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Freedom to Explore: Using the Eleventh Amendment to Liberate Researchers at State Universities from Liability for Intellectual Property Infringements

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FREEDOM TO EXPLORE: USING THE ELEVENTH AMENDMENT TO LIBERATE RESEARCHERS AT STATE UNIVERSITIES FROM LIABILITY FOR INTELLECTUAL PROPERTY INFRINGEMENTS

Gary Pulsinelli*

Abstract: In its 1999 decision in Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank, the Supreme Court held that the Eleventh Amendment protected states from suit for patent infringement, effectively making state universities immune from intellectual property suits. This Article analyzes how the Florida Prepaid decision affects researchers at state universities, and how those researchers may avoid liability under existing law. It first concludes that researchers at state universities might still be subject to injunctions against future infringement. The Article next observes that individual researchers at state universities might also face personal liability for damages, but then suggests that researchers at state universities should be entitled to assert qualified immunity when they are accused of patent or copyright infringement, and thereby potentially avoid liability. It then provides a framework for applying this qualified immunity, proposing that courts should grant researchers at state universities qualified immunity when their conduct does not violate a clearly established right of the patentee or copyright holder. Whether such a violation has occurred should be analyzed in much the same way that willful infringement is analyzed. Going beyond existing law, this article proposes a counterthrust against the current trend towards diminishing the public domain, in the form of legislation granting researchers at state universities absolute immunity from liability for patent and copyright infringement. Such a grant of immunity would create in state universities a space for exploring and developing new innovations that would otherwise be blocked by the presence of intellectual property protection-a particularly acute problem in some areas, where a veritable "patent thicket" would necessitate that any researcher desiring to work in those areas license a prohibitive number of patents from a variety of patentees. Thus freed from concerns over patent infringement, researchers at state universities could continue their work for the benefit of the citizens of their states and the public, in keeping with the mission of state universities.

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INTRODUCTION

Dr. Alice Little is a professor at a state university who studies the basic science involved in cloning agricultural animals, particularly cattle.¹ Her research is directed at helping farmers in her state, and all over the world, improve their stock by cloning and preserving the very best of their animals. By helping the farmers who feed us, Dr. Little also hopes her work will indirectly benefit the citizens of her state and the public. However, Dr. Little has a problem. The existing protocol for cloning agricultural animals (or any other mammal) is very complicated, containing many difficult steps. Furthermore, each of these steps is incredibly inefficient, resulting in very low yields. Dr. Little and her laboratory are hard at work trying to streamline the protocol and increase its efficiency. Her problem is that various commercial entities have obtained patents on, and therefore claim ownership over, many of the necessary steps in the cloning process. These commercial entities have begun sending her letters threatening to file suit for patent infringement unless she either stops her research or pays them for the privilege of continuing her basic research into the fundamentals of the cloning process.² She has become extremely frustrated over the rising level of patenting of these basic techniques that she needs to perform her research, and the concomitant difficulty in actually getting any research done.

^{1.} Dr. Little is fictional. However, the outline of her situation is similar to that of Dr. J. Lannett Edwards, who communicated the basic facts to me in a series of personal communications. Discussions with Dr. J. Lannett Edwards, Associate Professor, University of Tennessee, in Knoxville, Tenn. (numerous conversations from 2002–2007). Dr. Edwards's home page at the University of Tennessee is available at http://animalscience.ag.utk.edu/faculty/edwards.htm and a summary of her research projects at http://animalscience.ag.utk.edu/faculty/edwards_research.htm. For more on the University of Tennessee's Cloning Project, see http://animalscience.ag.utk.edu/ utcloneproject/default.html.

^{2.} See, e.g., Letter from Richard J. Warburg, Brobeck Phlager & Harrison LLP (on behalf of Infigen, Inc.) to Dr. Kelly R. Robbins, Professor & Dep't Head, Animal Sci. Dep't, The Univ. of Tenn. (Sept. 8, 2000) (on file with author) ("Notice of Potential Use of Methods from United States Patent Nos. 5,496,720 and 6,077,710 [covering certain mammalian cloning methods]").

Dr. Little has at least two objections to the patents. First, she believes that the patents were improvidently granted by the U.S. Patent & Trademark Office (PTO). In her view, many of the claimed method steps were well known to those versed in the cloning art, or at least obvious from that art, before the patent applications were filed.³ She also believes that at least some of the patentees have failed to comply with their disclosure obligations under the patent laws.⁴ However, now that the patents have been granted, she would bear a heavy and costly burden if she attempted to convince a court that the patents were invalid.⁵ Dr. Little objects to having her research held hostage to patents that she believes should never have been granted in the first place, with her only recourse in expensive procedures in court or before the PTO.

More fundamentally, she objects to this commercial intrusion into the traditional culture of basic scientific research.⁶ While she has no objections to patents when they are confined to the commercial appliedresearch sphere, Dr. Little shares the belief of many basic researchers, particularly academic researchers, that requiring a license to perform basic research is contrary to the essential culture of science, which should view this fundamental research as a cooperative endeavor to unravel the secrets of nature.⁷ As part of this cooperative endeavor, scientists should freely share their tools with other scientists in the interest of their shared effort to understand the natural world. Because she views basic research as a cooperative endeavor, under no circumstances would Dr. Little consider licensing the underlying technology she needs for her basic research.⁸ And her problem is magnified if the patentee wishes to block all others from performing the research at all, so that its own research can proceed without competition. Such a patentee could shut down Dr. Little's research completely, at

^{3.} See 35 U.S.C. § 102 (2000) (anticipation by prior art); id. § 103 (nonobviousness).

^{4.} See id. § 112 (disclosure requirements).

^{5.} See id. § 282 (issued patent presumed valid).

^{6.} I use the term "basic research" to refer to research into fundamental scientific problems that do not have direct commercial application, in contrast to "applied research" into practical problems with direct commercial application. See Rebecca S. Eisenberg, *Proprietary Rights and the Norms of Science in Biotechnology Research*, 97 YALE L.J. 177, 178 n.1 (1987) (providing a similar definition, but also noting the difficulties of making the distinction in many contexts).

^{7.} See generally id.; Arti Kaur Rai, Regulating Scientific Research: Intellectual Property Rights and the Norms of Science, 94 NW. U. L. REV. 77 (1999).

^{8.} Even if she were willing, she might run afoul of her government grant if she diverted funds which were already earmarked for other purposes into the payment of royalties. And even if such a diversion were permitted, it would drain the funds so used away from her research.

least until she could find a way to work around the claims of the patent (assuming such a work-around even exists). Further exacerbating this problem is the sheer number of different commercial entities claiming rights over different steps of the process. Navigating her way through this thicket of patents and coming to terms with each of the necessary parties—any one of whom holds the power to shut down her research—promises to be difficult, if not impossible. What is more, Dr. Little is only one of the tens of thousands of researchers at state universities around the country, more and more of whom find themselves facing this same kind of commercial threat to their basic research projects.

Dr. Little might find some hope in the Supreme Court's 1999 decision in *Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank*,⁹ where the Court held that the Eleventh Amendment protects the states from suit for patent infringement.¹⁰ Under *Florida Prepaid*, a state and its universities are immune from suit on patents. Under the logic of the decision, this immunity should also extend to copyright and federal trademark infringement.¹¹ While that is fine for the state and university, Dr. Little is more concerned with the impact of the decision on her personally.

Despite the introduction of several bills into Congress that attempted to avoid the limitations of the *Florida Prepaid* decision and make the states liable for intellectual property infringements,¹² none of these proposals has been enacted to date, and so state sovereign immunity from suit for intellectual property infringements remains the rule. It is therefore important to assess the implications of the decision in realworld intellectual property and state government contexts. Several commentators have already undertaken parts of this task.¹³ However, almost all of this commentary comes from the perspective of the intellectual property holder, and addresses how the states might be made liable to that holder.

^{9. 527} U.S. 627 (1999).

^{10.} See id. at 647-48.

^{11.} This extension is discussed infra notes 108-13 and accompanying text.

^{12.} See, e.g., Intellectual Property Protection Restoration Act of 1999, S. 1835, 106th Cong. (1999); Intellectual Property Protection Restoration Act of 2003, S. 1191, 108th Cong.

^{13.} See, e.g., Peter S. Menell, Economic Implications of State Sovereign Immunity from Infringement of Federal Intellectual Property Rights, 33 LOY. L.A. L. REV. 1399 (2000); Daniel J. Meltzer, Overcoming Immunity: The Case of Federal Regulation of Intellectual Property, 53 STAN. L. REV. 1331 (2001); Mitchell N. Berman, R. Anthony Reese, & Ernest A. Young, State Accountability for Violations of Intellectual Property Rights: How To "Fix" Florida Prepaid (and How Not To), 79 TEX. L. REV. 1037 (2001).

This Article focuses instead on how the *Florida Prepaid* decision affects individual state employees, in particular researchers and teachers at state universities, like Dr. Little, and how such researchers and teachers may avoid liability under existing law. Although prior commentary touches on possible ways individual researchers might avoid liability, in the course of considering obstacles that intellectual property holders must overcome to get relief, the analysis does not focus on the avoidance of individual liability or fully develop the possibilities it presents.

First, even though states, and hence state universities, are immune from liability for infringement damages, researchers at those universities might still be subject to injunctions against future infringement, which could have a devastating effect on research projects.¹⁴ However, this Article suggests that the existing remedial schemes in the intellectual property laws may preclude such proceedings for injunctive relief, and that practical considerations may also in many instances make them undesirable to intellectual property holders. Furthermore, recent trends in the equitable analysis of injunctive relief in patent cases indicate that persuading courts to grant such injunctions may be getting more difficult. Courts may instead give researchers the option to either pay an ongoing royalty for future use, as set by the court, or stop using the technology.¹⁵

Second, even though states and universities are immune from suit, researchers at state universities, like Dr. Little, might face *personal* liability for damages, a daunting prospect that may well dampen the desire to perform research at state institutions.¹⁶ This Article suggests that, under current law, researchers at state universities should be entitled to assert qualified immunity when they are accused of patent or copyright infringement, and thereby potentially avoid liability.¹⁷ The rationale for this qualified immunity is rooted in the traditional doctrines of patent experimental use and copyright fair use, doctrines that are

^{14.} See infra Part II.B.

^{15.} See eBay Inc. v. MercExchange, L.L.C., 126 S. Ct. 1837 (2006) (denying an injunction as a remedy for patent infringement).

^{16.} See infra Part II.C. Since private institutions are not immune from suit and they have deep pockets, a patentee will generally choose to sue the institution along with its individual researchers, with the institution ultimately footing the bill for both the cost of the defense and any damages awarded. Any injunctive relief won by the patentee in such a suit would apply to both the institution and the individual researcher.

^{17.} See infra Part III.B.

designed to advance the goals of the intellectual property systems by making their fruits available to subsequent users for purposes that are socially beneficial.¹⁸ Researchers at state universities like Dr. Little are excellent candidates to take advantage of these doctrines because they are performing research and teaching duties largely for the benefit of their states and for society as a whole rather than directly for their own profit. These researchers at state universities are therefore also excellent candidates for a qualified immunity defense rooted in these doctrines.

This Article then provides a framework for applying this qualified immunity under current law, proposing that courts should grant researchers at state universities qualified immunity when their conduct does not violate a clearly established right of the patentee or copyright holder. Whether such a violation has occurred should be analyzed in this context in much the same way that willful infringement is analyzed.¹⁹ Thus, if Dr. Little's legitimate belief that the patents are invalid and that her research therefore does not infringe those patents is objectively reasonable, she should be immune from personal liability for damages, even if a court eventually concludes that her belief was mistaken.

Looking beyond existing law and considering possible legislative changes, this Article's focus on researchers at state universities reveals the great opportunity presented by Florida Prepaid: the possibility of using the case to create a sphere in which researchers and teachers at state universities can study and improve upon protected inventions and creative works, and thus advance the interests of the public in ways that might otherwise be blocked.²⁰ That is, rather than attempting to avoid Florida Prepaid and thereby increase the liability of states and state officials, we should embrace the decision and thereby decrease liability for Dr. Little and other researchers at state universities. At best, the law as it presently exists might provide a limited protection for these researchers, in the form of qualified immunity against liability for damages. However, the current trend towards diminishing the public domain-through such developments as expanding patentable subject matter, increasing numbers of patents on basic research techniques, lengthening copyright terms, diminishing recognition of copyright fair use and patent experimental use, and an escalating tendency to sue for

^{18.} The experimental use and fair use doctrines are discussed *infra* Parts III.B.2.a and III.B.2.b, respectively.

^{19.} See infra Part IV.B.

^{20.} See infra Part V.

any perceived intellectual property violation—has created the need for a counterthrust to restore at least part of what has been lost.

This Article proposes such a counterthrust in the form of legislation granting researchers at state universities, like Dr. Little, absolute immunity from liability for patent and copyright infringement. Such a grant of immunity would create in state universities a space for exploring and developing new innovations that would otherwise be blocked by the presence of intellectual property protection-a particularly acute problem in some areas, such as Dr. Little's cloning research, where a veritable "patent thicket" would necessitate that any researcher desiring to work in those areas license a prohibitive number of patents from a variety of patentees.²¹ Although many of the arguments for such absolute immunity might also support a broader immunity for all researchers at universities (and even similar institutions), state universities do have some unique features, particularly a strong public purpose and strong public oversight, that make them well suited to the task of protecting the public domain. If researchers at state universities were thus freed from concerns with patent infringement, Dr. Little (and others like her) could continue her work for the benefit of her state's farmers, and thus indirectly for the benefit of her state's citizens and the public, in keeping with the mission of her state university.

The focus of this Article is on the research context, rather than teaching, and particularly on patent infringement, rather than copyright infringement. However, much of the analysis applies to both research and teaching, and to both copyrights and patents; the similarities and differences in the analysis are noted in many places in this Article. In addition, the law involving the Eleventh Amendment, sovereign immunity, and civil rights is elaborate and complex, and this Article attempts little more than a survey of those areas. The focus of this Article is on intellectual property issues, and so those other bodies of law are discussed only as required to give context to the intellectual property issues. For this reason, this Article also avoids resolving some of the complex questions raised by sovereign immunity and its abrogation, where such resolution is unnecessary to the proposed immunities.

^{21.} Cf. Carl Shapiro, Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting, in 1 INNOVATION POLICY AND THE ECONOMY 120 (Adam Jaffe, Joshua Lerner, & Scott Stern eds., 2000), available at http://books.google.com/books (search "navigating the patent thicket"; then follow "Innovation Policy and the Economy—Page 119" hyperlink) (defining the "packet thicket").

Part I of this Article describes some of the history of the Eleventh Amendment and its more recent application to federal intellectual property jurisprudence. Part II explores the current state of the world under the Florida Prepaid immunity regime, with particular emphasis on the status of researchers at state universities. Next, Part III focuses on a particular aspect of that current regime, the role of qualified immunity in suits against researchers sued in their individual capacities. Part III also explores some doctrines under patent and copyright law that might serve to justify the application of qualified immunity in intellectual property suits against researchers at state universities. Part IV describes a proposed framework under existing law for applying qualified immunity in intellectual property suits against researchers at state universities. Finally, Part V moves beyond existing law and explores the possibility of federal legislation that converts this qualified immunity into an absolute immunity, in the interest of restoring a portion of the eroding public domain.

I. THE ELEVENTH AMENDMENT AND INTELLECTUAL PROPERTY

A. Historical Background of the Eleventh Amendment

The Eleventh Amendment was enacted as a response to the Supreme Court's 1793 decision in Chisholm v. Georgia.²² In Chisholm, the Court had held that, because Article III of the Constitution provided that "[t]he iudicial Power [of the United States] shall extend . . . to Controversies . . . between a State and Citizens of another State,"23 an unconsenting state could be sued in federal court by a citizen of another state.²⁴ This holding created considerable concern among the states that they might be subject to suit on their Revolutionary War debts.²⁵ In response, Congress quickly passed the Eleventh Amendment in 1794 and the requisite number of states ratified the amendment in a very short

^{22. 2} U.S. (2 Dall.) 419 (1793). The history of the Eleventh Amendment is convoluted and complex, and I attempt only the minimum necessary to lend context to the rest of this article. For a good summary of the issues, see ERWIN CHEMERINSKY, FEDERAL JURISDICTION §§ 7.1–7.7 (4th ed. 2003). A more detailed exposition may be found in 1 JOSEPH G. COOK & JOHN L. SOBIESKI, JR., CIVIL RIGHTS ACTIONS ¶¶ 2.01–2.03 (2006).

^{23.} U.S. CONST. art. III, § 2.

^{24.} See CHEMERINSKY, supra note 22, § 7.2, at 401 (discussing Chisholm).

^{25.} See id. at 402.

time, although the presidential proclamation declaring the amendment to have been properly ratified was not issued for another three years.²⁶

The text of the Eleventh Amendment reads:

The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.²⁷

By its terms, the Eleventh Amendment precludes only suits against a state in federal courts by citizens of another state. Furthermore, many commentators have argued that the text and history of the Amendment suggest that it was meant only to apply to diversity jurisdiction in such suits, and was not meant to preclude jurisdiction over federal questions.²⁸ However, as Chief Justice Rehnquist noted for the majority in *Seminole Tribe of Florida v. Florida*²⁹ and reiterated in *Florida Prepaid*:

Although the text of the Amendment would appear to restrict only the Article III diversity jurisdiction of the federal courts, "we have understood the Eleventh Amendment to stand not so much for what it says, but for the presupposition . . . which it confirms." That presupposition, first observed over a century ago in *Hans v. Louisiana*, has two parts: first, that each State is a sovereign entity in our federal system; and second, that ""[i]t is inherent in the nature of sovereignty not to be amenable to the suit of an individual without its consent."" For over a century we have reaffirmed that federal jurisdiction over suits against unconsenting States "was not contemplated by the Constitution when establishing the judicial power of the United States."³⁰

30. Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 634–35 (1999) (quoting *Seminole Tribe*, 517 U.S. at 54) (citations omitted, other omissions in original).

^{26.} See id.

^{27.} U.S. CONST. amend. XI.

^{28.} See, e.g., CHEMERINSKY, supra note 22, § 7.3, at 407–08 and sources cited therein. At the time of the Eleventh Amendment's passage, diversity jurisdiction was the only jurisdiction the federal courts had, and thus the omission of federal question jurisdiction from the amendment is hardly surprising. See William P. Marshall, The Diversity Theory of the Eleventh Amendment: A Critical Evaluation, 102 HARV. L. REV. 1372, 1381 (1989) ("[T]he framers of the eleventh amendment were not faced with any immediate possibility that states would be sued in federal court on federal grounds. First, there was no statutory basis for federal jurisdiction; it was not until 1875 that general federal question jurisdiction was provided. Second, there were no federal laws which provided causes of action against the states." (footnotes omitted)).

^{29. 517} U.S. 44 (1996).

Thus, the Supreme Court has held that the Eleventh Amendment also immunizes unconsenting states against federal question suits by their own citizens,³¹ suits by foreign nations,³² federal administrative agency proceedings,³³ and even suits in their own state courts.³⁴ The Court views the Eleventh Amendment as a codification of the states' inherent sovereign immunity, and it interprets the Amendment accordingly.³⁵

B. Applying the Eleventh Amendment to Intellectual Property

1. Atascadero and Its Progeny

Historically, the general understanding among practitioners was that states were liable for infringements of intellectual property rights in the same way as private citizens,³⁶ and in fact some courts had so held.³⁷ That understanding was altered by the Supreme Court's 1985 decision in *Atascadero State Hospital v. Scanlon.*³⁸ In *Atascadero*, the Court held that if Congress wished to abrogate the states' sovereign immunity and make them subject to suit in federal court, then Congress must declare its intent to do so explicitly in the statute itself.³⁹ The Court acknowledged that under its prior holdings Congress had the power to abrogate state sovereign immunity under Section 5 of the Fourteenth Amendment, but it did not address the question of whether Congress might make such an abrogation under other powers.⁴⁰

- 32. See, e.g., Monaco v. Mississippi, 292 U.S. 313 (1934).
- 33. See Fed. Mar. Comm'n v. S.C. State Ports Auth., 535 U.S. 743 (2002).
- 34. See Alden v. Maine, 527 U.S. 706 (1999).

35. See CHEMERINSKY, supra note 22, § 7.3, at 408; see generally id. at 402–09. For that reason, this Article uses the terms "state sovereign immunity" and "Eleventh Amendment immunity" interchangeably.

36. U.S. GEN. ACCOUNTING OFFICE, PUBL'N NO. GAO-01-811, INTELLECTUAL PROPERTY: STATE IMMUNITY IN INFRINGEMENT ACTIONS 4 (2001), available at http://www.gao.gov/ new.items/d01811.pdf [hereinafter ELEVENTH AMENDMENT INTELLECTUAL PROPERTY REPORT] ("Historically, state governments have sued and been sued by others in federal court for intellectual property infringement just like any other owner or user of intellectual property.").

37. See Mills Music, Inc. v. Arizona, 591 F.2d 1278, 1285 (9th Cir. 1979) (state not entitled to Eleventh Amendment immunity in copyright infringement suit).

38. 473 U.S. 234 (1985).

39. *Id.* at 243 ("[W]e hold... that Congress must express its intention to abrogate the Eleventh Amendment in unmistakable language in the statute itself.").

40. Id. at 238 ("[W]hen acting pursuant to § 5 of the Fourteenth Amendment, Congress can abrogate the Eleventh Amendment without the States' consent." (citing Fitzpatrick v. Bitzer, 427

^{31.} See, e.g., Hans v. Louisiana, 134 U.S. 1 (1890).

Because the existing federal patent, copyright, and trademark statutes lacked such a clear statement of intent, courts soon held that they failed the *Atascadero* test. In *Richard Anderson Photography v. Brown*,⁴¹ the Fourth Circuit held that the Copyright Act did not contain a clear statement of intent to abrogate the states' Eleventh Amendment immunity, and so states were immune from suit for copyright infringement.⁴² Subsequent cases extended this immunity to patent infringement.⁴³

2. Union Gas

The Supreme Court subsequently addressed the question not answered in *Atascadero*, specifically: Under what circumstances does Congress have the *power* to abrogate the sovereign immunity of the states? The Court's first foray into the area was its 1989 decision in *Pennsylvania v. Union Gas Co.*⁴⁴ In that decision, a fractured court held that the Commerce Clause of Article I of the Constitution granted Congress the power to abrogate state sovereign immunity, and that Congress had in fact done so in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).⁴⁵ Thus, *Union Gas* "held that Congress could override the

43. See, e.g., Chew v. California, 893 F.2d 331, 336 (Fed. Cir. 1990) (holding that the Patent Act did not abrogate states' Eleventh Amendment immunity).

44. 491 U.S. 1 (1989).

U.S. 445, 456 (1976))). Abrogation under Section 5 is discussed *infra* notes 65-69 and accompanying text.

^{41. 852} F.2d 114 (4th Cir. 1988).

^{42.} *Id.* at 120 ("[W]e hold that the language of the Copyright Act, considered as a whole, does not clearly and unequivocally indicate Congress's intent to create a cause of action for money damages enforceable against the states in federal court, thereby directly abrogating the states' eleventh amendment immunity."); *accord* Lane v. First Nat'l Bank of Boston, 871 F.2d 166 (1st Cir. 1989); BV Eng'g v. Univ. of Cal., L.A., 858 F.2d 1394 (9th Cir. 1988).

^{45.} *Id.* at 23. Four Justices (Brennan, Marshall, Blackmun, and Stevens) concluded that Congress both had abrogated immunity with sufficient clarity and had the power to do so under Article I. *Id.* at 23. One Justice (White) concluded that Congress had not acted with sufficient clarity but had the requisite power. *Id.* at 45 (White, J., concurring in the judgment in part and dissenting in part). One Justice (Scalia) concluded that Congress had acted with sufficient clarity but lacked the power to do so. *Id.* at 29, 35–42 (Scalia, J., concurring in part and dissenting in part). Finally, three Justices (Rehnquist, O'Connor, and Kennedy) concluded that Congress had not acted with sufficient clarity and lacked the power to abrogate immunity anyway, and so joined various parts of the opinions by Justices White and Scalia. *See also id.* at 57 (O'Connor, J., dissenting). Counting votes, the clarity and power holdings each prevailed by a 5–4 vote, but not the same 5–4 vote.

Eleventh Amendment pursuant to any of its constitutional powers, so long as the law was explicit in its text authorizing suits against state governments."⁴⁶

3. The Remedy Clarification Acts

Congress responded to *Atascadero* and its intellectual property progeny in 1992 by using its power under Article I (as recognized in *Union Gas*) to enact three statutes: the Patent and Plant Variety Remedy Clarification Act,⁴⁷ the Copyright Remedy Clarification Act,⁴⁸ and the Trademark Remedy Clarification Act.⁴⁹ These Acts amended the respective remedy laws to state explicitly that Congress intended to abrogate state sovereign immunity and make states subject to the federal intellectual property laws.⁵⁰ Courts applying *Atascadero* found that Congress had expressed its will with sufficient clarity, and states were once again subject to infringement suits.⁵¹

50. See 35 U.S.C. §§ 271(h), 296 (2000) (patent infringement); 17 U.S.C. §§ 501(a), 511 (copyright infringement); 15 U.S.C. §§ 1114(1), 1122(b) (trademark infringement).

^{46.} CHEMERINSKY, supra note 22, § 7.7, at 451.

^{47.} Patent and Plant Variety Protection Remedy Clarification Act, Pub. L. No. 102-560, 106 Stat. 4230 (1992) (codified in scattered sections of 35 U.S.C. and 7 U.S.C.); see S. REP. No.102-280, at 7 (1992), as reprinted in 1992 U.S.C.C.A.N. 3087, 3093 ("To remedy the application of *Atascadero* to intellectual property laws, Senator DeConcini introduced S. 758 to explicitly establish that Congress did intend to subject States to patent infringement suits in Federal court.").

^{48.} Copyright Remedy Clarification Act, Pub. L. No. 101-553, 104 Stat. 2749 (1990) (codified in scattered sections of 17 U.S.C.); see H.R. REP. No. 101-282(I), at 2 (1989), as reprinted in 1990 U.S.C.C.A.N. 3949, 3950 ("While Atascadero was not a copyright case, a number of circuits have applied its reasoning to the copyright law in deciding that sovereign immunity bars plaintiffs in copyright infringement suits from recovering money damages from State defendants... The purpose of H.R. 3045, therefore, is to amend title 17 to clearly and explicitly abrogate State sovereign immunity to permit the recovery of money damages against States.").

^{.49.} Trademark Remedy Clarification Act, Pub. L. No. 102-542, 106 Stat 3567 (1992) (codified in scattered sections of 15 U.S.C.); *see* S. REP. No. 102-280 at 7, 1992 U.S.C.C.A.N. at 3093 ("To remedy the application of *Atascadero* to intellectual property laws, Senator DeConcini introduced S. 758 to explicitly establish that Congress did intend to subject States to patent infringement suits in Federal court... Similar legislation is required to rectify the inherent inequity plaguing the area of trademark protection. Accordingly, Senator DeConcini introduced S. 759, the Trademark Remedy Clarification Act.").

^{51.} See, e.g., Chavez v. Arte Publico Press, 59 F.3d 539 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000) (copyright and trademark case); Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 148 F.3d 1343 (Fed. Cir. 1998), rev'd, 527 U.S. 627 (1999) (patent case).

4. Seminole Tribe

The validity of the abrogation pursuant to these statutes depended upon whether Congress had the power to abrogate state sovereign immunity under the Intellectual Property Clause⁵² (for patents and copyrights) and the Commerce Clause⁵³ (for trademarks). Based on Union Gas. Congress seemed to be on safe ground in passing the Remedy Clarification Acts. That seemingly safe ground disappeared a few years later with the Supreme Court's 1996 decision in Seminole Tribe of Florida v. Florida.⁵⁴ In Seminole Tribe, the Seminole Tribe of Florida wanted to operate a casino in the state of Florida.⁵⁵ Pursuant to the Indian Gaming Regulatory Act,⁵⁶ the Tribe attempted to negotiate a gaming compact with the state.⁵⁷ When Florida refused to negotiate, in violation of the statutory requirement that it negotiate such compacts in good faith, the Tribe followed the procedures laid out in the Act and sued the state.⁵⁸ The state filed a motion to dismiss, asserting its sovereign immunity.⁵⁹ The district court denied the motion, but was reversed by the Eleventh Circuit, and the Tribe appealed to the Supreme Court.⁶⁰ The Court concluded that Congress had clearly intended to abrogate the sovereign immunity of the states in the Act, and that it purported to do so pursuant to its powers under the Indian Commerce Clause of Article I of the Constitution.⁶¹ However, in a five to four vote, the Court overruled its decision in Union Gas⁶² and held that Congress did not have the power to abrogate state sovereign immunity under its Article I powers, including the Indian Commerce Clause.⁶³ The Court therefore dismissed the suit against Florida on Eleventh Amendment sovereign immunity grounds.⁶⁴

- 59. Id. at 52.
- 60. Id. at 52-53.

- 62. Seminole Tribe, 517 U.S. at 66.
- 63. Id. at 72-73.
- 64. Id. at 73.

^{52.} U.S. CONST. art. I, § 8, cl. 8.

^{53.} U.S. CONST. art. I, § 8, cl. 3.

^{54. 517} U.S. 44 (1996).

^{55.} Id. at 51-52.

^{56. 25} U.S.C. § 2710(d) (1994), invalidated in part by Seminole Tribe, 517 U.S. at 72-73.

^{57.} Seminole Tribe, 517 U.S. at 51-52.

^{58.} See id.

^{61.} Id. at 56-57, 60. The Indian Commerce Clause is found at U.S. Const. art. I, § 8, cl. 3.

