Our Sovereignty, Patently: A Historical Perspective on Fitting Patent Rights with State and Tribal Sovereign Immunity

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Abstract

Modern courts recognize state and tribal sovereign immunity defenses asserted against patent lawsuits and IPRs, even while states and tribes can still initiate their own patent lawsuits against private parties. This immunity enables patent arbitrage by local governments in ways unrelated to incentivizing innovation. Tracing the historical conception of popular sovereignty that belongs to We the People, to the growth of state and tribal sovereignties, this Note reviews rationales driving domestic sovereignty as it impacts individual patent rights in the United States, and suggests ways to make domestic sovereignty privileges over patents more consistent with individual rights and Congress's national innovation policy goals.

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Introduction

Not every newly invented drug is a commercial success, but every newly invented drug requires significant investment. The dry-eye drug Restasis was no exception. The Allergan corporation diverted its limited time and manpower into its research for years, not knowing which experiments would be expensive deadends that would never materialize into a real drug. And even if an effective drug were created, the gamble still might not pay off. Only after securing an exclusive patent, FDA approval, and savviness in the cutthroat pharmaceutical market would the new drug turn a profit. Restasis, however, was one of the successful drugs: Exclusive sales ultimately accounted for \$1.5 billion in revenue and 10% of the large pharmaceutical company's annual sales. But the chemical and business formulas now proven, competitors seeking to make Restasis for themselves filed an invalidity challenge against its patents under Inter Partes Review (IPR), an administrative Patent Office proceeding designed to provide private litigants with an alternative to potentially ruinous costs of traditional litigation.

Under the America Invents Act, Allergan's patents should have been subject to IPR: Allergan was a private party, exposed to the same risks and costs applied to every competitor—including the risk and cost of defending its own patents from accusations of invalidity. To be exempt from these ordinary costs would present an unfair market advantage and could only be justified with an exceptional privilege. Attempting to evade their responsibility to answer to IPRs after a challenge had been instituted, Allergan tried to invoke an exceptional privilege: sovereign immunity. By reassigning ownership of its patents to the St. Regis Mohawk Indian tribe in New York, the patents would be generally immune from invalidity suits under tribal sovereign immunity. By September of the same year, Allergan was a mere "licensee," whose tribe-owned patents could not be challenged under IPR. IPR defeated.

The backlash was swift. Within two months, proposed legislation sought to block tribes from asserting sovereign immunity in IPR proceedings.³ While federal policy recognized the sovereignty of Indian tribes insofar as it was consistent with national interests, such as promoting Native American self-governance after a history of institutionalized federal subjugation, subverting national innovation

^{1.} See Joseph A. DiMasi, *The Price of Innovation: New Estimates of Drug Development Costs*, 22 J. HEALTH ECON. 151 (2003) (conducing a survey of random drugs and finding an average pre-marketing-approval R&D cost of \$802 million per drug in 2000 dollars).

^{2.} Marc S. Reisch, *Allergan Seeks Tribe's Help in Patent Dispute*, AM. CHEM. SOC'Y: CHEM & ENG'G NEWS (Sep. 18, 2017), https://cen.acs.org/articles/95/i37/Allergan-seeks-tribes-help-patent.html [https://perma.cc/R6ZR-UXNB].

^{3.} See infra note 161.

policy for local government profit was inconsistent with national interests. Reluctantly granting Allegan's demand to join the tribe as a codefendant, Judge Bryson ominously warned sovereignty ought not be treated as a "monetizable commodity that can be purchased by private entities as part of [a] scheme to evade their [private] legal responsibilities."⁴

But tribes were not the only group strategically using sovereign immunity to dodge patent litigation. State governments had been leveraging their sovereign immunity for years, even intervening in the market to protect favored patent licensees.⁵ Yet when previous legislation tried to limit state sovereign immunity for patent challenges, it was silent about tribal sovereign immunity.

Focusing exclusively on tribal (or state) misdeeds can muddy the underlying problem here, which is not isolated to a single ethnic or political group, but the conflict between domestic sovereign immunity and effective national patent policy. Assertions of domestic sovereignty curtail the rights of accused infringers to challenge invalid patents through IPR, and by curtailing those rights, immunity can challenge the carefully-crafted bargain between inventors and the patent system. But the Constitution originally delegated legal authority to Congress to make normative choices about what patent-based economic incentives best encourage innovation. State and tribal governments, relying on a series of Court decisions that strayed from the original meaning of the Constitution, can now pick patent winners and losers based on self-interest, sometimes at the expense of both individual patent rights and national patent policy. Even the Eleventh Amendment—originally promulgated in accordance with better protecting citizens' individual rights by shielding their state governments from out-of-state nuisance suits—is now used to enable state-sanctioned, out-of-state patent trolling of their own citizens.

This Note reviews how domestic sovereign immunity became so powerful and explores the implications of tribes' and states' use of sovereign immunity to influence the patent system, while highlighting how looking to the original meaning of the Constitution's Intellectual Property Clause and the Eleventh Amendment can provide context and support for patent policy that is more doctrinally consistent and more responsive to both individual rights and national innovation goals.

In Part I, I review the history of domestic sovereign immunity, especially the historical relationship between recognition of sovereignty and the role of governments in protecting individual liberties and privileges. I then explain how a series of controversial court decisions enabled states and tribes to assert new powers, tipping the balance of individual rights in the patent sphere. In Part II, I examine some of the problems that have emerged in the patent jurisprudence as a result of this shift in the presumption of sovereignty, and ways Congress has been thwarted from fixing them. In Part III, I explore a few possible judicial tools and legislative

^{4.} Order Granting Motion to Join Party, Allergan v. Teva Pharmaceuticals USA, No. 2:15-cv-1455-WCB, at *5 (E.D. Tex. Oct. 16, 2017).

^{5.} See infra note 116.

options, that, by hewing closer to the original meaning of the IP Clause and Eleventh Amendment, may be able to help mitigate these problems and better protect individual rights.

I. HISTORICAL BACKGROUND

A. The Framers' Understanding of Popular Sovereignty and State Immunity

A proper understanding of the original scope of state and tribal government power should begin with the backdrop of sovereignty theory in English law. In twelfth-century England, under the theory of absolute divine rights, sovereign power was unlimited, believed to be derived from God, and untethered to consent of the governed.⁶ However despotic, the king's will remained unbridled by any other earthly power and determined both the contours of the law and its execution. In his domain, the king was sovereign.⁷

Initially, the sovereign was not even limited by his own previous acts or promises, and voluntary delegations of powers to lesser authorities could be recalled at his pleasure. By the thirteenth century, however, certain delegations could take the form of more permanently binding law that even the king was not above. Though the king traditionally defined the relationship between himself and lesser nobles, in 1215, a group of barons persuaded the king to be bound by a body of rules and obligations codified in the Magna Carta.⁸ In 1217, the king was persuaded to issue the Charter of the Forest, promising a shared commons by affirmatively enshrining rights and privileges of subjects to hunt, gather wood, and make limited use of the vast forest lands he had claimed.⁹ But both charters still required the affirmative consent of each successive sovereign to retain legal and moral authority against it.

