouldn't ban Lyft from running a ride-sharing service in order to protect taxi incumbents, for example, but it makes sense to impose some licensing and insurance requirements on Lyft drivers to protect passengers and to make sure they comply with antidiscrimination laws. We also should consider the impact of ride-sharing services on overall driving and consider ways to encourage more widespread use of public transportation to combat climate change. By contrast, it makes little sense to ban Tesla from selling cars (or Diageo from selling alcohol) in a state because it wants to do so in a store it owns rather than through a multi-tier franchise system.

⁴⁵ Nick Grossman envisions increasingly modest entry licenses, and increasingly robust data-driven supervision and penalties during operations. Nick Grossman, *Regulation: The Internet Way: A Data-First Model for Establishing Trust, Safety, and Security* (Ash Center Harv. Kennedy Sch., White Paper, 2015), https://datasmart.ash.harvard.edu/news/article/white-paper-regulation-the-internet-way-660.

⁴⁶ Tennessee Wine & Spirits Retailers Ass'n v. Byrd, No. 18-96, cert. granted, 139 S. Ct. 52 (2018).

B. Litigation as Entry Regulation

Regulation is not the only way incumbent businesses make it hard for entrants to disrupt their markets. Business litigation is also often about market disruption. Plaintiffs often bring business tort claims for interference with prospective economic advantage, unjust enrichment, unfair competition, or antitrust when the injury they are complaining of is not actually injury to competition but injury from competition. Taxi companies, for instance, have sued Uber and Lyft on the theory that their disruptive market entry was itself anticompetitive. These suits too are at base about feared market disruption.

1. Antitrust and Business Torts

Antitrust. Antitrust law is designed to protect competition, preventing both collusion among erstwhile competitors and efforts to monopolize a market.⁴⁷ So it seems like a tool that will encourage rather than impede market disruption. It should be, and often it is. Challengers can and do use antitrust to break open markets, expose cartels, block mergers that concentrate the industry, and challenge anticompetitive sales and licensing practices.

But incumbents have also used antitrust as a tool to target new entrants. Sometimes the complaint is that the entrant is too efficient and the existing market participants can't compete. That was the complaint mom-and-pop grocery stores lodged against fancy new supermarket

⁴⁷ "[T]he Sherman [Antitrust Act] and the judicial decisions interpreting it are based upon the assumption that the public interest is best protected . . . by the maintenance of competition." United States v. Trenton Potteries Co., 273 U.S. 392, 397 (1927). Competition suffers when former competitors agree not to compete, *id.*, or when a dominant firm acts to impair a rival or exclude it from the market, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604 n.32 (1985). Sherman Act § 1 bars agreements that unreasonably restrain trade, while its § 2 bars single- or multi-firm conduct that seeks to gain or preserve monopoly power other than by competition on the merits. *See* 15 U.S.C. §§ 1-2 (2004).

chains from the late 1940s to the 1960s, for instance. ⁴⁸ It was the challenge small banks brought against national banking chains. ⁴⁹ It is why taxi companies brought antitrust claims against Uber and Lyft, ⁵⁰ despite the fact that the taxi franchises, not the entrants, are the ones restricting competition. It is what motivates some, though not all, claims of "predatory pricing"—an allegation that the defendant is charging customers too little. ⁵¹ It was used to justify Apple's collusion with book publishers to prevent Amazon from disrupting the publishing industry by lowering prices, for instance. ⁵² And it was the complaint makers of once-separate goods like car

⁴⁸ E.g., United States v. Von's Grocery Co., 384 U.S. 270, 281 (1966) (White, J., concurring) (agreeing to enjoin merger between two grocery chains where their combined share would have been 8.9% of revenue, or just greater than the largest chain's 8%); United States v. N.Y. Great Atl. and Pac. Tea Co., 67 F. Supp. 626, 638-39 (1946) (explaining how the A&P supermarket system used horizontal and actual or threatened vertical integration to prompt suppliers to sell to it at lower prices). For a discussion of this era of grocery cases, see Timothy J. Muris & Jonathan E. Nuechterlein, *Antitrust in the Internet Era: The Legacy of United States v. A&P* (George Mason Law & Economics Research Paper No. 18-15, 2018), http://ssrn.com/abstract=3186569.

⁴⁹ E.g., United States v. Phila. Nat'l Bank, 374 U.S. 321, 325-26, 330-31 (1963) (citing concerns that the number of independent banks had decreased by 714 to reach 13,460 and enjoining merger between two of Philadelphia's largest).

⁵⁰ See, e.g., Malden Transportation v. Uber Techs., Inc., 321 F. Supp. 3d 174, 180 (D. Mass. 2018) (dismissing antitrust claims against Uber); MacCausland v. Uber Techs., Inc., 312 F. Supp. 3d 209 (D. Mass. 2018).

The Supreme Court has repeatedly declared that "predatory pricing schemes are rarely tried, and even more rarely successful." Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 226 (1993) (quoting Matsushita Elec. Indus. Co. v. Zenith Radio Corp. 475 U.S. 574, 589 (1986)). In *Brooke Group*, the Court reasoned that a cigarette seller allegedly pricing its generics below even its own costs in order to force a rival to stop selling generics could not have had a reasonable prospect of recouping its profits, and so did not commit predatory pricing under the Robinson-Patman Act. *Id.* No court since has found a defendant guilty of predatory pricing under the Robinson-Patman Act or the Sherman Act. Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941, 942 (2002). In recent years, however, economists and lawyers have argued that welfare-reducing predatory pricing might actually be attempted frequently, and even succeed—not least because a monopolizing firm could price below a rival's costs but above its own, drive the rival from the market, and then raise its prices to the monopoly price. *See, e.g., id.*; Christopher R. Leslie, *Predatory Pricing and Recoupment*, 113 COLUM. L. REV. 1695 (2013). For example, an airline facing a new entrant on one route might decide to undercut the entrant's prices in order to dissuade entry across all of its routes. *Cf.* United States v. AMR Corp., 335 F.3d 1109, 1111 (10th Cir. 2003).

⁵² The Second Circuit correctly held Apple and the publishers' collusion illegal despite the argument that antitrust law should encourage efforts to prevent market disruption. United States v. Apple, Inc., 791 F.3d

radios and spellcheck software made as new cars and word processing programs integrated those features into their products. True, those don't fit the classic picture of big incumbents squashing little challengers; it is often the challengers that end up taking over the market, and the antitrust plaintiffs may be the "small dealers and worthy men" of a bygone era. But those successful new entrants that take over markets are doing so by competing vigorously on the merits, something we want in a market economy. That's not to say that there aren't reasons to be concerned about some structural shifts in the economy, or that we don't want policies to support local businesses. But giving individual companies the ability to thwart disruptive entry is the wrong way to go about it.

Trade or commerce under [circumstances where prices ultimately fall despite anticompetitive conduct] may nevertheless be badly and unfortunately restrained by driving out of business the small dealers and worthy men whose lives have been spent therein, and who might be unable to readjust themselves to their altered surroundings. Mere reduction in the price of the commodity dealt in might be dearly paid for by the ruin of such a class and the absorption of control over one commodity by an all-powerful combination of capital.

Fashion Originators' Guild of Am. v. Fed. Trade Comm'n, 312 U.S. 457, 467 (1941) (quoting United States v. Trans-Missouri Freight Ass'n, 166 U.S. 290, 323 (1897)).

^{290, 298 (2}d Cir. 2015) ("[T]he dissent's theory—that the presence of a strong competitor [like Amazon] justifies a horizontal price-fixing conspiracy—endorses a concept of marketplace vigilantism that is wholly foreign to the antitrust laws.") For a discussion of using antitrust as an "anti-disruption" tool, see Salil K. Mehra, *Competition Law for a Post-Scarcity World*, 4 Texas A&M L. Rev. 1, 15-21 (2016).

⁵³ E.g., Town Sound and Custom Tops, Inc. v. Chrysler Motors Corp., 959 F.2d 468, 471-72 (10th Cir. 1992) (cars and car radios); Reiffin v. Microsoft Corp., 158 F. Supp. 2d 1016, 1033 (N.D. Cal. 2001) (spell-check, although here finding the plaintiff's alleged tying claim—that Microsoft had "tied" spell check to its dominant word-processing software—was in fact merely a patent infringement claim "masquerade[ing]" as an antitrust injury claim); see also Novell v. Microsoft Corp., 731 F.3d 1064 (10th Cir. 2013); Aldridge v. Microsoft Corp., 995 F. Supp. 728 (S.D. Tex. 1998).

Unfair Competition. Most states have statutes or common law provisions forbidding unfair competition. Most states have statutes or common law provisions forbidding unfair competition. The Federal Trade Commission also has the power to address unfair competition under section 5 of the FTC Act. Section But those provisions are often quite vague about what exactly unfair competition is. The California statute, for instance, defines it as "any unlawful, unfair or fraudulent business act or practice "57 Fraud is already illegal, of course, and making "unlawful" acts unlawful seems a tad redundant, if unexceptionable. But what exactly is "unfair"? The statute doesn't say. And in the absence of a definition of what competition is "unfair," these laws are at particular risk of being used to prevent not unfairness but competition itself. That was true in MacCausland v. Uber Technologies, for instance, in which taxi drivers upset that Uber was competing with them sought (unsuccessfully) to have that competition declared unfair. Section Something similar happened with the traditional doctrine of unfair competition, which gave parties claims against certain conduct that did not involve use of another's trademark but put tight limits on the sorts of things viewed as unfair competition. Section Over time, those limits went away, leaving an overly broad concept of unfairness that lacked limiting principles.

⁵⁵ E.g., CAL. Bus. & PROF. CODE § 17200 (West 2018); see generally Alexander N. Cross, Comment, Federalizing Unfair Business Practice Claims under California's Unfair Competition Law, 1 U. CHI. LEGAL FORUM 489, 495-97 (surveying unfair competition laws adopted by the vast majority of states).

⁵⁶ 15 U.S.C. § 45 (2012).

⁵⁷ CAL. BUS. & PROF. CODE § 17200 (West 2018).

⁵⁸ MacCausland v. Uber Techs., Inc., 312 F. Supp. 3d 209, 211 (D. Mass. 2018) (considering unfair competition claims and antitrust claims and only explicitly dismissing the antitrust claims). We discussed this case before, see supra text accompanying note 131.

⁵⁹ Mark P. McKenna, *The Normative Foundations of Trademark Law*, 82 NOTRE DAME L. REV. 1839 (2007).

⁶⁰ See Mark P. McKenna, Property & Equity in Trademark Law, _ MARQ. L. REV. _ (forthcoming 2019); Mark P. McKenna, A Consumer Decision-Making Theory of Trademark Law, 98 VA. L. REV. 67 (2012).

Tortious interference. The related torts of tortious interference with contract and intentional interference with prospective economic advantage suffer from a similar problem. By their literal terms, the act of competing with an incumbent for an existing or potential future customer would be unlawful. Even more than the tort of unfair competition, the tort of interference with economic advantage runs the risk of making market disruption unlawful.⁶¹

Unjust enrichment. Unjust enrichment, properly understood, is a remedy, not a cause of action.⁶² It allows courts to require disgorgement of profits or tangible things held unjustly, but—as a remedy—only if the defendant holds those things in violation of some substantive legal doctrine.⁶³ Nonetheless, some courts have found liability for unjust enrichment as a tort in its own right.⁶⁴ The problem with treating unjust enrichment as a tort is similar to the problems with

⁶¹ Shyam Balganesh suggests that copyright law acts like the tort of interference with prospective economic advantage, giving plaintiffs control over market competition. Shyamkrishna Balganesh, *Copyright as Market Prospect*, 166 U. PA. L. REV. 443, 443 (2018). While we agree that there are parallels between the two, we think Balganesh is too willing to accept the idea of control over market prospects in both doctrines.

⁶² Joel Eichengrun, *Remedying the Remedy of Accounting*, 60 IND. L.J. 463, 467-68 (1985); *cf.* Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc., 527 U.S. 308, 318 (1999) (stating that equitable remedies, such as for unjust enrichment, are limited to the types of remedies available in equity courts in 1789); SEC v. Cavanagh, 445 F.3d 105, 120 (2d Cir. 2006).

⁶³ See Douglas Laycock, Restoring Restitution to the Canon, 110 MICH. L. REV. 929, 932-34 (2012) (book review) (discussing hypotheticals where the law will not disgorge through "forced exchange" where no legal rule has been broken, as would be true in the case of an unrequested benefit such as the aesthetic value created for you by your neighbor's new fence).

one of us (Lemley) represented the University of Colorado Foundation in that case. He won, so he can't be accused of sour grapes in criticizing it. *See also* Douglas Laycock, *Scope and Significance of Restitution*, 67 TEX. L. REV. 1277, 1284-85 (1989) ("Defendant may be unjustly enriched without having committed any other civil wrong. . . . [In these cases,] the law of restitution is substantive as distinguished from remedial."). The Third Restatement gives some cover to this position. RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 51 cmt. e.1 (2011) (suggesting courts ask "How far to follow a chain of causation before deciding that a particular element of profit is too remote from the underlying wrong to be subject to restitution?" and yet to also consider "the remedial alternatives available as a practical matter"). For discussion of the issue, see, for example, HANOCH DAGAN, UNJUST ENRICHMENT: A STUDY OF PRIVATE LAW AND

unfair competition and tortious interference: It unmoors the claim from any independent definition of a legal wrong, and therefore leaves to the complete discretion of the court the definition of "unjust." ⁶⁵

Noncompetition Agreements. A final category of business tort that is often aimed at preventing innovative competition is not really a tort at all, but (at least nominally) a breach of contract claim. Employers frequently require that their employees promise not to work for a competitor or start a competing business. Estimates are that 18% of the U.S. workforce is bound not to take a competing job when they leave.⁶⁶ That includes not only inventive or management employees with possible access to trade secrets and business strategies but line workers at fast food restaurants and bakeries.⁶⁷ Employees are generally given no choice but to agree to these

PUBLIC VALUES (1997); Christopher T. Wonnell, Replacing the Unitary Principle of Unjust Enrichment, 45 EMORY L.J. 153 (1996).

⁶⁵ E.g., Iconco v. Jensen Const. Co., 622 F.2d 1291, 1302, 1304 (8th Cir. 1980) (affirming, under Iowa law, disgorgement of unjust enrichment where defendant had won a government contract set aside for small businesses without meeting the bidding criteria); Holmes v. Palo, No. A17-1187, 2018 WL 3213035, at *5 (Minn. Ct. App. July 2, 2018) (affirming unjust enrichment finding even though there was no obvious numeric relation between what the parties contributed in money or labor and what each unmarried life partner received upon the dissolution of a business legally owned wholly by one partner); Nyberg v. Wettlaufer, No. A10-567, 2010 WL 4181505, at *2 (Minn. Ct. App. Oct. 26, 2010) (holding no abuse of discretion where trial court reached opposite result—no unjust enrichment—on similar facts as prior case). Cf. Laycock, supra note 152 at 1285 (asking rhetorically, "What is it that makes enrichment unjust in the absence of some wrong for which the law would impose damage liability?"); Saul Levmore, Explaining Restitution, 71 VA. L. REV. 65, 66-67 (1985) ("That [the seemingly open-ended] list of exceptions to the nonrecovery norm is itself qualified at virtually every point reflects the remarkably uneven terrain of restitution law," making it challenging to "generate confident predictions about [courts'] decisions.").