However, Seminole Tribe did not overrule the Court's prior ruling that Congress could abrogate Eleventh Amendment immunity under Section 5 of the later Fourteenth Amendment.⁶⁵ Section 1 of the Fourteenth Amendment provides that "[n]o State shall ... deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."66 Section 5 further provides that "[t]he Congress shall have power to enforce, by appropriate legislation, the provisions of this article."⁶⁷ The had previously held the Fourteenth Court that Amendment fundamentally altered the relationship between the states and the federal government and gave the federal government a power over the states that it previously lacked.⁶⁸ Seminole Tribe did not disturb the Court's prior holding that Congress may abrogate the states' sovereign immunity under Section 5 in order to enforce the individual rights, including protection of property interests, provided in Section 1.⁶⁹

The Seminole Tribe also asserted that, even if the state were immune under the Eleventh Amendment, it could still seek an injunction against the Governor of Florida in his official capacity pursuant to *Ex parte Young*,⁷⁰ requiring him to negotiate in good faith.⁷¹ The Court disagreed. It analyzed the statutory scheme, which laid out a detailed sequence of steps for negotiating tribe-state compacts and placed stringent requirements on suits against the state under the Act.⁷² The Court stated:

[W]here Congress has prescribed a detailed remedial scheme for the enforcement against a State of a statutorily created right, a court should hesitate before casting aside those limitations and permitting an action against a state officer based upon *Ex parte Young*.⁷³

The Court concluded that the detailed statutory scheme foreclosed the possibility of other remedies via a suit under *Ex parte Young*.⁷⁴ To rule

71. Seminole Tribe, 517 U.S. at 73. Ex parte Young suits against state officers acting in their official capacity are discussed in Part II.B, infra.

^{65.} Id. at 59.

^{66.} U.S. CONST. amend. XIV, § 1.

^{67.} U.S. CONST. amend. XIV, § 5.

^{68.} See Seminole Tribe, 517 U.S. at 59 (citing Fitzpatrick v. Bitzer, 427 U.S. 445 (1976)).

^{69.} See id.

^{70. 209} U.S. 123 (1908).

^{72.} Seminole Tribe, 517 U.S. at 73-75.

^{73.} Id. at 74.

^{74.} Id. at 76.

otherwise, the Court decided, was to invite Indian tribes to evade the stringent requirements set forth in the statutory scheme by filing suit directly under *Ex parte Young*.⁷⁵

5. Florida Prepaid and College Savings Bank

Seminole Tribe's overruling of Union Gas raised an obvious question concerning the constitutionality of the abrogation of state sovereign immunity in the Remedy Clarification Acts, because in passing them, Congress relied at least in part on its Article I powers.⁷⁶ However, Congress also purported to base those Acts in part on Section 5 of the Fourteenth Amendment, which remained a valid ground for abrogating state sovereign immunity.⁷⁷ Thus, the validity of the Remedy Clarification Acts was somewhat in doubt. The Supreme Court resolved this doubt in a pair of companion cases, *Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank*⁷⁸ and *College Savings Bank v. Florida Prepaid Postsecondary Education Expense Board*.⁷⁹

Both cases stemmed from the state of Florida's creation of a plan for prepaying college expenses using a special investment program, under the authority of the Florida Prepaid Postsecondary Education Expense Board (Florida Prepaid).⁸⁰ College Savings Bank held a patent on a method of managing such a program.⁸¹ College Savings Bank filed two suits against Florida Prepaid, the first alleging patent infringement⁸² and the second alleging that Florida Prepaid had used false advertising in

^{75.} Id. at 75.

^{76.} See S. REP. NO. 102-280, at 7-8 (1992), as reprinted in 1992 U.S.C.C.A.N. 3087, 3093-94 ("The provisions of [the Patent Remedy Clarification Act] are justified under the Patent Clause, the Commerce Clause and the enforcement provision of the fourteenth amendment. [The Trademark Remedy Clarification Act] is justified under the Commerce Clause and the fourteenth amendment."); H.R. REP. NO. 101-282(I), at 7 (1989), as reprinted in 1990 U.S.C.C.A.N. 3949, 3955 ("Congress' power under the Fourteenth Amendment has been repeatedly upheld, but in *Pennsylvania v. Union Gas*, the Court held that Congress has the power to abrogate under the Commerce Clause of Article I. The Committee believes that the *Union Gas* reasoning applies equally to the Copyright Clause of Article I." (footnote omitted)).

^{77.} See S. REP. NO. 102-280, at 7-8, 1992 U.S.C.C.A.N. at 3093-94; H.R. REP. NO. 101-282(I), at 7, 1990 U.S.C.C.A.N. at 3955.

^{78. 527} U.S. 627 (1999).

^{79. 527} U.S. 666 (1999).

^{80.} Florida Prepaid, 527 U.S. at 631.

^{81.} Id. at 630-31.

^{82.} Id. at 631.

selling its plan, actionable as unfair competition under the Lanham Act.⁸³ The district court granted Florida Prepaid's motion to dismiss the false advertising claim on grounds of sovereign immunity⁸⁴ but denied its motion to dismiss the patent claims.⁸⁵ College Savings Bank's appeal of the false advertising claim went to the Third Circuit, which held that the Trademark Remedy Clarification Act did not validly abrogate Florida's sovereign immunity and affirmed the district court's ruling that Florida Prepaid was immune from suit.⁸⁶ Its appeal of the patent claims went to the Federal Circuit, which held that the Patent Remedy Clarification Act did validly abrogate state immunity and affirmed the district court's ruling that the suit could proceed.⁸⁷ The Supreme Court granted certiorari in both cases.

In both cases, the Court held that the respective Remedy Clarification Acts evinced a clear intent to abrogate the states' Eleventh Amendment immunity, as required under *Atascadero*.⁸⁸ However, the Court then held that, under *Seminole Tribe*, Congress could not validly abrogate the states' immunity under its Article I powers, including the Intellectual Property Clause and the Commerce Clause.⁸⁹ The remaining issue was whether Congress appropriately enacted either Act pursuant to Section 5 of the Fourteenth Amendment.⁹⁰

For the patent claims, the Court concluded that a patent was "property" for purposes of the Fourteenth Amendment, and therefore Congress could validly abrogate Eleventh Amendment immunity with "appropriate legislation" if it found that states were depriving individuals of patent rights without due process of law.⁹¹ However, it

88. Florida Prepaid, 527 U.S. at 635; College Savings Bank, 527 U.S. at 670 (noting that Congress had amended the Lanham Act to apply to states and their officers, and to state that such parties were not immune under the Eleventh Amendment). The Court did not explicitly address the "clear intent" prong of Atascadero in College Savings Bank; however, it did address the issue of Congressional power to enact the Trademark Remedy Clarification Act, which inquiry would have been unnecessary unless the threshold requirement of clear intent had been met. See id. at 672–75.

^{83.} College Savings Bank, 527 U.S. at 671.

^{84.} Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Bd., 948 F. Supp. 400, 428 (D.N.J. 1996), aff^ad, 131 F.3d 353, 366 (3d Cir. 1997), aff^ad, 527 U.S. 666 (1999).

^{85.} Id., aff'd, 148 F.3d 1343 (Fed. Cir. 1998), rev'd, 527 U.S. 627 (1999).

^{86.} Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Bd., 131 F.3d 353, 366 (3d Cir. 1997).

^{87.} Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Bd., 148 F.3d 1343, 1346, 1355 (Fed. Cir. 1998).

^{89.} Florida Prepaid, 527 U.S. at 635-36; College Savings Bank, 527 U.S. at 672.

^{90.} Florida Prepaid, 527 U.S. at 635-36; College Savings Bank, 527 U.S. at 672.

^{91.} Florida Prepaid, 527 U.S. at 637, 641-42.

noted that its prior rulings established that "for Congress to invoke § 5, it must identify conduct transgressing the Fourteenth Amendment's substantive provisions, and must tailor its legislative scheme to remedying or preventing such conduct."⁹² The Court first looked to identify the "evil' or 'wrong' that Congress intended to remedy," and concluded that the record Congress compiled in the course of enacting the Patent Remedy Clarification Act did not support its contention that any such wrong was occurring.⁹³ In particular, the Court stated, "[i]n enacting the Patent Remedy Act... Congress identified no pattern of patent infringement by the States, let alone a pattern of constitutional violations."⁹⁴ It noted that the record contained no evidence showing widespread, unremedied infringement by the states.⁹⁵ In the absence of such a showing, the legislation was not an "appropriate" exercise of Congress's Section 5 powers.⁹⁶

Turning to the question of whether individuals were being deprived of their patent property rights without due process, the Court emphasized that mere deprivation was not enough—the deprivation had to be done without due process of law.⁹⁷ Thus, "only where the State provides no remedy, or only inadequate remedies, to injured patent owners for its infringement of their patent could a deprivation of property without due process result."⁹⁸ The Court then noted that "Congress, however, barely considered the availability of state remedies for patent infringement and hence whether the States' conduct might have amounted to a constitutional violation under the Fourteenth Amendment."⁹⁹ The Court further observed that it had previously held that a "state actor's negligent act that causes unintended injury to a person's property does not 'deprive' that person of property within the meaning of the Due Process Clause"—some sort of intentional or reckless action is required.¹⁰⁰ However, proving patent infringement required no such showing of an

93. Florida Prepaid, 527 U.S. at 639-40.

- 96. Id. at 645-46.
- 97. Id. at 642-43.
- 98. Id. at 643.
- 99. Id.
- 100. Id. at 645.

^{92.} Id. at 639. As discussed in the Court's opinion, see id. at 637-39, this "congruence and proportionality" test has its origins in the Court's decision in City of Boerne v. Flores, 521 U.S. 507, 519-20 (1997).

^{94.} Id. at 640.

^{95.} Id. at 640-41.

intent to infringe, and thus many patent infringements by states would not rise to the level of a constitutional violation.¹⁰¹ In light of the absence of proof that violations were widespread and that state law provided no remedy for such violations, the Court found that the broad abrogation remedy provided by the Act was far out of proportion to the harm it was supposed to redress:

Despite subjecting States to this expansive liability, Congress did nothing to limit the coverage of the Act to cases involving arguable constitutional violations, such as where a State refuses to offer any state-court remedy for patent owners whose patents it had infringed. Nor did it make any attempt to confine the reach of the Act by limiting the remedy to certain types of infringement, such as nonnegligent infringement or infringement authorized pursuant to state policy; or providing for suits only against States with questionable remedies or a high incidence of infringement.¹⁰²

The Court therefore concluded that the Act was not a proper exercise of Congress's authority under Section 5 of the Fourteenth Amendment and invalidated the Act.¹⁰³ Because the Act was invalid, Florida Prepaid retained its immunity.¹⁰⁴

For the false advertising claim, the Court found that College Savings Bank had no "property" right to be free of false advertising, and therefore Section 5 did not apply, leaving Congress without power to abrogate state immunity.¹⁰⁵ It also held that Florida had neither explicitly nor implicitly waived its sovereign immunity when it entered the commercial realm by forming Florida Prepaid.¹⁰⁶ Thus, the Court found Florida Prepaid immune from suit on both causes of action.¹⁰⁷

By its terms, *Florida Prepaid* invalidated only the Patent Remedy Clarification Act.¹⁰⁸ Similarly, *College Savings Bank* invalidated the Trademark Remedy Clarification Act only insofar as it applied to false

^{101.} Id.

^{102.} Id. at 646-47.

^{103.} *Id.* at 647-48. Because it is couched in terms of the adequacy of the record, the Court's reasoning appears to leave open the possibility that Congress could at some point, on a proper record, enact such a remedy for unconstitutional patent violations.

^{104.} *Id*.

^{105.} Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Bd., 527 U.S. 666, 672-75 (1999).

^{106.} Id. at 675-87.

^{107.} Id. at 672-75; Florida Prepaid, 527 U.S. at 647-48.

^{108.} Florida Prepaid, 527 U.S. at 647-48.

advertising claims;¹⁰⁹ the Court did not address its application to actual trademark claims. However, the logic of the decisions indicated that the Copyright Remedy Clarification Act and the Trademark Remedy Clarification Act were similarly invalid. This indication was subsequently confirmed when the Fifth Circuit invalidated both the Copyright Remedy Clarification Act and the Trademark Remedy Clarification Act in *Chavez v. Arte Publico Press*,¹¹⁰ following the logic of *Florida Prepaid* in determining that Congress had exceeded its powers under Article I and had failed to make an adequate case under Section 5 of the Fourteenth Amendment.¹¹¹

Thus, all three Remedy Clarification Acts have been nullified.¹¹² As a consequence, states are currently immune from suits in federal court under the federal intellectual property laws. Furthermore, because the federal courts have exclusive jurisdiction over patent and copyright suits,¹¹³ states are effectively immune from *any* suit for patent or copyright infringement.

6. Efforts to Overcome Florida Prepaid

Many commentators and legislators have expressed concern over this outcome, and have therefore proposed various possible ways to use other powers to restore state liability for intellectual property infringements.¹¹⁴

^{109.} College Savings Bank, 527 U.S. at 668–69, 691; see also id. at 673 ("The Lanham Act may well contain provisions that protect constitutionally cognizable property interests—notably, its provisions dealing with infringement of trademarks, which are the 'property' of the owner because he can exclude others from using them. The Lanham Act's false-advertising provisions, however, bear no relationship to any right to exclude" (citations omitted)).

^{110. 204} F.3d 601 (5th Cir. 2000).

^{111.} Id. at 603-08.

^{112.} Technically, because the Supreme Court has not specifically addressed the Copyright Remedy Clarification Act, each circuit is entitled to decide the issue of the validity of that Act for itself. However, the decision in *Chavez* follows so directly from *Florida Prepaid* and *College Savings Bank* (and even *Seminole Tribe* standing alone) that no circuit is likely to disagree.

^{113.} See 28 U.S.C. § 1338(a) (2000) ("The district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trademarks. Such jurisdiction shall be exclusive of the courts of the states in patent, plant variety protection and copyright cases.").

^{114.} See, e.g., Meltzer, supra note 13; Berman et al., supra note 13; Robert T. Neufeld, Closing Federalism's Loophole in Intellectual Property Rights, 17 BERKELEY TECH. L.J. 1295 (2002); Jennifer Cotner, Note, How the Spending Clause Can Solve the Dilemma of State Sovereign Immunity from Intellectual Property Suits, 51 DUKE L.J. 713 (2001). Professor Eugene Volokh offers a counterargument that the Florida Prepaid regime may not be as unjust as it appears. Eugene Volokh, Sovereign Immunity and Intellectual Property, 73 S. CAL. L. REV. 1161 (2000). He notes that the standard analogy is that an infringing state should be treated no differently from an

Some have suggested that Congress could use its spending power to restore this liability. In *South Dakota v. Dole*,¹¹⁵ the Supreme Court ruled that the spending clause gave Congress the power to use the grant or withholding of federal funds to encourage behavior by the states that it could not otherwise compel.¹¹⁶ Commentators have suggested that Congress could threaten to withhold some portion of the state's funding, such as its research funding, unless the state waived its immunity from suit for intellectual property infringements.¹¹⁷ As a variant on this theme, commentators have suggested that Congress could deny a state protection for its own intellectual property unless it waived its immunity from suit by other intellectual property holders.¹¹⁸

Alternatively, Congress might be able to create state liability by relying on Section 5 of the Fourteenth Amendment. The Court's decisions did not foreclose the possibility of this approach, at least for intellectual property rights that meet the Court's definition of "property," but merely indicated that Congress had not met its burden of showing that state intellectual property infringements were sufficiently widespread and harmful to justify the extremely broad remedy set forth in the Remedy Clarification Acts.¹¹⁹ Thus, one way to render the states liable would be for Congress to collect sufficient data to meet the

infringing private entity, id. at 1161–62, then offers two competing analogies. First, state sovereign immunity effectively puts the states on the same footing as the federal government, in that they are now free to infringe as long as they pay just compensation. Id. at 1162–67. Second, immunity from intellectual property infringement puts intellectual property on the same footing as tangible property, because the states are allowed to use tangible property as long as they pay just compensation. Id. at 1167–70. He notes in conclusion: "Readers can decide for themselves which of these analogies is more persuasive; I'm frankly not sure. But at least the existence of the latter analogies should caution us against being too quick or too heated in pragmatic or moral condemnation of the Court's decisions." Id. at 1170.

^{115. 483} U.S. 203 (1987).

^{116.} *Id.* at 211–12. In *Dole*, the threat was to withhold five percent of federal highway funds if a state did not raise its drinking age to twenty-one. *Id.* at 205, 211 (citing 23 U.S.C. § 158).

^{117.} See, e.g., Meltzer, supra note 13, at 1373-80; Berman et al., supra note 13, at 1132-46; Cotner, supra note 114, at 740-41.

^{118.} See, e.g., Meltzer, supra note 13, at 1380-89; Berman et al., supra note 13, at 1146-66; Cotner, supra note 114, at 724-40. Because state universities do considerable patenting pursuant to the Bayh-Dole Act, and a few of them have made significant profits off their patents, denying them such a right is a valid threat. See infra notes 450-52 and accompanying text. However, given the relatively small revenue gained by most states and the potentially large liability for intellectual property infringements, one commentator has speculated that the states are more likely to give up their own right to obtain intellectual property rather than to submit to suits for infringement. See Neufeld, supra note 114, at 1323-24.

^{119.} See Fla. Prepaid Secondary Educ. Bd. v. Coll. Sav. Bank, 527 U.S. 627, 635-48 (1999).

burden.¹²⁰ This data would need to show that intentional intellectual property infringement by states was widespread and that state remedies were inadequate to redress the harm to the intellectual property holders.¹²¹ However, such data is, at least at the current time, difficult to obtain (although the immunity provided under *Florida Prepaid* might make its availability more likely in the future).¹²² Alternatively, Congress could draft narrower legislation tailored to address only actual constitutional harms.¹²³ This legislation could make states liable only in circumstances in which the infringement was deliberate and state remedies had already proved insufficient.¹²⁴ Such limited legislation would almost certainly pass constitutional muster, although the protection it ultimately provided might be narrower than that provided by the intellectual property regimes themselves.¹²⁵

Finally, commentators have proposed relying on a type of suit in which states may not assert sovereign immunity: suits brought by the United States.¹²⁶ Because the United States is the overarching sovereign, the Supreme Court has held that states are not immune to suits by the United States itself, and that Congress may authorize suits in the name of the United States to enforce federal law.¹²⁷ A variation of this proposal is for the United States to authorize *qui tam* actions for intellectual property infringements, in which the intellectual property holder is given permission to sue in the name of the United States and keep some or all of the recovery.¹²⁸ However, these proposals have

^{120.} See, e.g., Berman et al., supra note 13, at 1074-83.

^{121.} See id.

^{122.} See id. at 1083.

^{123.} See, e.g., Meltzer, supra note 13, at 1344–57; Berman et al., supra note 13, at 1083–1109; Cotner, supra note 114, at 745–51.

^{124.} See, e.g., Meltzer, supra note 13, at 1344-46; Berman et al., supra note 13, at 1083-86.

^{125.} See, e.g., Meltzer, supra note 13, at 1347-57; Berman et al., supra note 13, at 1086-1109.

^{126.} See, e.g., Meltzer, supra note 13, at 1362-73; Berman et al., supra note 13, at 1115-21; Cotner, supra note 114, at 744-45.

^{127.} See, e.g., Meltzer, supra note 13, at 1362 ("It is well established that states have no immunity from suit by the United States. It is equally well established that Congress may authorize the United States to bring suit to enforce federal law, whether or not the United States claims a proprietary interest in the outcome." (citing United States v. Mississippi, 380 U.S. 128, 140 (1965); United States v. Raines, 362 U.S. 17, 27 (1960); United States v. Texas, 143 U.S. 621, 641–45 (1892)) (footnotes omitted)); Berman et al., supra note 13, at 1115–16.

^{128.} See, e.g., Meltzer, supra note 13, at 1365-71; Berman et al., supra note 13, at 1117-20.

serious practical and constitutional problems that make them unlikely to be effective general solutions.¹²⁹

Nonetheless, suits by the federal government might be effective in a particular class of cases: Those involving foreign holders of U.S. intellectual property rights. Pursuant to various international agreements and treaties, the United States has a duty to provide remedies to foreign nationals who hold U.S. intellectual property rights.¹³⁰ State sovereign immunity at least arguably puts the United States out of compliance with those agreements, insofar as no remedy is available against infringing states.¹³¹ Because the class of state infringements of intellectual property rights held by foreign nationals is likely to be small, suits by the United States into compliance with its international obligations.¹³²

Various bills proposing versions of these remedies have been introduced into Congress. For example, shortly after the *Florida Prepaid* decision, Senator Leahy introduced the Intellectual Property Protection Restoration Act of 1999.¹³³ This bill would have implemented a remedy tailored to the violations defined in Section 1 and enforced in Section 5 of the Fourteenth Amendment, and conditioned a state's ability to obtain intellectual property rights on its opting into the federal intellectual property systems by waiving its immunity to suits by other intellectual property holders.¹³⁴ Subsequent bills introduced into both the House and

^{129.} See, e.g., Meltzer, supra note 13, at 1362–64 (noting the costly and difficult decision that the government would have to make about when to intervene on behalf of an intellectual property holder attempting to sue a state); *id.* at 1365–71 (discussing the *qui tam* proposal and noting that it may well fail to pass constitutional muster); Berman et al., supra note 13, at 1117 (noting the "practical and political" difficulties of having the United States involved in every infringement suit against the states); *id.* at 1117–20 (discussing the *qui tam* proposal and noting that the Supreme Court is likely to invalidate it as an illegitimate trick to evade the strictures of Seminole Tribe). Professor Meltzer also discusses a "hybrid" scheme in which the United States intervenes only when a court has found a state guilty of infringement (via an *Ex parte Young* official capacity suit or a personal capacity suit), and the United States seeks a civil fine, to be paid eventually to the patentee. See Meltzer, supra note 13, at 1370–73.

^{130.} See Menell, supra note 13, at 1449–64. Professor Menell also discusses the possibility of relying on the Necessary and Proper Clause via these treaty obligations for power to abrogate state sovereign immunity. See id. at 1460–64.

^{131.} See id. at 1449.

^{132.} See Berman et al., supra note 13, at 1194-95.

^{133.} S. 1835, 106th Cong. (1999). The provisions of this bill are analyzed extensively in Berman et al., *supra* note 13, *passim*.

^{134.} See S. 1835 § 111 ("No State or any instrumentality of that State may acquire a Federal intellectual property right unless the State opts into the Federal intellectual property system.... A State opts into the Federal intellectual property system by providing an assurance [of] the State's

Senate—the Intellectual Property Protection Restoration Acts of 2001,¹³⁵ 2002,¹³⁶ and 2003¹³⁷—would have implemented an alternative reform. These bills proposed to: (1) deny remedies for intellectual property infringements for any patent, copyright, or trademark that was at any time owned by a state, unless that state had waived its sovereign immunity;¹³⁸ (2) make all remedies available against private infringers also available against state officers and employees;¹³⁹ and (3) make directly actionable all intellectual property violations that do not comply with the due process requirements of the Fourteenth Amendment or that effect a taking under the Fifth or Fourteenth Amendments.¹⁴⁰ However, to date, no relevant changes have been enacted.

As an alternative to a change in federal law, some commentators have noted that state law may be able to partially fill the gaps in state liability for intellectual property infringement that *Florida Prepaid* created, albeit in a more limited way.¹⁴¹ Most states have a constitutional clause or a statute with effect similar to that of the Fifth Amendment's takings clause. Such provisions might be used to file a suit against the state in state court, characterizing the intellectual property infringement as a taking of the intellectual property.¹⁴² Finally, some commentators have argued that the result in *Florida Prepaid* will have very little practical effect, because of other structural and political restraints on the states.¹⁴³

The Eleventh Amendment bans suits in federal court against a state by citizens of another state. In *Florida Prepaid*, the Supreme Court held that this Eleventh Amendment ban applies to patent infringement claims against states, and subsequent lower court cases have expanded that ban

140. See, e.g., id. § 5.

agreement to waive sovereign immunity from suit in Federal court in any action against the State or any instrumentality or official of that State—(1) arising under a Federal intellectual property law; or (2) seeking a declaration with respect to a Federal intellectual property right.").

^{135.} S. 1611, 107th Cong. (2001); H.R. 3204, 107th Cong. (2001).

^{136.} S. 2031, 107th Cong. (2002). The provisions of a draft of this bill are analyzed in Neufeld, *supra* note 114, at 1312–28.

^{137.} S. 1191, 108th Cong. (2003); H.R. 2344, 108th Cong. (2003).

^{138.} See, e.g., S. 1191 § 3.

^{139.} See, e.g., id. § 4.

^{141.} See, e.g., Menell, supra note 13, at 1413-28; Berman et al., supra note 13, at 1109-14.

^{142.} These ideas are explored in much greater depth in the cited references, and are largely beyond the scope of this article.

^{143.} See generally Jesse H. Choper & John C. Yoo, Who's Afraid of the Eleventh Amendment? The Limited Impact of the Court's Sovereign Immunity Rulings, 106 COLUM. L. REV. 213 (2006) (discussing generally the limited impact of state sovereign immunity); Menell, supra note 13.

to other areas of federal intellectual property law. To date, legislative efforts to limit *Florida Prepaid* have been unsuccessful, and other proposed remedial avenues remain largely untested. Thus, *Florida Prepaid* is still the governing law: States are immune from suits for intellectual property infringements.

II. THE CURRENT STATUS OF STATE UNIVERSITY RESEARCHERS UNDER *FLORIDA PREPAID*

Although much commentary has focused on how to "fix" Florida Prepaid and make states liable for intellectual property infringement. very little direct attention has been focused on the status of individual state employees in the post-Florida Prepaid world, and how they might be affected by state immunity for intellectual property infringement. This Article attempts to address that deficit, at least for a particular class of defendants. Researchers at state universities, like Dr. Little, whose research may lead them to use-deliberately or inadvertentlytechniques or materials that are covered by patents or copyrights, comprise one of the most likely classes of infringers. The remainder of this Article will discuss the liability of researchers at state universities for infringement of patents and copyrights.¹⁴⁴ This Part discusses the possible avenues by which an intellectual property holder might pursue an action against researchers at state universities, along with difficulties presented by these avenues. The following two Parts then focus on a qualified immunity defense that the researchers at state universities should be able to assert in response.

Unfortunately, at present there is no clear body of law defining the liability of such researchers. Virtually all law pertaining to sovereign immunity, particularly for state employees, has arisen in the context of civil rights litigation. Thus, much of what follows is argued by analogy to that body of law. Whether that analogy is apt is open to reasonable debate. However, I will attempt to justify it at the relevant points in the following discussion, and also indicate where it might not be a good fit.

This Part examines the potential liability of researchers at state universities for patent and copyright infringement. Part II.A notes that the universities themselves, as branches of the state, are almost certainly immune from damages liability under the Eleventh Amendment. Part

^{144.} While such researchers might theoretically also infringe trademarks, I consider the probability of their doing so—and more importantly, their *need* to do so in furtherance of their research—sufficiently remote that I do not address it.

II.B then examines the liability of researchers at state universities under the doctrine of *Ex parte Young*, which permits proceedings for injunctive relief against state officials in their official capacities. It notes that such proceedings are typically permitted despite the Eleventh Amendment, but that such suits may be precluded in the intellectual property context. This Part also examines the utility of such suits from the perspective of the intellectual property holder and their impact on the research process from the perspective of researchers at state universities. Finally, Part II.C discusses the possibility of suits for money damages against researchers at state universities in their personal capacities and the potential harms of such suits.

A. Immunity for State Universities

Under *Florida Prepaid*'s reasoning, a state itself cannot be sued for patent or copyright infringement, which raises the issue of how far and to whom that Eleventh Amendment immunity extends. In general, courts have held that branches of the state are protected under the umbrella of the state's sovereign immunity.¹⁴⁵ Courts have also held that state universities are branches of the state for purposes of sovereign immunity and thus have granted immunity to state universities.¹⁴⁶ Therefore, patent and copyright holders will not be able to sue the university directly for intellectual property infringement.¹⁴⁷

^{145.} See 1 COOK & SOBIESKI, supra note 22, \P 2.01[D], at 2-61 to 2-70 (listing branches of the state that have been granted immunity and collecting cases).

^{146.} See id. at 2-63 & n.197 (collecting cases).

^{147.} See, e.g., Xechem Int'l, Inc. v. Univ. Tex. M.D. Anderson Cancer Ctr., 382 F.3d 1324, 1327–28 (Fed. Cir. 2004) ("The University of Texas is deemed to be an arm of the State of Texas, and Xechem does not dispute that the University is properly accorded Eleventh Amendment immunity [from suit for damages for patent infringement]." (citations omitted)); BV Eng'g v. Univ. Cal., L.A., 858 F.2d 1394, 1395 (9th Cir.1988) ("The University of California and the Board of Regents are considered to be instrumentalities of the state, and therefore enjoy the same immunity as the state of California [from suit for damages for copyright infringement]." (internal quotation and citation omitted)); Kersavage v. Univ. Tenn., 731 F. Supp. 1327, 1329 (E.D. Tenn. 1989) ("No question is raised by the parties that the University of Tennessee is an arm of the State of Tennessee; this is now well-settled law. Consequently, the University may invoke the Eleventh Amendment to bar a suit against it for damages [for patent infringement]." (citations omitted)). But see ELEVENTH AMENDMENT INTELLECTUAL PROPERTY REPORT, supra note 36, at 8 ("[S]ome Pennsylvania universities generally considered to be public institutions are only quasi-state entities for litigation purposes and do not have immunity in federal courts.").

B. Suits Pursuant to Ex Parte Young

1. The Ex Parte Young Doctrine

Because states and branches of the state enjoy such broad immunity from suit under the Eleventh Amendment, the Court has developed a variety of doctrines that afford plaintiffs at least some relief.¹⁴⁸ One of the most important of these is the doctrine set forth in the Supreme Court's 1908 ruling in Ex parte Young.¹⁴⁹ In Ex parte Young, the Court held that the Eleventh Amendment's prohibition of suits in federal courts against states did not preclude proceedings against state officials who are acting in their official capacity.¹⁵⁰ The rationale (some have called it a fiction¹⁵¹) behind this ruling was that state law could not grant an official the authority to violate the Constitution or federal law, and therefore the state's sovereign immunity should not shield the official from all liability when such a violation took place.¹⁵² Thus, while a suit for patent or copyright infringement against a state or state university would be dismissed on immunity grounds, proceedings against a particular researcher in his or her official capacity (that is, as a researcher at the state university) would not be.