By the seventeenth century, the Crown's power was recognized as being more inherently limited: Absolute power wielded for despotism was fundamentally incompatible with rightful rule.¹⁰ The moral legitimacy of the government's very existence was conditioned on specific responsibilities, like a compact with its

^{6.} See generally Luke Glanville, Sovereignty and the Responsibility to Protect: A New History 37–59 (2013). For discussion on how the concept of sovereignty has changed, see John H. Jackson, Sovereignty – Modern: A New Approach to an Outdated Concept, 97 Am. J. Int'l L. 782 (2003).

^{7.} See 2 William Reynell Anson, The Law and Custom of the Constitution: The Crown 55-67 (1970).

^{8.} See William Sharp McKechnie, Magna Carta: A Commentary on the Great Charter of King John with an Historical Introduction 107-08 (1914).

^{9.} See The Charter of the Forest of King Henry III, http://info.sjc.ox.ac.uk/forests/Carta.htm [https://perma.cc/54QE-DBHS].

^{10.} See generally 1 WILLIAM BLACKSTONE, COMMENTARIES *1 at *271 (describing the Proclamation by the Crown Act 1539, which tried to expand the legal scope of the King's rightful power, as incompatible with natural law). "[A] statute, which was calculated to introduce the most despotic tyranny; and which must have proved fatal to the liberties of this kingdom, had it not been luckily repealed." *Id.*

subjects.¹¹ Further, the resolution of the English Ciavil War established that the king cannot govern at all without the consent of Parliament. In turn, the source of the power of the representative body in Parliament originated from *more* than mere voluntary delegation from the Crown's sovereignty, but from the people themselves. Locke postulated that *natural* rights existed, endowed by God to all people even in the absence of a state or sovereign, which it was the role of rightful government to help secure. The Bill of Rights 1689, reflecting these ideas,¹² accordingly limiting the Crown's power by conditioning the legitimacy of its sovereignty on the consent of the governed.¹³

At the time of the American Revolution, the Founders justified their revolt on the grounds that the English Crown systematically abused the natural rights of the American colonies. ¹⁴ By so severely trampling the rights of the people, the king had effectively ceded authority to rule back to the people. ¹⁵ Under this consent theory, the moral justification for government to secure the people's natural rights by acting as their agents. As explained by Randy Barnett, "first come rights, then come government." Our state and federal governments "deriv[ed] their just powers from the consent of the governed" —limited powers to act as agents for "We the People" and to the extent that the notion of sovereignty rested with anyone, it was with "the people." Natural rights, as postulated by Locke, are retained by the people as *individuals* rather than granted by state and

^{11.} See, e.g., GLANVILLE, supra note 6, at 58–59.

^{12.} See J.W. GOUGH, FUNDAMENTAL LAW IN ENGLISH CONSTITUTIONAL HISTORY 192–95 (1955) (discussing English sympathy for the American/Lockean construction of natural sovereignty belonging to the people, which differed from the dominant doctrine of parliamentary sovereignty inherited from the Crown); see generally Lois G. Schwoerer, Locke, Lockean Ideas, and the Glorious Revolution, 51 J. HIST. IDEAS 4, 531–38 (1990).

^{13.} See generally AW BRADLEY ET AL., CONSTITUTIONAL AND ADMINISTRATIVE LAW 12–19 (13th ed. 2003) (discussing generally at the legislation from 1215 that shaped the boundaries of constitutional law away from the Crown); *id.* at 45–59 (discussing parliamentary supremacy); *id.* at 55–59 (discussing the generally unlimited powers of parliament).

^{14.} See The Declaration of Independence para. 3 (U.S. 1776).

^{15.} The rights "reverted" back to the people because natural rights originated from the people. Rights are surrendered by the people as a social contract, in order to form a majoritarian government to protect these liberties from overreach by others. *See* RANDY E. BARNETT, RESTORING THE LOST CONSTITUTION: THE PRESUMPTION OF LIBERTY (rev. ed. 2014).

^{16.} See id. at 78.

^{17.} See The Declaration of Independence para. 3 (U.S. 1776).

^{18.} See generally DAVID SCHMIDTZ, THE LIMITS OF GOVERNMENT: AN ESSAY ON THE PUBLIC GOODS ARGUMENT (1991) (discussing theories for moral justification of the state, and how that informs to what extent states should be justified in their ability to infringe liberties with coercion to solve problems like holdouts and free riders).

^{19.} See Randy E. Barnett, The People or the State?: Chisholm v. Georgia and Popular Sovereignty, 93 VA. L. REV. 1729, 1730 (2007) (arguing that Chisholm is consistent with the Eleventh Amendment, as well as the broader, pre-Carolene Products individualist conception of popular sovereignty). Professor Barnett argues that the current, post-Hans use of the Eleventh Amendment to immunize states from citizen suit is inconsistent with the original public meaning and underlying philosophy of the Constitution and Declaration of Independence. Id.

federal governments.20

The Constitution's text reflected the Framers' view of popular sovereignty. The Ninth Amendment mirrored Locke's language of retained rights, acknowledging the people as ultimate sovereigns who had granted the government limited power. Additionally, Article III apparently recognized that state sovereign immunity was limited in at least two respects. First, "Citizens of another State" could sue states in federal court. Second, federal judicial power "extend[ed] to all Cases . . . arising under" federal law, without any exemption for citizen suits against a state.

Within less than a decade of ratification, the Founding Generation walked back part of Article III and granted the states limited immunities. In 1793, the Supreme Court in *Chisholm v. Georgia* rebuffed Georgia's assertions of sovereign immunity from a suit between the State and the citizen of another state.²⁴ This holding following the text's literal meaning—that federal, judicial power extended to cases between "a State and Citizens of another State." Wishing to prevent *Chishom* suits, in 1794, Congress proposed the Eleventh Amendment, which would empower states to assert immunity from "Citizens of another State" in federal court.²⁶

While the Amendment eliminated specific types of suits, doing so was consistent with consent theory and popular sovereignty. It did not hold that Chisholm was "wrongly decided."²⁷ States needed power to perform their duties to its citizens.²⁸ But rather than heralding a change in the origins of sovereignty, specific protections like the Eleventh Amendment were consistent with the Framers' understanding of the original meaning of "retained" individual rights arising from sovereignty retained by "the people."²⁹ Like kings once ceded authority to lesser nobles by compact, states received an additional power via constitutional amendment. Far from it standing for a blanket immunity as later reimagined,³⁰ this amendment facially applied only suits against a state commenced by "Citizens of another State," or by "Citizens or Subjects of any Foreign State."³¹

^{20.} See BARNETT, supra note 15, at 69–73, for more on Locke's conception of natural rights, and discussion by Madison of how entering society involves giving up some of these rights.