⁶⁶ James Prescott, Norman D. Bishara, & Evan Starr, *Understanding Noncompetition Agreements: The 2014 Noncompete Survey Project*, 2016 MICH. ST. L. REV. 369, 461 (2016).

⁶⁷ See Bimbo Bakeries USA, Inc. v. Botticella, 613 F.3d 102, 105 (3d Cir. 2010) (operations executive at muffin factory had noncompete); Uncle B's Bakery, Inc. v. O'Rourke, 920 F. Supp. 1405, 1414 (N.D. Iowa 1996) (all employees in bagel factory had noncompetes); Sarah Whitten, Jimmy John's Drops Noncompete Clauses Following Settlement, CNBC (June 22, 2016 1:08 PM ET updated 1:38 PM ET), https://www.cnbc.com/2016/06/22/jimmy-johns-drops-non-compete-clauses-following-settlement.html (reporting sandwich worker contracts will no longer include noncompete).

noncompetes.⁶⁸ And while the risk of losing trade secrets may justify some restrictions on a particular employee's work for a competitor, noncompete agreements aren't limited to those circumstances.⁶⁹ They provide an effective way for incumbents to block the most logical source of disruption—existing industry employees—from competing with them at all.

2. IP as Market Regulator

Perhaps the most significant legal tool used to regulate disruptive entry is one not normally thought of as a business tort law at all: IP law. As with antitrust, this might seem ironic. IP law is supposed to encourage innovation, after all. But like other legal doctrines, IP can be and often is used, not to promote innovation, but to prevent disruptive innovation.

Copyright law. The potential of IP to protect markets from disruption is most evident in copyright law. From the late 1990's through the Supreme Court's 2005 *Grokster* decision, music copyright owners brought a series of cases against technologies that enabled digital filesharing.⁷⁰ According to the labels, those technologies posed a mortal threat to the music industry.

⁶⁸ Orly Lobel, Talent Wants to Be Free: Why We Should Learn to Love Leaks, Raids, and Free Riding 70-72 (2013).

⁶⁹ E.g., James Crystal Licenses, LLC v. Infinity Radio Inc., 43 So. 3d 68, 71 (Fla. Dist. Ct. App. 2010) (declining to invalidate noncompete for radio station host but, finding no actual damages in its breach, vacating lower court's award); JonJuan Salon, Inc. v. Acosta, 922 So. 2d 1081, 1083 (Fla. Dist. Ct. App. 2006) (enjoining stylist from working at competing salon). See generally Steven Greenhouse, Noncompete Increasinaly Pop Up in Array of Jobs, N.Y. TIMES (June 8,2014), https://www.nytimes.com/2014/06/09/business/noncompete-clauses-increasingly-pop-up-in-array-ofjobs.html (discussing silly examples).

 $^{^{70}}$ E.g., Grokster, Ltd., 545 U.S. at 913; A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002); UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 351 (S.D.N.Y. 2000) (finding conversion from CD to MP3 not transformative).

The story is a familiar one.⁷¹ Time and time again, content owners have insisted that, if some new technology was allowed to proliferate, no one would ever create new music, movies, portraits, or whatever content was at issue.⁷² The threats in the first decades of the 20th century were the player piano and the gramophone. John Philip Sousa wrote an article, *The Menace of Mechanical Music*,⁷³ in which he argued that those infernal devices were a "threat to his livelihood, to the entire body politic, and to 'musical taste' itself The player piano and the gramophone [] strip[] life from real, human, soulful live performances."⁷⁴ And he articulated an argument that is going to sound familiar to anyone in the copyright industry:

Do they not realize that if the accredited composers, who have come into vogue by reason of merit and labor, are refused a just reward for their efforts, a condition is almost sure to arise where all incentive to further creative work is lacking, and compositions will no longer flow from their pens . . . ? What, then, of the playing and talking machines? 75

In other words, without some way for musicians to continue to get paid as they had been paid before (by selling sheet music), no one would write music. Interestingly, Sousa's concern was not with professional content creators. Notwithstanding the previous passage, his real concern was that amateur music-making was threatened by the rise of a professional musical class that could lead to the rampant destruction of the country. He wrote,

⁷¹ Portions of the following paragraphs are adapted from Lemley, *Sky Falling*, *supra* note 5.

⁷² Painter Paul Delaroche reportedly declared, on seeing his first daguerreotype, "From today painting is dead." STEPHEN BANN, PAUL DELAROCHE: HISTORY PAINTED 9 (1997).

⁷³ John Philip Sousa, *The Menace of Mechanical Music*, 8 APPLETON'S MAG. 278 (1906).

⁷⁴ Nate Anderson, *100 Years of Big Content Fearing Technology—In Its Own Words*, ARS TECHNICA (Oct. 11, 2009 8:00 PM), https://arstechnica.com/tech-policy/2009/10/100-years-of-big-content-fearing-technologyin-its-own-words/.

⁷⁵ Sousa, *supra* note 73, at 284.

[u]nder such conditions the tide of amateurism cannot but recede, until there will be left only the mechanical device and the professional executant. Singing will no longer be a fine accomplishment; vocal exercises, so important a factor in the curriculum of physical culture, will be out of vogue! Then what of the national throat? Will it not weaken? What of the national chest? Will it not shrink?" ⁷⁶

Later it was the photocopier that threatened books and other print content.⁷⁷ The VCR promised to destroy the movie and television industries. As Jack Valenti, head of the Motion Picture Association of America told Congress, "the VCR [was] to the American film producer and the American public as the Boston strangler is to the woman home alone."⁷⁸ DVRs were accused of being an even bigger threat to the advertising-supported TV model, because they would enable easy commercial skipping.⁷⁹ Digital audio tapes were such a threat to radio that the music industry persuaded Congress to create a compulsory licensing scheme that effectively scuttled

⁷⁶ *Id.* at 284.

⁷⁷ Melville Nimmer, the leading copyright scholar, wrote with respect to the photocopier that "the day may not be far off when no one need purchase books." *Copying v. Copyright*, TIME, May 1, 1972, at 62 (quoting Melville Nimmer).

⁷⁸ Home Recording of Copyrighted Works: Hearings on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705 Before the Subcomm. on Courts, Civil Liberties, and the Admin. of Justice of the H. Comm. on the Judiciary, 97th Cong. 8 (1982) (testimony of Jack Valenti, President, Motion Picture Association of America, Inc.). Valenti insisted that the film industry would "bleed and bleed and hemorrhage, unless this Congress at least protects one industry that is able to retrieve a surplus balance of trade and whose total future depends on its protection from the savagery and the ravages of this machine." *Id.*; see also Jessica Litman, *The Story of Sony v. Universal Studios: Mary Poppins Meets the Boston Strangler, in* INTELLECTUAL PROPERTY STORIES 358 (Jane C. Ginsburg & Rochelle C. Dreyfuss, eds., 2006).

⁷⁹ "It's theft. Your contract with the network when you get the show is you're going to watch the spots. Otherwise you couldn't get the show on an ad-supported basis. Any time you skip a commercial... you're actually stealing the programming." Anderson, *supra* note 30 (quoting Staci D. Kramer, *Content's King*, CABLEWORLD, Apr. 29, 2002).

DAT technology.⁸⁰ Then it was MP3 players and ultimately filesharing technologies.⁸¹ Even the internet itself has often been characterized as an existential threat.⁸²

None of those predictions of doom came true. The VCR didn't destroy the television or movie industries—indeed, the movie industry in particular benefitted enormously from the VCR and its follow-on technologies, because the home rental market (a market it might have squelched had Sony been found contributorily liable for designing the Betamax with a record button) turned out to be incredibly lucrative.⁸³ And the same was true of digital devices for recording and replaying television shows: rather than kill TV advertising, they actually increased the number of television commercials viewed.⁸⁴ The Internet hasn't killed the music industry, which, by most accounts, is as profitable now as it's ever been.⁸⁵ We're also getting more new

⁸⁰ 17 U.S.C. §§ 1001-1007 (2006).

⁸¹ Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072 (9th Cir. 1999). Ironically, the suit failed because the court concluded that MP3 players were immunized by a provision in the Copyright Act, 17 U.S.C. § 1008, passed in 1992 as part of an effort to regulate digital audio tape, which created a home taping exemption to copyright infringement. *Id.* at 1079.

⁸² So much so that the content industries have repeatedly tried to get Congress to give them extraordinary tools to hobble its use for infringing purposes. *See* Stop Online Piracy Act, H.R. 3261, 112th Cong. § 103 (2011); Protect IP Act, S. 968, 112th Cong. § 103 (2011).

⁸³ The VCR, and its successor, the DVD player, reportedly generated \$30 billion in revenues for the industry, through 2002. *See* Lemley, *Sky Falling*, *supra* note 5, at 129. (citing DIGITAL HOLLYWOOD, KEYNOTE SPEAKER BIO, WARREN LIEBFARB (2005), *available at* http://www.digitalhollywood.com/%231DHFall05/DVDOne.html.

See NIELSEN, DVR Use in the U.S. 3 (Dec. 2010), https://www.nielsen.com/content/dam/corporate/us/en/newswire/uploads/2010/12/DVR-State-of-the-Media-Report.pdf ("Contrary to fears that DVRs would wipe out the value of commercials because of viewers fast-forwarding through ads, DVRs actually contribute significantly to commercial viewing."). For a review of U.S., European, and Indian experiences with the introduction of digital TV time-shifting technology, and the sometimes contrary findings of different studies, see Shalini Kalia, DVR and Its Impact on Indian Market: Now and in Future, SAGE OPEN 5 (Oct.-Dec. 2014).

⁸⁵ See Timothy Geigner, RIAA Reports Music Industry Is Making All The Money Just As New Study Says Piracy Has Never Been More Widespread, TECHDIRT (Mar. 29, 2018 10:44 AM), https://www.techdirt.com/articles/20180323/14512839491/riaa-reports-music-industry-is-making-all-money-just-as-new-study-says-piracy-has-never-been-more-widespread.shtml; Jesse Kirshbaum, It's

music now than ever before.⁸⁶ And we have more video and book options than ever before by orders of magnitude.⁸⁷

But while none of these new technologies killed content or the content industries, they often did disrupt existing arrangements and change the structure of industries involved in content creation and distribution—often to the detriment of established industry players. Digital music spelled doom for CD sales even as illegal music sites were shut down. iTunes replaced CD sales, changing how people bought music away from CDs and toward singles and also reinvigorating back catalogs. More recently, streaming services have dramatically affected purchasing of recorded music; people now buy music services rather than music itself.⁸⁸ That doesn't mean artists don't get paid, but it certainly changes which intermediaries get paid and how much.

That same phenomenon holds across a variety of copyright contexts. Netflix didn't kill the at-home movie market, but it certainly disrupted Blockbuster's rental model. More recently, Netflix and Amazon have disrupted the vertically-integrated structure that has tied video content and distribution together, delivering content directly to consumers without it being bundled with

²⁰¹⁸ and the Music Business is Better than Ever, ADAGE (Jan. 02, 2018), https://adage.com/article/agencies/2018-music-business/311771/.

⁸⁶ Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460 (2015).

⁸⁷ Id. at 485.

⁸⁸ See, e.g., Jon Caramanica, How a New Kind of Pop Star Stormed 2018, N.Y. TIMES (Dec. 20, 2018), https://www.nytimes.com/interactive/2018/12/20/arts/music/new-pop-music.html (comparing purchases and plays on CD, download, paid streaming, and—by far the leader—free streaming); Joshua Brustein, Spotify Hits 10 Million Paid Users. Now Can It Make Money?, BLOOMBERG (May 22, 2014, 1:56 PM PDT), https://www.bloomberg.com/news/articles/2014-05-21/why-spotify-and-the-streaming-music-industry-cant-make-money.

Internet service. Content owners get paid—and in many cases significantly more—but existing intermediaries might not.

Not surprisingly, parties with strong interests in existing arrangements have often invoked copyright law to protect against the effects of new technologies or business models.

Take, for example, *Aereo*.⁸⁹ Once upon a time, consumers placed antennae on their own houses to receive local broadcast content without payment. When Congress became concerned that cable companies might cut broadcasters out, it required the cable companies to carry the broadcast channels and to pay for their content.⁹⁰ That resolution looked like a win for both parties—it provided a high-quality distribution pathway for television, and cable companies would both *pay* broadcasters for the privilege and *charge* customers for the service.⁹¹ But the original model of free over-the-air content coexisted with paid cable services.

Aereo sold a service that allowed its subscribers to watch television programs over the Internet on a delay of just a few seconds from the time the programs were broadcast over the air. When a subscriber wanted to watch a show that was currently airing, she would "select that show from a menu on Aereo's web site. Aereo's system, which consist[ed] of thousands of small antennas and other equipment housed in a centralized warehouse," responded by tuning a single

⁸⁹ American Broadcasting Cos., Inc. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

 $^{^{90}}$ See PATRICK R. PARSONS, BLUE SKIES: A HISTORY OF CABLE TELEVISION 349-52 (2008) (describing this sequence in the epic story of cable's rise and regulation).

⁹¹ The original promise to consumers was that because they paid for cable they would get content without commercials, though that proved to be illusory.

dime-sized "antenna, which was dedicated to the use of one subscriber alone, to the broadcast of the selected show." To convey the signal to the subscriber,

[a] transcoder translate[d] the signals received by the antenna into data that [could] be transmitted over the Internet. A server save[d] the data in a subscriber-specific folder on Aereo's hard drive and beg[an] streaming the show to the subscriber's screen once several seconds of programming ha[d] been saved. The streaming continue[d], a few seconds behind the over-the-air broadcast, until the subscriber ha[d] received the entire show.⁹³

Subscribers were able to watch the streamed broadcast on any internet-connected device and from any location. Streaming continued, on delay of a few seconds, until the subscriber received the entire show, after which the subscriber-specific copy was not retained. Hipportantly (at least under copyright law as it existed when Aereo was created), every stream was from a dedicated copy; if multiple subscribers wanted to watch the same show, then Aereo used two separate antennas to save two distinct copies and stream the shows through two separate transmissions, each from the subscriber's personal copy. The system was 1 to 1, not 1 to many.

ABC and other television content owners sued Aereo, alleging the retransmissions of over-the-air broadcasts via the individual antennas were public performances of the broadcasts because they "communicate[d] [the broadcasts] by any device or process whereby images or sounds are received beyond the place from which they [were] sent. 96

⁹² American Broadcasting Cos., Inc. v. Aereo, Inc., 134 S. Ct. 2498, 2500 (2014). Full disclosure: one of us (Lemley) represented Aereo in that case.

⁹³ Id.

⁹⁴ Id.

⁹⁵ *Id.* at 2503.