However, the doctrine of *Ex parte Young* has a very important limitation: Plaintiffs are permitted to request only injunctive relief, and are not permitted to sue for monetary damages.¹⁵³ That is, prospective relief is available, but retrospective damages are not. The line between

^{148.} The most important of these are the doctrine of *Ex parte Young*, 209 U.S. 123 (1908), which permits proceedings for injunctive relief against state officers in their official capacities, the subject of Part II.B, and the doctrine that permits suits for money damages against state officials in their personal capacities, the subject of Part II.C. In addition, the Court has permitted suits by the federal government against unconsenting states, suits in admiralty, and suits pursuant to the Supreme Court's appellate jurisdiction. *See* CHEMERINSKY, *supra* note 22, § 7.4, at 412–13. The Court has also permitted suits against cities and other municipal entities. *See id.* at 413–14. The court has further held that states may explicitly waive their immunity. *See id.* § 7.6.

^{149. 209} U.S. 123 (1908).

^{150.} See CHEMERINSKY, supra note 22, § 7.5.1, at 419-20.

^{151.} See, e.g., Idaho v. Coeur d'Alene Tribe, 521 U.S. 261, 270 (1997) (referring to the *Ex parte Young* exception as "an obvious fiction"); Choper & Yoo, *supra* note 143, at 225 (noting that *Ex parte Young* is "[w]idely recognized to have relied on a legal fiction").

^{152.} Ex parte Young, 209 U.S. at 159–60. For discussion, criticism, and defense of Ex parte Young, see CHEMERINSKY, supra note 22, § 7.5.1, at 419–22.

^{153.} See Edelman v. Jordan, 415 U.S. 651, 663–71 (1974) (articulating the distinction between the two forms of relief). "The seminal case articulating the distinction between retroactive and prospective relief is *Edelman v. Jordan.*" CHEMERINSKY, *supra* note 22, § 7.5.2, at 425.

the two is not always easy to draw,¹⁵⁴ particularly in civil rights cases, because of the wide range of forms that the injunction can take.¹⁵⁵ However, that issue should not create much of a problem with intellectual property cases, where the injunction typically is limited to halting future infringements. Thus, in a proceeding against the state researcher in his or her official capacity, the plaintiff could request only an injunction against further infringement, and not damages for past infringement. As one exception, in an appropriate case under *Ex parte Young*, the successful plaintiff is permitted to recover attorney fees incurred in the proceeding itself.¹⁵⁶ Such fees are not deemed to be retroactive damages for past harms, but rather costs of obtaining the prospective relief.¹⁵⁷ In civil rights cases brought pursuant to 42 U.S.C. § 1983, these fees are typically awarded under 42 U.S.C. § 1988.¹⁵⁸ In the intellectual property area, attorney fees are also available under the respective Acts,¹⁵⁹ and so may be awarded in appropriate cases.

While the *Ex parte Young* doctrine is well established in the civil rights context, the doctrine may not apply in the patent and copyright infringement contexts. As discussed above,¹⁶⁰ the Supreme Court in *Seminole Tribe* held that proceedings under *Ex parte Young* may be precluded where the statutory scheme itself contains a detailed remedial scheme against the states.¹⁶¹ That description certainly applies to patent

^{154.} See, e.g., Edelman, 415 U.S. at 667 ("As in most areas of the law, the difference between the type of relief barred by the Eleventh Amendment and that permitted under *Ex parte Young* will not in many instances be that between day and night.").

^{155.} See, e.g., Milliken v. Bradley, 433 U.S. 267, 288–90 (1977) (discussing whether a desegregation plan calling for several remedial and compensatory education programs provided relief that was prospective or retrospective); see also CHEMERINSKY, supra note 22, § 7.5.2, at 426–27 (discussing the difficulty in making the prospective/retroactive distinction in cases like Milliken (citing David P. Currie, Sovereign Immunity and Suits Against Government Officers, 1984 SUP. CT. REV. 149, 162 (criticizing the Court's conclusion in Milliken that the relief was prospective))); 1 COOK & SOBIESKI, supra note 22, ¶ 2.01[C], at 2-34 to 2-36 (discussing Milliken).

^{156.} See CHEMERINSKY, supra note 22, § 7.5.2, at 427 (citing Hutto v. Finney, 437 U.S. 678 (1978)).

^{157.} See id.

^{158.} Suits under § 1983 are discussed infra Part III.A.

^{159.} See 35 U.S.C. § 285 (2000) (patent law) ("The court in exceptional cases may award reasonable attorney fees to the prevailing party."); 17 U.S.C. § 505 (2000) (copyright law) ("Except as otherwise provided by this title, the court may also award a reasonable attorney's fee to the prevailing party as part of the costs.").

^{160.} See supra Part I.B.4.

^{161.} See Seminole Tribe of Fla. v. Florida, 517 U.S. 44, 73–76 (1996); see also CHEMERINSKY, supra note 22, § 7.5, at 434–36 (discussing this aspect of Seminole Tribe).

and copyright law, both of which spell out the available remedies in great detail.¹⁶² Furthermore, Congress made these remedies specifically applicable to the states in the Remedy Clarification Acts.¹⁶³ Under *Seminole Tribe*, these features may be enough to preclude *Ex parte Young* proceedings for injunctive relief in intellectual property cases.¹⁶⁴

However, courts may be reluctant to extend *Seminole Tribe* so far as to preclude such proceedings. In that decision, the remedy provided could apply *only* to the states,¹⁶⁵ and it was less than what would have been available in a suit under *Ex parte Young*.¹⁶⁶ In *Seminole Tribe*, the Court was reluctant to allow plaintiffs to pursue a broader cause of action under *Ex parte Young* and thereby upset the statutory scheme by avoiding the complex and specific limitations of the statute.¹⁶⁷ Under patent and copyright law, in contrast, the statutory remedies are applicable to everyone,¹⁶⁸ and they are much greater than would be allowed under *Ex parte Young*,¹⁶⁹ thus avoiding the problems that concerned the Court in *Seminole Tribe*.

165. The statute at issue, § 2710(d) of the Indian Gaming Regulatory Act, 25 U.S.C. § 2710(d) (1994), lays out the procedure for Indian tribes and states to enter into gaming compacts permitting the tribes to run gambling games on tribal land located within the state. The statute requires the state to negotiate such compacts, and to negotiate them in good faith. *Seminole Tribe*, 517 U.S. at 48–50. In the words of the Court,

[W]here the court finds that the State has failed to negotiate in good faith, the only remedy prescribed is an order directing the State and the Indian tribe to conclude a compact within 60 days. And if the parties disregard the court's order and fail to conclude a compact within the 60-day period, the only sanction is that each party then must submit a proposed compact to a mediator who selects the one which best embodies the terms of the Act. Finally, if the State fails to accept the compact selected by the mediator, the only sanction against it is that the mediator shall notify the Secretary of the Interior who then must prescribe regulations governing class III gaming on the tribal lands at issue.

Id. at 74–75.

166. See Seminole Tribe, 517 U.S. at 75-76.

167. See id.

168. See 35 U.S.C. § 271(a) (2000) ("[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States ... during the term of the patent therefor, infringes the patent." (emphasis added)); 17 U.S.C. § 501(a) ("Anyone who violates any of the exclusive rights of the copyright owner ... is an infringer of the copyright" (emphasis added)).

169. See, e.g., 35 U.S.C. §§ 283, 284 (providing for injunctions and damages, respectively, for patent infringement); 17 U.S.C. §§ 502, 504 (providing for injunctions and damages, respectively, for copyright infringement).

^{162.} See 35 U.S.C. ch. 29 ("Remedies for Infringement of Patent, and Other Actions"); 17 U.S.C. ch. 5 ("Copyright Infringement and Remedies")

^{163.} See 35 U.S.C. §§ 271(h), 296 (patent cases); 17 U.S.C. §§ 501(a), 511 (copyright cases).

^{164.} See Robert G. Bone, From Property to Contract: The Eleventh Amendment and University-Private Sector Intellectual Property Relationships, 33 LOY. L.A. L. REV. 1467, 1487–88 (2000) (noting this issue).

Furthermore, holding that the detailed remedial schemes of the patent and copyright acts preclude relief under Ex parte Young would have a paradoxical effect. In its failed attempt to defeat sovereign immunity and make states liable for infringement in the Remedy Clarification Acts. Congress would have created a remedial system specifically applicable to the states. Under a strict reading of Seminole Tribe, making the remedial scheme apply to the states would preclude proceedings for injunctive relief under Ex parte Young. Thus, in trying to make states completely liable, Congress would have not only failed in that effort, but it would have also destroyed one of the limited avenues of relief that would otherwise have been available against states. Clearly, this result could not be what Congress intended. Because the concerns that led to the result in Seminole Tribe---relief that applied only to the state and that was narrower than that available under Ex parte Young-are not really implicated in suits for patent or copyright infringement, courts are unlikely to reach this result. Thus, individual researchers at state universities are likely at risk for injunctions in their official capacities under Ex parte Young.

2. Value of Ex Parte Young Injunctions to the Intellectual Property Owner

Whether pursuing *Ex parte Young* injunctions is worthwhile to patentees is a separate question. Patentees will need to decide whether a proceeding that can yield only an injunction, but no damages, will accomplish their goals. On the one hand, the lack of damages may make the suit a poor investment. Patent litigation is very expensive, and limiting the potential reward for victory to an injunction may provide insufficient motivation to proceed.¹⁷⁰ The availability of damages at the end of the suit may be economically necessary to make the suit viable, and their absence may effectively discourage infringement suits.¹⁷¹ From the standpoint of the researcher, this outcome is, of course, the ideal result—he or she is effectively able to ride on the coattails of the state's

^{170.} See Bone, supra note 164, at 1486 ("Indeed, given the risks and expense of litigation, a rational plaintiff might even conclude that filing suit solely to obtain an injunction is not worth the costs."); ELEVENTH AMENDMENT INTELLECTUAL PROPERTY REPORT, supra note 36, at 24 ("An injunction in federal court is not an answer, [surveyed members of the intellectual property community] say, because it would not result in an award of damages and the litigation necessary to obtain the injunction could itself be expensive and protracted.").

^{171.} See Bone, supra note 164, at 1485–86 (discussing this problem generally and concluding "[h]ence, the injunction remedy is inadequate standing alone").

immunity and avoid suit for infringement, by virtue of his or her status as a researcher at a state university.

On the other hand, the unavailability of damages may be of little significance to the patentee in the context of researchers at state universities. First, the potential damages available might themselves be sufficiently minimal that they would not affect the patentee's decision as to whether or not to file suit. For patent law, the available damages would be either the patentee's lost profits or else a reasonable royalty for the infringement.¹⁷² Implicit in both remedies is an assumption of commercial activity on the part of the infringer that takes sales from the patentee (if the infringer is a competitor) or results in sales by the infringer, some part of which are due to the infringement and for which the patentee should be compensated (if the infringer is in a different market).¹⁷³ However, direct commercial activity of this nature is generally not a part of academic research or teaching.¹⁷⁴ Dr. Little is not selling anything; she is merely trying to make animal cloning more efficient. The patentee is unlikely to have lost any sales other than ones that could have been made directly to the researcher, or to have lost out on any royalty other than the one that could have been made on such a sale. These losses are quite likely small, and their presence (or absence) is unlikely to influence the patentee's calculus on whether to file suit.

A similar analysis pertains to copyright, but with a few twists. Unlike patent law, copyright law permits recovery of the infringer's profits, in addition to recovery for the copyright holder's lost profits.¹⁷⁵ However, the non-commercial context will again make such profits unlikely. More important is the issue of statutory damages.¹⁷⁶ The Copyright Act specifically provides for monetary damages for infringement, regardless

^{172.} See 35 U.S.C. § 284; see also, e.g., Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152 (6th Cir. 1978) (interpreting § 284).

^{173.} See, e.g., Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1549, 1554-55 (Fed. Cir. 1995) (en banc) (awarding damages for both types of commercial activity).

^{174.} Modern academic research is frequently sponsored, at least in part by commercial entities, which raises certain issues if the researchers are granted absolute immunity. See infra Part V.D. However, for purposes of the present discussion, the focus is on basic research that is not directly commercial, in the sense that it very rarely involves any kind of direct sales from the researcher to other entities, the type of conduct that damages would normally be expected to redress.

^{175.} See 17 U.S.C. § 504(b) ("The copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement" (emphasis added)).

^{176.} See id. § 504(c) (spelling out the requirements and amounts of statutory damages).

of actual loss to the copyright holder or gain to the infringer.¹⁷⁷ In a given case, these statutory damages might provide the incentive for a suit, and thus their absence in an *Ex parte Young* suit might diminish the copyright holder's interest in filing a suit.

The availability of attorney fees further complicates the analysis. Even if damages are not awarded, attorney fees might be,¹⁷⁸ and the possibility of such an award may make the proceeding worthwhile for the intellectual property holder. However, in patent suits, attorney fees are only available in "exceptional cases."¹⁷⁹ In practice, this normally means the plaintiff can only get fees for either litigation misconduct (which cannot be predicted in advance and thus cannot affect the patentee's decision on whether or not to file suit) or willful infringement.¹⁸⁰ Although the statutory language in the Copyright Act is different (fees are left to the discretion of the district court),¹⁸¹ in practice the situation is quite similar—the plaintiff is awarded attorney fees for litigation misconduct and/or willful infringement.¹⁸² Thus, in both cases, the award of attorney fees will largely turn on whether the infringement was willful. Willful infringement and its relationship to state sovereign immunity are discussed in detail below in Part IV.B.

Second, damages are frequently not the primary goal of an infringement suit. Often, what the patentee seeks is an injunction against future infringement,¹⁸³ so that it can drive the competing infringer out of the market and thereby increase its profits. As noted above, such competitive commercial motivation is typically lacking in the research

182. See MELVILLE B. NIMMER ET AL., CASES AND MATERIALS ON COPYRIGHT 604–12 (7th ed. 2006); see generally 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 14.10 [hereinafter NIMMER ON COPYRIGHT] (discussing the award of attorney fees in copyright cases).

183. See 35 U.S.C. § 283 (providing for injunctions in patent cases); see also ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 1039 (3d ed. 2002) ("[C]ompensation for past infringement in the form of damages is an important component of the patentee's relief. But perhaps a more important remedy from the patentee's point of view is the right to enjoin the defendant-infringer from continuing infringing activities."); KIMBERLY A. MOORE, PAUL R. MICHEL, & RAPHAEL V. LUPO, PATENT LITIGATION AND STRATEGY 544 (2d ed. 2003) ("[I]njunctive relief is often more valuable to a patent owner than the monetary damages she can recover from a defendant.").

^{177.} See id. § 504(a)(2), (c).

^{178.} See 35 U.S.C. § 285 (providing for attorney fees in patent cases); 17 U.S.C. § 505 (providing for attorney fees in copyright cases).

^{179.} See 35 U.S.C. § 285.

^{180.} See 7 DONALD S. CHISUM, CHISUM ON PATENTS § 20.03[4][c][iii] (1999) [hereinafter CHISUM ON PATENTS] (discussing attorney fees for prevailing patentees and collecting cases).

^{181.} See 17 U.S.C. § 505.

and teaching context. But driving out competitors is not the only possible motivation for seeking an injunction. Even if damages for *past* infringement are unavailable under *Ex parte Young*, the patentee might wish to force the researcher to enter into a licensing agreement to pay royalties for *future* uses of the patented technology. An injunction against future infringement may well force the researcher to negotiate with the patentee for a licensing deal.¹⁸⁴ Alternatively, the patentee may simply want to stop the researcher's work because it lies in a direction that the patentee itself wishes to pursue. Normally, the patent would protect the patentee against such competition, and an injunction proceeding pursuant to *Ex parte Young* would restore that right. An injunction against the infringer will usually shut down the research, at least for some time. Finally, the unavailibility of damages under *Ex parte Young* may be irrelevant if damages are available through suits against researchers in their personal capacities.¹⁸⁵

3. Harm of Ex Parte Young Suits to the Researcher

Even though the patentee's remedies are limited to injunctive relief in a proceeding under *Ex parte Young*, that form of relief can still be devastating to a researcher.¹⁸⁶ If the patented technology is at all important to the research project, then an injunction against infringement will bring the research to a halt. A successful patent proceeding pursuant to *Ex parte Young* that results in an injunction against even one small but crucial step in, for example, Dr. Little's cloning procedure will render her completely unable to perform further research into that procedure. A researcher in this position will be forced to lose valuable time finding a way to work around the injunction, perhaps by designing around the patent, or using a technique that is less effective. The use of these workarounds may seriously diminish the quality of the research results or make the research more time-consuming.

^{184.} See MERGES & DUFFY, supra note 183, at 1067 ("The bottom line for infringers [subject to an injunction] is that they will be excluded from further infringement. If they want to continue their activities, they must bargain with the [intellectual property] right holder."). An injunction could also itself require the researcher to pay royalties for continued use. See, e.g., Foster v. Am. Mach. & Foundry Co., 492 F.2d 1317, 1324 (2d Cir. 1974).

^{185.} Personal capacity suits for damages are discussed infra Part II.C.

^{186.} The direct harm to the researcher is largely the same whether the patent in question is valid or invalid. The harm to society is much greater if an improperly granted patent is nonetheless upheld by the court, and therefore blocks off further research that should have been allowed to proceed.

In some cases, the patentee might be willing to grant the researcher a license to the patented technology. However, a researcher facing a possible injunction is in a very difficult bargaining position.¹⁸⁷ The patentee may demand a high price for the license, forcing the researcher to find the funds to pay the licensing fee. At best, such payments will divert that money from funding further research. If such fees are not provided for in the grant funding the research, however, the researcher may simply be unable to requisition the funds to pay the fees.¹⁸⁸ Even this assumes that the researcher is willing to consider paying a licensing fee. Many researchers performing basic research¹⁸⁹ share Dr. Little's view that any such license to use a technique in the pursuit of basic research is contrary to the fundamental culture of science. Under this view. basic research is a cooperative endeavor to unravel the secrets of nature.¹⁹⁰ and so scientists should freely share their tools with other scientists, in the interest of the joint endeavor. This sentiment is particularly strong among basic researchers. Indeed, Dr. Little feels so

^{187.} See ROBERT P. MERGES, PETER S. MENELL & MARK A. LEMLEY, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 336 (4th ed. 2006) ("To the extent that a rightholder will consider negotiating a license with the infringer, the threat of an injunction will heavily influence the *terms* of the license. Specifically, it allows the rightholder to set her own price for the injury.").

^{188.} Federal research grants typically spell out precisely what is to be done with the funds received, with very little room for diversion to other purposes (indeed, such a diversion would in many cases be illegal). For example, the National Institutes of Health Grants Policy Statement's section on Selected Items of Cost states:

Invention, Patent, or Licensing Costs: Unallowable as a direct cost unless specifically authorized on the grant award. May be allowable as F&A [Facilities and Administrative (i.e., overhead)] costs, provided they are authorized under applicable cost principles and are included in the negotiation of F&A cost rates. Such costs include licensing or option fees

NAT'L INSTS. OF HEALTH, NIH GRANTS POLICY STATEMENT 92 (2003), available at http://grants1.nih.gov/grants/policy/nihgps_2003/nihgps_2003.pdf; see also id. at 136–39 (discussing "Enforcement Actions" and stating that "[a] grantee's failure to comply with the terms and conditions of award... may cause NIH to take one or more enforcement actions, depending on the severity and duration of the non-compliance.").

^{189.} As noted earlier, I use the term "basic research" to refer to research into fundamental scientific problems that do not have direct commercial application, in contrast to "applied research" into practical problems with direct commercial application. *See* Eisenberg, *supra* note 6, at 178 n.1 (providing a similar definition, but also noting the difficulties of making the distinction in many contexts).

^{190.} See generally Eisenberg, supra note 6; Rai, supra note 7. Not everyone agrees with this picture of the scientific enterprise. See generally F. Scott Kieff, Facilitating Scientific Research: Intellectual Property Rights and the Norms of Science—A Response to Rai and Eisenberg, 95 NW. U. L. REV. 691 (2001) (arguing that this view of science is too abstract to be of use in setting patent policy). But see generally Arti Kaur Rai, Evolving Scientific Norms and Intellectual Property Rights: A Reply to Kieff, 95 NW. U. L. REV. 707 (2001) (countering Kieff by arguing that scientific norms are instructive in encouraging patents).

strongly about this issue that under no circumstances would she agree to license the underlying technology needed in her basic research. Thus, even when the patentee is amenable to a license, the researcher may not be, and so an injunction may still adversely affect the research. Finally, in extreme cases, where no work-around is available and the patentee is unwilling to grant a license, the research may need to be stopped altogether, putting the researcher (and the university) in the very difficult position of being unable to complete research funded by a government grant.

4. Limitations on Injunctive Relief

One further wrinkle arises from limiting available remedies to injunctive relief. Injunctive relief is equitable in nature, meaning that its award is at the discretion of the court. In general, in deciding whether to issue an injunction, a court applies a four-factor test:

A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction. The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.¹⁹¹

Essentially, the plaintiff must demonstrate that it has sustained an irreparable injury that cannot be adequately remedied with monetary damages.¹⁹² The court must balance the harm to the patentee if the injunction is denied against the harm to the infringer if it is allowed.¹⁹³ The court must also take into consideration the public interest.¹⁹⁴

However, until recently, this analysis of eligibility for injunctive relief was more theoretical than actual for patent cases. The Federal Circuit established a rule for patent cases that, absent exceptional or extraordinary circumstances, an injunction should issue as a matter of course—and it took the word "extraordinary" very seriously.¹⁹⁵ The

^{191.} eBay Inc. v. MercExchange, L.L.C., 126 S. Ct. 1837, 1839 (2006).

^{192.} See id.

^{193.} See id.

^{194.} See id.

^{195.} See, e.g., MercExchange, L.L.C. v. eBay, Inc. (MercExchange II), 401 F.3d 1323, 1339

result of this rule was that denial of an injunction in a successful patent suit was extremely rare.¹⁹⁶ However, the Supreme Court recently addressed this rule in *eBay Inc. v. MercExchange, L.L.C.*¹⁹⁷

In eBay, the district court had found eBay guilty of infringing MercExchange's patent but it declined to grant injunctive relief, citing the facts that MercExchange was already willingly licensing its patents and was not itself practicing its patents.¹⁹⁸ On appeal, the Federal Circuit affirmed the judgment of infringement.¹⁹⁹ However, it reversed on the remedy and ordered the district court to grant the permanent injunction, citing its "general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances."200 On appeal, the Supreme Court reversed the Federal Circuit decision. In a brief opinion authored by Justice Thomas, the Court held that patent cases were subject to the same rules as all other cases, and courts should apply the same four-factor test for injunctive relief applied in other contexts.²⁰¹ However, it did agree with the Federal Circuit that the circumstances cited by the district court (non-practicing patentee willing to license) did not preclude injunctive relief, but that these circumstances were merely facts to be considered in applying the test.²⁰²

⁽Fed. Cir. 2005) (reversing the district court's denial of a permanent injunction after a finding of infringement, stating "[w]e therefore see no reason to depart from the general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances."), *rev'd*, 126 S. Ct. 1837 (2006). See generally 7 CHISUM ON PATENTS, *supra* note 180, § 20.04[2] (discussing permanent injunctions and collecting cases).

^{196.} See, e.g., MERGES & DUFFY, supra note 183, at 1062–64 (discussing the extreme rarity of a denial of a permanent injunction in patent cases); MERGES, MENELL & LEMLEY, supra note 187, at 340–41 (same).

^{197. 126} S. Ct. 1837 (2006).

^{198.} MercExchange, L.L.C. v. eBay, Inc. (*MercExchange 1*), 275 F. Supp. 2d 695, 710–15 (E.D. Va. 2003), rev'd, 401 F.3d 1323 (Fed. Cir. 2005), rev'd, 126 S. Ct. 1837 (2006). The court also noted that "[t]his case has been one of the more, if not the most, contentious cases that this court has ever presided over. From day one the parties have been unable to agree on anything, in fact, the only agreed stipulation at trial was that this court had subject matter jurisdiction." *Id.* at 714. The court further expressed its concern that, if it issued a permanent injunction, "[t]he court envisions contempt hearing after contempt hearing requiring the court to essentially conduct separate infringement trials to determine if [defendant's attempts to design around the patent] violates the injunction." *Id.*

^{199.} MercExchange II, 401 F.3d at 1326-31.

^{200.} Id. at 1339.

^{201.} eBay, 126 S. Ct. at 1839-41.

^{202.} Id. at 1840-41.

The Court remanded the case to the Federal Circuit, which, in turn, remanded to the district court.²⁰³

The Court's ruling in eBay opens up a new avenue of defense for researchers at state universities. Even if a researcher is found to be infringing a patent, he or she might be able to persuade the court to decline to issue a permanent injunction. Cases involving basic research at state universities might be particularly amenable to such a result. The patentee may well be licensing its patent to others, making it more difficult for the patentee to show irreparable harm and easier for the researcher to show that monetary damages (in the form of an ongoing royalty) are adequate. Furthermore, as noted above, the economic costs to the patentee are likely to be minimal, while the harm to the researcher is likely to be substantial (i.e., shutting down the research), tipping the balance toward the researcher. Finally, the researcher can typically make a strong case that his or her basic research at a public institution is in the public good, as with Dr. Little's research at her state university into the cloning of agricultural animals for the benefit of farmers in her state and around the world.²⁰⁴ Thus, the researcher may be able to avoid even injunctive relief.

However, even if the court denies the injunction and allows the research to continue, the court will, with virtual certainty, accompany the denial with a requirement that the researcher pay royalties to the patentee for future infringement²⁰⁵ (which, as discussed above, may be what the patentee wanted in the first place). Such a result may be unpalatable to some researchers, such as Dr. Little, but for those who can get past this reluctance, paying the imposed royalty will avoid shutting down the research. Such an ongoing royalty, even if it is ultimately paid by the state, is permissible under the *Ex parte Young* doctrine, because the relief is prospective, rather than retrospective.²⁰⁶ In the civil rights context, courts have repeatedly held that the Eleventh Amendment does not bar injunctive relief under *Ex parte Young* simply

^{203.} See id. at 1841 (remanding to the Federal Circuit); MercExchange, L.L.C. v. eBay, Inc., 188 F. App'x 993 (Fed. Cir. 2006) (remanding to the district court).

^{204.} Cf. Bone, supra note 164, at 1485-86 & n.66 (making a similar point regarding preliminary injunctions).

^{205.} See, e.g., Foster v. Am. Mach. & Foundry Co., 492 F.2d 1317, 1324 (2d Cir. 1974) (denying a permanent injunction, but requiring the infringer to pay ongoing royalties to the patentee).

^{206.} See Edelman v. Jordan, 415 U.S. 651, 663-71 (1974) (articulating the distinction between the two forms of relief).

because that relief requires the state to spend funds going forward; rather, it forbids any payment of any form of damages for past harms.²⁰⁷

C. Personal Liability for Damages

Ex parte Young does not provide the only mechanism by which plaintiffs can avoid a state's sovereign immunity under the Eleventh Amendment. The Supreme Court has held that "the Eleventh Amendment does not prevent suits against state officers for money damages to be paid out of the officers' own pockets, even when the damages are retrospective compensation for past harms."²⁰⁸ Thus, an aggrieved patentee can sue a researcher for damages in his or her personal capacity. The rationale for this rule is that the concern of the Eleventh Amendment is protection of the state treasury, and this concern is not implicated if the damages are paid directly by the officer.²⁰⁹ The Court has further held that the state's indemnification of the officer is irrelevant in this context.²¹⁰

Personal capacity suits present a frightening prospect for researchers like Dr. Little. While the state and university cannot be sued for damages, researchers themselves can. The discussion above suggested that these damages may not be particularly large in the patent context (though statutory damages may add up for copyright infringement), but "large" here is a matter of relative degree. A few tens of thousands of dollars may not mean much to a large corporate patentee or a large state university, but it may be devastating to a typical researcher at a state university. Furthermore, the accused researcher will be forced to defend him or herself in the lawsuit, the costs of which can easily run into the hundreds of thousands or even millions of dollars (or, in the absence of money to fund such a defense, forced to capitulate and terminate the research project). In practice, this harm may be somewhat attenuated, as most states indemnify their officials in such situations by paying for both

^{207.} See id. Once a court grants an injunction pursuant to Ex parte Young against further infringement (either absolutely or unless an ongoing royalty is paid), the court can enforce that injunction and impose damages for its violation; the Edelman v. Jordan restrictions on past damages do not apply. See 1 COOK & SOBIESKI, supra note 22, $\P 2.01[C]$, at 2-36 to 2-37 (concluding that "[t]he thrust of the opinion in, Hutto, therefore, seems unmistakably clear: the [E]leventh [A]mendment poses no barrier to a monetary award against a state as a means to secure compliance with a prospective decree" (citing Hutto v. Finney, 437 U.S. 678 (1978)).

^{208.} CHEMERINSKY, supra note 22, § 7.5.2, at 423.

^{209.} See id.