^{21. &}quot;The enumeration . . . of certain rights, shall not be construed to deny or disparage others retained by the people." U.S. CONST. amend IX (emphasis added).

^{22.} See U.S. Const. art III, § 2.

^{23.} Id.

^{24. 2} U.S. (2 Dall.) 419, 429 (1793).

^{25.} See U.S. Const. art III, § 2; Barnett, supra note 19, at 1745–47.

^{26. &}quot;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." U.S. CONST. amend XI.

^{27.} See Barnett, supra note 19, at 1745–47.

^{28.} States' duties included, in part, protecting the liberties of its people and resisting federal tyranny. See discussion of KY and VA Resolutions, *infra* text accompanying notes 131–132.

^{29.} See Barnett, supra note 19, at 1748-49.

^{30.} See discussion of Hans and Seminole Tribe infra pp. 597-600.

^{31.} U.S. CONST. amend XI.

Historical scholarship also indicates that the original public meaning of the amendment was understood at the time to grant precisely the *limited* immunity that the text specified.³² Importantly, the Eleventh Amendment said nothing to limit suits by citizens of a state against their home state. Thus, the Amendment left untouched Article III's grant of judicial power over "all cases ... arising under" federal law, at least insofar as those cases were brought by a citizen against its home state.

B. The Recognition of Immunity Arising from State Sovereignty

A series of Court decisions reinterpreted the Eleventh Amendment, adopting different theories of sovereignty to give states increasingly more immunity from individual and federal influence. Just ninety-six years after the Eleventh Amendment was ratified, the Court asserted in *Hans v. Louisiana*³³ that the Eleventh Amendment was not just a narrow rebuttal of the type of undesirable litigation in *Chisholm*. Instead, the Court read the Amendment as providing states with immunity from suits brought by its *own* citizens. Rather than following the text, the Court focused on uncovering the underlying *intent* of the Framers or Ratifiers of the Eleventh Amendment.³⁴ And because suits by citizens against their own state were "anomalous and unheard of when the constitution was adopted," the Court concluded that such suits were not "intended to be raised up by the constitution."³⁵ The Court reasoned that the Amendment had been intended to promulgate a shift in the fundamental role of the state: States had not been granted limited sovereignty in order to be immune—they were broadly immune because they had been *made* sovereigns.³⁶

Although this "original intent" originalism has since come to be disparaged by scholars, ³⁷ *Hans*' original intent-based holding was embraced into the late twentieth

^{32.} See John F. Manning, The Eleventh Amendment and the Reading of Precise Constitutional Texts, 113 YALE L.J. 1663 (2004) (examining the text and legislative history of the Eleventh Amendment to show the specificity of the rights being protected, such as the careful inclusion of foreign citizens while excluding immunity from a state's own citizens); id. at 1744 (discussing particularly how two justices in Chisholm concluded that "state sovereign immunity was flatly incompatible with the premises of our republican form of government"). See also Barnett, supra note 19, at 1743 (discussing same).

^{33. 134} U.S. 1 at 15 (1890).

^{34.} *Id.* at 18–19 (arguing that the idea of citizens suing their own states was unheard of in the 1790s, and thus that the Eleventh Amendment was meant to stop all suits). *See also* Edward A. Purcell, Jr., *The Particularly Dubious Case of Hans v. Louisiana: An Essay on Law, Race, History, and Federal Courts*, 81 N.C. L. Rev. 1927, 1952–53, 2056–59 (2003) (analyzing the historical context of *Hans*, arguing that *Hans*' sovereign immunity was contrary to even the original intent of the Framers and reflected post-Reconstruction judicial prejudices, and concluding that *Hans* ought to be removed from canon).

^{35. 134} U.S. at 18.

^{36.} See 134 U.S. 1, 15.

^{37.} See generally Barnett, supra note 19, at 1747–49 (discussing the advantages of an "original public meaning" interpretation of the Constitution and showing how reliance on "original intent" interpretations would distort rather than adhere to the public meaning of the text); Randy E. Barnett, Underlying Principles, 24 CONST. COMMENT. 405 (2007) (disambiguating original public meaning originalism from other approaches); Paul Brest, The Misconceived Quest for the Original Understanding,

century. For example, *Pennsylvania v. Union Gas Co.*³⁸ held that Congress could abrogate state sovereign immunity, relying on *Hans* with the proposition that states had limited sovereign immunity because they had relinquished some pre-existing sovereignty they had in order to form the federal government.³⁹ But seven years later in *Seminole Tribe v. Florida*, the Court rejected the narrative of states relinquishing sovereignty as a "misreading of precedent,"⁴⁰ and expanded upon *Hans*⁴¹ to hold that states, as sovereigns, are generally immune from even congressional intervention.⁴²

Although the specific holding in Chisholm was overruled by the Eleventh Amendment, Seminole Tribe diverged from the analysis of popular sovereignty explicated in *Chisholm* and shared by the Founders. ⁴³ Congress had passed a law that expressly abrogated state immunity if the state refused to negotiate in good faith during certain rulemaking proceedings over tribal activity. 44 When the tribe sued, the Court held the statute a violation of the Eleventh Amendment, concluding that Congress could not compel states (or states' officials) to submit to suit under its Article I powers.⁴⁵ The majority reasoned the Framers never intended the Constitution to abrogate pre-existing state sovereignty, 46 reframing *Chisholm* as "contrary to the well-understood meaning of the Constitution." According to the Court, the immunity captured in the Eleventh Amendment flowed from the "jurisprudence in all civilized nations" rather than from common law that was superseded by the Constitution. 48 Seminole Tribe described a "settled doctrinal understanding" that "sovereign immunity derives not from the Eleventh Amendment but from the structure of the Constitution itself."⁴⁹ Accordingly, courts have now come to view Seminole Tribe even more broadly, as standing for

60 B.U. L. Rev. 204, 209–217 (1980) (discussing generally how original intent originalism is incoherent and impracticable).