 $^{^{96}}$ 17 U.S.C. § 101 (2012) ("To perform . . . a work 'publicly' means . . . to transmit . . . a performance . . . of the work . . . to the public . . .").

Aereo threatened the existing economic model because its system allowed consumers to receive high-quality broadcast content without paying the cable companies. ⁹⁷ The case wasn't really about whether broadcasters would have the incentive to produce content, or whether consumers could get access to that content. It was about the fact that Aereo's model threatened the economic models of the very cable companies that Congress feared a generation ago would disrupt the broadcast companies' models.

Other copyright cases seek to prop up existing business models by using copyright in one work to preserve market dominance in a related market not protected by the copyrighted work. Many of these cases involve interoperability between components. In *Sega v. Accolade* and *Sony v. Connectix*, for example, the plaintiffs sought to use claims of copyright (and in *Sega* trademark as well) over interface components to prevent competitors from making compatible devices — either video games that played on the Sega game console or compatible consoles that could play games designed for the Sony Playstation. The goal of those claims was not to protect the copyrighted work itself but to use the copyright in an interface component to keep control over other, more important parts of the work not themselves protected by copyright. While the Ninth Circuit rejected those efforts, the Federal Circuit unfortunately allowed a similar overreach in *Oracle v. Google*, ironically while purporting to apply Ninth Circuit law. 100

⁹⁷ Perhaps ironically, digital antenna technology has improved sufficiently in recent years that consumers are increasingly able to receive that high-quality signal the (semi) old-fashioned way.

^{98 977} F.2d 1510 (9th Cir. 1992).

⁹⁹ 203 F.3d 596 (9th Cir. 2000).

¹⁰⁰ 750 F.3d 1381 (Fed. Cir. 2014).

Other IP doctrines. Patent and trademark law too can be used to target disruptive entry. Qualcomm, for instance, has aggressively asserted its portfolio of standard-essential patents and ignored its obligations to license those patents on reasonable terms in an effort to keep control over wireless telephone standards.¹⁰¹ Qualcomm is arguably abusing patent rights to try to obtain market control that a proper understanding of those rights wouldn't give it. But limitations on patent law can also target market disruption. One example is the patent misuse doctrine. The doctrine was developed by the courts to restrict the ability of patentees to abuse their patents in ways that restricted competition. It shares that goal with antitrust law. But, as with antitrust, courts have sometimes applied the doctrine even in the absence of competitive harm.¹⁰² As Judge Posner warned, having a doctrine motivated by antitrust law but not limited by the scope of that law is a dangerous thing.¹⁰³ The patent misuse doctrine can serve a valuable

¹⁰¹ Its behavior in this regard is the subject of a pending antitrust challenge. *See* Federal Trade Comm'n v. Qualcomm, Inc., No. 17-CV-00220-LHK (N.D.Cal. Nov. 06, 2018) (holding that Qualcomm was obligated to license its standard-essential patents to competitors).

¹⁰² See, e.g., Morton Salt Co. v. G. S. Suppiger Co., 314 U.S. 488, 493-494 (1942) (holding patent misuse defense could be raised even by a plaintiff unharmed by defendant's conduct, because "[t]he patentee, like these other holders of an exclusive privilege granted in the furtherance of a public policy, may not claim protection of his grant by the courts where it is being used to subvert that policy"); HOVENKAMP ET AL., supra note 23, at § 3.03. But cf. The Patent Misuse Reform Act of 1988, 35 U.S.C. § 271(d) (2012) (limiting misuse defense on several factors, though not on failure to show direct harm); Illinois Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 41-42 (2006) (interpreting § 271(d) to indicate that patentees do not presumptively possess market power).

¹⁰³ USM Corp. v. SPS Techs., Inc., 694 F.2d 505, 512 (7th Cir. 1982), cert denied, 462 U.S. 1107 (1983) (Posner, J.) ("If misuse claims are not tested by conventional antitrust principles, by what principles shall they be tested? Our law is not rich in alternative concepts of monopolistic abuse; and it is rather late in the day to try to develop one without in the process subjecting the rights of patent holders to debilitating uncertainty.")

purpose in protecting competition,¹⁰⁴ but courts must be (and increasingly are) careful to apply it only when doing so serves those procompetitive purposes.¹⁰⁵

Another example of an IP doctrine that is often misused against competitors is the trademark doctrine of initial interest confusion. The point of trademark law is to prevent consumer confusion. We have argued elsewhere that that confusion must be about something that matters. Attracting a consumer's attention by deceit can sometimes, if rarely, be the sort of confusion that matters. But the doctrine doesn't expressly require materiality, and a number of courts have found initial interest confusion in ordinary advertising designed merely to attract attention rather than to confuse. That misunderstands the purpose of the confusion

¹⁰⁴ A very, very long time ago, one of us suggested the doctrine was unnecessary, Mark A. Lemley, Comment, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 CALIF. L. REV. 1599 (1990), but he has since recanted, *cf.* Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CALIF. L. REV. 111, 171 (1999) (concluding patent misuse plays role in protecting federal patent policy against contractual incursions). The doctrine may reach some conduct that is in fact anticompetitive but not easily reached with antitrust law for various reasons. But it should be applied only when it serves those purposes.

¹⁰⁵ HOVENKAMP ET AL., *supra* note 23, sec. 3. 03. Indeed, Congress has instructed courts as much. *See* The Patent Misuse Reform Act of 1988, 35 U.S.C. § 271(d) (2012) (limiting patent misuse defense in some cases—such as where patentee receives revenues from activities that otherwise could be found contributorily infringing on the patent—unless the patentee has market power); *Illinois Tool Works Inc.*, 547 U.S. at 41-42 (2006) (interpreting § 271(d)).

¹⁰⁶ See Mark A. Lemley & Mark McKenna, *Irrelevant Confusion*, 62 STAN. L. REV. 413, 450 (2010) ("Whether courts or Congress are the actors, the change we propose is straightforward: the law should require that trademark owners claiming infringement based on confusion regarding anything other than source or responsibility for quality must demonstrate the materiality of that confusion to consumer purchasing decisions.")

¹⁰⁷ See, e.g., Rosetta Stone Ltd. v. Google, Inc., 676 F.3d 144, 173 (4th Cir. 2012) (remanding for further discovery claims that Google directly or contributorily infringed Rosetta Stone's mark by selling search ads using "Rosetta Stone" keyword to its rivals and possible direct infringers of mark); Rescuecom Corp. v. Google Inc., 562 F.3d 123, 131 (2d Cir. 2009) (holding trial court errored by dismissing complaint against Google for selling search ads using "Rescuecom" keyword to Rescuecom's rivals); People for Ethical Treatment of Animals v. Doughney, 263 F.3d 359, 366-67 (4th Cir. 2001) (affirming trial court's finding that parodic site registered as "peta.org" infringed PETA's service mark). But see Network Automation, Inc. v. Advanced Sys. Concepts, Inc., 638 F.3d 1137, 1154 (9th Cir. 2011) (holding trial court "fail[ed] to discern whether there is a likelihood of confusion in a keywords case"); Lamparello v. Falwell, 420 F.3d

requirement in trademark law. As the Sixth Circuit explained in *Groeneveld* when properly rejecting the doctrine:

[W]hat appears to concern Groeneveld is not so much initial-interest *confusion*, but initial interest, period. Groeneveld, in other words, simply does not want its customers to become interested in Lubecore as a potential competitor and possibly switch over. We cannot ascribe any other interpretation to Groeneveld's rather startling claim that evidence of diverted sales and declining revenues, which are the normal signs of a market opening up to competition, create "a reasonable inference of confusion and its likelihood." Groeneveld's desire to be the only game in town is perfectly natural; most companies would hope for that status. But Groeneveld cannot get any help from tradedress law in suppressing lawful competition.¹⁰⁸

Other trademark and design patent cases that target market disruption are filed against producers of spare parts, independent repair service providers, and resellers of genuine trademarked parts. The goal of these cases is to protect the IP owner's market against competition – in many cases competition from the IP owner's own goods. And trademark owners also sue competitors who run ads on Internet search engines targeted to customers who search for their products. The goals of those suits are generally not to prevent confusion itself but instead to prevent competitors from attracting the customer's attention to a competing product.

^{309, 317 (4}th Cir. 2005) (reversing trial court's finding of initial interest confusion where "[t]his critical element—use of another firm's mark to capture the markholder's customers and profits—simply does not exist[, such as with the www.fallwell.com site at issue,] when the alleged infringer establishes a gripe site that criticizes the markholder"). Full disclosure: one of us (Lemley) represented Google in the Rescuecom case.

¹⁰⁸ Groeneveld Transp. Efficiency, Inc. v. Lubecore Int'l, Inc., 730 F.3d 494, 519 (6th Cir. 2013).

¹⁰⁹ For discussion, see, e.g., Leah Chan Grinvald & Ofer Tur-Sinai, *Intellectual Property Law and the Right to Repair* (working paper 2019).

For a discussion of those suits, see Stacey L. Dogan & Mark A. Lemley, *Trademarks and Consumer Search Costs on the Internet*, 41 Hous. L. Rev. 777 (2004); Eric Goldman, *Deregulating Relevancy in Internet Trademark Law*, 54 Emory L.J. 507 (2005).

II. The Law's Response to Market Disruption Claims

In this section we consider the various ways courts evaluate market disruption lawsuits.

As we will see, business tort doctrines have largely evolved to be skeptical of those claims, while IP's treatment of market disruption has been much more uneven.

A. Business Torts and Market Disruption

Unfair Competition. As we noted in part I, unfair competition doesn't come with any preconceived notion of what is unfair, allowing plaintiffs to treat the very act of competition as unfair in many cases. Some courts have sought to address this problem by tying unfair competition to specific substantive standards. In California, for instance, an unfair competition claim that is at base an antitrust-type claim must meet the substantive standards of antitrust law. That leaves open some tricky definitional issues. And it may mean that, at least in the cases in which Cel-Tech applies, the "unfair" prong of California's unfair competition law has no more independent force than the "unlawful" or "fraudulent" prongs. But it is at least an effort

¹¹¹ See Cel-Tech Commc'ns., Inc. v. L.A. Cellular Tel. Co., 973 P.2d 527, 544 (Cal. 1990) ("When a plaintiff who claims to have suffered injury from a direct competitor's 'unfair' act or practice invokes section 17200, the word 'unfair' in that section means conduct that threatens an incipient violation of an antitrust law, or violates the policy or spirit of one of those laws because its effects are comparable to or the same as a violation of the law, or otherwise significantly threatens or harms competition."). But cf. Portney v. CIBA Vision Corp., 593 F. Supp. 2d 1120, 1129 (C.D. Cal. 2008) (allowing defendant's fraud-related counterclaims under California's Unfair Competition Law to proceed despite dismissing defendant's antitrust counterclaims).

¹¹² Seen another way, courts have suggested the "fraudulent" or "unlawful" prongs may have broader content, but that *Cel-Tech*'s test for unfairness at least covers a set of antitrust-like "anticompetitive practices" at issue in the case. *See* Davis v. Ford Motor Credit Co., 101 Cal. Rptr. 3d 697, 707 (Cal. Ct. App. 2009) (summarizing the "split of authority on this question among the Courts of Appeal [in California]").

to find substantive standards to define what is unfair, and so reduce the risk that the law will be turned against disruptive technologies that aim to compete on the merits.

Tortious Interference. A similar problem bedevils tortious interference doctrine. Competition often interferes with a competitor's actual or prospective business advantage. The law doesn't itself explain when that competition qualifies as tortious. Fortunately, courts have recognized this problem. As with unfair competition, they generally require that the interfering conduct be "wrongful by some legal measure other than the fact of the interference itself." 113 They create a privilege of fair competition that the tort cannot abridge. 114 And they provide procedural protections by requiring the court to determine the wrongful conduct and scope of privilege as a matter of law, rather than giving the issue to the jury. 115 By contrast, interference with existing contracts is easier to prove than is interference with the mere prospect of a contract: "a broader range of privilege to interfere is recognized when the relationship or economic advantage interfered with is only prospective." 116 This makes sense—breach of contract is a legal wrong, and inducing it can also be wrongful conduct. By contrast, we shouldn't be upset if I interfere with your prospects of contracting with some third party unless I engaged in some independently wrongful conduct. After all, that third party is free to enter into a contract with you or not, and until they do I should be free to try to get their business instead.

¹¹³ Della Penna v. Toyota Motor Sales, U.S.A., Inc., 902 P.2d 740, 751 (Cal. 1995).

¹¹⁴ PMC, Inc. v. Saban Enter., Inc. 52 Cal. Rptr. 2d 877, 891 (Cal. Ct. App. 1996), disapproved on other grounds in Korea Supply Co. v. Lockheed Martin Corp., 63 P.3d 954 n.11 (Cal. 2003). Of course, that simply begs the question we discussed in the last subsection: what competition is "fair"?

¹¹⁵ JUDICIAL COUNCIL CAL., *CACI No. 2202: Intentional Interference with Prospective Economic Relations, in* JUDICIAL COUNCIL OF CALIFORNIA CIVIL JURY INSTRUCTIONS (2017), https://www.justia.com/trials-litigation/docs/caci/2200/2202/.

¹¹⁶ Pacific Gas & Elec. Co. v. Bear Stearns & Co., 791 P.2d 587, 590 (Cal. 1990).

Unjust Enrichment. Unjust enrichment (when conceived of as a tort rather than a remedy) has a similar problem: how do we know when enrichment is "unjust"? Here, too, courts sometimes reduce the risk of this free-ranging tort being used to block disruptive market entry by tying the "unjustness" of the enrichment to some preexisting category of legal wrong. In University of Colorado Foundation v. American Cyanamid, for instance, the court insisted that unjust enrichment based on theft of a patentable idea could be actionable as a state tort only if the state court applied federal standards for patent inventorship. 117 By so doing, it grounded the unjust enrichment in a substantive legal wrong, albeit one that didn't specifically provide for a disgorgement remedy.

Antitrust. The issue with antitrust is different. While the doctrines just discussed lack a normative core, that's not true of antitrust. Antitrust is designed to protect competition. The problem is that antitrust plaintiffs often conflate that with protection of individual competitors, even if the thing those competitors want protection from is really robust competition. Antitrust has effectively confronted these claims, developing tools¹¹⁸ designed to make sure that antitrust

¹¹⁷ Univ. of Colo. Found., 196 F.3d at 1372. The court also found that the defendants committed fraud, a separate independent tort. *Id.* at 1374. The fraud damages were lower than the unjust enrichment award, but both awards were based on the same wrongful conduct and were eventually upheld on a subsequent appeal. Univ. of Colo. Found., Inc. v. Am. Cyanamid Co., 342 F.3d 1298 (Fed. Cir. 2003).