^{210.} See id. at 423-24.

the defense and any damages.²¹¹ However, indemnification is neither required nor universal.²¹² Furthermore, indemnification statutes vary widely from state to state, and it is not clear that all of them apply to patent and copyright infringement.²¹³

Thus, while state universities are immune from suit under the Eleventh Amendment, researchers at state universities may not share such immunity. First, intellectual property holders may be able to proceed under the doctrine of *Ex parte Young*, which permits proceedings for injunctive relief against state officials in their official capacities. While a court might interpret *Seminole Tribe* as prohibiting such proceedings in the intellectual property context because of the availability of other remedies, these proceedings nonetheless present risks to researchers at state universities in the form of threats to bring the research process to a halt. Furthermore, researchers at state universities may face personal liability for monetary damages. Fortunately for researchers at state universities, such personal capacity suits (at least in the civil rights context) are subject to a very important limitation. In

^{211.} See, e.g., Choper & Yoo, supra note 143, at 225-26 ("The limited significance of the Edelman doctrine, however, is accentuated by the widespread system of indemnification of state officers and the fact that the Eleventh Amendment has not been held to forbid lawsuits against them even though they will be indemnified by their government, thus often resulting in state liability as a matter of practical result." (footnotes omitted)); see also, e.g., MASS. GEN. LAWS ANN. ch. 258, § 9 (West 1988) (indemnification); N.J. STAT. ANN. § 59:10A-1 (1992) (same); N.Y. PUB. OFF. LAW § 17 (McKinney 2001) (same); OR. REV. STAT. § 30.285 (2001) (same); Phillip E. Hassman, Annotation, Validity and Construction of Statute Authorizing or Requiring Governmental Unit to Indemnify Public Officer or Employee for Liability Arising out of Performance of Public Duties, 71 A.L.R.3d 90 (1976) (collecting cases discussing state indemnification statutes); Kevin Oates, Professor Defend Thyself: The Failure of Universities to Defend and Indemnify Their Faculty, 39 WILLAMETTE L. REV. 1063, 1086–1100 (2003) (discussing indemnification of faculty at state universities generally).

^{212.} See Meltzer, supra note 13, at 1360 ("While most states do indemnify such individuals, it is also true that indemnification is neither universal, unlimited in scope, nor free from possible friction in operation.").

^{213.} See id. at 1360 & n.105 (discussing the wide variation in state indemnification statutes, and the difficulties in relying on a state's indemnification of its officers in infringement suits); Choper & Yoo, *supra* note 143, at 226 (discussing the variations and limitations of indemnification); *see also* CHEMERINSKY, *supra* note 22, § 8.6.1, at 512 (discussing state indemnification generally and noting that "[t]he content of the indemnification policies is determined by state and local law and hence varies enormously among jurisdictions"). In some respects, this situation is analogous to the difficulty courts currently have with determining whether a general business insurance policy covers liability for patent infringements. *Compare* Elan Pharm. Research Corp. v. Employers Ins. of Wausau, 144 F.3d 1372 (11th Cir. 1998) (holding that general business insurance policy provides for indemnification of policy holder found liable for patent infringement) with U.S. Test, Inc. v. NDE Envtl. Corp., 196 F.3d 1376 (Fed. Cir. 1999) (holding that general business insurance policy does not provide for indemnification of policy holder found liable for patent infringement).

personal capacity suits for damages, state officers are often entitled to assert immunity.²¹⁴ Immunity, particularly qualified immunity, is the subject of the next Part.

III. QUALIFIED IMMUNITY

Almost all of the law on state-officer immunity has arisen in the context of civil rights suits, particularly personal capacity suits under 42 U.S.C. § 1983. This Part explores the current state of the law of immunity and its relationship to intellectual property infringements committed by researchers at state universities. Part III.A discusses the background to § 1983 and the development of the doctrines of absolute and qualified immunity under that section.²¹⁵ Part III.B then examines the parallels between the civil rights qualified immunity doctrine and the intellectual property laws to analyze whether a similar immunity should apply in the intellectual property context.

A. Immunity in the Civil Rights Context

1. Section 1983

Congress originally enacted the provision now codified at 42 U.S.C. § 1983 in 1871, in response to the "Black Codes" in the south.²¹⁶ Section 1983 creates a cause of action for deprivations of constitutional rights or federal statutory rights by persons acting "under color of" state law:

Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges,

^{214.} Qualified immunity is available only in personal capacity suits requesting monetary relief; it does not apply in proceedings that request declaratory or injunctive relief. See 1 COOK & SOBIESKI, supra note 22, $\$ 2.06[A], at 2-255 to 2-256 ("Generally speaking, the doctrine of official immunity is applicable only in damage actions.... [O]fficial immunity cannot be invoked in suits seeking declaratory or injunctive relief...."); see also id. $\$ 2.06[A]; CHEMERINSKY, supra note 22, 8.6.3, at 529; HAROLD S. LEWIS, JR. & ELIZABETH J. NORMAN, CIVIL RIGHTS LAW AND PRACTICE § 2.41(b) (2d ed. 2004). Thus, even if qualified immunity applies, the researcher may still be subject to an injunction.

^{215.} For more detailed discussion of § 1983, see, for example, CHEMERINSKY, *supra* note 22, ch. 8; 2 & 3 COOK & SOBIESKI, *supra* note 22, chs. 7–12E; LEWIS & NORMAN, *supra* note 214, ch. 2.

^{216.} See CHEMERINSKY, supra note 22, § 8.2, at 469-70.

or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress \dots^{217}

As Professor Chemerinsky notes:

Section 1983 serves as the basic vehicle for federal court review of alleged state and local violations of federal law. Its importance in defining the role of the federal courts cannot be overstated.... Section 1983 is the basis for almost all constitutional rulings arising from the actions of state and local governments and their officers.²¹⁸

Suits under § 1983 are subject to certain important limitations. Particularly relevant to the present discussion, the Supreme Court has held that a state is not a "person" for purposes of § 1983, and therefore § 1983 does not abrogate the states' Eleventh Amendment immunity from suit for money damages.²¹⁹ Furthermore, just as with the *Edelman v. Jordan* limitation on *Ex parte Young*, that immunity extends to state officers sued in their official capacities.²²⁰ Thus, suits seeking money damages under § 1983 are personal capacity suits against state officers.²²¹

2. Intellectual Property Suits under Section 1983

The analysis in this paper proceeds on the assumption that an intellectual property holder can file infringement suits or proceedings against state officials directly under the particular intellectual property laws. As far as I have been able to ascertain, all such suits and proceedings filed to date have proceeded on this same assumption.²²²

^{217. 42} U.S.C. § 1983 (2000).

^{218.} CHEMERINSKY, supra note 22, § 8.1, at 466.

^{219.} See id., § 8.7, at 540–42 (discussing Quern v. Jordan, 440 U.S. 332 (1979), and Will v. Mich. Dep't of State Police, 491 U.S. 58 (1989)).

^{220.} See *id.* (concluding "[n]either states nor territories, nor their officers acting in their official capacity, can be sued under § 1983"). However, state officials may still be subject to proceedings for injunctive relief. See *id.* § 8.7, at 541; see also *id.* § 8.6.1, at 515 (discussing the distinction between personal capacity and official capacity suits); *id.* § 7.5.2, at 428–30 (same).

^{221.} See id. § 8.6.1, at 515 (discussing the distinction between personal capacity and official capacity suits); id. § 7.5.2, at 428-30.

^{222.} See, e.g., Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 631 (1999); Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 668–71 (1999); Pennington Seed, Inc. v. Produce Exch. No. 299, 457 F.3d 1334, 1337 (Fed. Cir. 2006); Chavez v. Arte Publico Press, 59 F.3d 539, 541 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000); Kersavage v.

However, § 1983 also provides a cause of action against state officials in their personal capacities for damages or injunctive relief for violations of federal laws.²²³ Because researchers at state universities conduct their research pursuant to their duties under state law, a patent infringement amounts to a deprivation of federal statutory rights "under color of" state law.²²⁴ Thus, it is at least possible that patentees might be able to file suit under § 1983 for infringement of federal intellectual property laws.²²⁵

The problem with filing intellectual property suits under § 1983 is that the intellectual property laws contain their own extensive remedial schemes, and therefore such suits may be precluded.²²⁶ In its 1981 decision in Middlesex County Sewerage Authority v. National Sea Clammers Ass'n.²²⁷ the Supreme Court stated "[w]hen the remedial devices provided in a particular Act are sufficiently comprehensive, they may suffice to demonstrate congressional intent to preclude the remedy of suits under § 1983."²²⁸ Both the patent act and the copyright act contain comprehensive remedial schemes.²²⁹ and so *Middlesex County* may bar § 1983 suits to enforce those acts. However, as Professor "lower Chemerinsky notes. courts have struggled to

223. See 42 U.S.C. § 1983 (2000).

224. See id.; see also CHEMERINSKY, supra note 22, § 8.3, at 474-81 (discussing "The Meaning of 'Under Color of State Law").

225. See CHEMERINSKY, supra note 22, § 8.8, at 542–44, (discussing this issue and noting that in Maine v. Thiboutot, 448 U.S. 1 (1980), "[t]he [Supreme] Court concluded that under the literal language of the statute, § 1983 suits are available whenever any federal law has been allegedly violated"). One of my reviewers suggested that § 1983 might in fact be the only way to file such a suit. Cf. Jett v. Dallas Indep. Sch. Dist., 491 U.S. 701, 733 (1989) (holding that suits against a state pursuant to 42 U.S.C. § 1981 must proceed via § 1983, reflecting the Supreme Court's trend of funneling suits against states through § 1983).

226. See CHEMERINSKY, supra note 22, § 8.8, at 545–48 (discussing preclusion of § 1983 actions under certain federal statutes, particularly when the statutory scheme itself contains a comprehensive enforcement mechanism); 2 COOK & SOBIESKI, supra note 22, ¶ 7.06[C] (same). The preclusion doctrine is somewhat akin to the limitation on the *Ex parte Young* doctrine invoked by the Supreme Court in Seminole Tribe, discussed supra notes 70–75 and accompanying text.

227. 453 U.S. 1 (1981).

228. Id. at 20.

229. See 35 U.S.C. ch. 29, §§ 281–297 (2000) ("Remedies for Infringement of Patent, and Other Actions"); 17 U.S.C. ch. 5, §§ 501–513 ("Copyright Infringement and Remedies").

Univ. of Tenn., 731 F. Supp. 1327, 1328 (E.D. Tenn. 1989); Lane v. First Nat'l Bank of Boston, 687 F. Supp. 11, 12 (D. Mass. 1988), *aff'd*, 871 F.2d 166 (1st Cir. 1989). *But cf.* State Contracting & Eng'g Corp. v. Florida, 258 F.3d 1329, 1337–38 (Fed. Cir. 2001) (dismissing patent infringement suit filed against Florida under § 1983, on the grounds that § 1983 did not abrogate state sovereign immunity).

implement . . . *Middlesex County*,"²³⁰ and thus the law on this point is not entirely clear.²³¹

Fortunately, a determination of whether a patentee may sue under § 1983 is likely to be unnecessary, as intellectual property holders will almost certainly prefer to sue under the intellectual property statutes anyway.²³² Such suits are preferable because the remedies available under the intellectual property laws are generally at least as effective as those available under § 1983, and most of the time will be more effective. For example, damages under § 1983 are limited to actual, proven harms.²³³ In patent cases, the amount of such harm is often difficult to demonstrate.²³⁴ However, the patent statute contains a "floor" for damages: When actual damages cannot be calculated, the successful patentee is entitled to at least "a reasonable royalty for the use made of the invention by the infringer."²³⁵ The difference is even more pronounced in copyright law, where statutory damages may be available even in the absence of proof of *any* harm to the copyright holder.²³⁶

232. This analysis assumes that such a suit brought directly under the patent or copyright laws is permissible in general. It further assumes the use of willfulness to determine the availability of qualified immunity in intellectual property suits, as discussed in detail *infra* Part IV.B. Thus, in any case in which qualified immunity does not preclude recovery of damages, the infringement must have been willful.

^{230.} See CHEMERINSKY, supra note 22, § 8.8, at 546; see also id. § 8.8, at 546–48 (exploring this difficulty).

^{231.} Cf. State Contracting & Eng'g Corp. v. Florida, 258 F.3d 1329 (Fed. Cir. 2001). State Contracting was a patent infringement suit against Florida in which a patentee alleged that the infringement was an unconstitutional taking that could be addressed by a suit under § 1983. Id. at 1332. The court quoted the district court's holding that Florida was immune from suit because "[a]llowing Plaintiffs' [§ 1983 claim] to proceed would vitiate the Eleventh Amendment analysis in the Supreme Court's College Savings Bank opinions by turning every patent infringement case against a state into a Section 1983 takings case for patent profits," id. at 1337, although it ultimately affirmed the dismissal on other grounds, id. at 1337–38.

^{233.} See CHEMERINSKY, supra note 22, § 8.11, at 578–81 (discussing damages under § 1983 and noting that "it is clearly established that damages exist under § 1983 to provide compensation for actual injuries suffered").

^{234.} See MERGES, MENELL & LEMLEY, supra note 187, at 335–37 (discussing the particular difficulties in measuring damages in patent and other intellectual property cases); MERGES & DUFFY, supra note 183, at 1067 ("[J]udicial valuation of patent rights after an infringement is very difficult and inaccurate.").

^{235. 35} U.S.C. § 284 (2000); see also Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1157 (6th Cir. 1978) ("When actual damages, e.g., lost profits, cannot be proved, the patent owner is entitled to a reasonable royalty.").

^{236.} See 17 U.S.C. § 504(a), (c). Statutory damages are available only if the copyright holder has registered the copyright prior to the infringement. 17 U.S.C. § 412.

Furthermore, because the infringement must have been willful,²³⁷ attorney fees would be available under the intellectual property statutes.²³⁸

The only reason an intellectual property holder might theoretically prefer to proceed under § 1983 would be to obtain attorney fees under § 1988. As noted above, attorney fees are available under the Patent and Copyright Acts only for willful, deliberate infringements. In contrast, a prevailing plaintiff receives an award of attorney fees in § 1983 cases almost as a matter of course following a favorable verdict or courtenforced consent decree.²³⁹ In practice, however, this distinction is likely to make very little difference. Because the suit is directly under § 1983. researchers at state universities will be able to claim qualified immunity, just as in any other action under § 1983.²⁴⁰ As discussed below, these researchers should be granted such qualified immunity as long as their conduct does not amount to willful infringement. So long as this is the case, plaintiffs will only be able to prevail in a § 1983 action for damages if they can show willful infringement²⁴¹—and if the infringement is willful, then attorney fees will be available under the intellectual property laws anyway. Hence, in any case in which attorney fees are available under § 1983 via § 1988, they should also be available under the intellectual property statutes. Thus, the intellectual property holder would have no incentive to sue under § 1983 rather than under the intellectual property laws.

3. Immunity Under Section 1983

By its terms, § 1983 creates liability for "*[e]very person*" who, under color of law, deprives another of constitutional or legal rights.²⁴² However, the Supreme Court has consistently held that state officials are entitled to claim common law immunities from suit as they existed at the

^{237.} Willful infringement is a necessary condition for abrogating the researcher's qualified immunity. See infra Part IV.B.

^{238.} The relationship between willful infringement and attorney fees is discussed *infra* notes 385-87 and accompanying text.

^{239.} See LEWIS & NORMAN, supra note 214, § 4.5, at 342 ("A plaintiff adjudged to be a prevailing party should ordinarily receive a fee award absent 'special circumstances,' such as the plaintiff's egregious misconduct.").

^{240.} See infra Part III.A.4.

^{241.} See infra Part IV.B.

^{242. 42} U.S.C. § 1983 (emphasis added).

time of the enactment of the statute in 1871.²⁴³ The Court has reviewed the statute and its history and concluded that Congress intended to preserve these immunities.²⁴⁴ The Court also reasoned that preserving immunity was important for policy reasons.²⁴⁵ The purpose behind the common law immunity was to prevent the risk of large damage awards from making state officials timid about exercising their discretion in doing their jobs. As the Court has described it:

The concept of the immunity of government officers from personal liability springs from the same root considerations that generated the doctrine of sovereign immunity. While the latter doctrine—that the 'King can do no wrong'—did not protect all government officers from personal liability, the common law soon recognized the necessity of permitting officials to perform their official functions free from the threat of suits for personal liability. This official immunity apparently rested, in its genesis, on two mutually dependent rationales: (1) the injustice, particularly in the absence of bad faith, of subjecting to liability an officer who is required, by the legal obligations of his position, to exercise discretion; (2) the danger that the threat of such liability would deter his willingness to execute his office with the decisiveness and the judgment required by the public good.²⁴⁶

The Court concluded that these policy considerations were equally relevant under § 1983, and state officials therefore retained their immunity under that statute.²⁴⁷

Immunity under § 1983 is divided into two types, absolute and qualified.²⁴⁸ Absolute immunity precludes all suits against the official, regardless of the legality of the actions taken, so long as the action falls within the scope of the activity to which the immunity applies.²⁴⁹ However, it is granted only in very limited contexts, particularly to

249. See id.

^{243.} See CHEMERINSKY, supra note 22, § 8.6.1, at 509–12; see also 1 COOK & SOBIESKI, supra note 22, \P 2.06[A] ("[T]he doctrine of official immunity is a well-established limitation upon the right of recovery under section 1983....").

^{244.} See CHEMERINSKY, supra note 22, § 8.6.1, at 510-12.

^{245.} See id. at 509-10.

^{246.} Scheuer v. Rhodes, 416 U.S. 232, 239-40 (1974) (footnotes omitted).

^{247.} See id. at 247-48.

^{248.} See 1 COOK & SOBIESKI, supra note 22, ¶ 2.06[B].

judges performing judicial acts,²⁵⁰ legislators performing legislative acts,²⁵¹ prosecutors performing prosecutorial functions,²⁵² police officers testifying as witnesses,²⁵³ and the President of the United States performing acts carrying out the presidency.²⁵⁴ Thus, traditional absolute immunity has no application to defendant researchers at state universities in intellectual property infringement suits;²⁵⁵ their only avenue for immunity is qualified immunity.

4. Qualified Immunity Under Section 1983

Qualified immunity, on the other hand, has much broader application. Qualified immunity is available to any state official performing his or her duties in good faith.²⁵⁶ Historically, the Supreme Court applied a test with both objective and subjective factors in determining when qualified immunity should apply.²⁵⁷ Then, with *Harlow v. Fitzgerald*²⁵⁸ in 1982, the Court established a purely objective standard for qualified immunity in § 1983 cases:

[G]overnment officials performing discretionary functions[] generally are shielded from liability for civil damages insofar as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known.²⁵⁹

This statement encapsulates the current standard for applying qualified immunity under § 1983. In a later case, the Court expounded upon the relationship between this standard and the policy behind the doctrine:

[P]ermitting damages suits against government officials can entail substantial social costs, including the risk that fear of personal monetary liability and harassing litigation will unduly

256. See CHEMERINSKY, supra note 22, § 8.6.3, at 528–29 (noting that qualified immunity is also known as "good faith immunity").

257. See id. § 8.6.3, at 528-31 (reviewing the history of qualified immunity under § 1983).

258. 457 U.S. 800 (1982).

259. Id. at 818.

^{250.} See CHEMERINSKY, supra note 22, § 8.6.2, at 517-20.

^{251.} See id. at 520-22.

^{252.} See id. at 522-26.

^{253.} See id. at 526-27.

^{254.} See id. at 527–28.

^{255.} Part V, *infra*, proposes creating a new absolute immunity for researchers at state universities accused of intellectual property infringement.

inhibit officials in the discharge of their duties. Our cases have accommodated these conflicting concerns by generally providing government officials performing discretionary functions with a qualified immunity, shielding them from civil damages liability as long as their actions could reasonably have been thought consistent with the rights they are alleged to have violated.²⁶⁰

The Court has also observed that "[a]s the qualified immunity defense has evolved, it provides ample protection to all but the plainly incompetent or those who knowingly violate the law."²⁶¹

Thus, the Supreme Court has developed a variety of immunity defenses that blunt the effects of the civil rights laws on individual state officers. Some special state actors are permitted an absolute immunity,²⁶² and all are permitted at least to assert a claim to qualified immunity.²⁶³ State actors will typically receive this immunity so long as they had no reason to know that their conduct violated the plaintiff's constitutional or statutory rights.²⁶⁴

B. Qualified Immunity in the Intellectual Property Context

Having established the standard for qualified immunity under § 1983, the next issue is whether to apply the same qualified immunity in the intellectual property context, and if so, how to apply it.²⁶⁵ A comparison of the law and policy behind qualified immunity in the civil rights area and in the intellectual property area shows that many of the same concerns are implicated. Furthermore, examination of the present intellectual property statutory regimes indicates that they should be read as preserving the possibility of a qualified immunity defense for researchers sued in their personal capacities. Finally, the policies behind the patent law experimental use exemption and the copyright fair use

^{260.} Anderson v. Creighton, 483 U.S. 635, 638 (1987) (internal citation omitted).

^{261.} Malley v. Briggs, 475 U.S. 335, 341 (1986).

^{262.} See CHEMERINSKY, supra note 22, § 8.6.2, at 517-28.

^{263.} See id. § 8.6.3, at 528-29.

^{264.} See Harlow, 457 U.S. at 818.

^{265.} The Supreme Court has recognized qualified immunity outside the § 1983 context (albeit still in the civil rights context). For example, federal officials are entitled to assert a qualified immunity in so-called "Bivens actions," based on the rule from Bivens v. Six Unknown Named Agents of Federal Bureau of Narcotics, 403 U.S. 388 (1971). See, e.g., Butz v. Economou, 438 U.S. 478, 496-504 (1978) (recognizing that qualified immunity is the same for federal officials facing Bivens action as it is for state officials facing § 1983 actions).

defense provide the necessary support for a qualified immunity defense for researchers at state universities accused of patent or copyright infringement.

1. Availability of Qualified Immunity

In deciding whether qualified immunity should apply in suits under § 1983, the Supreme Court looked at the structure and history of that statute in light of the policy behind qualified immunity and concluded that Congress intended qualified immunity to apply in these suits.²⁶⁶ Similarly, in determining whether researchers at state universities may enjoy qualified immunity in intellectual property suits, courts should look at the structure and history of the relevant intellectual property statutes in light of the policy behind qualified immunity, and decide whether Congress intended for qualified immunity to apply to these suits. As noted above, the policy behind qualified immunity is to avoid the risk of large monetary damage awards that could make state officials timid about exercising their discretion in doing their jobs.²⁶⁷

In many respects, the policy behind § 1983 qualified immunity fits the research situation quite nicely. If we believe that the research that researchers like Dr. Little perform at state universities is important for the social good, then we do not want the risk of large damage awards to cause these researchers to avoid using the most effective methods or sources to pursue their research. Such timidity on the part of researchers might delay or prevent important breakthroughs. Therefore, we should give researchers some protection in doing their jobs, again so long as they are not violating clearly established law.²⁶⁸

On the other hand, unlike § 1983, the patent and copyright laws contain fairly comprehensive statutory regimes that lay out explicit rules for remedies,²⁶⁹ including defenses,²⁷⁰ and these statutes contain no

^{266.} See LEWIS & NORMAN, supra note 214, § 2.22.

^{267.} See Harlow, 457 U.S. at 818-19.

^{268.} The interpretation of "violating clearly established law" in the context of patent and copyright infringement is discussed in detail *infra* Part IV.B.

^{269.} See 35 U.S.C. ch. 29, §§ 281–297 (2000) ("Remedies for Infringement of Patent, and Other Actions"); 17 U.S.C. ch. 5, §§ 501–513 (2000) ("Copyright Infringement and Remedies").

^{270.} See 35 U.S.C. § 282 ("Presumption of validity; defenses"); *id.* § 286 ("Time limitation on damages"); *id.* § 287 ("Limitation on damages and other remedies; marking and notice"); *see also id.* § 273 ("Defense to infringement based on earlier inventor" that applies only to business method patents). The Copyright Act does not define "defenses" so explicitly. However, it specifies the rights of the copyright owner, 17 U.S.C. § 106, and then provides a series of provisions limiting and

mention of immunities, qualified or otherwise. This pronounced absence suggests that reading one in is perhaps a stretch.²⁷¹ Because qualified immunity is a policy-driven construct of the common law, rather than a constitutional guarantee or other immutable aspect of state sovereign immunity, Congress is free to eliminate it where it chooses.²⁷² Indeed, the Remedy Clarification Acts, insofar as they survive *Florida Prepaid*, might be read to suggest that Congress has in fact eliminated immunity for patent infringement. The Patent Remedy Clarification Act added 35 U.S.C. § 271(h):

As used in this section, the term "whoever" includes any State, any instrumentality of a State, and any officer or employee of a State or instrumentality of a State acting in his official capacity. Any State, and any such instrumentality, officer, or employee, shall be subject to the provisions of this title in the same manner and to the same extent as any nongovernmental entity.²⁷³

And just in case that section did not express Congress's intent clearly enough, the Act also included § 296(a):

Any State, any instrumentality of a State, and any officer or employee of a State or instrumentality of a State acting in his official capacity, shall not be immune, under the eleventh amendment of the Constitution of the United States or under any other doctrine of sovereign immunity, from suit in Federal court by any person, including any governmental or nongovernmental entity, for infringement of a patent under section 271, or for any other violation under this title.²⁷⁴

The clear thrust of these sections is to make states, including their officers, liable for patent infringement just like non-governmental

defining the scope of those rights, *id.* §§ 107-122. Any of these enumerated limitations may provide a defense in a particular case. *See, e.g.*, Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 571-72 (1994) (asserting fair use under § 107 as a defense); Leicester v. Warner Bros., 232 F.3d 1212, 1213-15 (9th Cir. 2000) (asserting the right to make pictorial representations of an architectural work under § 120 as a defense). *See generally* 4 NIMMER ON COPYRIGHT, *supra* note 182, at §§ 13.04-13.09 (discussing defenses in copyright cases).

^{271.} Of course, the application of state sovereign immunity—with all its complexities and exceptions—to intellectual property law is of relatively recent origin, and so it is not surprising that the drafters of the Patent Act in 1952 failed to discuss qualified immunity specifically (at least prior to the Patent Remedy Clarification Act).

^{272.} See Berman et al., supra note 13, at 1127 ("[Q]ualified immunity is a doctrine of the common law, and as such it is subject to override by a duly enacted federal statute.").

^{273. 35} U.S.C. § 271(h).

^{274.} Id. § 296(a).

entities or persons. Such a direct statement of purpose would seem to leave very little room for concepts like qualified immunity.

However, the specific language of both statutes refers specifically to removing immunity for "any officer or employee of a State or instrumentality of a State *acting in his official capacity*."²⁷⁵ This choice of language seems to invoke the concept of "official capacity" proceedings under the doctrine of *Ex parte Young*, suggesting that the purpose of the statute is to overcome the *Edelman v. Jordan* restriction on that doctrine that precludes suits for retrospective damages.²⁷⁶ If so, the statute would appear to have no impact on "personal capacity" suits, and their accompanying qualified immunity. Under this reading, the statute does not abrogate qualified immunity.

This interpretation of the statute as having no impact on personal capacity suits appears to be the one made by the Fifth Circuit in Chavez v. Arte Publico Press,²⁷⁷ a copyright case decided after the effective date of the Copyright Remedy Clarification Act but before the Supreme Court decided Seminole Tribe or Florida Prepaid. The Copyright Remedy Clarification Act has two sections containing language virtually identical to the language quoted from the two sections of the Patent Remedy Clarification Act.²⁷⁸ The *Chavez* court first upheld the validity of the Copyright Remedy Clarification Act under Congress's Intellectual Property Clause powers, holding that Congress had abrogated sovereign immunity for the state of Texas and one of its officials acting in his official capacity, rendering the state potentially liable for damages for copyright infringement.²⁷⁹ The court then turned to the suit against the official in his personal capacity.²⁸⁰ Although it did not directly address the question of whether the Copyright Remedy Clarification Act had abrogated qualified immunity, it allowed the official to assert the defense and concluded that, on the facts of the case, he was entitled to claim qualified immunity.²⁸¹ By implication, therefore, the court must

^{275.} Id. §§ 271(h), 296(a) (emphasis added).

^{276.} The Edelman v. Jordan restriction on Ex parte Young proceedings is discussed supra notes 153-55 and accompanying text.

^{277. 59} F.3d 539 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000).

^{278.} Compare 17 U.S.C. §§ 501(a), 511 with 35 U.S.C. §§ 271(h), 296.

^{279.} Chavez, 59 F.3d at 543-47.

^{280.} Id. at 547.

^{281.} Id. at 547-48.

have concluded that qualified immunity survived the Remedy Clarification Acts.

Furthermore, the precise effect of *Florida Prepaid* on the Patent Remedy Clarification Act is not entirely clear, and thus the status of the sections amended by that Act²⁸² remains in doubt. Nowhere in the *Florida Prepaid* decision does the Court precisely state its holding with respect to the validity of the statutes.²⁸³ The Court focused almost entirely on Eleventh Amendment sovereign immunity and the liability of the state of Florida itself, and thus its holding that the Patent Remedy Clarification Act was invalid, at least insofar as it purported to abrogate the sovereign immunity of the state officers in their personal capacities, and therefore their status under the Act in that regard is not clear. Based on this lack of discussion, the decision might be read as invalidating the relevant sections only insofar as they apply to the states directly.

This conclusion is reinforced by the Court's approach to the case, which was to assess the impact of the Patent Remedy Clarification Act on Florida's Eleventh Amendment immunity.²⁸⁵ The Court concluded that Congress had exceeded its powers in its attempt to make states directly liable for patent infringements (and, presumably, also in its attempt to make officials liable in their official capacities for more than prospective relief). However, qualified immunity is a common law doctrine, not a constitutional doctrine, and Congress is free to abrogate it via statute.²⁸⁶ Thus, the Court's theory of Eleventh Amendment immunity is likely irrelevant to suits against officials in their personal capacities or the assertion by such officials of a qualified immunity defense, and therefore the part of the statute referring to officials arguably survives the Court's declaration of unconstitutionality. Under this reading of Florida Prepaid, Congress has effectively abrogated that qualified immunity by clearly making officials liable under the statute without reference to any form of immunity.

^{282. 35} U.S.C. §§ 271(h), 296(a).

^{283.} See Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999).

^{284.} See id. at 647-48 & passim.

^{285.} This was probably due largely to the fact that Florida Prepaid, an arm of the state, was the only defendant; no individual defendants were named in the suit. See id. at 631.

^{286.} See Berman et al., supra note 13, at 1127.