- 40. Seminole Tribe of Florida v. Florida, 517 U.S. 44, 65 (1996).
- 41. Id. at 64, 69 (1996).
- 42. A notable exception to broad state sovereignty exists in cases arising under § 5 of the Fourteenth Amendment. *But see* Fitzpatrick v. Bitzer 427 U.S. 445 (1975) (holding that states cannot assert sovereign immunity from suits arising under § 5); Tennessee v. Lane, 541 U.S. 509, 518 (2004); Pennington Seed, Inc. v. Produce Exch. No. 299, 457 F.3d 1334 (Fed. Cir. 2006).
 - 43. See Barnett, supra note 19, at 1742, 1751.
- 44. Florida refused to "negotiate with the Indian tribe in good faith" for gaming regulations. *Seminole Tribe*, 517 U.S. at 48.

- 46. See Seminole Tribe, 517 U.S. at 69.
- 47. Id. at 69.
- 48. Id. Contra Barnett, supra note 19, at 1742.
- 49. Alden v. Maine, 527 U.S. 706, 728 (1999).

^{38. 491} U.S. 1, 22–23 (1989) (holding that Congress could abrogate state sovereign immunity under its commerce clause powers).

^{39.} *See id.* at 19 (quoting Monaco v. Mississippi, 292 U.S. 313, 322–23 (1934)) ("States enjoy no immunity where there has been 'a surrender of this immunity in the plan of the convention."). For more on "plan waivers," see Melvyn R. Durchslag, State Sovereign Immunity: A Reference Guide to the United States Constitution 99–104 (2002).

^{45.} For more on how *Seminole Tribe* limited *Ex Parte Young* to situations where Congress had not provided *any* other remedial scheme, see Nathan C. Thomas, *Withering Doctrine of* Ex Parte Young, 83 CORNELL L. REV. 1068, 1088–89 (1998).

the proposition that Congress may not "utilize its Article I powers to elicit a waiver of sovereign immunity as a condition for participating in a field subject to congressional regulation"⁵⁰

Three years after *Seminole Tribe*, the Court further restricted Congress's powers in *Florida Prepaid v. College Savings Bank*.⁵¹ There, the Court struck down the Patent and Plant Variety Protection Remedy Clarification Act (PPVPRCA), a statute which barred states from claiming sovereign immunity against patent infringement suits.⁵² Arguing that the statute had "identified no pattern of patent infringement by the States, let alone a pattern of constitutional violations," the Court concluded that "the record at best offers scant support for Congress' conclusion that States were depriving patent owners of property without due process of law by pleading sovereign immunity." The majority held that the statute's "indeterminate scope" was insufficiently congruent with the alleged wrongful conduct, "particularly . . . in light of the scant support for the predicate unconstitutional conduct that Congress intended to remedy." States are constitutional conduct that Congress intended to remedy."

What we might call the "heightened congruence" requirement adopted by *Florida Prepaid* was not without problems. ⁵⁶ The Court had previously invented limits on legislative discretion to curtail state sovereign immunity. For example, in *Atascadero State Hospital v. Scanlon*, the Court required the legislature to present a "clear statement" that the law was intended to limit state sovereign immunity before it would interpret a law as doing so. But in *Florida Prepaid*, even while it was "abundantly clear that Congress was attempting to hurdle the thenmost-recent barrier" the Court had imposed, ⁵⁷ the statute was struck down by introducing a new heightened congruence requirement. Not only was it "unfair," Stevens argued, but by forcing Congress to adhere to a heightened congruence standard not based on precedent or plain text, and in light of other requirements piling barrier after barrier, the Court sowed uncertainty as to what

^{50.} College Savings Bank v. Prepaid Postsecondary Educ. Expense Bd., 948 F. Supp., 400, 416 (1996).

^{51.} Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank, 527 U.S. 627, 645–48 (1999).

^{52.} See Fla. Prepaid, 527 U.S. at 652, 662.

^{53.} Id. at 640.

^{54.} *Id.* at 646.

^{55.} Id. at 647.

^{56.} I use the term heightened congruence here to distinguish from the "congruence and proportionality between the injury to be prevented or remedied and the means adopted to that end" described in *City of Boerne v. Flores*, which the dissent argues is satisfied here. *Id.* at 662 (Stevens, J., dissenting).

^{57.} *Id.* at 654 (Stevens, J., dissenting) (discussing the "clear statement" test promulgated 14 years earlier in Atascadero State Hospital v. Scanlon). *See also* Pennsylvania v. Union Gas, 491 U.S. 1, 45 (White, J., concurring) (reiterating the desire for "unmistakable language in the statute" of Congressional intent, per *Atascadero*); Chew v. California, 893 F.2d 331, 334–35 (1990) (holding that states are able to assert sovereign immunity from patent infringement because congressional intent to abrogate sovereign immunity was not "unmistakably clear").

^{58.} Id. at 654.

Congress must do when it wants to limit state sovereign immunity.⁵⁹ Instead, the dissent argued there was "precise congruence" between the means and ends⁶⁰: Congress's committee report had clearly warned that states were already actively and "heavily involved in the federal patent system"⁶¹—every state receiving patents, universities receiving thousands of patents and hundreds of millions in patent royalties each year—and concluded that state patent infringement was likely to increase.⁶² The majority held this evidence was not convincing enough to justify abrogation of state sovereign immunity for patent cases.⁶³ That is, absent convincing evidence, states would be presumed able to rely on their state sovereign immunity without abridgement, even against the individual rights of patent owners.

Thus, in contrast with the presumption of individual liberty and sovereignty belonging to the people that was elucidated by the Founders, after *Florida Prepaid*, individual patent rights could be curtailed by state infringement or intervention, and Congress would be unable to stop the states from infringing, except in limited circumstances. However, as these cases shifted the presumption of sovereignty away from "We the People," patent rights have been further curtailed by assertions of tribal sovereign immunity.

C. A Brief Review of Native American Tribal Sovereignty

Like states, Native American tribes have recently been asserting increasingly bold sovereign immunity powers over patent suits. But focusing on only controversial tribal patents practice can obscure the role of Congress to decide the relative balance of patent rights against state and tribal powers, particularly when they share overlapping territories: Changing the relative scope of tribal sovereignty can impact state power, and vice versa. To better understand how individual liberties could be protected by tribal sovereignty, and where tribal

^{59.} In particular, the dissent was concerned about the state of Congress's ability to pass prophylactic legislation under § 5 of the Fourteenth Amendment. *Id.* at 660 ("The full reach of that case's dramatic expansion of the judge-made doctrine of sovereign immunity is unpredictable; its dimensions are defined only by the present majority's perception of constitutional penumbras rather than constitutional text.").