In § 1 analysis, courts may find conduct illegal *per se* when "the practice facially appears to be one that would always or almost always tend to restrict competition and decrease output," such as price-fixing. Broad. Music, Inc. v. Colum. Broad. Syst, Inc., 441 U.S. 1, 19-20, (1979). They may conduct a "quick look" analysis under the rule of reason when there is a "close family resemblance between the suspect practice and another practice that already stands convicted in the court of consumer welfare." Polygram Holding, Inc. v. F.T.C., 416 F.3d 29, 37 (D.C. Cir. 2005); *see also* California Dental Ass'n v. F.T.C., 526 U.S. 756, 770 (1999). Finally, they may conduct a full-blown "rule of reason" analysis otherwise, which is far more defendant-friendly. *See* Maurice E. Stucke, *Does the Rule of Reason Violate the Rule of Law?*, 42 U. CAL. DAVIS L. REV. 1375 (2009) ("The empirical evidence reflects that most rule-of-reason claims never reach juries; rather, most are decided on motions to dismiss or summary judgment, and most (and in some

claims "protection competition, not competitors." In particular, antitrust standing doctrines attempt to prevent plaintiffs from using antitrust as a competitive weapon by requiring that the injury the plaintiff suffers flow from the anticompetitive nature of defendant's conduct rather than from vigorous competition. We discuss those tools—and in particular the antitrust injury doctrine—in more detail in Part III. 120

Noncompetition Agreements. As we discussed in Part I, companies often use noncompete agreements to make it harder for employees to start new companies that might compete with them and for existing companies to lure talent in a competitive market. States have been inconsistent in their treatment of noncompetes. A minority of states, most notably California, ban them altogether. Most states impose some time and scope limitations on noncompetes but otherwise enforce them. The economic evidence is quite strong that noncompetes restrict

surveys nearly all) antitrust plaintiffs lose."); Matthew Sipe, *The Sherman Act and Avoiding Void-for-Vagueness*, 45 FLA. ST. U. L. REV. (2018).

¹¹⁹ See Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 458 (1993) ("The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself.").

¹²⁰ See infra notes 164-218 and accompanying text.

¹²¹ Regarding California, see CAL. BUS. & PROF. CODE § 16600 (West 2018); Edwards v. Arthur Andersen LLP, 189 P.3d 285, 288 (Cal. 2008) (interpreting section 16600 to bar all noncompetes "unless the agreement falls within a statutory exception," with those exceptions pertaining to the sale of businesses). Other states that ban noncompetes include Alabama, Louisiana, Montana, and North Dakota. See 1 Peter S. Menell, Mark A. Lemley, & Robert P. Merges, Intellectual Property in the New Technological Age 121 (2017 ed.). States forbidding them for professionals but allowing them otherwise include Colorado, Delaware, Massachusetts, and Tennessee. *Id.*

This is true, for instance, of Idaho, IDAHO CODE ANN. § 44-2701 (West 2018) (limiting enforceability of noncompetes that are "reasonable as to its duration, geographical area, type of employment or line of business"), Michigan, MICH. COMP. LAWS § 445.774a (2018) (limiting similarly), and South Dakota, S.D. CODIFIED LAWS § 53-9-11 (limiting enforceability to two-year agreements related to like business in a specified area). See generally 1 PETER S. MENELL, MARK A. LEMLEY, & ROBERT P. MERGES, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 119 (2017) (discussing majority rule).

innovation and economic growth.¹²³ Indeed, the success of Silicon Valley has been traced to the ease of innovation that California's refusal to enforce noncompetes makes possible.¹²⁴ But in most states today they represent a significant barrier to disruptive competition. There are preliminary signs that might be changing. The Obama administration began the process of

¹²³ See, e.g., LOBEL, supra note 157, at 70-72 (collecting studies—including "natural" experiments following policy changes in Michigan, Florida, Texas, and Louisiana—and showing that more enforcement of noncompetes leads to less labor mobility and research productivity); Matt Marx, Reforming Non-Competes to Support Workers 5 (Brookings Inst.: The Hamilton Project, Policy Proposal 2018-04, Feb. 2018), https://www.brookings.edu/wp-content/uploads/2018/02/es_2272018_reforming_noncompetes_support_workers_marx_policy_propo sal.pdf (collecting literature on "chilling effect" of noncompetes and proposing reforms); Prescott et al., supra note 155, at 377-78 (collecting literature on effects of noncompete on labor mobility and innovation, though qualifying this literature as lacking in quantitative rigor). But see Jonathan M. Barnett & Ted M. Sichelman, Revisiting Labor Mobility in Innovation Markets 1 (Univ. S. Calif. L. Sch., Legal Stud. Working Paper Series, 2016-207, 2016), (finding California's "non-enforcement" of noncompetes overstated because, through other contractual mechanisms, California employers achieved similar restrictions on labor mobility, and so arguing that other factors better explain Silicon Valley's rapid innovation).

¹²⁴ See, e.g., ALAN HYDE, WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF A HIGH-VELOCITY LABOR MARKET (2003) (making this point); ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128, 44 (1994) (attributing Silicon Valley's faster pace of innovation to itinerant engineers and entrepreneurs, who for cultural and legal reasons alike--those legal reasons including a propensity to deal without having yet signed contracts, though she did not call out noncompetes in particular--were able to iterate faster than their cloistered colleagues on the East Coast); Ronald J. Gilson, The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete, 74 N.Y.U. L. Rev. 575 (1999) (arguing California's refusal to enforce noncompetes explains why Silicon Valley innovation outpaced Massachusetts's Boston-based innovation, where noncompetes are enforced); Alan Hyde, Should Noncompetes Be Enforced?: New Empirical Evidence Reveals the Economic Harm of Non-Compete Covenants, REGULATION 6, 8-9 (Winter 2010-2011) (summarizing early cultural and more recent legal and economic studies of Silicon Valley and the importance of non-enforcement of noncompetes to its success). But see Barnett & Sichelman, supra note 161, at 1 (arguing this case is overstated because California employers developed other mechanisms, including legal, to slow labor mobility).

limiting noncompetes, though that, like much else, went out the window in the 2016 election. 125

And there may be a trend in the states toward restricting noncompetes. 126

B. IP and Market Disruption

As we have just seen, courts in most business tort cases have developed rules to police the use of those laws to prevent disruption. The record in IP, by contrast, is more mixed Sometimes courts reject market disruption arguments in IP cases, either because they see the value of the new technology or business model or because the harm claimed by the plaintiff seems remote. In other cases, courts are more receptive to claims of disruption—in the sense that they openly credit those arguments in doctrinal contexts in which they are directly relevant, or in the sense that those arguments indirectly shape the ways courts define the parties rights and obligations. In part we have this mixed record because IP law does intend to prevent some forms of disruption. But the confusion also stems from the fact that courts often act without thinking about how their IP decisions influence market competition.

1. Anti-Disruption Impulses in IP

IP rights can prevent market disruption in several ways. First, courts are sometimes persuaded to define legal rights in ways that are skewed by impulses about effects of new technologies on the particular parties to the case. 127 Those legal definitions are often justified in

https://obamawhitehouse.archives.gov/the-press-office/2016/10/25/fact-sheet-obama-administration-announces-new-steps-spur-competition.

¹²⁶ See Mass. Gen. Laws ch. 149, § 24L (2018) (newly limiting noncompetes in Massachusetts); Callum Borchers, *The Best State for Science and Tech? It's Massachusetts, Again*, WBUR 90.9: BOSTONOMIX (Dec. 18, 2018), https://www.wbur.org/bostonomix/2018/12/18/milken-institute-science-tech-rankings (explaining high rating in science- and tech-friendliness is partly attributable to legislative change limiting noncompetes).

"free riding" and "unfair competition" terms, and sometimes they reflect courts' negative reactions to parties attempts to design their business models to technically comply with the law while violating its spirit. And even when the conduct falls far enough outside defined legal rights that they cannot identify any clear violation, courts sometimes recognize ill-defined penumbral claims relying on broad concepts of misappropriation or unfair competition.

There is perhaps no better example of a court's redefinition of legal rights to capture disruptive technology than *Aereo*, the company that made tiny broadcast antennas. According to the plaintiffs, Aereo's system was effectively a cable system, but Aereo was not paying any of the fees cable systems pay to broadcasters to carry their content.¹²⁸

The Court agreed, concluding that "Aereo's activities [were] substantially similar to those of the CATV companies that Congress amended the Act to reach." Aereo, not just its subscribers, "publicly performed" the works because it sold a service that "allow[ed] subscribers to watch television programs, many of which are copyrighted, almost as they are being broadcast. In providing this service, Aereo use[d] its own equipment, housed in a centralized warehouse, outside of its users' homes." Aereo "carrie[d] . . . whatever programs it receive[d], and it offered all the programming of each over the air station." No matter that Aereo used

Aereo would have been able to rebroadcast by paying the statutory license fees, and that still would have upset the market. See Transcript of Oral Argument at 3-7, 28, Aereo, 134 S. Ct. 2498, https://www.supremecourt.gov/oral_arguments/argument_transcripts/2013/13-461_97l5.pdf. And indeed they ultimately had it both ways. Fox TV Stations, Inc v. Aereokiller, LLC, 851 F.3d 1002 (9th Cir. 2017).

¹²⁹ Aereo, 134 S. Ct. at 2506.

¹³⁰ Id.

¹³¹ Id.

equipment (antennas) that "emulate[d] equipment a view could use at home"—that was, according to the Court, also true of the equipment used by cable companies considered by the Court in *Fortnightly* and *Teleprompter*, to which Congress responded in the 1976 Act. 132

What about the fact that, unlike cable systems, which transmit constantly without selection by the viewer, "Aereo's system remains inert until a subscriber indicates that she wants to watch a program"? Doesn't that mean that the subscriber, and not Aereo, selected the content that was performed? Not to the majority, because cable subscribers also could select which programs to view by turning the channel. Turning the channel could not, of course, change the behavior of the cable company (the television shows were being retransmitted regardless); all it did was determine whether the viewer could see that transmission. But, for the Aereo majority, that was a distinction without a difference. It could not see why this "single difference, invisible to the subscriber and broadcaster alike, could transform a system that is for all practical purposes a traditional cable system into 'a copy shop that provides its patrons with a library card."

In other words, it did not matter that Aereo designed its system to be technically distinct from cable systems in at least two significant ways—by making it 1:1 (using different antennas to create unique copies for individual subscribers rather than grabbing the signal with one antenna

¹³² *Id.* at 2507.

¹³³ Id.

¹³⁴ That was a critical difference for the dissent. *See id.* at 2513-14 (Scalia, J., dissenting). And it informed the rejection of similar copyright claims in *In re Autohop Copyright Litig.*, No. 13-3573, 2013 WL 5477496 (C.D. Cal. Oct. 1, 2013).

¹³⁵ Aereo, 134 S. Ct. at 2507.

¹³⁶ Id.

and retransmitting it to all subscribers), and by capturing and retransmitting signals to subscribers only if/when those subscribers affirmatively selected a specific program.¹³⁷ These technological differences "concern[ed] the behind-the-scenes way in which Aereo deliver[ed] television programming to its viewers' screens. They d[id] not render Aereo's commercial objective any different from that of cable companies. Nor d[id] they significantly alter the viewing experience of Aereo's subscribers."¹³⁸

Notably, the Court was not only receptive but indeed actively hostile toward Aereo's evident intent to design its system to comply with existing precedent. At the oral argument at the Supreme Court, Justice Roberts asked Aereo's lawyer directly whether there was any explanation for Aereo's use of 10,000 dime-sized antenna, other than "to get around the copyright laws." When Aereo's lawyer demurred, suggesting that copyright law shouldn't depend on the number of antenna, but on who is doing the performance, Justice Scalia drove the point home: "you're just saying that by doing it this way you don't violate the copyright laws. But his question is, is there any reason you did it other than not to violate the copyright laws?" The sense that, in the end, Aereo's system was really just a Rube Goldberg device designed technically to comply with previous cases, but meant to operate functionally as a cable system, pervades the

¹³⁷ Nor did it matter that the Court's treatment of Aereo's system makes it nearly impossible to differentiate the use of an ordinary antenna on the roof of a viewer's home. That antenna also transmits broadcasts by communicating them in a way that images and sounds are received beyond the place from where they were sent.

¹³⁸ *Id.* at 2508.

¹³⁹ Transcript of Oral Argument, *supra* note 87, at 31 (Roberts, CJ.) ("But is there any reason you need 10,000 of them? Can't you just—if your model is correct, can't you just put your antenna up and then do it? I mean, there's no technological reason for you to have 10,000 dime-sized antenna, other than to get around the copyright laws.")

¹⁴⁰ Id. at 32 (Scalia, J.).

Court's opinion—and perhaps explains the opinion's failure to grapple with the potential implications of its holding. This kind of analogizing along functional lines is hardly foreign to copyright, and it isn't always done to find infringement. But, ironically, *Aereo* rejected the legal reasoning of *Cartoon Network*, and particularly its emphasis on volitional conduct, in reaching its conclusion in *Aereo*. *Aereo* complied with the law but did so in a way that disrupted established markets. So the Court simply changed the law.

Something similar could be said about *Grokster*.¹⁴² In that case, the defendant carefully conformed its behavior to the rules of secondary liability set forth in *Sony* and various circuit court decisions, which prevented the facilitation of direct infringement by a centralized music streaming site but distinguished companies that just provided software that was capable of substantial noninfringing uses.¹⁴³ Grokster did just what the *Napster* court said it could do – just provide software that was capable of substantial noninfringing uses. But it did so while still facilitating quite a lot of direct infringement. Just as in Aereo,¹⁴⁴ the lower courts held that Grokster's conduct was lawful because it complied with the rules in force at the time,¹⁴⁵ but the Supreme Court ultimately created a new legal doctrine to reach that conduct *and applied that*

¹⁴¹. In this respect, we might contrast *Aereo* with *Cartoon Network*, which analogized the remote DVR to the VCR in finding the remote DVR noninfringing. *See infra* notes ____ and accompanying text.

¹⁴² Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

¹⁴³ In particular, the Ninth Circuit's decision in Napster and the Seventh Circuit's decision in Aimster. *In re* Aimster Copyright Litigation, 334 F.3d 643 (7th Cir. 2003); A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

¹⁴⁴ WNET, Thirteen v. Aereo, Inc., 712 F.3d 676, 680 (2d Cir. 2013), *rev'd and remanded sub nom.* Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498 (2014).

¹⁴⁵ Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd., 380 F.3d 1154, 1167 (9th Cir. 2004) ("In this case, the district court correctly applied applicable law and properly declined the invitation to alter it.).

doctrine retroactively to find Grokster liable. 146 It did so because, as in Aereo, the defendant had found a way to comply with the law while disrupting the plaintiff's market.

2. Accommodating Disruption

To be sure, courts in IP cases sometimes reject market disruption arguments. The Supreme Court, for example, was unmoved by market disruption arguments in *Fortnightly Corp. v. United Artists Television, Inc.*, which involved cable retransmissions of over-the-air television broadcasts at the dawn of the cable television industry.¹⁴⁷ According to the broadcasters, the retransmissions violated their public performance rights.¹⁴⁸ The Court rejected that claim, holding that retransmission was not infringing because it was more like passive "viewing" of the television broadcasts than active "performance" of the works.¹⁴⁹ That was true, the Court held in *Teleprompter Corp. v. CBS*, even when viewers received retransmissions of distant signals that were not normally available in their areas.¹⁵⁰ Notably, the Court in *Teleprompter* concluded that broadcasters and content owners would not be harmed by retransmissions of distant signals because they could adjust their advertising rates (or change their business models) to account for the broader audiences made possible by the retransmissions.¹⁵¹

¹⁴⁶ *Grokster*, 545 U.S. at 919 ("We hold that one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.").