On the other hand, the decision is couched in terms of the Patent Remedy Clarification Act as a whole. At the beginning of its opinion, the Court stated:

[T]he Court of Appeals held that Congress had validly abrogated the State's sovereign immunity from infringement suits pursuant to its authority under § 5 of the Fourteenth Amendment. We hold that... the statute cannot be sustained as legislation enacted to enforce the guarantees of the Fourteenth Amendment's Due Process Clause, and accordingly reverse the decision of the Court of Appeals.²⁸⁷

Then, at the end of its opinion, the Court added:

The Patent Remedy Act's indiscriminate scope offends this principle [of proportionality between the constitutional violation and the remedy], and is particularly incongruous in light of the scant support for the predicate unconstitutional conduct that Congress intended to remedy.... The historical record and the scope of coverage therefore make it clear that the Patent Remedy Act cannot be sustained under § 5.... The statute's apparent and more basic aims were to provide a uniform remedy for patent infringement and to place States on the same footing as private parties under that regime. These are proper Article I concerns, but that Article does not give Congress the power to enact such legislation after *Seminole Tribe*.²⁸⁸

The most straightforward reading of these portions of the text is that the Court invalidated the statutory provisions in their entirety. They are therefore of no effect and cannot be read as defeating qualified immunity. This conclusion is bolstered by the fact that the Act contains no "savings clause" that would allow parts of it to remain in effect if other parts are struck down.²⁸⁹

Regardless of the status and interpretation of the amendments made by the Patent Remedy Clarification Act, the general terms of the patent infringement statute may be broad enough to preclude an immunity

^{287.} Florida Prepaid, 527 U.S. at 630. Which "statute" the Court meant is never clearly established.

^{288.} Id. at 647-48 (footnote omitted).

^{289.} See Patent and Plant Variety Protection Remedy Clarification Act, Pub. L. No. 102-560, 106 Stat. 4230 (1992) (codified in scattered sections of 35 U.S.C. and 7 U.S.C.); see also ELEVENTH AMENDMENT INTELLECTUAL PROPERTY REPORT, supra note 36, at 30–31 (making a similar observation about the continuing viability of the Remedy Clarification Acts, including the absence of savings clauses).

defense. Each liability provision in the patent infringement statute²⁹⁰ is phrased in terms of "whoever" undertakes certain defined actions being guilty of infringement, indicating that Congress intended a broad reach for this section.²⁹¹ Such broad reach might well be seen as leaving no room for qualified immunity. However, § 1983 is expressed in similarly broad terms ("[e]very person"²⁹²), and the Court has had no difficulty in reading it as permitting a qualified immunity defense.²⁹³ Furthermore, absent the amendments of the Patent Remedy Clarification Act, the statute lacks anything like a clear statement of intent to abrogate qualified immunity for state officials, and so a court might be reluctant to read such intent into the statutory language. Courts considering this issue have concluded that a qualified immunity defense is at least potentially available in intellectual property cases.²⁹⁴

When these possibilities are considered together, the conflicting indications in the statutes and Supreme Court precedents make drawing firm conclusions on the issue of qualified immunity difficult. However, the best reading of the present statutory regime is that it preserves the possibility of a qualified immunity defense for researchers sued in their personal capacities. Many commentators who have addressed *Florida Prepaid* have similarly concluded (or assumed) that qualified immunity survived the decision.²⁹⁵ In fact, these commentators raise the possibility of abrogating qualified immunity and allowing the patentee to collect from individual officers as a way to address some of the problems created by *Florida Prepaid*.²⁹⁶ Because these officers will presumably be

295. See, e.g., Berman et al., supra note 13, at 1122-26 (concluding that state officials are entitled to claim qualified immunity for intellectual property infringements); Meltzer, supra note 13, at 1357 & n.96 (conducting, in a footnote, an abbreviated analysis along the same lines as the one in this section, with a similarly hedged conclusion); cf. Menell, supra note 13, at 1407-08 (arguing that qualified immunity does not generally apply in intellectual property cases, but also suggesting the possibility that qualified immunity might apply to certain types of copyright infringement "for research or educational purposes").

296. See, e.g., Berman et al., supra note 13, at 1126-30 (discussing whether Congress should

^{290. 35} U.S.C. § 271 (2000).

^{291.} The Copyright Act uses the similarly broad "anyone." See 17 U.S.C. § 501(a).

^{292. 42} U.S.C. § 1983.

^{293.} See CHEMERINSKY, supra note 22, § 8.6.1, at 509; 1 COOK & SOBIESKI, supra note 22, § 2.06[A].

^{294.} See Chavez v. Arte Publico Press, 59 F.3d 539, 540 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000); Kersavage v. Univ. Tenn., 731 F. Supp. 1327, 1328 (E.D. Tenn. 1989); Lane v. First Nat'l Bank of Boston, 687 F. Supp. 11, 12 (D. Mass. 1988), aff'd, 871 F.2d 166 (1st Cir. 1989). These decisions are discussed in more detail infra Part IV.B.1.

indemnified by the state, the end result is equivalent to suing the state while avoiding the strictures of the Eleventh Amendment.²⁹⁷

2. The Experimental Use Exemption and Fair Use Defense

Assuming the statutes as currently written and interpreted under *Florida Prepaid* do not preclude qualified immunity, the issue becomes whether researchers at state universities *should*, as a matter of policy and existing law, be permitted to assert a qualified immunity defense. As noted above, the qualified immunity doctrines derive from common law immunities that existed at the time § 1983 was enacted. The patent and copyright laws have related historical doctrines that excused certain otherwise infringing acts—notably the experimental use exemption in patent law and the fair use defense in copyright law—and these doctrines provide the necessary justification for a qualified immunity in the intellectual property context. Just like the common-law immunities, these exceptions implement important public policies, and thus suggest that researchers at state universities should be able to invoke qualified immunity.

a. Patent Law: The Experimental Use Exemption²⁹⁸

The common-law experimental use exemption²⁹⁹ is an important but narrow patent law doctrine that exempts certain uses of patented inventions from claims of infringement. The doctrine traces its roots to Justice Story's 1813 opinion in *Whittemore v. Cutter*.³⁰⁰ According to Justice Story, "it could never have been the intention of the legislature to

abrogate qualified immunity for intellectual property infringements); *cf.* Meltzer, *supra* note 13, at 1359–61 (discussing the difficulties that would remain even if Congress abrogated qualified immunity, but also noting that such an abrogation may have some benefit).

^{297.} See Meltzer, supra note 13, at 1359-61 (discussing such a plan, and noting its potential problems).

^{298.} The following discussion is condensed from my earlier exploration of the experimental use exemption. See Gary Pulsinelli, Share and Share Alike: Increasing Access to Government-Funded Inventions under the Bayh-Dole Act, 7 MINN. J. L. SCI. & TECH. 393, 418–28 (2006).

^{299.} This Article uses the term "experimental use exemption" rather than "research exemption," as that is the term more commonly used in the literature. This usage is not to be confused with the doctrine of "experimental use" as applied to negating a prior public use or sale. *See, e.g.*, City of Elizabeth v. Am. Nicholson Pavement Co., 97 U.S. 126 (1877) (applying the experimental use doctrine); *see also* Gregory N. Pate, *Analysis of the Experimental Use Exception*, 3 N.C. J.L. & TECH. 253, 256 (2002) (noting that "[t]he 'experimental use exception' actually describes two entirely separate [patent law] doctrines").

^{300. 29} F. Cas. 1120 (C.C.D. Mass. May 1813) (No. 17,600).

punish a man, who constructed such a machine merely for philosophical experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects."³⁰¹ Justice Story subsequently distinguished this type of use from "the making with an intent to use for profit, and not for the mere purpose of philosophical experiment, or to ascertain the verity and exactness of the specification."³⁰² As Judge Newman of the Federal Circuit recently noted, when these cases were decided in 1813, "philosophical experiments" referred to "natural philosophy"—what we now call simply "science."³⁰³ Justice Story's creation rapidly evolved into an accepted defense to infringement, as evidenced by its inclusion in treatises from the late nineteenth century.³⁰⁴

The experimental use exemption is premised on the idea that patent law is eminently a utilitarian doctrine. As a consequence, pure research not directed towards profits, such as that performed by Dr. Little and other researchers at state universities, should be deemed non-infringing, as it does not interfere with the pecuniary interests of the patentee.³⁰⁵ Similarly, one of the major purposes of the patent system is to provide an incentive for inventors to disclose their invention and thereby get technical information into the hands of those who can make use of it.³⁰⁶ Thus, the common-law experimental use exemption, as traditionally understood, allows for non-commercial research on the patented invention.³⁰⁷

304. See Roche Prods., Inc. v. Bolar Pharm. Co., 733 F.2d 858, 862 (Fed. Cir. 1984) (discussing the history of the experimental use exemption and citing W. ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS § 898 (1890)).

305. As a corollary of this view of the doctrine, research done in a corporate context is virtually never deemed to be eligible for the exemption. See Ronald D. Hantman, Experimental Use as an Exception to Patent Infringement, 67 J. PAT. & TRADEMARK OFF. SOC'Y 617, 626–30 (1985) (collecting cases).

306. See ROGER E. SCHECHTER & JOHN R. THOMAS, PRINCIPLES OF PATENT LAW 12 (2004).

307. For a summary and discussion of some of the varying proposed implementations of an experimental use system, including its widespread use in foreign patent systems, see NATIONAL RESEARCH COUNCIL, A PATENT SYSTEM FOR THE 21ST CENTURY 108–17 (Stephen A. Merrill, Richard C. Levin & Mark B. Myers eds., 2004) (chapter entitled "Seven Recommendations for a 21st-Century Patent System: Shield Some Research Uses of Patented Inventions from Infringement

^{301.} Id. at 1121.

^{302.} Sawin v. Guild, 21 F. Cas. 554, 555 (C.C.D. Mass. Oct. 1813) (No. 12,391).

^{303.} See Integra Lifesciences I, Ltd. v. Merck KGaA, 331 F.3d 860, 874–75 n.8 (Fed. Cir. 2003) (Newman, J., dissenting), vacated, 545 U.S. 193, (2005); see also Brief for Amicus Curiae Bar Ass'n of the District of Columbia—Patent, Trademark & Copyright Section in Support of Neither Party at 6–8, Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005) (No. 03-1237) ("Later cases show that the term 'philosophical,' as used in Whittemore [], is synonymous with the term 'scientific.'").

Commentary on the common-law experimental use exemption has been mixed. Some commentators believe that any but the most minimal exemption is entirely inappropriate and undermines the strength of the patent system.³⁰⁸ Others counter that the doctrine plays a crucial role in the law, particularly in accommodating patent law to the norms of science (principally the scientific norm of the free sharing of ideas and techniques as part of a unified endeavor), especially in the realm of "basic" research; the doctrine is also important in resolving otherwise intractable sharing problems (such as anticommons).³⁰⁹

Cases involving the common-law experimental use exemption for researchers at academic institutions have arisen only infrequently. The exemption for such researchers has traditionally operated more informally—historically, academic scientists have patented their inventions only rarely, and commercial patentees have sued academic researchers only rarely.³¹⁰ The modern emphasis on extracting a patent's full value, coupled with an increase in profit-motivated research in universities, is causing a shift in this behavior, and so experimental use has recently taken on more importance.³¹¹

The Federal Circuit has generally viewed the common-law experimental use exemption with grave suspicion, reading the exemption

Liability").

^{308.} See generally, e.g., Richard E. Bee, Experimental Use as an Act of Patent Infringement, 39 J. PAT. OFF. SOC'Y 357 (1957); Jordan P. Karp, Experimental Use as Patent Infringement: The Impropriety of a Broad Exception, 100 YALE L.J. 2169 (1991); Michael S. Mireles, An Examination of Patents, Licensing, Research Tools, and the Tragedy of the Anticommons in Biotechnology Innovation, 38 U. MICH. J.L. REFORM 141, 201-05, 211-16 (2004); Heather Hamme Ramirez, Defending the Privatization of Research Tools: An Examination of the "Tragedy of the Anticommons" in Biotechnology Research and Development, 53 EMORY L.J. 359, 384-88 (2004).

^{309.} See generally, e.g., Rebecca S. Eisenberg, Patents and the Progress of Science: Exclusive Rights and Experimental Use, 56 U. CHI. L. REV. 1017 (1989); Hantman, supra note 305; Janice M. Mueller, No "Dilettante Affair": Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools, 76 WASH. L. REV. 1 (2001); Rochelle C. Dreyfuss, Protecting the Public Domain of Science: Has the Time for an Experimental Use Defense Arrived?, 46 ARIZ. L. REV. 457 (2004); Katherine J. Strandburg, What Does the Public Get? Experimental Use and the Patent Bargain, 81 WIS. L. REV. 81 (2004). Cf. generally Maureen A. O'Rourke, Toward a Doctrine of Fair Use in Patent Law, 100 COLUM. L. REV. 1177, 1173, 1197 (2000) (proposing a "fair use" right for patent law based on the copyright fair use doctrine).

^{310.} See FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY at 35 (2003), available at http://www.ftc.gov/os/2003/10/innovationrpt.pdf ("The strength and contours of the defense have not been fully tested; as several panelists testified, corporations typically have not sued universities.").

^{311.} See Dreyfuss, supra note 309, at 457-61 (exploring the reasons for this shift).

narrowly.³¹² The Supreme Court has not recently addressed the scope of the common-law research exemption directly; however, it demonstrated its greater acceptance of such doctrines when it reversed the Federal Circuit's narrow reading of the statutory research exemption (which applies to research relating to FDA drug approval³¹³) and expanded this exemption to exempt a broader range of conduct.³¹⁴

Despite the Federal Circuit's current reluctance to endorse the experimental use exemption, the doctrine has an important role to play in giving researchers flexibility to explore patented technology. Indeed, as Judge Newman of the Federal Circuit noted in her dissent in *Integra Lifesciences I, Ltd. v. Merck KGaA*:

The patent statute [in § 112] requires full disclosure of the invention, including details of enabling experiments and technical drawings and best modes and preferred embodiments, even commercial sources of special components. Such details would be idle and purposeless if this information cannot be used for 17–20 years [i.e., the length of the patent term].... To the contrary, the patent system both contemplates and facilitates research into patented subject matter, whether the purpose is scientific understanding or evaluation or comparison or improvement. Such activities are integral to the advance of technology.³¹⁵

Thus, just as the Supreme Court found that § 1983 retained the common law's qualified immunity because of its long history and the important

^{312.} See, e.g., Madey v. Duke Univ., 307 F.3d 1351 (Fed. Cir. 2002) (declining to allow the exemption; holding expressed in very broad language that leaves only a narrow exemption), cert. denied, 539 U.S. 958 (2003); Embrex, Inc. v. Serv. Eng'g Corp., 216 F.3d 1343, 1353 (Fed. Cir. 2000) (Rader, J., concurring) ("[N]either the statute nor any past Supreme Court precedent gives any reason to excuse infringement because it was committed with a particular purpose or intent, such as for scientific experimentation or idle curiosity."); Roche Prods., Inc. v. Bolar Pharm. Co., 733 F.2d 858 (Fed. Cir. 1984). But see Integra Lifesciences I, Ltd. v. Merck KGaA, 331 F.3d 860, 872–78 (Fed. Cir. 2003) (Newman, J., dissenting) (arguing for a more robust common-law experimental use exemption and asserting that the broad language of Madey was unnecessary dicta), vacated, 545 U.S. 193 (2005).

^{313.} See 35 U.S.C. § 271(e) (2000) ("It shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention . . . solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs or veterinary biological products.").

^{314.} Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193, 206–08 (2005) (interpreting \S 271(e) to permit research into a patented compound even if the data generated was never submitted to the FDA, as long as it was "reasonably related" to the process of generating data to submit to the FDA).

^{315.} Integra Lifesciences, 331 F.3d at 875 (Newman, J., dissenting).

policies it serves,³¹⁶ courts should find that the long-standing experimental use exemption implements important patent law policies. The rationale behind experimental use—permitting research uses aimed at further exploration of the patented technology without a profit motive—dovetails nicely with the work done by researchers at state universities. The exemption should therefore serve as a basis for qualified immunity for researchers at state universities.

b. Copyright Law: The Fair Use Defense

Like the experimental use exemption, the fair use defense traces its roots to an opinion by Justice Story.³¹⁷ However, unlike experimental use, fair use has been codified in the copyright law.³¹⁸ Thus, it is a stronger, better-established doctrine, and as such it can serve as a justification for qualified immunity in the copyright context.

The fair use defense serves several important functions in copyright law. In large part, it is inextricably linked to academic pursuits and the use of copyrighted works in such pursuits. According to the House Report accompanying the Copyright Act of 1976, "[t]he specific wording of section 107 [codifying fair use] as it now stands is the result of a process of accretion, resulting from the long controversy over the related problems of fair use and the reproduction (mostly by photocopying) of copyrighted material for educational and scholarly purposes.³¹⁹ Allowing certain otherwise infringing uses as fair use also advances the goals of the Constitution by encouraging the creation of new works following upon existing works.³²⁰ Fair use further helps release First Amendment tension by permitting as fair use some forms of free speech that might otherwise be suppressed by copyright holders.³²¹ In some cases, fair use can remedy market failures that prevent the use of a work even where such use is economically viable, such as cases where transaction costs make the transaction infeasible³²² or where the

^{316.} See, e.g., Anderson v. Creighton, 483 U.S. 635, 638 (1987); see also supra Part III.A.4.

^{317.} See Folsom v. Marsh, 9 F. Cas. 342 (D. Mass. 1841) (No. 4901).

^{318.} See 17 U.S.C. § 107 (2000).

^{319.} H.R. REP. NO. 94-1476, at 66 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5679.

^{320.} See ROGER E. SCHECHTER & JOHN R. THOMAS, INTELLECTUAL PROPERTY § 10.1, at 213 (2003) ("[T]he fair use doctrine prevents 'rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster."" (quoting Iowa State Univ. Res. Found. v. Am. Broad. Co., 621 F.2d 57, 60 (2d Cir. 1980))).

^{321.} See id. § 10.7, at 247-48.

^{322.} See id. § 10.1, at 214-16.

use of the work is in a critique or parody that the copyright holder refuses to license. 323

The fair use provision of the Copyright Act states:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.³²⁴

The statute represents a codification of the pre-existing common law doctrine.³²⁵ It provides a general list of types of uses deemed "fair," followed by an illustrative, rather than exhaustive, list of factors to be considered in deciding whether a particular use is "fair."³²⁶

As codified in the statute, some of the canonical categories of fair use are "teaching (including multiple copies for classroom use), scholarship, or research."³²⁷ Thus, the sort of uses that researchers at state universities will be making of copyrighted works fall neatly into the fair use category. However, fitting the use into a statutory category does not end

^{323.} See Robert P. Merges, Are You Making Fun of Me?: Notes on Market Failure and the Parody Defense in Copyright, 21 AIPLA Q.J. 305 (1993) (discussing the role of fair use in overcoming market failure in the form of "bargaining breakdown" that results when non-economic factors prevent the completion of an otherwise economically viable transaction). In general, the copyright holder has a right to refuse to license any and all others, except in rare cases where that refusal would violate antitrust principals and would thus amount to copyright misuse. See generally 4 NIMMER ON COPYRIGHT, supra note 182, § 13.09 (discussing copyright misuse).

^{324. 17} U.S.C. § 107 (2000).

^{325.} See H.R. REP. NO. 94-1476, at 66 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5679.

^{326.} See 17 U.S.C. § 107.

^{327.} Id.

the fair use inquiry.³²⁸ Fair uses must also be analyzed using the four factors in the statute. In practice, the inquiry under the first factor, the purpose and character of the use, focuses on whether the use fits one of the enumerated categories, whether the use is commercial, and whether the use is transformative of the original work or mere copying.³²⁹ The inquiry under the second factor, the nature of the copyrighted work, looks at whether the work is at the copyright "core" of creative, expressive works, or whether it is instead largely factual in nature, with use of the latter being more likely to be found fair.³³⁰ For the third factor, the amount and substantiality of the portion used, the inquiry focuses on whether the party asserting fair use has taken a quantitatively or qualitatively large portion of the work, and whether the amount taken was more than was necessary for the purported fair use.³³¹ The fourth factor, the effect of the use upon the potential market for the copyrighted work, is now deemed the most important.³³² The inquiry under this factor requires deciding whether the new work opens new markets, or whether it merely usurps the demand for the existing work, causing harm to its market value.³³³

The case law addressing fair use is very inconsistent, in large part because the nature of the inquiry is so fact-intensive and subjective, but also because the doctrine itself is complex, vague, and ill-defined.³³⁴ Indeed, the House Report accompanying the Copyright Act of 1976 observed:

Although the courts have considered and ruled upon the fair use doctrine over and over again, no real definition of the concept has ever emerged. Indeed, since the doctrine is an equitable rule of reason, no generally applicable definition is possible, and

333. See SCHECHTER & THOMAS, supra note 320, § 10.2.4, at 227-31.

^{328.} See SCHECHTER & THOMAS, supra note 320, § 10.2.1, at 218. Nor is it even a necessary part of it—the list of categories is not exclusive, and so uses not enumerated may still be deemed fair uses. See id.

^{329.} See id., § 10.2.1, at 218–24.

^{330.} See id., § 10.2.2, at 224-26.

^{331.} See id., § 10.2.3, at 226–27.

^{332.} See, e.g., Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 566 (1985) ("This last factor [effect on the market] is undoubtedly the single most important element of fair use." (citing 4 NIMMER ON COPYRIGHT, *supra* note 182, § 13.05[A])).

^{334.} See id. § 10.2, at 216-17.

each case raising the question must be decided on its own facts. 335

It is therefore often hard to judge in advance what will be found to be a "fair use" of a copyrighted work and what will instead be found an infringement.³³⁶ As a consequence, however, anyone using a copyrighted work in an academic context (barring a blatant commercial use) will be able to make at least a colorable claim that his or her use qualifies as fair, and proving that such a claim is made in bad faith is likely to be very difficult.

Thus, fair use specifically applies to copyright use in the academic context. Just like the experimental use exemption, the fair use defense has long-standing common law roots and it implements important copyright law policies by giving researchers flexibility to analyze, criticize, and use copyrighted works. And also just like the experimental use exemption, the fair use defense should therefore serve as a firm basis for qualified immunity for researchers at state universities.

3. Potential Problems with the Experimental Use Exemption and Fair Use Defense

A possible objection to justifying qualified immunity under the experimental use exemption or fair use defense is that these doctrines make qualified immunity unnecessary. Because those doctrines are both directly available as defenses to infringement suits, what purpose is served by having a qualified immunity based on them? The difference is that a successful experimental use or fair use defense requires that the researcher be *right*—the use must actually qualify as an experimental use or fair use. Thus, if a court disagrees with the researcher's assessment of the situation, then the researcher is liable for the infringement. In contrast, with a qualified immunity defense, the researcher need only demonstrate a good-faith, reasonable belief that the use was experimental or fair.³³⁷ Even if a court ultimately concludes that the use was not, in fact, experimental or fair, the researcher will still be able to claim qualified immunity as long as he or she had a good-faith,

^{335.} H.R. REP. NO. 94-1476, at 65 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5679.

^{336.} See II PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 12.1, at 12:3–12:4 (3d ed. 2006) ("[The fair use doctrine is] a source of frustration to the lawyer who needs to know whether his or her client can safely proceed with a project that skirts the edges of liability.").

^{337.} See infra Part IV.B; see also Bone, supra note 164, at 1484-85.

reasonable belief that the use was experimental or fair.³³⁸ Thus, qualified immunity will protect the researcher in situations where the experimental use or fair use defenses will not, and so qualified immunity has an important role to play.³³⁹

The Supreme Court has developed a variety of immunity doctrines to protect state officers in civil rights suits. The rationale behind the civil rights doctrine of qualified immunity bears substantial similarity to the rationale behind some important intellectual property law doctrines. In particular, the patent law doctrine of experimental use and the copyright law doctrine of fair use share a significantly parallel rationale with the qualified immunity doctrine, and thus can serve to justify the application of qualified immunity in the intellectual property context.

IV. A FRAMEWORK FOR QUALIFIED IMMUNITY

As detailed in the preceding sections, a strong argument can be made that, under current law, qualified immunity should apply in the intellectual property context. Assuming that it does, courts will need a framework to apply it in that context. At present, the only extant framework for applying qualified immunity arises out of suits filed under § 1983, so those cases must therefore serve as the starting point for applying qualified immunity in other contexts. Part IV uses doctrines from current law to develop a framework for applying qualified immunity in the intellectual property arena. Part IV.A starts by describing how courts apply qualified immunity in the civil rights area. Part IV.B then applies the concepts of Part IV.A to intellectual property suits against researchers at state universities. After reviewing the few existing cases that address this issue, it turns to the intellectual property doctrine of willful infringement as a close analogue to the civil rights doctrine of qualified immunity. It uses the willful infringement doctrine as the basis for a proposed framework for applying qualified immunity

^{338.} The same rule applies in willful infringement cases. As long as the accused infringer has a good-faith, reasonable belief that his or her conduct does not infringe, the infringement cannot be willful, even if that belief turns out to have been entirely mistaken. *See, e.g.*, Polaroid Corp. v. Eastman Kodak Co., 16 U.S.P.Q.2d (BNA) 1481, 1535–39 (D. Mass. 1990), *amended for clerical errors by* 17 U.S.P.Q.2d (BNA) 1711 (D. Mass. 1990) (even though opinion of counsel was incorrect on the infringement issue, it was competently prepared and therefore the infringement was not willful). The *Polaroid* case is discussed in 7 CHISUM ON PATENTS, *supra* note 180, § 20.03[4][b][v][C] at 20-364 to 20-365.

^{339.} Of course, if the researcher is correct in his or her belief that the use was experimental or fair, then either defense will itself defeat liability.

in intellectual property suits against researchers at state universities. Part IV.C concludes by addressing some potential problems in using the willful infringement doctrines to implement qualified immunity for researchers at state universities.

A. Applying Qualified Immunity Under Section 1983

As described in Part III.A.4 above, the objective standard the Supreme Court has set forth for qualified immunity in § 1983 cases is:

[G]overnment officials performing discretionary functions[] generally are shielded from liability for civil damages insofar as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known.³⁴⁰

The first element of this standard is whether the official is "performing discretionary functions."³⁴¹ The Supreme Court has used this phrase in contrast to ministerial functions that are dictated by statutes or other positive law, or directly ordered by superior state officials, for which functions qualified immunity is generally inapplicable.³⁴² Under this standard, researchers in the laboratory are clearly performing discretionary functions. Researchers always choose their own techniques and sources for their research; these elements of the research enterprise are not (and indeed could not be) dictated by provisions of law or other officials.³⁴³ Indeed, most researchers would rebel if any other official attempted to dictate the course of the research.

Therefore, qualified immunity will depend on whether researchers "violate [a] clearly established statutory or constitutional right[] of

^{340.} Harlow v. Fitzgerald, 457 U.S. 800, 818 (1982).

^{341.} Id.

^{342.} See id. at 816 ("[Qualified i]mmunity generally is available only to officials performing discretionary functions. In contrast with the thought processes accompanying 'ministerial' tasks, the judgments surrounding discretionary action almost inevitably are influenced by the decisionmaker's experiences, values, and emotions."); see also LEWIS & NORMAN, supra note 214, § 2.22 (discussing the history of qualified immunity and noting that the Supreme Court embraced "a doctrine that defendants sued in their individual capacity with respect to discretionary, as opposed to merely ministerial, functions would enjoy qualified immunity from damages"); 1 COOK & SOBIESKI, supra note 22, $\P 2.06[B]$, at 2-278 (discussing the discretionary/ministerial distinction).

^{343.} In the broadest sense, some techniques may be limited by law—such as techniques involving human subjects or embryonic stem cells—and these limitations may be important. However, the day-to-day selection of techniques, sources, and reagents is very much at the discretion of the researcher.

which a reasonable person would have known."³⁴⁴ This standard has proved rather troublesome in the civil rights context, and courts have struggled with determining the level of generality at which it should be applied.³⁴⁵ At the highest level, all constitutional and statutory rights are clearly established. For example, the right to be free of unlawful searches and seizures is certainly "clearly established."³⁴⁶ But that observation does not help in answering the question of whether a state official who commits a *particular* act that might violate that right is nevertheless entitled to claim qualified immunity for suit under § 1983. In practice, therefore, courts must look at the specifics of a particular incident-for example, did this search and seizure violate a clearly established right?³⁴⁷ Answering that question involves examining the searches and seizures that have previously been deemed illegal and determining whether the standards established in those cases should have revealed to a reasonable state official that his or her conduct violated a clearly established right.³⁴⁸

B. Applying Qualified Immunity in the Intellectual Property Context

In the intellectual property context, qualified immunity is applicable only when no "clearly established [intellectual property] right" has been violated. Patentees and copyright holders, of course, have a "clearly established right" not to have their patents and copyrights infringed. However, stating the problem in those terms is clearly at the wrong level of abstraction.³⁴⁹ The real issue must be how to judge whether a "reasonable" researcher would have known he or she was violating the right (that is, infringing the patent or copyright) in a *particular* patent or

^{344.} Harlow, 457 U.S. at 818.

^{345.} See 1 COOK & SOBIESKI, supra note 22, $\ 2.06[B]$, at 2-269 to 2-273 (discussing Anderson v. Creighton, 483 U.S. 635 (1987), and observing that in that case, "the Court candidly acknowledged that determination of whether conduct violates a clearly established constitutional right depends substantially on the level of generality used to define the relevant constitutional rule").

^{346.} See id. § 2.06[B].

^{347.} See *id*. Determining whether a particular right is "clearly established" in the civil rights context has generated an enormously complex body of law that is fraught with ambiguity and circuit splits about the appropriate level of abstraction. See *id*. Fortunately, most of the complexity is directly applicable only in the civil rights context and does not easily translate into other contexts. I will therefore not explore the issue further here. For further exposition of this topic, see *id*.; CHEMERINSKY, supra note 22, § 8.6.3, at 533–39; LEWIS & NORMAN, supra note 214, § 2.22.

^{348.} See 1 COOK & SOBIESKI, supra note 22, ¶ 2.06[B].

^{349.} Cf. Anderson, 483 U.S. at 639-41 (making a similar observation regarding warrantless searches).

copyright case. Fortunately, both of those bodies of law already have doctrines that are helpful for answering that question. Before looking at patent and copyright law and proposing a framework for qualified immunity, Part IV.B.1 reviews the few intellectual property cases that discuss qualified immunity.