^{60. &}quot;There is precise congruence between 'the means used' (abrogation of sovereign immunity in this narrow category of cases) and 'the ends to be achieved' (elimination of the risk that the defense of sovereign immunity will deprive some patentees of property without due process of law)." *Id.* at 662. In *City of Boerne v. Flores*, the Court required a more deferential congruence requirement of "precise congruence." 521 U.S. 507 (1997) (striking down federal RFRA law as applied to states, and holding that for Congress to pass prophylactic or remedial legislation under § 5 of the Fourteenth Amendment, it needs to show "congruence and proportionality" between the violation and the means to address it). *See also Fla. Prepaid*, 527 U.S. at 660–63 (discussing how the *Fla. Prepaid* majority's analysis is inconsistent with *City of Boerne* because "[n]one of the concerns that underlay our decision" in *Boerne* "are even remotely implicated in this case"—the RFRA Act in that case demanded major changes to the meaning of the First Amendment, while here there was "no impact whatsoever on any substantive rule of law").

^{61.} Fla. Prepaid, 527 U.S. at 657.

^{62.} Id. at 656.

^{63.} Id. at 640.

sovereignty fits into Congress's balance between patent rights and policy interests in supporting different domestic sovereignties, a brief review of the history of tribal sovereignty is provided.

Before European colonization, "from time immemorial," indigenous tribes were the undisputed sovereigns of the Americas.⁶⁴ Even as tribes were displaced westward by European colonization, the British government recognized that the scope of tribal sovereignty was limited only by its geographic borders, like with any foreign sovereign.⁶⁵ Tribes were not party to the Convention.⁶⁶

But as state and federal borders expanded through the nineteenth century, tribal "sovereignty" became increasingly limited, even on tribal land. In *Johnson v. M'Intosh*, the federal government issued a land grant to seize property that Johnson had owned for almost fifty years.⁶⁷ The government successfully argued the old title was invalid because it had originally been obtained from the Native American tribes that owned the land.⁶⁸ By holding that only the federal government could issue valid letters patent, the Court invalidated land sales by *all* Indian tribes. The tribes had lost their sovereignty, it reasoned, even over remote western lands, through conquest, and retained a mere "right of occupancy" that could be later extinguished by the superior sovereign.⁶⁹

By the early twentieth century, lands owned by tribes had been reduced to the status of "Indian Country": Tribes enjoyed self-government rights only by the assent of Congress. Since the early 1820s, courts, Congress, and administrative agencies had imposed an extensive body of rules defining the rights and immunities of tribes and its officials. The scope of this created "sovereignty" ebbed and flowed under different implementations of the thousands of federal regulations granting and limiting tribal government. While Native Americans fared

^{64.} *See also* Worcester v. Georgia, 31 U.S. (6 Pet.) 515, 559 (1832) (establishing Indian tribes as "distinct, independent political communities, *retaining their original natural rights*, as the undisputed possessors of the soil, from time immemorial; with the single exception of that imposed by irresistible power" of European colonists that abridge their lands (emphasis added)).

^{65.} See Joseph D. Matal, A Revisionist History of Indian Country, 14 ALASKA L. REV. 283, 289–91 (1997) (discussing the history of Indian sovereignty, particularly the initially fixed idea of Indian sovereignty that shifted only through change in borders, as recognized by statute).

^{66.} This point was later emphasized in cases reaffirming tribal sovereignty. *See* Blatchford v. Native Village of Noatak, 501 U.S. 775 at 782 (1991) (discussing how neither tribes nor states surrendered immunity to each other in forming the Federal government).

^{67.} See Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543, 550-55 (1823).

^{68.} Id. at 550-55.

^{69.} *See also* Cherokee Nation v. GA, 30 U.S. (5 Pet.) 1, 1, 10 (1831) (holding that the Cherokee "are a State" but less than full sovereigns—a dependent nation whose "relations to the United States resemble that of a ward to his guardian").

^{70.} See, e.g., Michigan v. Bay Mills Indian Community, 134 S. Ct. 2024 at 2035 ("As this Court has stated before, analogizing to Ex Parte Young... tribal immunity does not bar such a suit for injunctive relief against individuals, including tribal officers, responsible for unlawful conduct."). See also Big Horn County Elec. Coop. v. Adams, 219 F.3d 944, 954 (9th Cir. 2000) (holding acceptable an injunction on tax collection, but not to order the tax refunded from the tribe after it was mixed into its treasury). Also see analogous holding for state sovereignty in, e.g., Scheuer v. Rhodes, 416 U.S. 232, 237–38 (1974) (discussing how money damages against an official do not violate sovereign immunity, as long as the damages are attributable to the officer, and not paid from the state treasury).

better under a sympathetic administrator and increased self-governance from the early to mid-twentieth century, overall, federal management into the mid-1970s had been "an economic, social and cultural disaster" for the tribes, which has only come to be more fully addressed in recent years by increased tribal autonomy to self-rule.

But the contours of tribal sovereignty defined by the regulations and legislation are ultimately Congress' prerogative. For example, the Court affirmed in *Kiowa Tribe v. Manufacturing Technologies* that tribal sovereignty can be abrogated by congressional authorization, but not unilaterally by courts.⁷³ Decided two years after the Court affirmed state sovereignty in *Seminole Tribe*, *Kiowa* upheld the tribal sovereign immunity defense even when the tribe and its officials might be acting on non-tribal land. It was "Congress' role [to] reform[] tribal immunity"—its unique position "to weigh and accommodate the competing policy concerns and reliance interests." In other words, the Court opined, "It is fundamentally Congress's job, not ours, to determine whether or how to limit tribal immunity."

Further deferring to Congress to articulate where tribal sovereignty is curtailed, the Court confirmed a presumption of tribal sovereignty in *Michigan v. Bay Mills Indian Community*. Although tribal sovereignty, unlike state sovereignty, is that of "domestic dependent nations" that are "subject to the will of the Federal Government" to some extent—the Court reaffirmed that, like states, tribes retain "inherent sovereign powers" to assert immunity. Accordingly, the Court emphasized, any congressional abrogation needed to be "unambiguous" and

^{71.} See Felix S. Cohen, The Erosion of Indian Rights, 1950–1953: A Case Study in Bureaucracy, 62 YALE L.J. 348, 348, 352 (1953) (detailing many rights of Native Americans on Tribal land, and how they are curtailed by the more than 2200 Federal regulations issued by the Commissioner for Indian Affairs); id. at 348–52 (discussing quantifiable improvements to economic and social conditions under a sympathetic Administrator and protections of rights by legislation and judicial decisions). See also FELIX S. COHEN, HANDBOOK OF FEDERAL INDIAN LAW (1958).