¹⁴⁷ 392 U.S. 390 (1968).

¹⁴⁸ Id.

¹⁴⁹ *Id.* at 399-401. Jane C. Ginsburg, "The Exclusive Right to Their Writings": Copyright and Control in the Digital Age, 54 ME. L. REV. 195, 207-8 (2002) (characterizing *Fortnightly* and *Teleprompter* as "rather strained" and best "understood in the context of [the Court's] perception that the broadcast industry was endeavoring to kill of a new rival, cable.").

¹⁵⁰ 415 U.S. 394, 408-10 (1974).

¹⁵¹ *Id.* at 411-13; see also id. at 403 (Fortas, J., dissenting) (rejecting the majority's impulse to protect the new technology and sarcastically noting that "it [was] darkly predicted that the imposition of full liability

Similarly, the Court in *Sony* rejected the motion picture industry's attempt hold Sony secondarily liable for the copyright infringing activities by the users of its Betamax videotape recorder. Acknowledging copyright's history of developing in response to significant technological change, the Court emphasized its "consistent deference to Congress when major technological innovations alter the market for copyrighted materials." It then borrowed from patent law's staple article of commerce doctrine to set a high bar for holding the producer of the technological means of infringement liable when that producer is not in a position to control the use of copyrighted works by others. "The sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely capable of substantial noninfringing uses." 154

The Betamax had such substantial noninfringing uses because many copyright owners did not object to private copying of their works and because, the Court held, private "time-shifting" was fair use. The result in *Sony* was particularly notable since the industry was trying to shut down videotape recorders in favor of a different technology—videodisc players—which was non-

upon all CATV operations could result in the demise of this new, important instrument of mass communications; or it its becoming a tool of the powerful networks which hold a substantial number of copyrights used in the television industry").

¹⁵² Sony Corp. v. Univ. City Studios, Inc., 464 U.S. 417, 420 (1984)

¹⁵³ *Id.* at 431.

¹⁵⁴ *Id.* at 442.

¹⁵⁵ *Id.* at 454-55.

recordable.¹⁵⁶ The case literally was about who got to determine the shape of the market. And though the Court did not address that background struggle directly, it rejected another form of market disruption argument, crediting the District Court's distinction between "adjustments in marketing strategy," which might have been necessary once the Betamax was on the market, and market *harm*, which the copyright owners could not establish.¹⁵⁷ Presciently, the Court even accepted the District Court's conclusion that time-shifting was more likely to aid the plaintiffs than hurt them,¹⁵⁸ which turned out to be not only true but enormously true.¹⁵⁹

More recently, the Second Circuit rejected Cartoon Network's claim that Cablevision's remote DVR (RS-DVR) system infringed its reproduction and public performance rights. ¹⁶⁰ In the court's view, the remote DVR served the same function as the VCR, just using modern technology. ¹⁶¹ "[T]he RS–DVR allows Cablevision customers who do not have a stand-alone DVR to record cable programming on central hard drives housed and maintained by Cablevision at a 'remote' location. RS–DVR customers may then receive playback of those programs through their

¹⁵⁶ See Jane C. Ginsburg, Copyright and Control over New Technologies of Dissemination, 101 COLUM. L. REV. 1613, 1624 (2001) (citing JAMES LARDNER, FAST FORWARD: HOLLYWOOD, THE JAPANESE, AND THE ONSLAUGHT OF THE VCR (1987)).

¹⁵⁷ Sony, 464 U.S. at 454.

¹⁵⁸ *Id.* at 453.

 $^{^{159}}$ Far from destroying the industry, the VCR ultimately drove more than \$30 billion in new sales for Hollywood. Supra, note 39.

¹⁶⁰ Cartoon Network LP, LLLP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008).

¹⁶¹ Of course, the movie industry did successfully scuttle the first such technology. *See* Newmark v. Turner Broad. Network, 226 F. Supp. 2d 1215 (C.D. Cal. 2002). The case against SONICBlue, the maker of the RePlayTV, settled without an opinion when the company was driven into bankruptcy. *See* Paramount Pictures Corp. v. RePlayTV, 298 F. Supp. 2d 921 (C.D. Cal. 2004).

home television sets, using only a remote control and a standard cable box equipped with the RS–DVR software."¹⁶²

After describing the operation of Cablevision's system in significant technological detail, the court concluded that the temporary "buffer copies" it created were not fixed "for a period of more than transitory duration," and the system therefore did not create copies of the copyrighted works. 163 It then held that the legally relevant conduct was the subscribers' conduct ordering the system to produce a copy of a specific program, and not Cablevision's conduct in designing, housing, and maintaining a system designed only to produce that copy. 164 Like the Supreme Court did in *Fortnightly* and *Teleprompter*, the Second Circuit emphasized active conduct in relation to particular copies and interpreted the plaintiff's legal rights narrowly in the face of arguments that the new technology fundamentally disrupted their exploitation of the broadcast programs. Courts in the Ninth Circuit have come to similar conclusions in the DISH Autohop litigation, rejecting claims that DISH's "Hopper" DVR undermined copyright owners' business models by allowing viewers to skip commercials. 1655

In a different context, the Second Circuit also rejected the Authors Guild's claim against Google for its operation of the Google Books project. As the court described that project:

acting without permission of rights holders, Google has made digital copies of tens of millions of books, including Plaintiffs', that were submitted to it for that purpose by major libraries. Google has scanned the digital copies and established a publicly available search function. An Internet user can use this function to search without charge to determine whether the book contains a specified word or term and also

¹⁶² Cartoon Network, 536 F.3d at 124.

¹⁶³ *Id.* at 130.

¹⁶⁴ Id.

¹⁶⁵ In re Autohop Copyright Litig., No. 13-3573, 2013 WL 5477496 (C.D. Cal. Oct. 1, 2013). Full disclosure: Lemley represented DISH in this litigation.

see "snippets" of text containing the searched-for terms. In addition, Google has allowed the participating libraries to download and retain digital copies of the books they submit, under agreements which commit the libraries not to use their digital copies in violation of the copyright laws. 166

The Second Circuit found the reproduction and (usually partial) public display of the copyrighted works to be fair use. According to the court, the scanning was transformative because it had a transformative purpose, even if it didn't transform the works themselves. ¹⁶⁷ Quoting its previous decision in *Hathi Trust*, the court said that "the creation of a full-text searchable database is a quintessentially transformative use . . . [as] the result of a word search is different in purpose, character, expression, meaning, and message from the page (and the book) from which it is drawn." ¹⁶⁸ Provision of the search function and of "snippets" of the scanned books were also transformative, because "[s]nippet view add[ed] important value to the basic transformative search function, which tells only whether and how often the searched term appears in the book." ¹⁶⁹

The snippet view was also unlikely to harm the authors, because the snippets were in most cases unlikely to satisfy demand for complete books.¹⁷⁰ Importantly, even the exceptions to that rule wouldn't justify a different conclusion regarding the effect on the market, because the loss associated with substitution of the snippet for a complete work will also "generally occur in relation to interests that are not protected by the copyright."¹⁷¹ For example, the court noted,

¹⁶⁶ Authors Guild v. Google, Inc., 804 F.3d 202, 207 (2d Cir. 2015).

¹⁶⁷ *Id.* at 217.

¹⁶⁸ Id.

¹⁶⁹ Id.

¹⁷⁰ Id.

¹⁷¹ Id.

"[a] snippet's capacity to satisfy a searcher's need for access to a copyrighted book will at times be because the snippet conveys a historical fact that the searcher needs to ascertain," and obviously historical facts are not subject to copyright.¹⁷²

In other words, the court didn't conclude that copying snippets would have no substitutionary effect, but rather that the substitutionary effect of the snippets wasn't necessarily traceable to acts of infringement. It is also notable that Google took steps to protect copyright owners in those cases in which the snippets might substitute because of their presentation of copyrighted content. Specifically, Google "disable[d] snippet view entirely for types of books for which a single snippet is likely to satisfy the searcher's present need for the book, such as dictionaries, cookbooks, and books of short poems."¹⁷³

Finally, the court rejected the plaintiffs' "contention that Google ha[d] usurped their opportunity to access paid and unpaid licensing markets for substantially the same functions that Google provides . . ."¹⁷⁴ That argument failed "in part because the licensing markets in fact involve very different functions than those that Google provides, and in part because an author's derivative rights do not include an exclusive right to supply information (of the sort provided by Google) about her works."¹⁷⁵

¹⁷² Id.

¹⁷³ *Id.* at 210.

¹⁷⁴ *Id.* at 207.

¹⁷⁵ Id.

3. Where Does This Leave Us?

These cases don't mean that market disruptors have nothing to fear from IP. As we have seen, many cases go the other way. Further, even when Courts reject market disruption arguments, it's often after the issue has been litigated extensively. And Congress has at times responded to those judicial resolutions by imposing compulsory licensing schemes—allowing proliferation of the technology, but demanding administratively-determined payment to the IP owners. That is the story of the mechanical license, which Congress crafted after the Court refused to enjoin player pianos in White-Smith. 176 It's also the story of the compulsory license for cable retransmissions built into the 1976 Act in response to Fortnightly and Teleprompter. 177 These responses regulate market disruption. But importantly, they do so deliberately, as a matter of copyright policy. And they regulate it by imposing costs and conditions on disruptive entry rather than prohibiting it entirely. That makes disruption harder, but it doesn't stop it altogether, allowing clearly superior business models to grow despite their legal disadvantage. Streaming music, for instance, is now the dominant form of music delivery despite a copyright compulsory license regime implemented in 2005 in an effort to protect radio from online streaming competition.¹⁷⁸

¹⁷⁶ 17 U.S.C. § 115 (2012); White-Smith Music Publishing Company v. Apollo Company, 209 U.S. 1 (1908).

¹⁷⁷ 17 U.S.C. § 111; see also id. at § 1201(k) (requiring copy control devices for videotape recorders and prohibiting circumvention of those controls).

¹⁷ U.S.C. § 114. Congress responded in 2018 by further raising the compulsory license fee for streaming in the Music Modernization Act. But streaming is so well established that the goal of that Act seems to be simply to extract more money from companies like Spotify rather than to discourage streaming altogether.

IP is designed to encourage innovation. As a result, different kinds of disruption arguments matter in cases involving copyright and trademark claims than antitrust and unjust enrichment claims. Where IP is at stake, courts should focus on whether the disruption will do too much to undermine private incentives to invest in new creation. Making that determination requires some assumptions about the incentive effects of IP rights generally, and we acknowledge the uncertainty of those assumptions. But unless we think IP rights have *no* relation to incentives, we need to be sensitive to the fact that some risk of uncompensated disruption could hurt innovation.

At the same time, courts should not presume that private losses necessarily implicate broader policy concerns, and as a result, they should be wary of conflating the fact of disruption with the violation of a legal right. Absent legal constraint, a new technology or market entrant will often force incumbents to change their business models or fail in the marketplace. That's how markets work in a dynamic economy. That risk doesn't mean that no one invests or that market actors should be able to expect courts to protect them against having to adapt. Quite the contrary: the prospect of disrupting an inefficient industry often induces innovation by start-ups. Courts therefore need to differentiate cases in which disruption would actually interfere with the purposes of IP law from those involving simple harm to the plaintiff.

In some cases, the private costs of disruption are high and the social value of the new technology is relatively low—either because it's not a significantly improved technology or because it doesn't materially improve consumers' access to goods or services. Those are the easy cases for IP, at least if we assume there was some social value to the incumbent's initial contribution. The private costs of disruption justify treating the entrant's conduct as infringing,

and in fact we risk losing more social value by failing to prevent the disruption than we'd gain from availability of the new technology.¹⁷⁹ Many patent cases fall into this category, both because the way we define infringement makes it harder to use patent law to reach disruptive conduct that is truly different¹⁸⁰ and because patent law is more likely than copyright or trademark law to intend control over a market. Precisely because a patent may control a market-dominating technology, we make it harder to get a patent than we do a trademark or copyright.

At the other end of the spectrum are cases in which the social value of the disruptive technology is high and the private costs of disruption are fairly low—perhaps because it wouldn't be difficult for the incumbent to change models, or because the disruptive technology doesn't really compete with the incumbent in any direct way. A well-designed system should treat these technologies non-infringing. But parties often want to control new technologies and/or extract some of their value, so they argue that the technologies will disrupt future markets they "deserve" and/or hope to exploit. 182

See Mark A. Lemley, The Economics of Improvement in Intellectual Property Law, 75 Tex. L. Rev. 1989 (1997).

¹⁸⁰ Harder, but not impossible. Patents on interfaces, like copyrights on interfaces, can be used to restrict competition in the unpatented components that need to use those interfaces. *See, e.g.,* C.R. Bard, Inc. v. M3 Sys., 161 F.3d 1380 (Fed. Cir. 1998).

¹⁸¹ The Google Book Search case might be an example of the latter. Authors Guild v. Google, Inc., 804 F.3d 202 (2d Cir. 2015). Full disclosure: one of us (Lemley) represented Google in that case. Patent troll suits are another. *See* Robin C. Feldman & Mark A. Lemley, *Is Patent Litigation Efficient?*, 98 B.U. L. REV. 649 (2018) (arguing that patent enforcement serves society only when the patentee has engaged in some form of direct or indirect technology transfer).

¹⁸² See Michigan Document Services v. Princeton University Press, 74 F.3d 1512, 1523 (6th Cir. 1996) ("It is circular to argue that a use is unfair, and a fee therefore required, on the basis that the publisher is therefore deprived of a fee"), vacated en banc, 74 F.3d 1528 (6th Cir. 1996). On claims to own future markets, see Lemley & McKenna, supra note 15. On the circularity of claims of harm based on the license fee one could obtain if the defendant's conduct were prohibited, see American Geophysical Union v. Texaco, Inc., 60 F.3d 913 (2d Cir. 1994) (Jacobs, J., dissenting); Mark A. Lemley, Should a Licensing Market Require Licensing?, 70 L. & CONTEMP. PROBS. 185 (2007).

The hardest cases are those in which the social value of the new technology is high but the private costs of disruption are also high. The first challenge in these cases is to determine whether the private costs implicate broader policy concerns. In cases where disruption is likely to do so, an ideally-designed system would define the disruptive conduct as infringing, precisely because the disruption threatens the core concerns of the system. Still, the significant social value of the disruptive technology shouldn't be ignored, and courts should be conscious of that value in tailoring the remedies in these cases. Plaintiffs should generally not be entitled to have courts keep productive new technologies out of the market, whether by injunction or by ruinous penalties. Any remedy in market disruption cases should be limited to the plaintiff's losses and should interfere with market competition as little as possible.