1. Prior Cases

Only a few courts have addressed the issue of qualified immunity in intellectual property cases directly, and their holdings cover the spectrum of possible outcomes. The first two cases, *Kersavage v. The University of Tennessee*³⁵⁰ and *Lane v. First National Bank of Boston*,³⁵¹ were decided after the Supreme Court held in *Atascadero* that Congress needed to express its intent clearly in order to abrogate state sovereign immunity, but before the Remedy Clarification Acts provided the requisite clear statements. The third, *Chavez v. Arte Publico Press*,³⁵² was decided after the Remedy Clarification Acts were enacted, but before *Seminole Tribe* and *Florida Prepaid*.³⁵³

In *Kersavage*, Joseph Kersavage sued the University of Tennessee and two of its professors for patent infringement.³⁵⁴ The University and both professors filed a motion to dismiss, on the grounds of sovereign immunity.³⁵⁵ The district court held that the University, as an arm of the state, was entitled to absolute immunity, and this immunity extended to the professors acting in their official capacity.³⁵⁶ It then went on to consider the professors' assertion of qualified immunity in the suit against them in their personal capacities.³⁵⁷ The court stated, "th[is c]ourt does not believe that qualified immunity applies to the individual defendants as a matter of law because the law of patent infringement is clearly established, relegating the application of such

^{350. 731} F. Supp. 1327 (E.D. Tenn. 1989).

^{351. 687} F. Supp. 11 (D. Mass. 1988), aff'd, 871 F.2d 166 (1st Cir. 1989).

^{352. 59} F.3d 539 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000).

^{353.} A fourth case, Richard Anderson Photography v. Brown, 852 F.2d 114 (4th Cir. 1988), also considered (and denied) an immunity defense in a copyright case. See *id.* at 122–23. However, the asserted immunity was based on *state* law, and so the court did not discuss traditional qualified immunity. See *id.*

^{354.} Kersavage, 731 F. Supp. at 1328. Kersavage was also a professor at the University. Id.

^{355.} Id.

^{356.} Id. at 1329-30.

^{357.} Id. at 1330.

immunity to be decided as a question of fact."³⁵⁸ Thus, while it did not reject the defense of qualified immunity, it held that it was a factual question that must be reserved for trial.³⁵⁹ On reconsideration, the court appeared to shift its position, stating:

The question of whether these two individual defendants infringed the plaintiff's patent does not present the kind of question or circumstances to which a defense of qualified immunity applies. The issue is wholly factual.... Although the question of qualified immunity is initially one of law, the Court is convinced that based on the allegations of the complaint, the individual defendants are not entitled to qualified immunity.

Qualified immunity requires the contours of the law to be sufficiently clear "for any reasonable official in the defendant's position to know that what the official is doing violates [a] right." The complaint and evidence submitted in support of the motions presently before the Court raise an issue of fact based on allegations that the defendants were aware of the plaintiff's patent rights and used a similar invention in a manner that infringed these rights. If true, the defendants surely knew under established patent law that their actions would violate the law protecting patent rights. Furthermore, denial of qualified immunity as a matter of law permits the defense to be asserted as one of good faith immunity to liability to be decided on the facts.³⁶⁰

Thus, the court appears to have held that a defense based on qualified immunity can never succeed in a patent case because the issue is so factintensive that it cannot be decided as a matter of law; instead, the individual defendants are entitled to assert a "good-faith immunity" defense as an issue to be decided on the facts.³⁶¹

^{358.} Id.

^{359.} Id.

^{360.} Id. at 1332 (citations omitted).

^{361.} Although the opinion is not entirely clear on this point, the court appears to have possibly misunderstood the principle of "good-faith immunity." "Good-faith immunity" is often used as an alternative term for qualified immunity, see CHEMERINSKY, supra note 22, § 8.6.3, at 528–29, but this does not seem to be how the court is using the term. The court's citation is at best obliquely related to the issue, but it might be read as invoking the concept of the "good-faith defense" that is sometimes permitted to private citizens sued under § 1983 for malicious prosecution or other uses of judicial process in a manner that violates the plaintiff's rights. See id. at 539–40 (discussing the good-faith defense, citing Duncan v. Peck, 844 F.2d 1261 (6th Cir. 1988) (permitting private defendant to assert good-faith defense to a § 1983 action)). The contours of this defense are not

In *Lane*, Joan Lane sued the Bank of Boston, the Commonwealth of Massachusetts, two of its departments, and three individual employees of those departments for copyright infringement of her compilation database of certain public financial information.³⁶² The Commonwealth, its departments, and the employees filed a motion to dismiss, asserting their state sovereign immunity.³⁶³ The court granted the motion with respect to the Commonwealth, its departments, and the individual employees in their official capacities, finding that they enjoyed absolute immunity under the Eleventh Amendment.³⁶⁴ The court then turned to the employees' assertion of qualified immunity from the suit against them in their personal capacities.³⁶⁵ The court reviewed the law of qualified immunity, particularly the standard for when a right is "clearly defined" under *Harlow*.³⁶⁶ The court then addressed the defendants' argument for qualified immunity:

[D]efendants argue that they remain protected by qualified immunity because the laws of copyrightability of compilations, as applied to documents such as Lane's, were not clearly established at the time the defendants allegedly violated the plaintiff's rights.

Defendants assert that there is a split in authority regarding the exact interest which is protected in compilations, and on that basis argues [sic] that the confusion protects their qualified immunity.³⁶⁷

. . . .

367. Id. at 15-16, 17.

entirely clear, but it is a subjective, fact-based analysis that is generally limited to cases (1) involving private defendants, where (2) the alleged underlying offense (such as malicious prosecution) permits a good-faith defense. *See id.* Patent suits against researchers at state universities are against state officials, and the patent laws do not recognize good faith as a defense to infringement; consequently, the good-faith defense is not implicated. Or perhaps the court simply used careless language, and actually intended only to delay its decision on qualified immunity until it could be decided on the facts of the case.

^{362.} Lane v. First Nat'l Bank of Boston, 687 F. Supp. 11, 12–13 (D. Mass. 1988), aff'd, 871 F.2d 166 (1st Cir. 1989).

^{363.} Id.

^{364.} *Id.* at 14–15. On interlocutory appeal, this part of the ruling was affirmed by the First Circuit. Lane v. First Nat'l Bank of Boston, 871 F.2d 166 (1st Cir. 1989). The appeal did not address qualified immunity.

^{365.} Lane, 687 F. Supp. at 15-17.

^{366.} Id. at 15-16.

Thus, the court's analysis focused on whether Lane's *particular* copyright was well established.³⁶⁸ The court ultimately concluded that the law was clear that such compilations were copyrightable, and therefore the qualified immunity defense failed on the particular facts of the case.³⁶⁹ However, the court did not reject the application of a qualified immunity defense in a copyright case on its face; it merely concluded the defense was inapplicable in Lane's particular factual situation.³⁷⁰ The court did not directly address the issue of whether reasonable persons in the position of defendants would have had a goodfaith belief that they were not, in fact, violating a clearly established right by infringing Lane's copyright and whether that belief would have enabled them to assert qualified immunity. This omission likely occurred because the defendants couched their defense in terms of the general clarity of the coverage of a copyright in a compilation.³⁷¹

Finally, in *Chavez*, Denise Chavez sued Arte Publico Press and one of its employees for copyright infringement.³⁷² The court noted that Arte Publico Press was part of, and "legally indistinguishable from," the University of Houston, which was owned and operated by the State of Texas.³⁷³ The individual defendant was "a University employee who at all times relevant acted on its behalf."³⁷⁴ The defendants moved to dismiss, asserting their respective sovereign immunities.³⁷⁵ The court held that the Copyright Remedy Clarification Act had validly abrogated the states' Eleventh Amendment immunity, and therefore Arte Publico was not entitled to assert sovereign immunity as a defense (at least as to any infringements that occurred after the effective date of the Clarification Act).³⁷⁶ It then turned its attention to the employee's

374. Id.

375. Id. at 541.

376. Id. at 546–47. The Supreme Court subsequently granted certiorari in the case, vacated the Fifth Circuit's decision, and remanded for reconsideration in light of its decision in Seminole Tribe. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996). While the case was on remand to the Fifth Circuit, the Court issued its Florida Prepaid and College Savings Bank decisions. Chavez v. Arte Publico Press, 204 F.3d 601, 603. (5th Cir. 2000), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000). The Fifth Circuit concluded

^{368.} Id. at 16-17.

^{369.} Id.

^{370.} See id. at 15-17.

^{371.} See id.

^{372.} Chavez v. Arte Publico Press, 59 F.3d 539, 540 (5th Cir. 1995), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000).

^{373.} Id.

assertion of qualified immunity from suit against him in his personal capacity.³⁷⁷ The court observed that the contractual provision that was at the heart of the case was ambiguous.³⁷⁸ It therefore concluded, "[b]ecause the licensing contract was reasonably susceptible to two interpretations, one of which renders [the employee's] alleged act perfectly legal, he is entitled to qualified immunity."³⁷⁹

Lane and Chavez are easily reconciled. In both cases, the court looked to the facts of the *particular* case to determine whether the state official was entitled to assert a claim of qualified immunity; the specific facts merely led to opposite outcomes. Furthermore, both cases can be reconciled with Kersavage, at least under the Kersavage court's original formulation. In all three cases, the application of qualified immunity turned on whether the employee should reasonably have known of the infringement. In Chavez and Lane, which were copyright cases, the facts were clear enough that the issue could be easily decided at an early stage. In Kersavage, a much more complicated patent case, making such a determination at an early stage was proportionately more difficult. The court in Kersavage therefore concluded it could not, as a matter of law, decide whether reasonable persons in the position of the defendants would have known they were violating a clearly established right by infringing the patent. It accordingly decided to postpone resolution of the issue until after further factual development through litigation. In the court's view, because the defendant needed to submit to further litigation, the defendant could not properly be said to enjoy "qualified immunity" from suit.³⁸⁰ As the court recast the analysis, however, the defendant could still enjoy a more factually dependent "good-faith immunity."³⁸¹ Although the court's decision on reconsideration was confused on this issue, from a practical standpoint, the only real difference between the two inquiries is in their timing, and thus the amount of litigation involved.

380. Kersavage v. Univ. Tenn., 731 F. Supp. 1327, 1330 (E.D. Tenn. 1989).

that Congress lacked the power under the intellectual property clause to abrogate state sovereign immunity, and therefore the Copyright Remedy Clarification Act was invalid and Arte Publico was entitled to assert sovereign immunity. *Id.* at 608. The court did not revisit the qualified immunity issue.

^{377.} Chavez, 59 F.3d at 547.

^{378.} Id.

^{379.} Id.

^{381.} Id. at 1331-32.

2. Willful Infringement

Although these prior cases addressed qualified immunity in the intellectual property context, they did not do so in detail or with a view to creating a cohesive doctrine. In light of *Florida Prepaid*, developing such a doctrine has assumed greater importance. This development must begin with the existing law on qualified immunity in § 1983 cases, as elaborated in Harlow and its extensive progeny.³⁸² However, these cases have created a morass of law on the application of qualified immunity. and the contours of the doctrine are unclear.³⁸³ Furthermore, the doctrine does not lend itself to direct application in the intellectual property context. Thus, courts attempting to analyze qualified immunity in the intellectual property context will need to develop their own test. I propose that qualified immunity should apply when appropriate in intellectual property cases and that the applicable test should be based on the existing willful infringement doctrines found in both patent and copyright law. In practice, these doctrines establish a test that in many ways bears a striking resemblance to that established by the Supreme Court in Harlow, and thus they can serve as an excellent starting place for developing a parallel test in intellectual property suits. These willful infringement doctrines also provide a ready-made body of law that can assist the courts in addressing qualified immunity, obviating the need to develop an entirely new body of law.

a. Willful Infringement in Patent Cases

The Patent Act's damages provision states:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

^{382.} The *Harlow* decision and its objective standard for qualified immunity are discussed *supra* Part III.A.4. See also infra note 389 & accompanying text (discussing later interpretation of *Harlow*).

^{383.} See 1 COOK & SOBIESKI, supra note 22, $\[2.06[B] \]$; see also supra Part III.A.4 (discussing Harlow and its objective standard for qualified immunity); infra note 389 & accompanying text (discussing later interpretation of Harlow); infra notes 398-400 & accompanying text (discussing Harlow's implementation of the objective test).

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.³⁸⁴

The Patent Act further provides that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party."³⁸⁵

In practice, trebling of damages and the award of attorney fees typically occurs when the infringement is found to be "willful."³⁸⁶ The primary criterion in determining whether an infringement is willful is "whether, under all the circumstances, a reasonable person would prudently conduct himself with any confidence that a court might hold the patent invalid or not infringed."³⁸⁷ Thus, a court assessing whether a researcher has committed willful infringement must address much the same issue as it would in assessing whether the researcher is entitled to claim qualified immunity—whether a reasonable person in the position of the researcher would have known that he or she was infringing a clearly established patent right.

At first glance, equating an objective standard based on what a reasonable person would know with a more individualized standard—such as willfulness—that takes into account the state of mind of the infringer might seem problematic. However, in practice, the willfulness standard is applied in a way that fits fairly nicely with how the qualified immunity standard is applied. In assessing willfulness, courts first look to the threshold issue of whether the infringer knew of the patent. If not, then the infringement could not have been willful—logically, a person cannot deliberately infringe a patent of which he or she had no knowledge.³⁸⁸ This is a purely subjective standard, based on what the accused infringer *actually* knew, making it seem an ill fit with the objective test applied in qualified immunity. However, the Supreme Court has noted in another context that applying the objective test for qualified immunity will often require inquiry into the information possessed by the party asserting the defense:

^{384. 35} U.S.C. § 284 (2000) (emphasis added).

^{385.} Id. § 285.

^{386.} See Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1342 (Fed. Cir. 2004). For a thorough exposition of the issues of enhanced damages, attorney fees, and willful patent infringement, see 7 CHISUM ON PATENTS, *supra* note 180, § 20.03[4][b], [c].

^{387.} Ryco, Inc. v. Ag-Bag Corp., 857 F.2d 1418, 1428 (Fed. Cir. 1988).

^{388.} See 7 CHISUM ON PATENTS, supra note 180, § 20.03[4][b][v][H], at 20-408 (stating, "[a] person cannot be a willful infringer of a patent if he has no knowledge of the patent," and collecting cases).

[T]he determination whether it was objectively legally reasonable to conclude that a given search was supported by probable cause or exigent circumstances will often require *examination of the information possessed by the searching officials*. But contrary to the [plaintiffs'] assertion, this does not reintroduce into qualified immunity analysis the inquiry into officials' subjective intent that *Harlow* sought to minimize. The relevant question in this case, for example, is the objective (albeit fact-specific) question whether a reasonable officer could have believed Anderson's warrantless search to be lawful, in light of clearly established law *and the information the searching officers possessed*. Anderson's subjective beliefs about the search are irrelevant.³⁸⁹

Thus, a threshold inquiry into the accused infringer's knowledge of the patent is entirely consistent with the Supreme Court's objective test for qualified immunity.

Once the threshold issue of knowledge of the patent is passed, the core of the willfulness inquiry is an objective inquiry into the reasonableness of the accused infringer's conduct. The Federal Circuit has stated this willful infringement test in various ways, all with the same basic emphasis on the objective reasonableness of the accused infringer's conduct. For example, as noted above, in Ryco, Inc. v. Ag-Bag Corp.,³⁹⁰ the court stated, "[t]he test is whether, under all the circumstances, a reasonable person would prudently conduct himself with any confidence that a court might hold the patent invalid or not infringed."391 Later, in State Industries, Inc. v. Mor-Flo Industries, Inc.³⁹² the court used the formulation: "To establish willful infringement, a plaintiff must prove by clear and convincing evidence that the defendant acted with no reasonable basis for believing it had the right to do so."³⁹³ In Hoechst Celanese Corp. v. BP Chemicals Ltd.,³⁹⁴ the court expressed the standard thus: "The issue of 'willful' infringement measures the infringing behavior, in the circumstances in which the infringer acted, against an objective standard of reasonable

394. 78 F.3d 1575 (Fed. Cir. 1996).

^{389.} Anderson v. Creighton, 483 U.S. 635, 641 (1987) (internal citation omitted) (emphasis added).

^{390. 857} F.2d 1418 (Fed. Cir. 1988).

^{391.} Id. at 1428.

^{392. 883} F.2d 1573 (Fed. Cir. 1989).

^{393.} Id. at 1581.

commercial behavior in the same circumstances. Willful infringement is thus a measure of reasonable commercial behavior in the context of the tort of patent infringement."³⁹⁵

Because "infringement" is effectively the violation of an established right (the patent right), this objective inquiry into the reasonableness of the defendant's conduct using the willfulness analysis nicely parallels that required for qualified immunity under *Harlow*. If the infringement was willful—that is, if a reasonable person in the position of the accused infringer would have known that he or she was infringing a patent—then the accused infringer has "violate[d a] clearly established statutory . . . right[] of which a reasonable person would have known." Conversely, if a reasonable person would *not* have known that he or she was infringing a patent, then the infringement was not willful and the accused infringer has not "violate[d a] clearly established statutory . . . right[] of which a reasonable person would *not* have known that he or she was infringing a patent, then the infringement was not willful and the accused infringer has not "violate[d a] clearly established statutory . . . right[] of which a reasonable person would have known." In the former case, the infringer has not be able to claim qualified immunity, while in the latter he or she should be entitled to claim it.

Of course, the parallel between the two doctrines is not perfect. While the willfulness inquiry is largely objective, it does incorporate subjective elements relating to the behavior of the accused infringer that are inconsistent with the objective inquiry mandated under *Harlow*. For example, the Federal Circuit has stated:

Although various criteria have been stated for determining "willful infringement," . . . the primary consideration is whether the infringer, acting in good faith and upon due inquiry, had sound reason to believe that it had the right to act in the manner that was found to be infringing. . . . Thus precedent displays the consistent theme of whether a prudent person would have had sound reason to believe that the patent was not infringed or was invalid or unenforceable, and would be so held if litigated.³⁹⁶

However, later in the same opinion, the court noted:

[T]he issue of willfulness not only raises issues of reasonableness and prudence, but is often accompanied by questions of intent, belief, and credibility \dots .³⁹⁷

^{395.} Id. at 1583.

^{396.} SRI Int'l, Inc. v. Adv. Tech. Labs., Inc., 127 F.3d 1462, 1464-65 (Fed. Cir. 1997).

^{397.} *Id.* at 1465; *see also* Read Corp. v. Portec Inc., 970 F.2d 816, 826–28 (Fed. Cir. 1992) (spelling out a multifactor test for enhanced damages, of which many factors are subjective).

The latter set of subjective considerations is of course outside the scope of the objective test set forth in *Harlow*. Thus, a court adapting the willful infringement test for use as a qualified immunity test would have to decide whether it should consider these additional factors, or limit itself to the objective portion of the test.

Historically, the Supreme Court took such subjective factors (or at least ones very much like them) into account in assessing qualified immunity.³⁹⁸ Then, in *Harlow*, the Court was searching for a mechanism to rid the courts of vexatious, non-meritorious suits against state officials at an early stage, without the need for extensive discovery or trial.³⁹⁹ The Court concluded that the subjective factors were the main culprit in slowing down the process, as they were factual in nature and thus typically required a trial to resolve them. The Court therefore eliminated those factors in the interest of streamlining the procedure.⁴⁰⁰ However, as discussed below,⁴⁰¹ even the objective portion of the willfulness analysis in intellectual property cases is very fact-intensive, almost certainly requiring a trial to resolve. Thus, meeting *Harlow*'s goal of streamlining the process is likely impossible in the intellectual property context anyway, and so the court might as well use all of the information at its disposal, both subjective and objective.

Using willfulness as the touchstone for qualified immunity has the advantage of making use of a large, ready-made body of existing case law, as willfulness is now commonly asserted in patent cases.⁴⁰² This existing law can be easily adapted to the qualified immunity issue, obviating the need to develop a new body of law to address the issue.⁴⁰³

In most willfulness cases, the key issue has been whether the accused infringer obtained an opinion letter regarding infringement from an attorney.⁴⁰⁴ Accordingly, such opinion letters should also be important in asserting a qualified immunity defense that is based on the willfulness standard. In general, entities will seek such opinion letters as soon as

^{398.} See Harlow v. Fitzgerald, 457 U.S. 800, 815–17 (1982). (discussing the then-prevailing test that incorporated subjective and objective elements); see also 1 COOK & SOBIESKI, supra note 22, ¶ 2.06[B] (discussing pre-Harlow law); CHEMERINSKY, supra note 22, § 8.6.3, at 529–30 (same).

^{399.} See Harlow, 457 U.S. at 814-18.

^{400.} See id. at 814-19.

^{401.} See infra Part IV.C.

^{402.} See generally 7 CHISUM ON PATENTS, supra note 180, § 20.03[4][b], [c].

^{403.} See id. (discussing this body of law and collecting cases).

^{404.} See id. 20.03[4][b][v][C], [D] (discussing the role of opinion letters in willfulness determinations).

they become aware that their conduct may implicate the patent of another. An opinion letter will typically assert that the entity's conduct does not infringe the patent and/or that the patent is invalid (and therefore cannot be infringed).⁴⁰⁵ However, the existence of the letter alone is not sufficient. The letter must be competently prepared (that is, it must be prepared with full knowledge of all relevant facts and it must address all issues relevant to infringement, including infringement under the doctrine of equivalents),⁴⁰⁶ the entity must actually rely on it, and this reliance must be reasonable.⁴⁰⁷ If these conditions are met, then the letter will provide a full defense to willfulness, even if it is later revealed to have been incorrect, and even if, at trial, the entity does not ultimately assert any of the grounds set forth in the letter.⁴⁰⁸

Obtaining and relying on an opinion of counsel from the university counsel's office is therefore an excellent expedient for a researcher who may be infringing a patent and who wants to preserve his or her qualified immunity defense.⁴⁰⁹ However, practical considerations may make this path significantly less useful. Preparing competent infringement opinions is an expensive and time-consuming task.⁴¹⁰ In a large university—where many faculty are each using a wide variety of different, constantly changing, potentially patented techniques—generating all the necessary opinions would be prohibitively expensive.⁴¹¹ Thus, having universal opinion coverage is impracticable, if not impossible. However, opinions could still be prepared in a relatively limited number of cases, such as where a researcher receives a

^{405.} See Marta E. Gross & Emily L. Rapalino, Patent Opinion Basics, 825 PLI/PAT 133, 142–46 (2005) (discussing "Non-Infringement Positions" and "Invalidity Positions").

^{406.} See id. at 153-54.

^{407.} See id. at 152.

^{408.} See, e.g., Ortho Pharm. Corp. v. Smith, 959 F.2d 936, 944 (Fed. Cir. 1992) ("While an opinion of counsel letter is an important factor in determining the willfulness of infringement, its importance does not depend upon its legal correctness. Indeed, the question arises only where counsel was wrong. Rather, counsel's opinion must be thorough enough, as combined with other factors, to instill a belief in the infringer that a court might reasonably hold the patent is invalid, not infringed, or unenforceable."). See generally 7 CHISUM ON PATENTS, supra note 180, § 20.03[4][b][v][D] ("Counsel Opinion Competence Issues").

^{409.} Assuming, of course, that the university counsel's office employs attorneys competent to prepare infringement letters. More likely, the counsel's office would retain outside counsel for the task.

^{410.} See Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law's Willfulness Game*, 18 BERKELEY TECH. L.J. 1085, 1092 (2003) (discussing the high cost of opinion letters).

^{411.} Indeed, given the amount of time necessary to do each opinion properly, the task is also quite likely to be physically impossible.

letter from a patentee putting the researcher on notice of potential infringement liability, or where a researcher's program is built around a single potentially protected technique.

Historically, an attorney opinion was almost a necessity in avoiding a finding of willfulness.⁴¹² Indeed, the Federal Circuit applied a rule that if the infringer did not present an opinion, or indicated that it had such a letter but declined to provide it, the trier of fact was to *presume* that such a letter was unfavorable.⁴¹³ However, the Federal Circuit removed that presumption in 2004 in *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*⁴¹⁴ Thus, opinions of counsel are now less of a necessity for researchers at state universities. Researchers like Dr. Little who have a good-faith belief that they are not infringing a patent, or that the patent is invalid, no longer risk liability simply because the university did not provide an opinion to support that belief.⁴¹⁵ Of course, under the Supreme Court's standard from *Harlow*, their belief must still be reasonable; they just no longer need an opinion to avoid liability.

Such reliance on attorney opinions is not a novel proposition in the qualified immunity context. Several courts have accepted reliance on advice of counsel as meeting the defendant's burden on the "clearly established right" prong of the qualified immunity defense in civil rights cases, ⁴¹⁶ although not all courts agree.⁴¹⁷

b. Willful Infringement in Copyright Cases

A similar analysis applies to suits for copyright infringement, as copyright law also has a willfulness doctrine and concomitant body of case law. In copyright cases, willfulness determinations are generally made in the context of statutory damages, which a successful plaintiff may choose in lieu of actual damages.⁴¹⁸ The statutory damages

^{412.} See Lemley & Tangri, supra note 410, at 1091 ("In patent law, the Federal Circuit has effectively hinged the question of intent on whether the accused infringer obtained and believed a competent opinion of counsel.").

^{413.} See id. ("Failure to obtain such an opinion creates a presumption of willfulness, and failure to disclose an opinion in court after it was obtained creates a presumption that the opinion was unfavorable." (footnotes omitted)).

^{414. 383} F.3d 1337, 1344 (Fed. Cir. 2004).

^{415.} See Gross & Rapalino, supra note 405, at 162-64 (discussing the impact of Knorr-Bremse).

^{416.} See 1 COOK & SOBIESKI, supra note 22, $\P2.09[A]$, at 2-386 to 2-387 & n.11 (collecting cases).

^{417.} See id. ¶ 2.09[A], at 2-386 to 2-387 & n.10 (collecting cases).

^{418.} See 17 U.S.C. § 504(c)(1) (2000) (permitting the copyright owner to elect to recover

provision allows for enhanced damages "where the copyright owner sustains the burden of proving, and the court finds, that the infringement was committed willfully."⁴¹⁹ In practice, the court determines willfulness in a copyright case much the same way as in a patent case:

[O]ne who has been notified that his conduct constitutes copyright infringement, but who reasonably and in good faith believes the contrary, is not "willful" for these purposes. But one who "recklessly disregards" a copyright holder's rights, even if lacking actual knowledge of infringement, may be subject to enhanced damages.⁴²⁰

However, asserting qualified immunity in the copyright context should be much easier than in the patent context. Copyright's well established but poorly defined fair use defense⁴²¹ leaves substantial room for researchers at state universities defending copyright suits to argue that they believed that their teaching or research constituted fair use of the copyrighted material. Even if this belief was misguided, the fair use defense's ambiguous contours will make it difficult for the copyright holder to demonstrate that reliance on the defense was unreasonable and that the accused infringer therefore had the requisite willful intent. Furthermore, the fair use defense has particular power in the academic context, because academic use is one of the canonical categories of fair use as defined in the statute.⁴²² Therefore, a court will likely have a difficult time finding any belief of noninfringement to be so unreasonable as to constitute willful infringement. The fair use doctrine thus makes a qualified immunity defense particularly strong in the copyright context.

statutory damages). One caveat to this rule should be noted: The copyright holder is only entitled to elect statutory damages if the copyright was properly registered prior to the infringement. See 17 U.S.C. § 412.

^{419.} Id. § 504(c)(2).

^{420. 4} NIMMER ON COPYRIGHT, *supra* note 182, § 14.04[B][3][a], at 14-79 (footnotes omitted); *see also id.* § 14.04[B][3][a], at 14-79 to 14-82 (collecting cases, and also discussing the role of opinion of counsel in negating willfulness).

^{421.} Fair use is discussed in more detail supra Part III.B.2.b.

^{422.} See 17 U.S.C. § 107 (fair use applies to "purposes such as criticism, comment, news reporting, *teaching* (including multiple copies for classroom use), *scholarship*, or *research*" (emphasis added)); see also Menell, supra note 13, at 1407 & n.34 (suggesting that qualified immunity might apply to certain types of copyright infringement "for research or educational purposes" and noting that such uses might be justified as fair uses).

C. Problems with Willfulness in Qualified Immunity

However, using willfulness as the touchstone for the qualified immunity defense does have some problems.⁴²³ The most significant problem is that one of the major benefits of an immunity defense is to free the official from having to defend the suit by disposing of it at an early stage. One of the Supreme Court's primary concerns in Harlow v. Fitzgerald was that the subjective prong of the existing test for qualified immunity required an extensive factual inquiry, and was thus unsuited to resolution at an early stage of the proceedings.⁴²⁴ Because the purpose of qualified immunity was to free the official from the need to defend a suit a slow, fact-dependent analysis was contrary to the goals of the defense.⁴²⁵ As the Fifth Circuit noted in Chavez, "This [qualified] immunity is not merely immunity from liability, but is also immunity from suit, and it is effectively lost if a case is erroneously permitted to go to trial."426 The objective standard introduced in Harlow was intended to make the analysis of qualified immunity faster and easier, minimizing harm to the official and disruptions to the government.427

The willfulness doctrine does not lend itself to such rapid resolution, particularly in patent cases. Applying the doctrine is very complex and fact-intensive, and proper assessment of the defense takes time. The process might be simplified and accelerated if its primary basis is an opinion letter of counsel, but even in such cases, establishing that the opinion is competent and covers all the relevant bases is still time-consuming.⁴²⁸ Furthermore, in the context of the litigation, performing the willfulness analysis first typically does not make sense. After all, the researcher can only be guilty of willful infringement if he or she infringed in the first place. A researcher could have the worst opinion letter in the world (or none), and even believe that he or she was infringing, but ultimately if the patent was invalid or the researcher

^{423.} These and other problems with qualified immunity in the intellectual property context lead me to propose an absolute immunity for researchers at state universities accused of intellectual property infringements. *See infra* Part V.

^{424.} See Harlow v. Fitzgerald, 457 U.S. 800, 815-19 (1982).

^{425.} See id.