^{72.} Joseph P. Kalt & Joseph William Singer, *Myths and Realities of Tribal Sovereignty: The Law and Economics of Indian Self-Rule*, (John F. Kennedy School of Business Faculty Research Working Papers No. RWP04-016, 2004), https://scholar.harvard.edu/files/jsinger/files/myths_realities.pdf [https://perma.cc/6KDQ-J6U3]. The authors discuss the history and (expensive) failures of federal management, and emphasize how tribal self-rule promises positive economic benefits to both local and tribal governments, while also respecting the government's legal and moral obligations to the tribes.

^{73.} Kiowa Tribe v. Mfg. Techs., 523 U.S. 751, 760 (1998) (holding that tribes may claim sovereign immunity in state court, even for governmental or commercial activity, and whether or not the activity occurs on or off tribal property, unless Congress has abrogated the sovereignty).

^{74.} Id, at 758–59.

^{75.} Michigan v. Bay Mills Indian Community, 134 S. Ct. 2024, 2037 (2014).

^{76.} *Id*, at 2039 (holding that tribes may claim sovereign immunity against a state in federal court when Congress has not explicitly abrogated the tribal immunity: "We will not rewrite Congress's handiwork").

^{77.} Id. at 2039.

^{78.} Id. at 2039.

^{79.} Id. at 2027.

"must be clear. The baseline position . . . is tribal immunity." In *Bay Mills*, the statute abrogated immunity only on tribal land, but the tribe successfully argued that tribe-owned land was not "tribal land," and thus not anticipated. 81

But the presumption of tribal immunity can challenge state governance. Dissenting in *Bay Mills*, Justice Thomas characterized the holding as an unauthorized judicial expansion of tribal sovereignty. Recognizing that concurrent sovereign powers in the same territory can be countervailing, and an increase of one amounts to a decrease in another, he characterized the unauthorized increase in tribal powers as "an affront to state sovereignty." Joining Justice Thomas, but going further in his own dissent, Justice Scalia recommended reversing *Kiowa* as wrongly decided, "its error has grown more glaringly obvious," and concluded that even "*stare decisis* does not recommend its retention."

Today, expanding or limiting one type of domestic sovereignty in favor of another impacts competing powers that may have competing policy goals. State powers need to be preserved from unauthorized judicial replacement by tribal sovereignty. Tribal and state sovereignties in turn, if unchecked, can defeat Federal interests in promoting innovation. In striking a balance between these interests, Congress should be aware there may not be an elegant solution to meet every national policy goal and most effectively protect every individual right. For instance, like state sovereignties, tribal sovereignty could benefit everyone: Scholars have suggested that tribes' limited leeway to engage in controversial activity may allow them to serve as additional laboratories of

^{80.} Id. at 2031. Note the similarities here with the "clear statement" requirement from the state sovereignty cases.

^{81.} The Indian Gaming Regulatory Act (IGRA) abrogated sovereignty for causes of action related to gambling on tribal lands. Although the tribe owned, maintained, and developed the land and its future casinos, their activity was not specifically on "tribal land" and thus not anticipated by the statute's language.

^{82.} Bay Mills, 134 S. Ct. at 2045 (Thomas, C., dissenting).

^{83.} See id. at 2045–46 (Scalia, A., dissenting). But if reevaluating cases, *Hans* and *Seminole Tribe* might be reexamined as well.

^{84.} Especially when different precedents point different ways. *See, e.g.*, Matal, *supra* note 65, at 321–32 (describing how precedent based on the Montana Rule and *Seymour v. Superintendent* leads to contradictory results, and arguing that consistency should be achieved by returning to principles in the founding tribal sovereignty cases); *id.* at 350–51 (discussing the need to address situations where tribal sovereignties implicate states' rights).

^{85.} See generally Bay Mills, 134 S. Ct. at 2055 (Ginsburg, J., dissenting) (characterizing both State and Tribal sovereign immunity jurisprudence as judicially exorbitant and "beyond the pale"). It has even been argued that domestic sovereign immunities never included a special privilege against patent litigation. See, e.g., Eagle H. Robinson, Infringing Sovereignty: Should Federal Courts Protect Patents and Copyrights from Tribal Infringement?, 32 Am. INDIAN L. REV. 233, 233–34, 255–56 (2008) (discussing why tribes should be subject to private patent suits, and arguing why domestic sovereign immunity was never intended by Congress to be applied to patent and copyright issues).

^{86.} Examples of controversial behavior include payday lending. See Liliana Burnett, *The Current State of Arbitration Clauses Within Native American Tribal Contracts: An Examination of Binding Arbitration Contracts in Native American Payday Lending*, 4 Arbitration Brief 142, 142–80 (2014). For more on the benefits of allowing self-rule, see Kalt, supra note 71, and for discussion on why protecting against state intervention can help encourage self-development and prevent chilling off-

democracy,⁸⁷ help them self-recover from historical subjugation,⁸⁸ while being responsive to special tribal dignitary concerns.⁸⁹

In the meantime, scholars have suggested looking to history and founding case law when state and tribal sovereignty clash, resolving inconsistency in a way that better reflects congressional, rather than judicial, policy choices. ⁹⁰ Ultimately, Congress decides. ⁹¹ But to the extent that the patent system was originally supposed to encourage innovation, rather than reward sovereignty rental, immunities enjoyed by one sovereign, if any, should apply to others. To the extent tribes should not be engaging in patent trolling and patent arbitrage, states should not be engaging in it either.

D. Patents and Congress's Innovation Policy

Presumptions of tribal and state sovereign immunity over patents can curtail individual rights of patent owners to challenge sovereign-backed infringers, and individual rights for anyone to challenge invalid patents being asserted against them. But if these weakened or distorted individual incentives for innovation are incompatible with its national innovation policy, Congress can try to adjust the scope of these sovereignties over patents to be more consistent with its patent law. To better understand the role of the patent system, the following paragraphs briefly discuss the history and rationale behind Congress's patent power and briefly trace how courts have treated the limits of the reach of these powers.

Patents are not God-given, natural rights like "life" and "liberty,"⁹² but instruments affirmatively created by governments to promote societal goals. To these ends, patent rights have varied wildly across cultures and governments in their purpose, scope, and design.⁹³ Not everything is patentable. Accordingly, by the

reservation activity, see *Federal Indian Law—Tribal Sovereign Immunity*—Michigan v. Bay Mills Indian Community, 128 Harv. L. Rev. 301 at 309–10 (2014).

^{87.} See also Katherine Florey, Making It Work: Tribal Innovation, State Reaction, and the Future of Tribes as Regulatory Laboratories, 92 WASH. L. REV. 713, 713, 720, 784 (2017) (exploring the history and role of tribes as another possible Brandeisian laboratory of democracy, and how even though the tribes are very different from states, through, e.g., tribal autonomy, tribal innovations can allow states and tribes to learn from each, consistent with Brandeisian experimentation and federalism).