In Part III, we offer some ideas about how to implement these principles in the law.

III. When Is Disruption Unfair?

Unfair competition shouldn't be redundant. The law of business torts, including IP, needs a metric to distinguish complaints that are really about competition per se from those that are really about conduct that is unfair independently of its competitive aspect. Right now, court responses to market disruption arguments seem to be ad hoc, particularly in IP cases.

In this section, we suggest two ways to distinguish those cases. First, market harm standing alone should not be the basis for a cause of action. Legal doctrines need some independent substance besides the fact of competitive injury. Second, even if a doctrine has a normative core, we need a test that measures whether the plaintiff's interest in enforcing the

law aligns with society's interest in having that law. We suggest adoption of "IP injury" and "business tort injury" doctrines that parallel the existing "antitrust injury doctrine."

A. Doctrines Without Substance

One of us has previously suggested a framework for IP liability that requires both technical similarity and market harm.¹⁸³ Fromer and Lemley worried about cases that find liability based on similarity without harm.¹⁸⁴ Many IP laws permit plaintiffs to sue for technical acts of infringement even though the plaintiff has suffered no real injury.¹⁸⁵ The problems of patent and copyright trolls both stem from the lack of an explicit market harm requirement.¹⁸⁶ So too do some of the most worrisome lawsuits from a free speech standpoint, such as copyright, trademark, and right of publicity lawsuits against parodies, satires, and criticism.¹⁸⁷

¹⁸³ See Jeanne C. Fromer & Mark A. Lemley, *The Audience in Intellectual Property Infringement*, 112 MICH. L. REV. 1251, 1251 (2014).

¹⁸⁴ Id. at 1262-67.

¹⁸⁵ For instance, patent "[e]xperts are likely to find infringement when two items are technically similar, whether or not consumers would view them as market substitutes"; however, a "use that does not interfere with the plaintiff's market in some way generally does no relevant harm." *Id.* at 1254-55; *see also id.* at 1262-67 (further explaining how merely technical infringement might be found in the patent context).

¹⁸⁶ See, e.g., id. at 1291-92; Jeanne C. Fromer, Should the Law Care Why Intellectual Property Rights Have Been Asserted?, 53 Hous. L. Rev. 549, 556-57 (2015) (arguing that assertions of patent rights and copyrights not motivated by protecting the holder's market against infringing substitutes create problems for the rights regimes and should warrant closer scrutiny).

¹⁸⁷ For parodies, see, for example, Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 591 (1994) (copyright suit against rap parody of "Pretty Woman"); Mattel, Inc. v. Walking Mountain Prods., 353 F.3d 792, 796 (9th Cir. 2003) (trademark suit against artist of "Barbie Enchiladas" and other works). For satires, see, for example, Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc., 109 F.3d 1394, 1400-01, 1406 (9th Cir. 1997) (trademark suit against Dr. Seuss-styled retelling of O.J. Simpson murder case, "The Cat in the Hat"); MasterCard Int'l, Inc. v. Nader 2000 Primary Comm., Inc., No. 00 Civ.6068(GBD), 2004 WL 434404, at *1, *16 (S.D.N.Y. Mar. 8, 2004) (trademark suit against Nader Campaign's use of Mastercard's "Priceless" template in ad critiquing money in politics). For suits against even nominative uses that can be chilling, see, for example, New Kids on the Block v. News Am. Pub., 971 F.2d 302, 307 (9th Cir. 1992) (Kozinski, J.) ("Much useful social and commercial discourse would be all but impossible if speakers were under threat of an infringement lawsuit every time they made reference to a person, company or product by using its

But we should worry as much or more about those cases that find the opposite, rooting liability in market harm in the absence of sufficient technical similarity. Business torts (including IP regimes) run the risk of treating market disruption itself as illegal unless they are cabined with a substantive requirement of wrongful behavior that is more than just the fact of market disruption itself. In IP regimes, that independent substantive element is most commonly some sort of technical similarity analysis.

In most IP cases, courts don't explicitly treat market substitution as actionable itself. But they have a strong tendency to define the violations in ways that are obviously dominated by (we would say skewed by) impulses about "free riding" or "unfair competition" that are divorced from the underlying theories of the causes of action. And this tendency to ignore the core doctrine is compounded in cases that expand the substantive boundaries of the law to reach defendants who disrupt the plaintiff's market without doing anything the law traditionally would have viewed as infringing.

Resisting the urge to treat market harm, standing alone, as the violation of a legal right means that courts should reject torts or doctrines that treat injury to the plaintiff as sufficient to create a cause of action. This is an issue that has divided courts considering both unfair competition and unjust enrichment.

Unjust enrichment, properly understood, is a remedy, not a cause of action. It allows courts to require disgorgement of profits or tangible things held unjustly, but—as a remedy—

trademark."); Stacey L. Dogan & Mark A. Lemley, *Parody as Brand* 47 U.C. DAVIS L. REV. 473 (2013). In general, see James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882, 884, 907-26 (2007) (examining how IP rights accrete beyond their policy-justified boundaries in the context of litigious rights holders, reasoning it's "[b]etter [to be] safe than sued")

only if the defendant holds those things in violation of some legal rule.¹⁸⁸ The same is true of the torts of unfair competition and interference with economic advantage. Unlike unjust enrichment, these are properly torts in their own right. But without standards for defining unfairness, courts are free to define any conduct they like as "unfair," whether or not it is independently illegal or deceptive.

These freestanding torts can swallow other areas of law by creating liability even for acts that would not have violated substantive law. To avoid this, states like California require unfair competition to be tied to some independent standard of illegal or tortious conduct, such as antitrust. They have done the same with intentional interference with economic advantage. And some courts are careful to treat unjust enrichment as a remedy, not as an independent cause of action. We endorse those limits and suggest they should be adopted uniformly.

The risk is not simply that these free-standing torts will supplant other, better-defined causes of action. They may create bad substantive law because to some plaintiffs (and some

¹⁸⁸ See Douglas Laycock, Restoring Restitution to the Canon, 110 MICH. L. REV. 929, 932-34 (2012) (discussing hypotheticals where the law will not disgorge through "forced exchange" where no legal rule has been broken, as would be true in the case of an unrequested benefit such as the aesthetic value created for you by your neighbor's new fence).

¹⁸⁹ See Cel-Tech Commc'ns., Inc. v. L.A. Cellular Tel. Co., 973 P.2d 527, 544 (Cal. 1990) ("When a plaintiff who claims to have suffered injury from a direct competitor's "unfair" act or practice invokes section 17200, the word 'unfair' in that section means conduct that threatens an incipient violation of an antitrust law, or violates the policy or spirit of one of those laws because its effects are comparable to or the same as a violation of the law, or otherwise significantly threatens or harms competition.").

¹⁹⁰ See, e.g., Della Penna v. Toyota Motor Sales, U.S.A., Inc., 902 P.2d 740, 751 (Cal. 1995) (requiring that the interfering conduct be "wrongful by some legal measure other than the fact of the interference itself").

¹⁹¹ See Laycock, supra note 152, at 1286 ("If a state says that plaintiff may waive the tort and sue in quasi-contract, and if it treats quasi-contract as real contract for some purposes, or if quasi-contract has its own set of collateral rules, plaintiff may be able to choose between different statutes of limitation, survivorship rules, sovereign immunity rules, and rights to jury trial.").

judges), the very act of competition can seem unfair. Antitrust spent decades weeding out cases brought by competitors whose complaint was that they were out-competed on the merits¹⁹² or whose products were rendered irrelevant as companies integrated different products together.¹⁹³ Those who lost out in the marketplace often had an appealing emotional case to a jury that didn't want to deprive them of their livelihood, even though it was competition itself—not unfair competition—that hurt them. From an economic perspective, competition is a good thing. But our human instinct often tells us that competition itself is unfair competition. Courts need tools to resist that instinct.

There is a similar problem in IP cases. As we have observed elsewhere, courts and juries have a very strong anti-free-riding impulse. 194 Even in the absence of an IP right people have a

¹⁹² E.g., United States v. Von's Grocery Co., 384 U.S. 270, 281 (1966) (White, J., concurring) (agreeing to enjoin merger between two grocery chains where their combined share would have been 8.9% of revenue, or just greater than the largest chain's 8%); United States v. N.Y. Great Atl. and Pac. Tea Co., 67 F. Supp. 626, 638-39 (1946) (explaining how the A&P supermarket system used horizontal and actual or threatened vertical integration to prompt suppliers to sell to it at lower prices). For a discussion of this era of grocery cases, see Timothy J. Muris & Jonathan E. Nuechterlein, *Antitrust in the Internet Era: The Legacy of United States v. A&P* (George Mason Law & Economics Research Paper No. 18-15, 2018), http://ssrn.com/abstract=3186569.

¹⁹³ See supra note 134.

Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 Tex. L. Rev. 1031, 1043-46 & nn. 48-56 (2005) (collecting and discussing examples); Lemley & McKenna, *supra* note 15, at 140-41, 146-47, 189 (contending courts tend to find trademark infringement where they perceive defendant free-riding on plaintiff's investments in the mark); Mark P. McKenna, *The Right of Publicity and Autonomous Self-Definition*, 67 U. PITT. L. Rev. 225, 247-250 (2005) (arguing similarly). Other authors have noted that courts use free-riding to justify IP rights enforcement. *E.g.*, David J. Franklyn, *Debunking Dilution Doctrine: Toward a Coherent Theory of the Anti-Free-Rider Principle in American Trademark Law*, 56 Hastings L.J. 117, 117, 140-42 (2004) (contending courts are animated in anti-dilution trademark cases by concern for free-riding); Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 VA. L. Rev. 149, 178 & n.106 (1992) (deriding the tendency to conclude that "if value, then right"); Rochelle C. Dreyfuss, *Expressive Genericity: Trademarks as Language in the Pepsi Generation*, 65 NOTRE DAME L. Rev. 397 (1990); Felix Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. Rev. 809 (1935).

strong instinct that copying is wrong.¹⁹⁵ And that instinct extends to the use of someone else's "property" without paying.¹⁹⁶ Whatever the merits of that instinct in dealing with tangible things, it can mislead in IP. As Wendy Gordon puts it, "[a] culture could not exist if all free riding were prohibited within it."¹⁹⁷ When we expand the universe of things that are off limits from borrowing someone's car or their axe to "borrowing" their ideas, their words, or even talking about them, we put shackles not only on commerce but on intellectual discourse. IP law is supposed to be carefully calibrated to do this only when we conclude it is necessary. Allowing it to be supplemented with an amorphous unjust enrichment or unfair competition doctrine lets courts and juries give free rein to that impulse.

To prevent that risk, courts have refused to let state unfair competition laws step in where design and utility patents refuse protection. ¹⁹⁸ And they have created various channeling

¹⁹⁵ See, e.g., Mengfei Huang et al., Human Cortical Activity Evoked by the Assignment of Authenticity when Viewing Works of Art, 5 FRONTIERS HUM. NEUROSCIENCE, 1, 6 (2011) (finding that regions of the brain "associated with reward and monetary gain, presumably reflecting the increase in the perceived value of the artwork," were activated when subjects were told the Rembrandt they were viewing was authentic but that regions of the brain associated with tasks requiring holding working memory to be activated when subjects were told the Rembrandt was a copy, presumably reflecting their effort to discover what made the painting unoriginal); Kristina R. Olson & Alex Shaw, 'No Fair, Copycat!': What Children's Response to Plagiarism Tells Us About their Understanding of Ideas, 14 DEVELOPMENTAL SCI. 431, 431 (2011) (finding that "by age 5 years old, children understand that others have ideas and dislike the copying of these ideas"); F. Yang et al., No One Likes a Copycat: A Cross-Cultural Investigation of Children's Response to Plagiarism, 121 J. EXP. CHILD PSYCH. 111, 111 (finding "children from cultures that place different values on the protection of ideas[, specifically the United States, Mexico, and China,] nevertheless develop similar concerns with plagiarism by 5-year-olds").

¹⁹⁶ See, e.g., Alex Shaw, Vivian Li, Kristina R. Olson, *Children Apply Principles of Physical Ownership to Ideas*, 36 COGNITIVE SCI. 1381, 1384 (2012) (collecting literature).

¹⁹⁷ Gordon, supra note 179, at 167.

¹⁹⁸ See Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 168 (1989) (holding state statute protecting boat hull designs was invalid under the Supremacy Clause because, "[b]y offering patent-like protection for ideas deemed unprotected under the present federal scheme, the Florida statute conflicts with the 'strong federal policy favoring free competition in ideas which do not merit patent protection' (quoting Lear, Inc. v. Adkins, 395 U.S. 653, 676 (1969))); Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225,

doctrines that prevent one form of IP from overstepping its bounds and undoing the limits of another IP regime.¹⁹⁹ Those doctrines don't always work,²⁰⁰ but they exist. Copyright and trademark have been less consistent in their preemption of state unfair competition laws. But we think courts need to cabin IP-based unjust enrichment and unfair competition arguments, taking care to apply the same substantive standards IP law would.²⁰¹ The "unjust" component of any enrichment is not the defendant's profit per se, but "what advantage . . . the defendant

^{232-33 (1964) (}holding that "because of the federal patent laws a State may not, when the article is unpatented and uncopyrighted, prohibit the copying of the article itself or award damages for such copying"); Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234, 238 (1964) (holding the same on the same day, even where an identical copy of an unpatented item caused consumer confusion).

¹⁹⁹ See, e.g., Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 25-26, 38 (2003) (barring recovery under trademark law where, besides questions of consumer confusion, plaintiff had declined what would have been adequate protection under copyright law, as defendant's "World War II Campaigns in Europe" video set was sufficiently similar to plaintiff's once-copyrighted, now expired "Crusade in Europe" television series); Christopher Buccafusco, Mark A. Lemley, & Jonathan S. Masur, Intelligent Design, 68 DUKE L.J. 75, 78-82 (2018) (evaluating and proposing reforms to doctrinal screens, or rules and tests built into each IP regime's doctrine that bar from protection works better suited to other regimes, and costly screens, which raise a cost barrier to bar as a practical matter protection for certain works for which the cost would not be justified); Christopher Buccafusco & Mark A. Lemley, Functionality Screens, 103 VA. L. REV. 1293, 1294-95 (2017) (evaluating and proposing reforms to functionality-related screens in IP regimes); Mark P. McKenna, Dastar's Next Stand, 19 J. INTELL. PROP. L. 357, 387 (2012) (detailing Dastar decision and arguing that it should be understood as, or extended to mean that, Dastar "reserve[s] to copyright law the rules for use of creative material, much as TrafFix reserves to patent law rules for control of useful features").

²⁰⁰ Buccafusco, Lemley, & Masur, *supra* note 184, at 109-123 (analyzing the failure of doctrinal and costdriven IP screening, particularly the demise of copyright's useful article doctrine in the wake of the Supreme Court's decision in *Star Athletica*, the "toothless[ness]" of design patent's creativity screen, and the weakness of trade dress's functionality screen).