^{426.} Chavez v. Arte Publico Press, 59 F.3d 539, 547 (5th Cir. 1995) (citation omitted), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000).

^{427.} See Harlow, 457 U.S. at 815-19.

^{428.} Preparation of opinion letters is discussed supra notes 404-11 and accompanying text.

activity non-infringing, then the researcher's conduct cannot be called "willful."⁴²⁹ Of course, a court is free to conduct the litigation in whatever order it sees fit, so it can conduct the willfulness-based qualified immunity analysis first if it appears to be the easiest way to dispose of a particular case.

Ultimately, the complexity of the willfulness inquiry may not present any significant practical difficulties. Despite the Supreme Court's intentions, in practice, civil rights litigation produces a similar result much of the time.⁴³⁰ Many civil rights suits require a significant and time-consuming factual analysis before the court can reach a decision on qualified immunity.⁴³¹ Furthermore, in patent and copyright cases, courts will need to conduct infringement analyses as part of their proceedings under *Ex parte Young* anyway. If a court finds infringement, it can then conduct a willfulness analysis. In this situation, the researcher's position effectively becomes "double (or triple) or nothing"—if the infringement is found to be willful, then the patentee will not only get damages, it will also get enhanced damages; if the infringement is found not to be willful, then the patentee will get no damages because the researcher will be able to assert qualified immunity.

Thus, under current law, researchers at state universities like Dr. Little should be entitled to assert qualified immunity when they are accused of patent or copyright infringement. By analogy to § 1983's standard of official immunity for conduct that "does not violate clearly established statutory or constitutional rights of which a reasonable person would have known," they should be granted qualified immunity when their conduct does not violate a clearly established intellectual property right. Whether such a violation of a clearly established

^{429.} On the other hand, the same argument applies in the civil rights context—it ultimately does not matter whether the law was clearly established if the search was legal in the first place. The issue does not seem to cause any problems there.

^{430.} See Alan K. Chen, The Burdens of Qualified Immunity: Summary Judgment and the Role of Facts in Constitutional Tort Law, 47 AM. U. L. REV. 1, 2-3 (1997) ("This Article examines and criticizes the Supreme Court's paradoxical approach to crafting qualified immunity law, which simultaneously encourages resolution of the defense on summary judgment and shapes the doctrine to ensure an almost inevitable factual inquiry that precludes pretrial termination of civil rights claims.").

^{431.} Cf., e.g., Manion v. Mich. Bd. Med., 765 F.2d 590, 598 (6th Cir. 1985) (holding defendants entitled to assert qualified immunity even though whether it applied could not be resolved on summary judgment), overruled on other grounds by Watts v. Burkhart, 978 F.2d 269 (6th Cir. 1992).

intellectual property right has occurred should be assessed in this context by ascertaining whether the infringement was willful.⁴³²

V. TAKING IT FURTHER: ABSOLUTE IMMUNITY

Most commentators analyzing *Florida Prepaid* have focused on ways to avoid it or limit its effects in order to hold the states liable for their intellectual property rights infringements.⁴³³ In many contexts, particularly where, as in *Florida Prepaid*, the state is competing economically with private entities, this approach makes sense. However, from the perspective of researchers at state universities, this approach appears precisely wrong. Rather than looking for ways to *increase* liability on the states and state actors, we should seek to *decrease* liability for researchers at state universities.

Qualified immunity is an important defense for researchers at state universities accused of patent or copyright infringement. Indeed, it is the best defense current law permits. However, as discussed above in Part III.B.1, its availability in intellectual property cases is not entirely clear. Furthermore, even assuming that qualified immunity is available, it does not go far enough because it will be expensive to assert and will still leave a substantial risk of liability. Therefore, the best approach to the immunity issue is to discard current law entirely and move in a new direction: Rather than limiting researchers at state universities to the relatively limited qualified immunity they are entitled to assert under current law, Congress should change the laws to grant these researchers absolute immunity from liability for infringements committed in the course of their academic research. Such an absolute immunity would help resolve many of the difficulties presented by qualified immunity and, properly limited, it also has the potential to solve certain other doctrinal problems presented by the existing intellectual property laws.

The overarching vision behind such proposed absolute immunity is this: Society *needs* a limited sphere in which those who are not directly motivated by profit can use patented inventions without fear of liability.⁴³⁴ Such a sphere would allow researchers free rein to explore

^{432.} Professor Richard Bone makes a similar point in passing regarding the use of the willful infringement doctrine in the context of qualified immunity, although he places it under an *Ex parte Young* analysis. *See* Bone, *supra* note 164, at 1484.

^{433.} See supra Part I.B.6; see also, e.g., Meltzer, supra note 13; Berman et al., supra note 13; Menell, supra note 13; Neufeld, supra note 114; Cotner, supra note 114.

^{434.} See JOHN P. WALSH, CHARLENE CHO & WESLEY M. COHEN, PATENTS, MATERIAL

the full potential of a patented technology, perhaps taking it in new and unanticipated directions. Freed from fear of infringement liability, researchers might figure out how to apply the protected technology to new questions, or simply work on improving the invention itself, or do something totally unexpected with it. Dr. Little could continue her research into the cloning of agricultural animals without the fear that one of the many companies with a patent on a small step in her protocol might attempt to shut her down at any moment. All of this research would inure to the benefit of the public and thereby improve the common good.

This Part explores the implications of a legislative grant of absolute immunity against intellectual property infringement for researchers at state universities. Part V.A describes the problems presented by the present regime, which at best grants only a qualified immunity. Part V.B then explains how these problems, as well as several other important problems of the present intellectual property laws, would be addressed by granting statutory absolute immunity to researchers at state universities. Part V.C explores the limits of the statutory grant of immunity, concluding that it should be limited to researchers at state universities and not extended to researchers at other types of institutions. Finally, Part V.D examines the possible ways in which such an absolute immunity for researchers at state universities might be implemented, and what the terms of such an immunity should be.

A. Disadvantages of Qualified Immunity

Absolute immunity would solve some of the problems presented by the more limited qualified immunity. First, asserting qualified immunity will obviously require engaging the services of an attorney,⁴³⁵ which can

TRANSFERS AND ACCESS TO RESEARCH INPUTS IN BIOMEDICAL RESEARCH 3-4 (2005), available at http://tigger.uic.edu/~jwalsh/WalshChoCohenFinal050922.pdf ("A key reason for the negligible impact of patents on the conduct of academic biomedical research is that researchers largely ignore them. While such disregard for IP may, for the time being, minimize the social costs that might otherwise emerge due to restricted access, it is still important that the institutional environment maintain a free space for academic research."); NATIONAL RESEARCH COUNCIL, *supra* note 307, at 110 (discussing the problems that patents create for academic research and stating "[w]e believe these circumstances may justify providing some sort of safety valve" for academic research). See generally id. at 108-17 (section entitled "Seven Recommendations for a 21st-Century Patent System").

^{435.} University counsel would be unsuitable for this task, because (1) university counsel is unlikely to have the necessary expertise to try a complex patent case and (2) the counsel's duty is to

quickly become expensive. Although in many cases these fees may be covered by the state through an indemnification clause.⁴³⁶ in other cases they may not be, leaving the researcher in the difficult position of having to pay his or her own very expensive legal bills. Furthermore, even if the state pays for the defense, it will still consume large amounts of the researcher's time, diverting him or her from performing actual research. If the immunity were absolute, however, such a defense would be unnecessary-personal-capacity suits would not be filed in the first place, as they would be inherently unwinnable. Similarly, absolute immunity would solve the problem of having to conduct a full trial to determine whether an immunity defense applied. As the Fifth Circuit observed in Chavez, "[t]his [qualified] immunity is not merely immunity from liability, but is also immunity from suit, and it is effectively lost if a case is erroneously permitted to go to trial."437 Absolute immunity accomplishes exactly that goal, as it can be resolved easily without a trial on the underlying factual issues-it effectively equals immunity from suit.

B. Advantages of Absolute Immunity.

Absolute immunity can also help address some problems created by the intellectual property laws themselves. First, absolute immunity would enhance the information-sharing function of patents.⁴³⁸ Basing the qualified immunity defense on the willfulness of infringement creates the perverse incentive for researchers to embrace a general policy of *avoiding* looking at patents, so that they can maintain their good-faith belief that they do not infringe any patents. Maintaining this belief allows them to assert that any infringement is unintentional, because—as noted above—infringement of an unknown patent cannot be willful.⁴³⁹

the university, such that he or she would be subject to potentially irreconcilable conflicts of interest in attempting to represent researchers at state universities in their personal capacities.

^{436.} See supra notes 211-13 and accompanying text (discussing indemnification).

^{437.} Chavez v. Arte Publico Press, 59 F.3d 539, 547 (5th Cir. 1995) (citation omitted), vacated sub nom. Univ. of Houston v. Chavez, 517 U.S. 1184 (1996), rev'd on remand, 204 F.3d 601 (5th Cir. 2000).

^{438.} See Lemley & Tangri, supra note 410, at 1100–02 & n.45 (discussing the informationdissemination function of patents); see also Johnson & Johnston Assocs. v. R.E. Serv. Co., 285 F.3d 1046, 1071–72 (Fed. Cir. 2002) (en banc) (Newman, J., dissenting) (discussing the informationsharing function of patents and observing that "[i]nformation dissemination is a critical purpose of the patent system").

^{439.} See supra note 388 and accompanying text.

However, one of the main functions of patents is to disseminate information for use by others, and to avoid duplication of work that has already been completed. The patent laws, particularly the § 112 requirements of enablement, written description, and best mode,⁴⁴⁰ are specifically designed to force the patentee to share information with the public as the *quid pro quo* for receiving valuable patent protection.⁴⁴¹ A doctrine that discourages study of all this information contained in patents thus contradicts one of the fundamental functions of patents. Indeed, this criticism has been leveled at the willfulness doctrine as a whole—enhancing damages for willful infringement leads perversely to less knowledge being gleaned from patent disclosures.⁴⁴² Granting absolute immunity would remove this worry, freeing researchers to look at patents and learn from them, thereby saving considerable time, effort, and expense.

Absolute immunity might also help address a more fundamental problem that has crept into modern intellectual property law: the erosion of the public domain. The recent trend in intellectual property law has been, almost without exception, toward strengthening and expanding the rights of intellectual property holders.⁴⁴³ The flip side is, of course, a matching decrease in the rights of the public, and a corresponding impoverishment of the public domain.⁴⁴⁴

^{440.} See 35 U.S.C. § 112 (2000).

^{441.} See supra note 315 and accompanying text (quoting Judge Newman's exposition on this issue in dissent).

^{442.} See, e.g., Lemley & Tangri, supra note 410, at 1100–03. Lemley and Tangri point out that "[a]lthough patent policy presumes that the public learns from patents, the willfulness game creates a strong incentive not to read patents." *Id.* at 1100. Further, "experienced patent lawyers often advise their clients to avoid reading patents in order to avoid liability for willfulness." *Id.* at 1102. Another commentator has also argued that "[d]ue to the Federal Circuit's willful infringement rules, however, many innovators now avoid reading patents to protect themselves from treble damage awards in infringement suits. These rules consequently undermine the disclosure function of the patent system." Note, *The Disclosure Function of the Patent System (or Lack Thereof)*, 118 HARV. L. REV. 2007, 2017 (2005); see also id. at 2017–23.

^{443.} See, e.g., State St. Bank & Trust Co. v. Signature Fin. Group, 149 F.3d 1368 (Fed. Cir. 1998) (formalizing the extension of patentable subject matter to include business methods and computer software); Sony Bono Copyright Term Extension Act, 17 U.S.C. §§ 302–305 (2000) (extending the length of the copyright term from life plus 50 years to life plus 70 years); Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified in scattered sections of 17 U.S.C., 28 U.S.C., & 35 U.S.C. (2000)) (providing penalties for tampering with digital rights management technology); Federal Trademark Dilution Act of 1995, 15 U.S.C. §§ 1125, 1127 (2000) (providing a federal cause of action for dilution of famous trademarks).

^{444.} This subject is discussed extensively elsewhere, and the examples presented in this Article represent only a small sampling of the topic. For an introduction to the topic, see James Boyle,

For example, in the patent realm, the Federal Circuit's decision in *Madey v. Duke University*⁴⁴⁵ severely curtailed the traditional understanding of the contours of the experimental use exemption, declaring illegal a great swath of academic and other non-profit research commonly believed to be permitted.⁴⁴⁶ In assessing Duke University's liability for infringing a patent owned by a scientist formerly employed by the university, the court stated:

In short, regardless of whether a particular institution or entity is engaged in an endeavor for commercial gain, so long as the act is in furtherance of the alleged infringer's legitimate business and is not solely for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry, the act does not qualify for the very narrow and strictly limited experimental use defense.⁴⁴⁷

Furthermore, the range of patentable subject matter has been expanding, first to encompass living matter⁴⁴⁸ and, more recently, to cover areas previously thought ineligible for protection, such as business methods and computer software.⁴⁴⁹ Damages in intellectual property suits have

Foreword: The Opposite of Property?, 66 LAW & CONTEMP. PROBS. 1 (Spring 2003) (introducing and summarizing the articles in a volume dedicated to discussion of the public domain). Professor Boyle also describes the first "Conference on the Public Domain" held at Duke Law School in 2001. See id. at 1-2. A webcast of the conference is archived at http://law.duke.edu/pd/realcast.htm. For a further sampling of the literature, see Glynn S. Lunney, Jr., The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act, 87 VA. L. REV. 813 (2001); Lawrence Lessig, Re-Crafting a Public Domain, 18 YALE J.L. & HUMAN. 56 (2006); LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD (2001); Mary LaFrance, Steam Shovels and Lipstick: Trademarks, Greed, and the Public Domain, 6 NEV. L.J. 447 (Winter 2005-2006); Eileen M. Kane, Patent Ineligibility: Maintaining a Scientific Public Domain, 80 ST. JOHN'S L. REV. 519 (2006); Kevin Outterson, The Vanishing Public Domain: Antibiotic Resistance, Pharmaceutical Innovation and Intellectual Property Law, 67 U. PITT. L. REV. 67 (2005). But cf. Robert P. Merges, A New Dynamism in the Public Domain, 71 U. CHI. L. REV. 183, 183 (2004) ("Many believe intellectual property has overreached, and that policymakers must respond. In this Essay, I argue that the critique may have merit, but private parties are in some cases taking matters into their own hands.").

^{445. 307} F.3d 1351 (Fed. Cir. 2002).

^{446.} See id. at 1362.

^{447.} Id.

^{448.} See Diamond v. Chakrabarty, 447 U.S. 303 (1980).

^{449.} See State St. Bank & Trust Co. v. Signature Fin. Group, 149 F.3d 1368, 1375-77 (Fed. Cir. 1998) (formalizing the extension of patentable subject matter to include business methods and computer software). See generally Robert P. Merges, As Many as Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform, 14 BERKELEY TECH. L.J. 577 (1999) (examining this expansion of patentable subject matter and its negative impact on the Patent & Trademark Office); John R. Thomas, The Patenting of the Liberal Professions, 40 B.C. L. REV. 1139 (1999) (criticizing this expansion of patentable subject matter beyond the traditional

also been growing, increasing the consequences of a finding of infringement and thereby reducing incentives to work at the edges of protected areas.⁴⁵⁰

Another source of erosion of the public domain is the Bayh-Dole Act.⁴⁵¹ Under the Bayh-Dole Act, inventions funded by the federal government, many of which formerly would have fallen into the public domain, are now being patented by universities and other non-profit institutions.⁴⁵² Increased patenting by universities and other research foundations pursuant to Bayh-Dole has accelerated the existing trend of increased patenting in all sectors, a trend further fueled by the expanding range of patentable subject matter.⁴⁵³ In turn, these numerous patents on many small pieces of technology create "patent thickets" that are difficult to navigate, and which might prevent any one user from getting all the rights necessary to put the pieces together to create a useful product or technique.⁴⁵⁴ Indeed, commentators in the field have coined the term "tragedy of the anticommons" to describe the problem that may

technical realm and predicting its further expansion into other non-technical areas); Alan L. Durham, "Useful Arts" in the Information Age, 1999 B.Y.U. L. REV. 1419 (predicting that the expansion of patentable subject matter into the realm of the computer will have the effect of making many other non-technological innovations patentable through their implementation on computers).

^{450.} See MERGES, MENELL, & LEMLEY, supra note 187, at 350 ("The bottom line on patent damages—whether based on lost profits or reasonable royalty—is that they are growing." (citing William O. Kerr & Gauri Prakash-Canjels, Patent Damages and Royalty Awards: The Convergence of Economics and Law, 38 LES NOUVELLES 83 (2003))); see also id. at 347–50 (exploring "four novel theories [that] have been used to increase damage awards in the past several years"); id. at 613 (noting implementation of enhanced damages for "counterfeiting" a copyrighted work); NIMMER ET AL., supra note 182, at 603 (noting the increasing maximum amounts of copyright statutory damages).

^{451.} Bayh-Dole Act, Pub. L. No. 96-517, 94 Stat. 3015 (codified as amended at 17 U.S.C. § 117 and 35 U.S.C. §§ 200-212, 301-307 (2000 & Supp. II 2002)). For a fuller description of the Bayh-Dole Act, its history, and some of its consequences, see generally Pulsinelli, *supra* note 298, and Rebecca S. Eisenberg, *Public Research and Private Development: Patents and Technology Transfer in Government-Sponsored Research*, 82 VA. L. REV. 1663 (1996).

^{452.} See Pulsinelli, supra note 298, at 410; Eisenberg, supra note 451, at 1708–10. See generally, e.g., Thomas A. Massaro, Innovation, Technology Transfer, and Patent Policy: The University Contribution, 82 VA. L. REV. 1729, 1731–32 (1996) (discussing the changes and benefits Bayh-Dole has brought to university research).

^{453.} See Arti K. Rai & Rebecca S. Eisenberg, Bayh-Dole Reform and the Progress of Biomedicine, 66 LAW & CONTEMP. PROBS. 289, 292 (2003) ("The patenting trend accelerated significantly, however, after the passage of the Bayh-Dole Act in 1980.... This almost ten-fold increase in university patenting was significantly greater than the two-fold increase in overall patenting during the same time period" (footnotes omitted)); MERGES, MENELL & LEMLEY, supra note 187, at 123 ("The sheer number of patents being granted has increased roughly threefold in the past 20 years").

^{454.} See Rai & Eisenberg, supra note 453, at 297 (using the term "patent thicket").

arise when too many rights in a particular technology are granted, resulting in the underuse of that technology.⁴⁵⁵ With so many parties claiming rights over pieces of the cloning protocol she is trying to improve, Dr. Little and others in her field are quite likely to find themselves facing just such an impenetrable thicket of patents that threatens to choke off further research.

Similar trends toward expanding intellectual property rights also operate in the copyright area. The repeated extension of the term of copyright protection⁴⁵⁶ has kept many works protected that otherwise would have fallen into the public domain, and thus been available to serve as the raw materials of future works.⁴⁵⁷ Whole new areas of copyrightable subject matter are being added, such as coverage for sound recordings⁴⁵⁸ and architectural works.⁴⁵⁹ At the same time, new rights are being created, such as the digital performance right for sound recordings.⁴⁶⁰ Even works on which protection had lapsed are being

456. The original term of copyright was 14 years, plus the possibility of a renewal term of 14 years, for a possible total of 28 years. The Copyright Act of 1909 extended the term to 28 years, plus the possibility of a renewal term of 28 years, for a possible total of 56 years. The Copyright Act of 1976 further extended the term to life of the author plus 50 years (or 75 years for entity authors). The Sony Bono Copyright Term Extension Act added another 20 years, so the current term is life plus 70 years (95 years for entity authors). See MERGES, MENELL & LEMLEY, supra note 187, at 370–71 (tracing this historic development).

457. See LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY 21-24 (2004) (describing how Walt Disney developed cartoons from previous works available in the public domain; Walt Disney Co. is one of the major driving forces behind the repeated extensions of copyright term).

458. See Sound Recording Amendment of 1971, Pub. L. No. 92-140, 85 Stat. 391 (adding, *inter alia*, the section presently codified at 17 U.S.C. § 102(a)(7) (2000) (establishing "sound recordings" as copyrightable subject matter)).

459. See Architectural Works Copyright Protection Act, Pub. L. No. 101-650, tit. VII, 104 Stat. 5133, 5133-34 (1990) (adding, *inter alia*, 17 U.S.C. § 102(a)(8) (establishing "architectural works" as copyrightable subject matter)).

460. See Digital Right in Sound Recording Act of 1995, Pub. L. No. 104-39, 109 Stat. 336

^{455.} See Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCIENCE 698 (1998). The phrase "tragedy of the anticommons" is a reference to the classic description of the "tragedy of the commons." See id. at 698 (citing Garrett Hardin, The Tragedy of the Commons, 162 SCIENCE 1243 (1968)). Briefly, under the "tragedy of the commons" identified by Professor Hardin, "people often overuse resources they own in common because they have no incentive to conserve." Id. Professors Heller and Eisenberg observe that the converse may also be true, asserting that "a resource is prone to underuse in a 'tragedy of the anticommons' when multiple owners each have a right to exclude others from a scarce resource and no one has an effective privilege of use." Id. Professors Heller and Eisenberg are especially concerned that too many patent rights are being awarded in the biotechnology field, particularly on "upstream" basic research that is needed to feed "downstream" applied research, and that these patents are thus interfering with the progress of research in this area. Id.

removed from the public domain by having their copyrights "restored."⁴⁶¹

One of the biggest sources of erosion in the copyright area, and one that often has direct impact on researchers at state universities, is the Digital Millennium Copyright Act⁴⁶² (DMCA). The DMCA has severely restricted research into certain areas of digital protection because of the fear of liability it engenders.⁴⁶³ For example, Dr. Edward Felten at Princeton University, responding to the invitation of a group that included the Recording Industry Association of America (RIAA), cracked the Secure Digital Music Initiative (SDMI) protection scheme used on digital music recordings. When Dr. Felton attempted to publish his results, RIAA threatened suit under the DMCA.⁴⁶⁴ As many commentators have noted, research into methods for thwarting encryption methods are a very important part of ensuring that such encryption methods are robust.⁴⁶⁵ Granting absolute immunity to

464. See Robin D. Gross, Digital Millennium Dark Ages, http://www.eff.org/IP/DMCA/ Felten_v_RIAA/20011107_eff_felten_article.html (Nov. 7, 2001). Dr. Felten and his team took part in the Hack SDMI Challenge, a public challenge sponsored by the SDMI, a consortium of recording industry and technology companies. See id. The Challenge was aimed at developing ways of circumventing the digital protection methods used on digital music recordings. See id. Dr. Felten and his team successfully cracked the SDMI protection scheme. See id. However, when they desired to publish their work, the RIAA threatened suit under the DMCA, on the grounds that the publication would teach others how to circumvent the copy protection scheme, in violation of § 1201(a). See id. Dr. Felten filed a declaratory judgment suit, alleging that such an action would violate the First Amendment. See id. (citing Felten v. Recording Indus. Ass'n of Am., No. CV-01-2669 (D.N.J. Nov. 28, 2001)). The documents from the case are collected on the EFF web site at http://www.eff.org/IP/DMCA/Felten_v_RIAA/. The RIAA backed down and allowed Dr. Felten and his team to publish their paper. See id. However, the RIAA gave its sanction to only that particular paper; it expressly reserved its right to file suit under the DMCA for any future papers. See id.

465. See, e.g., Joseph P. Liu, The DMCA and the Regulation of Scientific Research, 18

⁽adding, *inter alia*, 17 U.S.C. § 106(6) (granting the copyright owner the right "in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission")).

^{461.} See 17 U.S.C. § 104A ("Copyright in restored works").

^{462.} Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified in scattered sections of 17 U.S.C., 28 U.S.C., & 35 U.S.C.).

^{463.} Briefly, the DMCA prohibits specific acts to circumvent technological measures controlling access to a protected work, as well as creating or trafficking in devices that enable such circumvention. 17 U.S.C. § 1201(a). It also prohibits creating or trafficking in devices that enable circumvention of technological measures controlling use of a protected work, but not specific acts to circumvent such measures. *Id.* § 1201(b). Further, it prohibits the falsification, removal, or alteration of "copyright management information." *Id.* § 1202. For a more thorough discussion of the DMCA and its provisions, see, for example, Neil A. Benchell, *The Digital Millennium Copyright Act: A Review of the Law and the Court's Interpretation*, 21 J. MARSHALL J. COMPUTER & INFO. L. 1 (2002).

researchers at state universities would enable these researchers to carry out this important research into encryption and decryption, without fear of liability under the DMCA.⁴⁶⁶

In a related vein, the DMCA has also operated to prevent what would otherwise be fair uses of copyrighted material that is protected by digital means. Ostensibly in the interest of preserving the fair use of protected works, the DMCA does not prohibit circumventing technical barriers that prevent the use of the protected work⁴⁶⁷ (as opposed to circumventing technical barriers that prevent *access* to the protected work, which is prohibited⁴⁶⁸). However, it does prohibit the manufacture of and trafficking in any tools that would make such circumvention possible.⁴⁶⁹ Thus, while fair use is theoretically preserved, it is available only to those with sufficiently advanced decryption skills that they can break the protection scheme *by themselves*. Any attempt by others to assist with this task—including by publishing a method of doing so—would be a violation of the DMCA.⁴⁷⁰ However, this deficiency could be

BERKELEY TECH. L.J. 501 (2003). Professor Liu explains:

466. Violations of the DMCA are not copyright infringements, even though the relevant portions of the DMCA are codified with the Copyright Act. See MERGES, MENELL & LEMLEY, supra note 187, at 572 ("[V]iolations of the DMCA are not acts of copyright infringement, but separate offenses."). Thus, the proposed absolute immunity statute will have to be drafted to include immunity from violations of the DMCA explicitly.

467. See 17 U.S.C. § 1201(b). This aspect of the DMCA's impact on fair use is discussed in MERGES, MENELL & LEMLEY, supra note 187, at 569-70.

468. See 17 U.S.C. § 1201(a).

469. See id. § 1201(b).

Indeed, according to commentators, the DMCA will actually make encryption technologies more susceptible to such attacks, since copyright owners will not be able to improve their systems using the results of open and legitimate encryption research. That is, by chilling legitimate encryption research, the DMCA will simply drive encryption research into less legitimate channels. Weaknesses discovered by attackers will not be published and reviewed in academic journals or on the Internet. Consequently, individuals and companies will never be confident that any proposed or implemented systems are robust and secure.

Id. at 512; see also Gross, supra note 464 ("In addition to threatening freedom of expression and scientific advancement, the DMCA actually weakens the security of computer products. As any computer security professional will tell you, it is by testing systems and publicly discussing discovered weaknesses that the art of computer security moves forward. In an electronic world that is ever more dependent upon technological measures to maintain the safety and protection of individuals bank, medical, email, and other private information, driving this crucial science underground is dangerously irresponsible, fostering public insecurity.").

^{470.} See id.; see also Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001) (affirming injunction against publication of DeCSS code that permitted computer users to decrypt and use material recorded on DVDs). This problem was also the subject of a bill introduced into the House of Representatives in 2005. See Benefit Authors without Limiting Advancement or Net Consumer Expectations (BALANCE) Act of 2005, H.R. 4536, 109th Cong. (2005).

overcome if researchers at state universities were granted absolute immunity for violations of the DMCA. These researchers would be able to do the research necessary to unlock the encryption schemes and then disseminate the necessary tools so that others can exercise their longstanding right to make fair use of the copyrighted material, a right that the DMCA would otherwise block for all but the most technology-savvy users.

These trends, along with many others, have severely eroded the public domain. Granting researchers at state universities absolute immunity against suits for intellectual property infringement would be an important check on this growth of intellectual property rights. Strong rights are an important source of incentives to create new inventions and new works, but rights that are overly strong diminish the value of these new inventions and works by making them inaccessible for further development and study.⁴⁷¹ Attempting to solve this problem by granting broad freedom to infringe intellectual property rights would likely severely jeopardize future progress. However, creating a *limited* sphere in which infringement is permitted can release some of the growing pressure of increased rights, by allowing important research to proceed in a limited, non-commercial fashion while still preventing widespread commercial infringement.

C. Parties Protected by Absolute Immunity

One reaction to this argument might be that it proves too much—if allowing infringement is so helpful, why not extend it to everyone? That argument, of course, goes too far—intellectual property rights serve important functions in encouraging innovation, and allowing widespread infringement would entirely defeat these functions. Allowing infringement by academic researchers at state universities, on the other hand, is unlikely to have significant impact on intellectual property incentives.⁴⁷² However, a more limited form of this question is more

^{471.} *Cf.* Integra Lifesciences I, Ltd. v. Merck KGaA, 331 F.3d 860, 875 (Fed. Cir. 2003) (Newman, J., dissenting) (observing that disclosure of scientific information for future research is one of the primary purposes of the patent system, and a narrow research exemption that severely limits such future research is inconsistent with this purpose), *vacated*, 545 U.S. 193 (2005).

^{472.} I have explored this ground before, in the context of proposing a limited, non-commercial license to patents on inventions developed pursuant to government research grants. See Pulsinelli, supra note 298, at 442–43. This license would be available to all recipients of such government grants, a category largely comprising researchers at universities and other non-profit institutions, which would thus address many of the same concerns as the proposed absolute immunity, but it

troublesome: Why should researchers at state universities enjoy this freedom, while similarly situated researchers at private universities or other non-profit facilities do not?⁴⁷³

One answer is that non-profit and private university researchers are no different, and should be entitled to this absolute immunity to the same extent as researchers at state universities.⁴⁷⁴ Such an expansion would create an even broader sphere for experimenting with protected technology, which might be a good idea. However, because overexpansion of the sphere might adversely affect the value of intellectual property rights, it is preferable, at least at the outset, to limit the absolute immunity sphere to researchers at state universities.