^{88.} See Cohen, supra note 71, at 348, 352–73.

^{89.} See also Bay Mills, 134 S. Ct. at 2042 (Sotomayor, J., concurring) ("If Tribes cannot sue States for commercial activities on tribal lands, the converse should also be true. Any other result would fail to respect the dignity of Indian Tribes."). See also Scott Dodson, Dignity: The New Frontier of State Sovereignty, 56 OKLA. L. REV. 777, 780–808, 831–32 (2003) (discussing the history, theory, and current state of the dignity rationale, as part of the state sovereign immunity doctrine).

^{90.} *See*, *e.g.*, discussion of returning to principles in founding cases in Matal, *supra* note 65, at 283, 332.

^{91.} Note the criticism that proposed legislation is fixating only on tribal patent sovereignty rental, but not states', as a double standard, *Saint Regis Mohawk Tribe Outraged at Senator McCaskill's Attempt to Abrogate Sovereign Immunity*, St. Regis Mohawk Tribe Blog (Oct. 5, 2017), https://www.srmt-nsn.gov/news/2017/saint-regis-mohawk-tribe-outraged-at-senator-mccaskills-attempt-to-abrogate-sovereign-immunity [https://perma.cc/XNW4-YZ3U].

^{92.} THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776).

^{93.} See, e.g., RH LOWIE, PRIMITIVE SOCIETY 237–41 (1920) (discussing exclusive patent rights developed amongst the Plains Indians); PHYLARCHUS OF NAUCRATIS, THE DEIPNOSOPHISTS, OR,

eighteenth century, patents had long been recognized by English law as belonging to inventors as a privilege, not a natural right.⁹⁴ But in America, Congress is "the source of all rights under patents."⁹⁵

To create the American patent system, Congress was granted unique federal powers. The Framers expressed interest in a truly national patent system and suspicion of state competence to achieve national goals. The Intellectual Property Clause is the only enumerated power in the Constitution that is conditioned on promotion of a specific public purpose: The patent system must promote the progress of science.

Congress decides what "progress"¹⁰¹ looks like.¹⁰² It also decides what type of exclusive patent rights will best effectuate that progress.¹⁰³ The specific contours of these patent rights shaped the ability for individuals to freely practice and

BANQUET OF THE LEARNED OF ATHENÆUS 835 (trans. H. Bohn 1854) (noting a one-year exclusive right granted in third century CE Syberius for innovative culinary dishes).

- 94. PETER DRAHOS, PHILOSOPHY OF INTELLECTUAL PROPERTY, 29–33 (1996) (discussing how patents were historically treated as privileges rather than natural rights, and patent laws in seventeenth century England came to be understood as a straight piece of economic policy).
- 95. Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 517 (1917). *See also* Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 592 (1834) (discussing how "secure" in the IP clause refers to the newly created right); Brown v. Duchesne 60 U.S. (19 How.) 183, 195 (1856) (discussing how patent property rights are "derived altogether from these statutory provisions" and "cannot go beyond them").
- 96. See Edward C. Walterscheid, Conforming the General Welfare Clause and the Intellectual Property Clause, 13 HARV. J.L. & TECH. 87 at 90–97 (1999).
- 97. See THE FEDERALIST No. 43 (noting need to make "effectual provision" for these goals, foreshadowing the consequentialist language defining the Congress's IP powers in the Constitution). See Mossoff, Who Cares What Thomas Jefferson Thought about Patents Reevaluating the Patent Privilege in Historical Context, 92 CORNELL L. REV. 953, at 977–85 (2007) (clarifying the context of what common law, related to natural rights, is being referred to here).
- 98. U.S. CONST. art. I, § 8, cl. 8 ("To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.").
- 99. See Brief for the Federal Respondent at 2, Oil States Energy Services, v. Greene's Energy Group, No. 16-712 (Oct. 23, 2017), http://www.scotusblog.com/wp-content/uploads/2017/10/16-712-bs-federal-respondent.pdf [https://perma.cc/QVQ2-LVD4].
- 100. U.S. CONST. art. I, § 8, cl. 8. Note that this utilitarian or consequentialist requirement lends itself to historical analysis to ascertain what exactly comprises "promoting."
- 101. See, e.g., John R. Thomas, *The Question Concerning Patent Law and Pioneer Inventions*, 10 BERKELEY TECH. L.J. 35, 78–81, 95–103 (1995) (discussing also different philosophical backgrounds, like Lockian, Hegelian, and Heideggerian patent rights theories, and further proposing an affirmative approach to patent rights that reflect the realities of litigation, actual technological development, and desired social values, and especially better promote and protect groundbreaking, game-changing, pioneer inventions).
- 102. Congress decides the ends: It is "the source of all rights under patents." Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 517 (1917).
- 103. Congress decides the means: Congress's plenary power to shape and regulate patents and their instrumentalities constitutes a broad, "permissive" authority—"the sign of how far Congress has chosen to go can come only from Congress." Deepsouth Packing Co. v. Laitram Corp., 406 US 518, 530 (1972). To achieve these ends, Congress decides whether patents are a created positive property, a recognized negative property, grants private or public rights, or something in between. *See*, *e.g.*, MCM v. Hewlett-Packard Co., 812 F.3d 1284, 1289–90, 1293 (Fed. Cir. 2015) (noting that "patents are public rights"). The court also discusses how Congress has power to "create a seemingly 'private' right that is so closely integrated into a public regulatory scheme as to be a matter appropriate for agency resolution." *Id.* at 1290 (quoting Thomas v. Union Carbide Agricultural Products Co., 478 U.S. 568, 593–94 (1985)).

utilize information in the shared domains of human knowledge—their relationship with the intellectual commons. 104 Accordingly, before the Eleventh Amendment, in implementing the IP Clause, Congress would have decided whether creating special privileges for states or tribes in the patent system would help innovation. But after Florida Prepaid, based on the Seminole Tribe theory that states had been sovereigns before the Eleventh Amendment, states influence what "progress" looks like. Tribes, similarly, have used their post-Bay Mills presumption of sovereignty to profit by shielding themselves from patent litigation. The resulting patent system, for individuals, involves high barriers to challenging state and tribal patent sovereignty. Although domestic sovereigns were held to have waived sovereignty to invalidity counterclaims in federal court if they initiate infringement litigation, they were held to have not waived immunity to IPRs even when affirmatively participating in the patent system, 105 initiating patent contracts with the plaintiff, 106 and initiating patent litigation. ¹⁰⁷ By putting up barriers to prevent patent law from breaching these immunities, the compromised patent system enables leveraging monopolies to enrich tribes and states, by curtailing individual patent rights in ways unrelated to encouraging innovation.