²⁰¹ At least one court already has done so: Univ. of Colo. Found., Inc. v. Am. Cyanamid Co., 196 F.3d 1366, 1372 (Fed. Cir. 1999) (holding unjust enrichment based on theft of a patentable idea actionable as a state tort only if the state court applied federal standards for patent inventorship).

derive[s] from using the complainant's invention over what he had in using other processes then open to the public and adequate to enable him to obtain an equally beneficial result." ²⁰²

Even if a law serves a valid purpose, as IP laws do, courts need to be careful that individual doctrines stay moored to the purposes and limits that animate those IP laws. When they don't, the risk is that those doctrines will be used to prevent, not unfair competition, but competition itself.

B. An IP Injury Doctrine

While the risk of falling back on an unarticulated instinct against disruptive competition is greatest when the law provides little or no doctrinal guidance limiting the scope of the right, the strength of the anti-free-riding impulse means that even laws with a normative core can be expanded or distorted to prevent legitimate competition.

Copyright fair use cases, for instance, ask whether the plaintiff would suffer market harm if the defendant's use became widespread, but do not generally require that that market harm flow from the act of infringement itself.²⁰³ Similarly, courts do not require that the market harm affect plaintiff's current market, allowing instead a showing of merely hypothetical harm to an unrelated market plaintiff may never exploit.²⁰⁴ And indeed courts have sometimes been willing

²⁰² Mowry v. Whitney, 81 U.S. 620, 651 (1872). For a detailed discussion of the history of unjust enrichment as a remedy in IP cases, see George P. Roach, *Counting the Beans: Unjust Enrichment and the Defendant's Overhead*, 16 Tex. INTELL. PROP. L.J. 483 (2008).

²⁰³ See Suntrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1281 (11th Cir. 2001) ("[T]he market harm factor requires proof that [the allegedly infringing work] has usurped demand for [the original], or that widespread conduct of the sort engaged in by [defendant] would harm [plaintiff's] derivative markets." (citations omitted)).

²⁰⁴ See Am. Geophysical Union v. Texaco, Inc., 60 F.3d 913, 937 (2d Cir. 1994) (Jacobs, J., dissenting) (pointing out that majority held the market factor weighed in favor of plaintiff even though "there [was] no normal market in photocopy licenses, and no real consensus among publishers that there ought to be one"); cf. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 577 (1994) (requiring consideration of the

to find market harm based solely on the fact that the plaintiff could have collected a royalty for a use that would otherwise be fair. ²⁰⁵ A particularly dramatic example is *Oracle v. Google*, where the Federal Circuit ignored controlling Ninth Circuit law in order to find that Oracle suffered market harm in a market it was unlikely to enter even though Google copied only a tiny fraction of Oracle's code in order to render its Android operating system compatible with Java. ²⁰⁶ Other cases have found it unfair to reproduce laws that have been adopted from privately-written standards because it harms the market for the privately-written standard. ²⁰⁷

effect on the market for rap derivatives of a Roy Orbison song, even though he had shown no inclination to enter such a market).

²⁰⁵ See Texaco, Inc., 60 F.3d at 937 (Jacobs, J., dissenting). But see Bill Graham Archives v. Dorling Kindersley Ltd., 448 F.3d 605, 615 (2d Cir. 2006) ("Since DK's use of BGA's images falls within a transformative market, BGA does not suffer market harm due to the loss of license fees.").

²⁰⁶ Oracle v. Google Inc., 750 F.3d 1376 (Fed. Cir. 2017). For detailed discussions of the case and its shortcomings, see Joseph Gratz & Mark A. Lemley, *Platforms and Interoperability* in Google v. Oracle, 31 HARV. J.L. & TECH. 603 (2018); Peter S. Menell, *Rise of the API Copyright Dead?: An Updated Epitaph for Copyright Protection of Network and Functional Features of Computer Software*, 31 HARV. J.L. & TECH. 305 (2018); and Pamela Samuelson & Clark D. Asay, *Saving Software's Fair Use Future*, 31 HARV. J.L. & TECH. 535 (2018).

²⁰⁷ Fortunately that view has not prevailed. One trial court found as much. See Am. Soc'y for Testing & Materials v. Public.Resource.org, Inc., No. 13-CV-1215 (TSC), 2017 WL 473822, at *18 (D.D.C. Feb. 2, 2017) ("Whatever merit there may be in Defendant's goal of furthering access to documents incorporated into regulations, there is nothing in the Copyright Act or in court precedent to suggest that distribution of identical copies of copyrighted works for the direct purpose of undermining Plaintiffs' ability to raise revenue can ever be a fair use."). However, the trial court was reversed on this point. See Am. Soc'y for Testing & Materials, et al. v. Public.Resource.Org, Inc., 896 F.3d 437, 449 (D.C. Cir. 2018) ("PRO's attempt to freely distribute standards incorporated by reference into law qualified as a use that furthered the purposes of the fair use defense."). Disclosure: Lemley represents Public Resource in this matter. For a similar trial court finding and appellate court reversal (there invalidating the copyright of plaintiff) involving the same defendant, see Code Revision Comm'n v. Public.Resource.Org, Inc., 244 F. Supp. 3d 1350, 1360 (N.D. Ga. 2017), rev'd and remanded sub nom. Code Revision Comm'n for Gen. Assembly of Georgia v. Public.Resource.Org, Inc., 906 F.3d 1229 (11th Cir. 2018). As yet another example, the Fifth Circuit initially held that private model codes retained their copyright even following enactment as law so "long as the citizenry has reasonable access to such publications cum law." Veeck v. S. Bldg. Code Cong. Int'l Inc., 241 F.3d 398, 411 (5th Cir. 2001). But upon rehearing that holding was effectively reversed, with the en banc Fifth Circuit considering that, while the model codes themselves were copyrightable works, the enacted laws were facts, and the model code organization could not enforce its copyrights against an

As we described above, especially in copyright cases the Supreme Court has shown itself willing to change the substantive law to cover the defendant when the defendant seems like a bad actor, even though its acts didn't violate preexisting law. In *Grokster*, the defendant carefully conformed its behavior to the rules of secondary liability set forth in *Sony* and various circuit court decisions. And in *Aereo*, the defendant followed existing precedent defining public performance and distinguishing remote control by users from centralized operation of a broadcast system. In both cases, the lower courts held the defendants' conduct lawful because it complied with the rules in force at the time. And in both cases the Supreme Court blithely created a new legal doctrine to reach that conduct and applied that doctrine retroactively to find the defendants liable. Whatever one thinks of the substantive results of those cases, the idea that we will just redefine what constitutes infringement after the fact to outlaw conduct that was legal when entered into is troubling.

Trademark cases have also sometimes focused on market harm to the exclusion of the substantive requirement of consumer confusion. Courts considering the so-called "merchandising right" have allowed plaintiffs to prevail simply because the defendants used their mark on goods such as T-shirts, without distinguishing between confusing and non-confusing

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entity republishing those facts. See Veeck v. S. Bldg. Code Cong. Int'l, Inc., 293 F.3d 791, 802 (5th Cir. 2002) (en banc).

²⁰⁸ Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 919 (2005) ("We hold that one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.").

uses of the mark that might have caused the same harm.²⁰⁹ And courts have been willing to presume harm to a brand even from uses in markets a plaintiff would never enter.²¹⁰

Not all these cases involve efforts to stop competition itself, but some do. And the doctrines open the door to abusive claims like those made in *Oracle, Star Athletica*, and *Smack Apparel*.

For the past four decades, antitrust law has fought similar abuses by carefully limiting who has standing to bring antitrust cases. The "antitrust injury" doctrine requires that a plaintiff show at the outset that they suffered "injury of the type the antitrust laws were intended to prevent and that flows from that which makes [a] defendants' acts unlawful."²¹¹ The doctrine is designed to prevent precisely the sort of unfair disruption claims we discuss in this article: suits by plaintiffs

²⁰⁹ See, e.g., Fifty-Six Hope Music Rd. v. A.V.E.L.A., Inc., 778 F.3d 1059 (9th Cir. 2015); Board of Supervisors for La. State Univ. Agric. & Mech. Coll. v. Smack Apparel Co., 550 F.3d 465, 481-82 n.54 (5th Cir. 2008) (holding apparel with school colors and slogans infringed university trademarks even though parties stipulated no consumer was confused about origin or licensure); Coca-Cola Co. v. Gemini Rising, Inc., 346 F. Supp. 1183, 1191 (E.D.N.Y. 1972) (enjoining "Enjoy Cocaine" poster stylized like "Enjoy Coca-Cola" poster because, "[e]ven though in this case there is no confusion of goods or passing off in the strict trademark sense, there is a sufficiently clear showing of the impairment of plaintiff's mark as a selling device because of defendant's use"). For an argument that trademark law properly contains no such right to control the sale of merchandise merely because it contains a mark, see Stacey L. Dogan & Mark A. Lemley, *The Merchandising Right: Fragile Theory or Fait Accompli?*, 54 EMORY L.J. 461 (2005). For a discussion whether post-sale confusion generates harms trademark law should care about, see Jeremy N. Sheff, *Veblen Brands*, 96 MINN. L. Rev. 769, 780-83, 793 (2012).

²¹⁰ See, e.g., Scarves by Vera, Inc., v. Todo Imports Ltd., 544 F.2d 1167, 1172 (2d Cir. 1976) (holding defendant scarf maker infringed on plaintiff cosmetics maker because plaintiff might seek to sell scarves with its "Vera" mark in the future); Precision Tune Inc. v. Tune-A-Car, Inc., 611 F. Supp. 360 (W.D. La. 1984) (enjoining defendant's use of confusingly similar mark in a distant geography where, hypothetically plaintiff might seek to expand); see generally Lemley & McKenna, supra note 15, at 146-47 (analyzing trend of courts to find trademark infringement where plaintiff and defendant are in different markets). The Lanham Act § 43 protects famous brands from "dilution" by blurring or tarnishment, including uses outside the market where the mark is currently used. 15 U.S.C. § 1125 (2012). But courts have extended trademark law to cover such uses even when the mark is not famous enough to qualify for antidilution protection.

²¹¹ Brunswick Corp., 429 U.S. at 489; *see also* Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 109-114, 122 (1986) (discussing history of doctrine and extending it to Clayton Act § 16).

who lost in the marketplace because of competition on the merits, not because of its absence.²¹²

A plaintiff driven out of the market by a more efficient competitor, for instance, has suffered market harm, but hasn't suffered harm of the kind antitrust law cares about. To the contrary, antitrust law is supposed to encourage rather than punish such competition.²¹³ The antitrust injury doctrine has been effective in weeding out many suits by disgruntled competitors upset by competition rather than its absence.²¹⁴

²¹² See Cargill, Inc., 479 U.S. at 122 ("a plaintiff . . . must show a threat of antitrust injury, [and a] showing of loss or damage due merely to increased competition does not constitute such injury").

²¹³ By contrast, when competition *is* threatened, as by cartels, courts allow even participants in the illegal agreement to challenge it, rejecting a defense of unclean hands. Perma Life Mufflers, Inc. v. International Parts Corp., 392 U.S. 134, 138 (1968). This is part of antitrust's effort to undermine anticompetitive agreements by sowing discord among co-conspirators. *See* Christopher R. Leslie, *Trust, Distrust, and Antitrust*, 82 Tex. L. Rev. (2004).

²¹⁴ For cases exemplifying the antitrust injury screen in practice, see, for example, CBC Companies, Inc. v. Equifax, Inc., 561 F.3d 569, 573 (6th Cir. 2009) ("Essentially, CBC disagrees with the price terms of the contract that Equifax proposed and CBC later signed. But even where a business carries a significant portion of the market share, antitrust law is not a negotiating tool for a plaintiff seeking better contract terms."); Norris v. Hearst Tr., 500 F.3d 454, 468 (5th Cir. 2007) (holding no antitrust injury where newspaper distributor was displaced by a monopolist newspaper as it vertically integrated into distribution); Port Dock & Stone Corp. v. Oldcastle Ne., Inc., 507 F.3d 117, 123 (2d Cir. 2007) ("Where a defendant is alleged to have acquired other firms in order to achieve monopoly power at the manufacturing level of a product market, dealers or distributors terminated in the aftermath do not have standing to assert claims . . . for monopolization at the manufacturing level . . . [because such a] dealer's injury was caused by the manufacturer's decision to terminate their relationship, something the manufacturer could have just as well done without having monopoly power."); SmithKline Beecham Corp. v. Apotex Corp., 383 F. Supp. 2d 686, 698 (E.D. Pa. 2004) (settlement between brand-name and generic drug maker increased competition against plaintiff generic drug maker, and so did not cause an antitrust injury). For studies on the effect of the 1977 Brunswick Corp. decision recognizing the "antitrust injury" doctrine, see Jonathan M. Jacobson & Tracy Greer, Twenty-One Years of Antitrust Injury: Down the Alley with Brunswick v. Pueblo Bowl-o-Mat, 66 ANTITRUST L.J. 273 (1998) ("The Court's opinion put a halt to what had been a persistent expansion of the private treble damage remedy."); see also Ronald W. Davis, Standing on Shaky Ground: The Strangely Elusive Doctrine of Antitrust Injury, 70 ANTITRUST L.J. 697, 775 (2003) (arguing that the screen enables courts to dismiss cases too easily and that courts should instead dismiss more cases on the merits). But cf. Edward A. Snyder & Thomas E. Kauper, Misuse of the Antitrust Laws: The Competitor Plaintiff, 90 MICH. L. REV. 576-81 (1991) (finding no clear pattern pre- and post-Brunswick in dismissal decisions regarding plaintiff competitors, though the authors recognize that isolating the effect of the decision is difficult and that their results lack statistical significance).

Extending the antitrust injury doctrine to unfair competition and other tort claims based on allegedly anticompetitive conduct would help screen out claims of unfair competition or unjust enrichment that are in truth merely claims of "unfair" disruption. Indeed, some courts have already taken that step.²¹⁵ We applaud that move, and think the principle needs to be recognized more generally in business tort cases.

We also need a similar doctrine for IP cases. Christina Bohannan and Herb Hovenkamp have suggested adopting an "IP injury" doctrine modeled on the antitrust injury requirement. As they explain it:

We propose a concept of "IP injury" that limits IP remedies to situations in which the IP rights holder has suffered actual harm sufficiently linked to the purpose of intellectual property law, which is to incentivize innovation. An infringement that benefits the infringer and does no cognizable harm to the IP right holder or anyone else is a pure Pareto improvement—something that can be said of few involuntary transactions.

The challenge for legal policy is to determine when the IP holder has not suffered any cognizable harm. This analysis requires a re-examination of IP externalities, or spillovers, where IP should follow the antitrust lead in permitting the market to correct for them, intervening only where the inability to recover for an external benefit has a material impact on ex ante incentives to innovate.²¹⁷

²¹⁵ See Cel-Tech Commc'ns., Inc. v. L.A. Cellular Tel. Co., 973 P.2d 527, 544 (Cal. 1990) (holding that "unfair" prong of California's unfair competition law is limited to "conduct that threatens an incipient violation of an antitrust law, or violates the policy or spirit of one of those laws because its effects are comparable to or the same as a violation of the law, or otherwise significantly threatens or harms competition").