Furthermore, there are some good reasons for so limiting the sphere. State universities, with their strong oversight and commitment to public education, may be the proper setting in which to implement the absolute immunity policy. State universities are founded with a strong public purpose, particularly educating the state's citizens and undertaking research that benefits them (and, along the way, society as a whole).⁴⁷⁵ Many of the larger state universities—the ones most likely to take advantage of the sphere of absolute immunity—were founded pursuant to the federal land-grant program, which had the express purpose of

would be limited to non-commercial use of the patented technology in research conducted pursuant to such grants. *See id.* In that article, I also explored the reasons that granting such a limited license, to a limited number of basic researchers, would not interfere with the fundamental incentives provided by patents. *See id.* at 446–58.

^{473.} Indeed, this argument might form the basis of an equal protection suit by researchers so situated. Whether such a suit would succeed is beyond the scope of this Article. However, since "researchers not at state universities" is not a suspect classification, Congress would need only a rational basis for passing such legislation. *See, e.g.*, F.C.C. v. Beach Comm'n, Inc., 508 U.S. 307, 313–21 (1993) (describing and applying the rational basis test to Congress's Cable Communications Policy Act of 1984). The analysis that follows suggests such a rational basis.

^{474.} Cf. Volokh, supra note 114, at 1161–62 (observing that Florida Prepaid "generated a firestorm of criticism" and that the criticism "generally rests on a simple and intuitively appealing analogy: If a state agency infringes a copyright or patent, it should be treated no differently from a private entity that infringes a copyright or patent."). Professor Volokh's analysis of this analogy is addressed in more detail supra note 114.

^{475.} See, e.g., Press Release, National Association of State Universities and Land-Grant Colleges, State and Land-Grant Universities Are Powerful Engines for Economic Growth (Aug. 23, 2001), http://www.nasulgc.org/Whatsnew/Press_Releases/Economic_Impact01.pdf ("State and land-grant universities provide major stimulus to their state and regional economies—they generate jobs, attract and help create new high-tech businesses, and increase state tax revenues in addition to providing a well-educated work-force, according to a report released today. 'Shaping the Future – The Economic Impact of Public Universities' is based on a survey of member institutions conducted by the National Association of State Universities and Land-Grant Colleges (NASULGC).").

enhancing the education of state citizens in the military and agricultural arts.⁴⁷⁶ Subsequent legislation expanded that purpose to include cooperative agricultural extension.⁴⁷⁷

Today, America's land-grant universities continue to fulfill their democratic mandate for openness, accessibility, and service to people, and many of these institutions have joined the ranks of the nation's most distinguished public research universities. Through the land-grant university heritage, millions of students are able to study every academic discipline and explore fields of inquiry far beyond the scope envisioned in the original land-grant mission.⁴⁷⁸

Public universities are also subject to strong public oversight, which should help curb any tendency to excesses, particularly incursions into the commercial field.⁴⁷⁹ Such oversight is typically subject to "sunshine"

^{476.} See NAT'L ASS'N OF STATE UNIVS. & LAND-GRANT COLLS., THE LAND-GRANT TRADITION: WHAT IS A LAND-GRANT COLLEGE?, http://www.nasulgc.org/publications/Land_Grant/land.htm.

^{477.} See NAT'L ASS'N OF STATE UNIVS. & LAND-GRANT COLLS., THE LAND-GRANT TRADITION: OF THE LAND-GRANT SYSTEM: 1862-1995, http://www.nasulgc.org/ DEVELOPMENT publications/Land_Grant/Development.htm ("In 1914 the Smith-Lever Act established the system of cooperative extension services to bring people the benefits of current developments in the field of agriculture, home economics and related subjects."); see also Wikipedia, Land-Grant University, http://en.wikipedia.org/wiki/Land-grant_university ("The mission of these institutions, as set forth in the 1862 Act, is to teach agriculture, military tactics, and the mechanic arts, not to the exclusion of classical studies, so that members of the working classes might obtain a practical college education.... The mission of the land-grant universities was subsequently expanded ... to include cooperative extension-the sending of agents into rural areas to help bring the results of agricultural research to the end users.") (last visited Apr. 9, 2007, 16:50 PST).

^{478.} NAT'L ASS'N OF STATE UNIVS. & LAND-GRANT COLLS., *supra* note 476; *see also* Extension Serv., N.D. State Univ., Orientation on the Web, Session 6—The Land-Grant University, http://www.ag.ndsu.nodak.edu/orientation/landgrant/landgrant.htm ("A land-grant university is directed to educate the people of its state and solve problems through academic, research and extension programs.").

^{479.} Professor Peter Menell has extensively analyzed this and other restraints on government infringements of intellectual property rights, and he suggests that these restraints will minimize the practical impact of the *Florida Prepaid* decision. See generally Menell, supra note 13. He observes that states are subject to certain social and bureaucratic restraints that reduce their inclination to infringe. See id. at 1428-36. Of particular relevance are his observations that "[t]he public holds government entities and officials to higher standards of fairness, honesty, openness, and accountability than private actors," id. at 1430, and "[g]overnment entities conduct their activities through public processes," id. at 1431. Furthermore, "[p]ublic employees are typically accountable to a wide range of constituencies," id. at 1431, and "the public sector tends to attract employees who place a higher value on intrinsic rewards, self-sacrifice, and public service than workers in the private sector," id. at 1432. "These [and other] distinctive characteristics of state government suggest that state entities are unlikely to adopt policies encouraging, permitting, or excusing infringement of federal intellectual property rights." *Id.* He does note, however, that "[o]ne area in which social and bureaucratic constraints will probably have less of a dampening effect on state

laws,⁴⁸⁰ so that the public can monitor exactly what advantage is being taken of the absolute immunity. Such oversight will help ensure that research conducted under the protective umbrella of immunity has a legitimate research purpose and does not spill into the competitive commercial realm. Limiting absolute immunity to state universities might also help level the playing field in faculty hiring. State universities typically cannot offer the same pay that private institutions do, and so they often lose out in the hiring process.⁴⁸¹ Absolute immunity for researchers at state universities might give these universities something to offer that the private universities cannot: They can authorize research into protected materials and techniques, without fear of liability.⁴⁸² Thus,

infringement relates to state university research." *Id.* at 1433. Professor Menell also discusses market-based restraints on infringement, *id.* at 1436–38, as well as political restraints, *id.* at 1438–48. *See also* ELEVENTH AMENDMENT INTELLECTUAL PROPERTY REPORT, *supra* note 36, at 25 ("Some state officials we contacted noted that the states have strong policy motivations not to commit intellectual property infringement, as they are governmental authorities committed to protecting and preserving the rights of their citizens."). *But see* Bone, *supra* note 164, at 1499 ("Although it is conceivable that officials internalize a special role morality as government agents with a public trust, it is unlikely that faculty and staff at state universities see themselves as occupying a governmental role or feel especially obligated by virtue of holding a public office."); *see also id.* at 1500 (noting that researchers at state universities often view their infringing conduct as justified and thus are not concerned with the morality of their conduct).

^{480.} STUDENT PRESS LAW CENTER, ACCESS TO STUDENT GOVERNMENT MEETINGS AND INFORMATION (2003), http://www.splc.org/legalresearch.asp?id=69 ("In general, open meetings laws, which are found in all 50 states and the District of Columbia, provide legal authority that allows the public to attend, photograph, record or broadcast the meetings of 'governmental' or 'public bodies'.... [A]Imost all open meetings laws include provisions that apply to the top governing body of a public college-level institution, such as a board of regents. In many of those states whose sunshine laws do not specifically mention colleges or universities, the state's courts or attorney general's office has issued an opinion saying that the open meetings law extends to institutions of higher education."); see also, e.g., TENN. CODE ANN. §§ 8-44-101 to 8-44-108 (2002).

^{481.} See Scott Smallwood, The Price Professors Pay for Teaching at Public Universities, CHRON. HIGHER EDUC. Apr. 20, 2001, available at http://chronicle.com/free/v47/i32/32a01801 .htm (documenting the growing salary gap between research professors at public and private universities); see also Colloquy, The Growing Salary Gap Between Public and Private Universities, CHRON. HIGHER EDUC. April 19, 2001, http://chronicle.com/colloquylive/2001/04/salary/ (discussing the reasons for and implications of this gap).

^{482.} This argument might be seen as analogous to part of the policy behind granting immunity to state officials, which is to ensure that talented individuals are willing to serve in government. See, e.g., CHEMERINSKY, supra note 22, § 8.6.3, at 539. Absolute immunity for researchers at state universities helps ensure that quality researchers like Dr. Little are willing to conduct their research and teaching at state universities, and thus use their knowledge and skills for the benefit of the citizens of that state and society as a whole.

public state universities⁴⁸³ may be the ideal place to create a sphere for the exploration of protected technology.⁴⁸⁴

D. Implementation⁴⁸⁵

Implementing absolute immunity for researchers at state universities would require legislative action.⁴⁸⁶ Although the Supreme Court has been fairly generous in its qualified immunity rulings, it would exceed its authority if it tried to implement an absolute immunity for researchers at state universities. The issue, then, is what provisions such legislation should contain.

The proposed statute should grant absolute immunity from liability for intellectual property infringements to researchers at state universities using patented technology or copyrighted works in the course of their

Menell, supra note 13, at 1447 (footnote omitted).

^{483.} This analysis still leaves a category that is harder to dismiss, which is public/non-state universities such as community colleges, city universities, etc. *Cf.* Meltzer, *supra* note 13, at 1363 ("[A]s local governments have no immunity, one could . . . question why the enforcement strategy should differ if the defendant is SUNY or CUNY."). This category does present a problem, as political subdivisions of a state are typically not entitled to protection under the Eleventh Amendment, and thus researchers at these universities are unlikely to be able to take advantage of any traditional immunities. *See, e.g.*, 1 COOK & SOBIESKI, *supra* note 22, $\P 2.05$ [C]; CHEMERINSKY, *supra* note 22, § 7.4, at 413 ("[T]he Court long has held that the Eleventh Amendment does not bar suits against municipalities or political subdivisions of a state."). However, that result does not suggest that they need also be eliminated from the proposed absolute immunity, which could easily be drafted to cover these researchers as well. In any case, this category is likely to be small, and whether it is included or excluded from absolute immunity likely makes little overall difference.

^{484.} Professor Menell makes a similar point, although with somewhat less enthusiasm:

In view of the multiplicity of institutional constraints upon state infringement of federal intellectual property rights, the *Florida Prepaid* decisions are likely to have more of a symbolic than substantive impact on state policies respecting intellectual property rights. Yet in a few areas—such as the use of patented research methods in basic research conducted at state universities—state institutions may toe and possibly cross the line. Here, the narrow experimental use exception of the federal patent system may undermine innovation by hindering basic research of the type that is the hallmark of university research Although the increasingly commercial character of state university research may alter this assessment, the effect of greater leeway for universities to engage in basic research without concern for patent licensing arguably will have an ambiguous or positive impact on progress in biomedical and other areas of scientific research.

^{485.} In a previous paper, I proposed a limited, non-commercial license to patents on inventions developed pursuant to government research grants. This license would be available to all recipients of such government grants, for use in research conducted pursuant to such grants. See Pulsinelli, *supra* note 298, at 442–74. Because the goals and implementation of that license bear great similarity to the proposed absolute immunity, the following discussion is a condensed analysis of the terms of that license, with reference where appropriate to the fuller discussion provided there.

^{486.} No traditional category of absolute immunity would apply to infringements by researchers at state universities. See supra notes 248-54 and accompanying text.

research. The term "researcher" should be broadly defined to include not only professors and principal investigators like Dr. Little but also postdoctoral fellows, research assistants, graduate and undergraduate students, technicians, and all others who assist in the research project. However, the immunity should extend only to infringements that are committed in the course of the research project, broadly defined.

Immunity should extend to use for non-commercial purposes only.⁴⁸⁷ The point of the immunity is to give researchers the freedom to explore patented technology, not to let them compete directly with commercial entities. However, making this distinction may prove difficult in practice. One possible way to implement it would be in terms of the Patent Act's definition of infringement:

[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.⁴⁸⁸

In general, researchers should need only to use, and in some cases make, the patented invention; offers to sell, sales, or imports of the patented invention will typically not be necessary.⁴⁸⁹ Therefore, the statute should preserve these latter rights in the patentee and not immunize the researcher from liability for performing them. All rights to commercialize the invention should remain with the patentee. The researcher should be immune only insofar as he or she makes or uses the patented invention in the course of a research project at the state university.

Alternatively, the proposed statute might utilize a variant of factor four of the fair use test, which instructs the court to consider "the effect of the use upon the potential market for or value of the copyrighted work."⁴⁹⁰ The statute would then focus the analysis on the actual impact of the infringement on the patentee, rather than on the particular type of act committed. In crafting such a rule, Congress would need to draft carefully to avoid circular reasoning: If the use is not protected as a fair use, then the researcher would need to pay a royalty to use the technology. Therefore, protecting the use as fair would deprive the

^{487.} See Pulsinelli, supra note 298, at 468-73.

^{488. 35} U.S.C. § 271(a) (2000).

^{489.} With some possible exceptions for sharing materials or producing particular pieces of apparatus. See Pulsinelli, supra note 298, at 469-70.

^{490. 17} U.S.C. § 107(4) (2000).

patentee of that royalty. Depriving the patentee of the royalty would have an impact on the market (in the loss of that royalty), and thus the use should be deemed not fair. Under this reasoning, no use can ever be fair, because any use will always deny the patentee a royalty.⁴⁹¹ The statute would have to be clear that the type of economic impact in question is the infringer's usurping the patentee's market, not merely his or her depriving the patentee of a royalty.

However, the prohibition on commercial activity becomes murky when applied in the context of university/industry collaborations and funding agreements. Modern laboratories commonly receive funds from commercial entities, often in exchange for rights in the fruits of the research.⁴⁹² Should such research be immunized because it is performed by researchers at state universities, or should be it not be immunized because its fruits will go, at least partially, to a commercial entity? This auestion is difficult to answer. I suggest that the source of funding should be ignored—in determining whether absolute immunity applies. the only relevant issue should be whether the accused infringer is a researcher at a state university-but with reservations. In many cases, the question is irrelevant, because commercialization of the research will not be covered by the immunity, and the commercialized research will, insofar as it still incorporates the patented technology, need to be licensed from the patentee.⁴⁹³ In other cases, however, the patented invention may be only a step in the research toward creating the commercial technology, without the patented technology being incorporated into the final product, which is more problematic.494 Perhaps this situation could be handled with a compulsory royalty on the

^{491.} The court arguably fell into this circular reasoning in *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913 (2d Cir. 1994). The court was considering whether scientists could rely on the fair use defense when they copied journal articles to assist their research or if they instead needed a license to copy. *Id.* at 914. The court concluded that such use was not fair because copying of journal articles harmed the market for the journal. *Id.* at 929–31. The source of this harm was that, if the copying were not fair use, the journal could have received a royalty fee in exchange for a license to copy—even though whether such a license to copy was necessary was exactly the question it was attempting to answer in the first place. *See id.*; *see also id.* at 938 (Jacobs, J., dissenting) (pointing out the circularity of the majority's reasoning); MERGES, MENELL & LEMLEY, *supra* note 187, at 536 (discussing the circularity in *American Geophysical Union*); SCHECHTER & THOMAS, *supra* note 320, § 10.2, at 228–31 (discussing circularity generally and in *American Geophysical Union*, as well as ways to avoid it).

^{492.} See, e.g., Bone, supra note 164, at 1474-76 (discussing different types of arrangements between state universities and the private sector).

^{493.} See Pulsinelli, supra note 298, at 447-48.

^{494.} See id. at 448-57 (discussing situations in which this is or is not a problem).

sold product.⁴⁹⁵ Furthermore, trying to determine whether immunity applies based on what percentage of funding comes from what source is likely to be difficult in many cases, and will create unnecessary uncertainty.⁴⁹⁶ Finally, because the proposed immunity traces its roots to the Eleventh Amendment,⁴⁹⁷ basing the immunity on the status of the researcher as a state employee, rather than on his or her source of funding, seems more consistent with these roots.⁴⁹⁸

The statutory provision must also be drafted to cover all types of relief in all types of suits. As discussed earlier, researchers at state universities may be sued in their official capacities for injunctive relief⁴⁹⁹ and in their personal capacities for both damages⁵⁰⁰ and injunctive relief.⁵⁰¹ Both injunctions and money damages can significantly harm the researcher, and thus the researchers would need to be immunized against both types of suits.

Immunizing researchers at state universities is also likely to have international implications. The United States is a member of several treaties and other conventions that require member states to maintain a

497. The remaining connection is admittedly somewhat tenuous.

^{495.} See id. at 449 & n.325 (proposing such a solution); see also id. at 423 & n.192 (discussing the issue more generally (citing Janice M. Mueller, No "Dilettante Affair": Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools, 76 WASH. L. REV. 1, 58 (2001), and Katherine J. Strandburg, What Does the Public Get? Experimental Use and the Patent Bargain, 81 WIS. L. REV. 81, 142–46 (2004))).

^{496.} Cf. id. at 473-74 & n.423 (discussing the practical difficulties in basing eligibility for a license on the percentage of funding that comes from the government versus other sources).

^{498.} Professor Robert Bone discusses potential problems that state sovereign immunity creates for university-private sector dealings. See Bone, supra note 164, at 1497–1511. These problems would be worse if researchers at state universities were granted absolute immunity. He views contract law as a partial solution to some of these problems, particularly those problems involving direct relationships between the university and the private sector party. See id. at 1489–91, 1504–11; see also Menell, supra note 13, at 1425–28 (discussing potential use of contract as basis for seeking damages for intellectual property infringements by states); id. at 1437–38 (discussing such contract actions in the context of state universities). However, Professor Bone notes that the possibility of immunized infringement is likely to move some forms of scientific discovery out of the patent system, to be protected instead by secrecy, to the detriment of the scientific enterprise as whole. See Bone, supra note 164, at 1505–08. Detailed analysis of this issue is beyond the scope of this Article, but while the point is well taken, I believe that the effect of this increased secrecy will be somewhat limited, and the previously discussed gains from absolute immunity outweigh this problem.

^{499.} See supra Part II.B.

^{500.} See supra Part II.C.

^{501.} State officials can still be sued in their personal capacities for injunctive relief even if they can claim qualified immunity against suit for damages. *See* CHEMERINSKY, *supra* note 22, § 8.6.3, at 529 ("Qualified immunity exists only as to suits for damages, not as to suits for injunctive relief.").

certain base level of protection for intellectual property, and that restrict their right to make exceptions to this protection.⁵⁰² Granting absolute immunity to researchers at state universities may run afoul of the broad terms of those agreements.⁵⁰³ However, these agreements do contain provisions that authorize certain limited exceptions to the general rules, including one for "public noncommercial use."⁵⁰⁴ Although these provisions are not entirely clear and a complete analysis is beyond the scope of this Article, a cursory review suggests that a limited exception for researchers at state universities would likely fit within these exceptions.⁵⁰⁵ International intellectual property diplomacy is a bigger issue.⁵⁰⁶ The United States is frequently pushing the rest of the world to tighten up their intellectual property regimes, and immunizing some of its citizens for infringement would be inconsistent with those initiatives.⁵⁰⁷ However, if it is strictly limited to the research context, the proposed immunity should present few real problems on this front.

Timing issues are also important, as suddenly immunizing a group of researchers can dramatically change the calculus on the value of a patent, leading to possible takings claims under the Fifth Amendment.⁵⁰⁸ Because a patent is generally considered a strong property right, patentees are likely to resist the sudden imposition of a limitation on who can be sued under the patent by asserting that the change effects a taking of a property right without just compensation.⁵⁰⁹ This concern

506. The problems that state sovereign immunity creates for intellectual property diplomacy are discussed in Menell, *supra* note 13, at 1455–64.

^{502.} See Menell, supra note 13, at 1449-55; Berman et al., supra note 13, at 1173-88.

^{503.} See Menell, supra note 13, at 1449–55; Berman et al., supra note 13, at 1173–88. Both of these articles discuss the problems that state sovereign immunity creates with respect to complying with treaty and international agreement obligations, because foreign patentees now lack a remedy against states. An absolute immunity would, of course, create an even more extreme noncompliance.

^{504.} Menell, *supra* note 13, at 1450. This provision contains notification and compensation requirements that may make fitting the proposed absolute immunity within its terms problematic. *See id.*

^{505.} Indeed, many European nations that are signatories to these treaties and agreements have codified experimental use provisions in their laws. *See* Eisenberg, *supra* note 309, at 1018 n.6 ("The patent laws of many other countries, including Japan and most members of the European Economic Community, recognize an experimental use exemption that is not limited to specific fields of technology."); NATIONAL RESEARCH COUNCIL, *supra* note 307, at 111–112 (discussing the experimental use exemption in other countries).

^{507.} See id.

^{508.} See U.S. CONST. amend. V.

^{509.} As I have noted previously, patent law reform raises some very interesting questions of takings law. See Pulsinelli, supra note 298, at 467 & n.395. Further exposition of this issue is

could be addressed by making the change prospective, applying only to patents filed after the effective date of the legislation. Some disgruntled patentees might still complain that they started the research project based on the expectation of obtaining a patent that would let them sue such researchers, and depriving them of that expectation is a taking of property without compensation. Given the attenuated nature of the harm and the historical experimental use exemption and fair use doctrines, however, such a suit seems somewhat tenuous at best and unlikely to succeed.⁵¹⁰

When I presented this proposal to others, some reacted negatively to what they perceived as the grant of a free boon to researchers at state universities. They suggested one way to make it more palatable was to require, as a *quid pro quo*, that anyone whose work infringes the patents of others forego any patenting of that work.⁵¹¹ While such a proposal has a certain aesthetic appeal, it founders on grounds both doctrinal and practical. From a doctrinal perspective, the vision of a subsidy to researchers is not entirely accurate. While it is true that researchers benefit from immunity from infringement suits, the premise behind the immunity proposal is that society also benefits from having a sphere in which research into patented inventions can take place, without concern over patent infringement.⁵¹² Many interesting and socially valuable results are likely to arise from this limited sphere of freedom, results that might otherwise be prevented by the intellectual property laws. Thus, we grant researchers immunity not to improve their careers but to get valuable research for society, much as we grant patents in the first place

beyond the scope of this Article and is left for future development.

^{510.} A detailed analysis of whether such an argument would be successful is well beyond the scope of this Article.

^{511.} Similar suggestions appear in the literature in conjunction with various proposals to implement a broad experimental use exemption. For example, Professor Rochelle Dreyfuss describes her plan thus:

Under this plan, a university or other nonprofit research institution that wants to use patented material and cannot obtain a license from the patentee on reasonable terms could use the technology without permission if it is willing to sign a waiver. The waiver would require the institution to promptly publish the results of work conducted with the patented technology and to refrain from patenting discoveries made in the course of that work.

Dreyfuss, supra note 309, at 471 (citing Rochelle C. Dreyfuss, Varying the Course in Patenting Genetic Material: A Counter-Proposal to Richard Epstein's Steady Course, in PERSPECTIVES ON PROPERTIES OF THE HUMAN GENOME PROJECT (F. Scott Kieff ed., 2003)).

^{512.} See supra Part V.B.

not to reward research efforts but in exchange for knowledge that is valuable to society.⁵¹³

Furthermore, such a quid pro quo rule runs directly counter to the thrust of the Bayh-Dole Act.⁵¹⁴ The Bayh-Dole Act permits institutions that receive federal funding to patent any inventions that arise from the research and license them commercially, keeping any proceeds.⁵¹⁵ The theory behind the Bayh-Dole Act was that the federal government was spending large amounts of taxpaver money to fund academic research. but it was not receiving much return in the form of consumer products.⁵¹⁶ Congress studied the problem and concluded that the reason for this low conversion rate, at least in part, was the lack of patent protection on the inventions resulting from federally funded research.⁵¹⁷ In the absence of protection, no company had the incentive to invest in converting the invention into a commercial product, because once it successfully created a product, any other company was free to piggyback on the investment, selling its own version of the product at a lower price because it faced much lower research and development costs.⁵¹⁸ In response, Congress passed the Bayh-Dole Act,⁵¹⁹ which permitted researchers who received federal funding to patent and license any resulting inventions.⁵²⁰ Since the passage of the Act, patenting in universities and other federal funding recipients has exploded.⁵²¹ The result is that more government-funded technology is getting into the hands of private industry and thence to the public, and in the process sometimes creating major new revenue streams for the institutions.⁵²²

^{513.} The information-sharing function of patents is discussed supra notes 438-42 and accompanying text.

^{514.} Bayh-Dole Act, 35 U.S.C. §§ 200-212 (2000 & Supp. II 2002). For a more complete description of the Bayh-Dole Act, its history, and some of its consequences, see generally Pulsinelli, *supra* note 298, and Eisenberg, *supra* note 451.

^{515.} See Pulsinelli, supra note 298, at 402-04.

^{516.} See id. at 397-98.

^{517.} See id. at 398-402.

^{518.} See id. at 394.

^{519.} Bayh-Dole Act, Dec. 12, 1980, Pub. L. No. 96-517, 94 Stat. 3015-28 (codified as amended at 35 U.S.C. §§ 200-212 (2000 & Supp. II 2002)).

^{520.} See Pulsinelli, supra note 298, at 402-09.

^{521.} See Rai & Eisenberg, supra note 453, at 292 ("The patenting trend accelerated significantly, however, after the passage of the Bayh-Dole Act in 1980.... This almost ten-fold increase in university patenting was significantly greater than the two-fold increase in overall patenting during the same time period...." (footnotes omitted)).

^{522.} See Pulsinelli, supra note 298, at 410.

Most (though not all) observers view Bayh-Dole as a success and credit it with improving the return on federal investment.⁵²³

Implementing a rule that requires researchers at state universities to forgo patenting of their inventions is inconsistent with the vision behind the Bayh-Dole Act that granting rights in technology is the best way for taxpayers to get a return on their investments in technology research. In the absence of patents, the resulting technology is likely to languish, with no company having sufficient incentive to develop it further. Denying patents to researchers at state universities might thus spark a return to the problems that existed prior to Bayh-Dole, particularly because state universities are such significant recipients of federal funding.⁵²⁴

The quid pro quo rule also presents practical difficulties. For a researcher to know whether he or she is permitted to patent a piece of research, the researcher must know whether he or she infringed any patents in the course of the research. Sometimes, the answer may clearly be yes-the researcher may later learn of a patent that was clearly infringed, or the immunity may have led to knowing infringement. However, in many cases, the issue is not so clear. The researcher may invest considerable money and effort to obtain a patent, only to discover that he or she infringed another's patent along the way and therefore must now dedicate the patent to the public. Or the researcher may appear to infringe a patent, but may have a good argument that in fact the patent is not infringed, either because the claims are invalid or because the research did not infringe the patent claims as properly construed. The only way to determine whether the research did in fact infringe the patent (and was therefore ineligible for patent protection) would be to litigate the issue, which is a time-consuming and expensive course-and the point of granting immunity to these researchers in the first place is to shield them from just this sort of distraction.⁵²⁵ In the meantime, because

^{523.} See id. at 410-12.

^{524.} Of course, not all agree with this analysis. Some commentators believe that the Bayh-Dole Act has been a disaster for research, tying up important research with proprietary rights that prevent further research while providing very little in real returns to the universities. *See generally, e.g.*, Eisenberg, *supra* note 451; Heller & Eisenberg, *supra* note 455. Indeed, as noted above, this tie-up of rights is one of the reasons behind my absolute immunity proposal. *See supra* notes 451–55 and accompanying text. For this group of commentators, anything that thwarts Bayh-Dole is to be praised, not rejected.

^{525.} Furthermore, in the absence of an actual infringement suit (or a threat of suit sufficient to permit the filing of a declaratory judgment action), a judicial opinion on infringement might well run afoul of the case or controversy requirement.

of the statutory filing deadlines for patent applications, the researcher will not be able to wait for the outcome of the litigation and will have to proceed with the patent prosecution process, without knowing if he or she will be able to keep any resulting patent or will be forced to dedicate it to the public. As a consequence, any patent issued to a researcher eligible for the immunity (whether formally exercised or not) will remain under a cloud: The patent will be invalidated if that researcher is ever found to have infringed any patents in the course of the research, because such an infringement would invoke the "no patenting" terms of the *quid pro quo* rule. Also problematic is the case where, halfway through a project, the researcher discovers that he or she has inadvertently used an infringing technique, and at that point switches to a non-infringing technique—should the researcher be permitted to patent the fruits of the research?

These questions demonstrate the great complexity that would be added by a rule that requires forfeiture of patent rights in exchange for immunity from infringement suits. Given the doctrinal difficulties presented above, it hardly seems worthwhile to create a complex statute that can handle these practical difficulties. The immunity inquiry is greatly simplified if researchers at state universities are free to infringe patents in the course of their research, without simultaneously having to wonder whether they are giving up their rights to patent the research.

CONCLUSION

Academic basic researchers, including researchers at state universities like Dr. Little, are increasingly threatened by suits for intellectual property infringement, especially patent infringement. These researchers often believe that such threats are entirely improper because they are completely at odds with the norms of basic research, which require the sharing of materials and techniques in aid of the common grand enterprise of unraveling the secrets of nature. As a partial solution to this problem, those researchers at state universities should, under current law, be able to assert a qualified immunity defense in infringement suits pursued against them in their personal capacities. They should be granted this qualified immunity as long as they had a reasonable, goodfaith belief that their research did not infringe the patents (or copyrights) in question. The best way to test the reasonableness of their belief is to use the existing willful infringement doctrines, so that any infringement that is not willful is excused from liability.

However, the qualified immunity defense as it exists under current law still leaves researchers open to the risk of considerable personal liability, and, potentially, of research-halting injunctions. In order to further the progress of science and free these researchers to make important scientific discoveries, legislation should move beyond the restrictions of current law and should grant researchers at state universities absolute immunity from liability for intellectual property infringements. Such a statutory absolute immunity will create in the state universities a sphere where patented inventions and discoveries (as well as copyrighted works) can be further explored and improved upon, without fear of infringement liability. Creating such a sphere will serve, at least in part, to counter the current trend towards the diminution of the public domain. It will also help break through the "thickets" that may be arising as ever more pieces of the overall research endeavor become ensnared by intellectual property rights. Society should grant these researchers immunity so that we can overcome some of the roadblocks to further research and reap the full rewards of our intellectual property protection system.