²¹⁶ See BOHANNAN & HOVENKAMP, supra note 24, at 48; Bohannan & Hovenkamp, supra note 24, at 979-80; see also Gugliuzza, supra note 24, at 750 (discussing the IP injury proposal).

²¹⁷ Christina Bohannan & Herbert J. Hovenkamp, *IP and Antitrust: Reformation and Harm* (Faculty Scholarship at Penn Law, Repository No. 1083, 2010), https://scholarship.law.upenn.edu/faculty_scholarship/1803/; *see also* BOHANNAN & HOVENKAMP, *supra* note 24 at 56 (making similar point); Bohannan & Hovenkamp, *supra* note 24, at 989 (making similar point).

We think this is a good idea, but fully operationalizing it is hard because it requires a court to identify what constitutes cognizable IP harm. As one of us has argued before, that harm is often circular: I have suffered an injury if the law gives me a right to collect money from your use, and often I have a right to collect money from your use if we view that use as injuring me. There are ways to break that circularity, but the notion of harm from IP infringement is a notoriously malleable one.

We propose one specific implementation of the IP injury idea that will target claims of unfair disruption. If a plaintiff claims market harm, either in proving substantive IP infringement

licensing terms are not actually a good measure of damages because they are distorted by the courts' remedial standards. An ironic corollary is that licensing terms are actually less reliable as a proxy for harm than they would be if the licensing-based damages standard did not exist. If courts persist in using this inaccurate measure, patent owners will respond by reducing the number of licenses they grant.

Erik Hovenkamp & Jonathan Masur, *How Patent Damages Skew Licensing Markets*, 36 REV. LITIG. 379, 384 (2017).

²¹⁸ See Mark A. Lemley, Should a Licensing Market Require Licensing?, 70 L. & CONTEMP. PROBS. 185, 190 (2007) ("Whether a use is fair depends on whether the copyright owner loses anything from the use, but under Texaco, whether the copyright owner loses anything from the use depends on whether the use is deemed fair; only if it is not a fair use would there be licensing revenue to lose."); see also Am. Geophysical Union v. Texaco, Inc., 60 F.3d 913, 930-31 (2d Cir. 1994) (holding scientific journals could prevail on copyright infringement claims because Texaco, already paying some institutional licensing fees but unwilling to pay individual licensing fees (hence in court), might have been willing to pay licensing fees); id. at 937 (Jacobs, J., dissenting) (pointing out circularity of majority's reasoning). A similar circularity infects reasonable royalties in patent law, since they are calculated based on what the parties would agree to, but what the parties would agree to is determined by what a court would award if they didn't agree. See Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 Tex. L. Rev. 1991, 2021 (2007). Indeed, the circularity propagates and creates additional problems as patent licensers decide whether to forge licensing agreements while anticipating that courts may use these market-achieved agreements as benchmarks for remediation in future cases. Id. at 2021-2022. Accordingly,

²¹⁹ See, e.g., Bill Graham Archives v. Dorling-Kindersley, Ltd., 448 F.3d 605 (2d Cir. 2006) (refusing to apply *Texaco*'s circular reasoning to transformative uses); Hovenkamp & Masur, *supra* note 210, at 413 (proposing that, whatever method courts use to calculate reasonable royalties, they do so without reference to existing licensing fees for the same patent in the market); Lemley & Shapiro, *supra* note 210, at 2035-39 (suggesting that courts restrict injunctions and award damages with sensitivity to the upward spiral of royalty rates).

(such as by showing that the parties compete in trademark law, or using market effect to defeat a copyright fair use defense) or in assessing damages, courts should ask the following question: Would the plaintiff suffer the same injury from a market intervention that is not infringing? If so, the injury the plaintiff suffers is attributable to the defendant's competition generally and does not flow specifically from infringement. For example, if Grokster could lawfully have provided software that people use to download copyrighted files had it done so under a different name, 220 the fact that it chose the name in order to induce infringement, even if unlawful, hasn't caused the copyright owner's injury. The injury would come from the legality of the software itself. 221 Similarly, if Google could lawfully reimplement Java's application programming interfaces (APIs) in its Android operating system without using the same names as Java's APIs, any injury to Oracle must be limited to market harm caused by the use of those names, not the use of the APIs themselves or the value of Android as a whole. Such an IP injury doctrine will help weed out injury actually caused by infringement from claims in which IP is being used as a tool to serve other ends.

There are elements of such a doctrine in disparate parts of the law already. Patent law requires a plaintiff who wants to recover lost profits to show that the defendant didn't have available noninfringing alternatives, for instance.²²² And that rule might extend to the calculation

The choice of the name "Grokster" to capitalize on "Napster" was one of the primary pieces of evidence the Court used to find an intent to induce infringement.

Two concurring opinions, each signed by three justices, in fact disagreed on whether the provision of that software was lawful.

²²² Grain Processing Corp. v. Am. Maize-Prod. Co., 185 F.3d 1341, 1351 (Fed. Cir. 1999) ("[O]nly by comparing the patented invention to its next-best available alternative(s)—regardless of whether the alternative(s) were actually produced and sold during the infringement—can the court discern the market

of reasonable royalties, though the law is less clear.²²³ A patentee who wants an injunction might—or might not—have to show that customers wanted the patented feature in order to show irreparable harm from infringement.²²⁴ And a patentee who wants to use its success in the

value of the patent owner's exclusive right, and therefore his expected profit or reward, had the infringer's activities not prevented him from taking full economic advantage of this right.")

²²³ See, e.g., Mentor Graphics Corp. v. EVE-USA, Inc., 851 F.3d 1275, 1287 (Fed. Cir. 2017), cert. dismissed, 139 S. Ct. 44 (2018) ("We agree . . . apportionment is an important component of damages law generally, and we believe it is necessary in both reasonable royalty and lost profits analysis."); AstraZeneca AB v. Apotex Corp., 782 F.3d 1324, 1335 (Fed. Cir. 2015) ("[I]t was proper for the [district] court to hold that the difficulties Apotex would have encountered upon attempting to enter [defendant's] market with a non-infringing product are relevant to the royalty rate"). But cf. Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1549 (Fed. Cir. 1995) (en banc) (endorsing, albeit arguably in dicta, that plaintiffs may use the "entire market rule"—that is, they may attribute all the value of an apparatus to the patented infringed components therein—"whether for reasonable royalty purposes . . . or for lost profits purposes"); Bose Corp. v. JBL, Inc., 274 F.3d 1354, 1361 (Fed. Cir. 2001) (same). For more background, see generally Mark A. Lemley, Distinguishing Lost Profits from Reasonable Royalties, 51 Wm. & MARY L. REV. 655, 664-665 (2009) (discussing failure of patent remedies to appropriately differentiate the value defendant obtained through its efforts from those obtained through infringement).

²²⁴ In the Apple-Samsung saga, the Federal Circuit at first demanded that Apple show that consumers would not purchase defendant's product without the infringing feature in order to establish irreparable harm and warrant preliminary injunction. See Apple Inc. v. Samsung Elecs. Co. (Apple II), 695 F.3d 1370, 1374-75 (Fed. Cir. 2012) ("The patentee must... show that the infringing feature drives consumer demand for the accused product." (emphasis added)); Apple, Inc. v. Samsung Elecs. Co. (Apple I), 678 F.3d 1314, 1324 (Fed. Cir. 2012) ("Sales lost to an infringing product cannot irreparably harm a patentee if consumers buy that product for reasons other than the patented feature," and "a likelihood of irreparable harm cannot be shown if sales would be lost regardless of the infringing conduct." (emphasis added)). Later, it appeared to soften this "causal nexus" requirement, acknowledging a plaintiff could still show irreparable harm warranting a permanent injunction even if other features also drove consumer demand. See Apple Inc. v. Samsung Elecs. Co. (Apple IV), 809 F.3d 633, 640 (Fed. Cir. 2015) ("The purpose of the causal nexus requirement is to establish the link between the infringement and the harm, to ensure that there is 'some connection' between the harm alleged and the infringing acts . . . regardless of whether the injunction is sought for an entire product or is narrowly limited to particular features." (emphasis added)); Apple Inc. v. Samsung Elecs. Co. (Apple III), 735 F.3d 1352, 1364 (Fed. Cir. 2013) (holding that a plaintiff seeking a permanent injunction does not need to "show that a patented feature is the exclusive reason for consumer demand, [but rather] must show some connection between the patented feature and demand for [defendant's] products."). A recent case cited to these apparently differing Apple standards with seemingly equal approval, and yet required a seemingly lower bar than all of them: Macom Tech. Sols. Holdings, Inc. v. Infineon Techs. AG, 881 F.3d 1323, 1330 (Fed. Cir. 2018) (holding the district court did not clearly error in finding a "causal nexus" between an infringed patent and resulting sales of a product even where the product "might have [contained] non-infringing design-arounds" of the allegedly infringing features).

marketplace as evidence its invention was nonobvious must show some sort of nexus between the invention and that market demand.²²⁵

We suggest generalizing those cases into an IP injury doctrine. A general requirement that the plaintiff's injury be traceable to infringement, not merely to the act of competition or disruption itself, will help courts weed out cases not motivated by IP infringement but by market disruption.

C. Paying off the incumbents?

We have offered reasons to worry about IP and tort suits that are really efforts to prevent market disruption, and tools to control those suits. But even with those tools, sometimes IP and tort suits against market disruption will win. Maybe the entrant engaged in disruption in a way that really did constitute some independent legal wrong. Maybe courts didn't listen to us, and their intuition against free riding proved too strong to ignore. Or maybe, in rare cases, the incumbents had legitimate settled expectations to some form of market exclusivity that were necessary to induce them to invest in the first place. We explicitly offer such exclusivity to

²²⁵ See, e.g., Diamond Rubber Co. v. Consolidated Rubber Tire Co., 220 U.S. 428, 441 (1911) (noting approvingly that a tire was "commercially successful" when upholding the patent as a nonobvious improvement over prior art); Alco Standard Corp. v. Tenn. Valley Auth., 808 F.2d 1490 (Fed. Cir. 1986) ("This is one of those cases where evidence of secondary considerations[, here especially commercial success,] 'may ... establish that an invention appearing to have been obvious in light of the prior art was not." (quoting Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538 (Fed. Cir. 1983)); see generally Rochelle Cooper Dreyfuss, The Federal Circuit: A Case Study in Specialized Courts, 64 N.Y.U. L. REV. 1, 9-10 (1989) (discussing use of commercial success in the Federal Circuit's nonobviousness inquiry, and collecting cases), Robert P. Merges, Commercial Success and Patent Standards: Economic Perspectives on Innovation, 76 CALIF. L. REV. 803, 820, 826-27 (1988) (discussing history of courts' favor, disfavor, and favor once again for commercial success as factor in nonobviousness inquiry, and collecting cases).

pharmaceutical and biotechnology patent owners, for instance.²²⁶ And some might worry about the distributional consequences of disruptive innovation.²²⁷

Still, even in these cases, there is room for courts to adhere to and improve the doctrine to reduce abuse of IP rights. That's because even when the law does protect incumbents against disruptive innovation, rightly or wrongly, *how* it does so is critically important. While the normal remedy in IP cases has traditionally been an injunction, injunctive relief is often a bad idea when it is directed against a disruptive innovation. Granting an injunction means that society loses the value of the disruptive technology. So, even if that innovation disrupts the plaintiff's market in a way that causes it injury for which the law should compensate, the plaintiff's remedy should be compensation, not control.²²⁸ A sufficiently punitive damages award²²⁹ or disgorgement of the

²²⁶ Hatch-Waxman Act, 21 U.S.C. §§ 355-60 (2012).

See, e.g., Lemley, Scarcity, supra note ___, at __ (discussing the disruption likely to be associated with technologies like 3D printing and how society might respond). We're not generally too concerned about those distributional consequences in the context of the lawsuits we consider here. It is incumbents, not the public at large, that is likely to bear the burden. Most of them are large, well-funded legacy companies, and if they can't make it in a new competition, well, that's the way a market economy works. But even if you believe incumbents deserve special consideration in some circumstances (say, taxi drivers whose market has been disrupted by ride-sharing), compensating them for innovative disruption is preferable to depriving the world of the benefits of that disruption.

²²⁸ See Mark A. Lemley & Philip J. Weiser, Should Property or Liability Rules Govern Information, 85 TEX. L. REV. 783, 784 (2007) ("[W]here injunctions cannot be well tailored to the scope of the property right at issue but necessarily restrain the use of property not owned by the plaintiff, those consequences can overwhelm the benefits of property rules in enforcing legal rights.").

Recent cases have seen minimum statutory damages in the hundreds of millions and even billions of dollars in cases like *Viacom v. YouTube* and *Authors Guild v. Google. See* First Amended Complaint at ¶¶ 3, 10, Viacom Int'l. Inc. v. YouTube, Inc., 940 F.Supp.2d 110 (S.D.N.Y. 2013) (seeking actual damages of "at least one billion dollars" or statutory damages for an alleged 150,000 infringing video clips watched over 1.5 billion times); Pamela Samuelson, *The Google Book Settlement as Copyright Reform*, 2011 WIS. L. REV. 479 (2011) 507 & n.136 (reporting estimate of minimum statutory damages of \$3.6 trillion at stake in *Authors Guild, Inc. v. Google, Inc.*); Alison Flood, *Authors Seek Damages in Google Books Copyright Row*, THE GUARDIAN (Aug. 7, 2012 13:05 EDT), https://www.theguardian.com/books/2012/aug/07/authors-damages-google-book-copyright (reporting plaintiffs seeking minimum statutory damages of \$750 per work for 12 million copied works, which multiplies to \$9 billion dollars); Peter S. Menell, *Assessing the DMCA Safe Harbors: The Good, the Bad, and the Ugly*, THE MEDIA INST. (Aug. 31, 2010),

defendant's profits from disruptive entry could stop the socially desirable disruption of a defendant just as easily as an injunction.²³⁰ Even if we want to compensate incumbents because their market is disrupted, their remedy should be limited to the reasonable, expectation-backed, investment harm they suffered.

IV. Conclusion

The law shouldn't prevent new entrants from disrupting existing incumbents without good reason. A variety of legal doctrines allow plaintiffs to sue for market disruption, either by making it a part of the cause of action or, more indirectly, by having the outcome influenced by the perception of free riding. We think those legal doctrines need some discipline, tying claims of market disruption to the actual purposes of the laws. Unfair competition is too often viewed as redundant. It shouldn't be.

https://www.mediainstitute.org/2010/08/18/assessing-the-dmca-safe-harbors-the-good-the-bad-and-the-ugly/ (opining that "billion-dollar statutory remedies—as alleged in the YouTube case—makes little sense in the absence of billion-dollar harms").

²³⁰ Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 Yale L.J. 1027 (1995) (describing a continuum between liability and property rules); Louis Kaplow & Steven Shavell, *Do Liability Rules Facilitate Bargaining: A Reply to Ayres & Talley* 105 YALE L.J. 221 (1996).