The way states and tribes are currently utilizing their sovereign immunity over patents can help illustrate the extent of their impact on Congress's innovation policy. The following section further explores some of the consequences of how states and tribes use their patent sovereign immunity.

II. How Sovereign Immunity Is Currently Being Used

Some uses of state and tribal sovereign immunity can hamper Congress's innovation policy and weaken individual patent rights. This is not to imply it is constitutional to limit legitimate state sovereignty whenever its "good" for the patent system—this Note focuses more on what body should make patent policy decisions, rather than what that policy should be. If local governments curtail

^{104.} See, e.g., DRAHOS, supra note 94, at 41–72.

^{105.} Voluntary participation in the patent system was held insufficient to rise to the level of implied waiver in *Fla. Prepaid*. For more on so-called *Parden* waivers, see discussion *infra* note 154.

^{106.} See Xechem Int., Inc. v. University of Texas, 382 F.3d 1324 at 1329 (Fed. Cir. 2004) (holding that entering into multiple contracts and research agreements was still not enough to amount to constructive waiver because, under 527 U.S. at 675–76, this waiver can *only* occur when 1) the state invokes Federal court jurisdiction on its own initiative, or 2) upon a "clear declaration" of intent to submit to federal jurisdiction).

^{107.} To determine whether immunity applies, it will "determine whether they are the type of proceedings from which the Framers would have thought the States possessed immunity when they agreed to enter the Union." Fed. Mar. Comm'n v South Carolina State Ports Auth., 535 U.S. 743, 756 (2002) ("FMC"). See Vas-Cath v. University of Missouri, 473 F.3d 1382 (Fed. Cir. 2006) (holding that PTO interference proceedings are sufficiently similar to civil litigation to be characterized as a lawsuit, subject to a sovereign immunity defense). But see University of New Mexico v. Knight, 321 F.3d 1111 (Fed. Cir. 2003) (holding that the state waives sovereignty to compulsory counterclaims and appeals when it voluntarily initiates litigation in federal court); Lapides v. Board of Regents of the University System of Georgia, 122 S. Ct. 1640, 1650 (2002) (holding that the state waives sovereignty when voluntarily removing civil claim from state to federal court).

individual patent rights in ways Congress finds undesirable, but that are not statutorily prohibited, Congress should pass legislation to address the perceived problems. The following examples of the consequences of applying state and tribal sovereign immunity to patent cases reveal extensive state and tribal participation and influence in the patent system.

State and tribal sovereign immunity is being asserted not just against IPR proceedings, but patent litigation in federal courts. Emboldened states and tribes have developed strategies to profit from their patent immunity privileges, like sovereignty rental, that allow them to pick winners and losers for reasons unrelated to fostering innovation. As a result, the effects of unbridled domestic patent sovereignty have been to steamroll *some* patent owners' individual rights, and *some* citizens' individual rights to challenge bogus patents through trial.

More specifically, sovereign immunity from IPR has created two de facto classes of patents—rebuttable, and non-rebuttable by IPR—based only on current ownership, opening the door to arbitrage. Leveraging domestic sovereign immunity is further explored in the following section, particularly its implications for the balance of power among states, tribes, individuals, and the federal government.

State colleges and universities have begun negotiating with private, third parties to rent out their sovereign immunity to evade IPR and district court litigation—the same technique used in the Allergan case. ¹⁰⁹ But potential patent misuse by states is especially alarming considering the disproportionate influence of state universities in the patent system, which by 2009, accounted for 25% of patents issued in the U.S., and over \$2.6 billion in annual licensing revenue. ¹¹⁰ State universities have extracted record cash settlement from private parties it accuses of patent infringement. ¹¹¹ The extent of this state-patent interaction is difficult to quantify, ¹¹² but

^{108.} This is exactly what happened in the Allergan-St. Regis Mohawk deal. In fact, according to the lawyer responsible for organizing the deal, transferring ownership of a patent to a sovereign entity can increase its value between four and ten times. Adam Davidson, *Why is Allergan Partnering with the St. Regis Mohawk Tribe?*, NEW YORKER (Nov. 20, 2017), https://www.newyorker.com/magazine/2017/11/20/why-is-allergan-partnering-with-the-st-regis-mohawk-tribe [https://perma.cc/7KC3-DV7N].

¹⁰⁹ *Id*

^{110.} See, e.g., Maria Teresita Barker, Patent Litigation Involving Colleges and Universities: An Analysis of Cases from 1980–2009, at 5 (2011) (Ph.D. dissertation, University of Iowa); Goldie Blumenstyk, University Inventions Sparked Record Number of Companies in 2008, CHRONICLE OF HIGHER EDUC. (2010). See also, Farmer, J., University Inventions Sparked Record Number of Companies in 2008, CHRONICLE OF HIGHER EDUC. (2007); Jim Farmer, Should Universities Patent Their Research? Universities Say Yes. But Should They?, E-LITERATE (Aug. 26, 2007), http://mfeldstein.com/should-universities-patent-their-research-universities-say-yes-but-should-they/ [https://perma.cc/CVB5-NR6F].

^{111.} Joe Mullin, Apple Faces \$862M Patent Damage Claim from University of Wisconsin, ARS TECHNICA (Oct. 14, 2015, 12:11 PM), https://arstechnica.com/tech-policy/2015/10/apple-faces-862m-patent-damage-claim-from-university-of-wisconsin/ [https://perma.cc/4HM2-RFCN]; Gene Quinn & Steve Brachmann, Caltech's Infringement Lawsuit Against Apple, Broadcom Is Latest in University Patent Suit Trend, IPWATCHDOG (Jun. 14, 2016), http://www.ipwatchdog.com/2016/06/14/caltech-infringement-lawsuit-apple-broadcom/id=69834/ [https://perma.cc/3779-HXEP].

^{112.} See generally John R. Allison et al., Our Divided Patent System, 82 U. CHI. L. REV. 1073, 1126 (2015) (discussing how activity like licensing is hard to infer from litigation data available).

some studies have suggested that after *Florida Prepaid*, states have begun licensing more aggressively, leveraging their sovereign immunity to coerce better licensing agreements from private enterprise, amounting to a tax on innovation.¹¹³

With sovereign immunity, state universities can distort markets: They can extract more favorable licenses, externalize costs of patent prosecution, ¹¹⁴ and insulate themselves from liability for infringement, whereas private research universities or private companies cannot. ¹¹⁵ Even without intentional abuse, states can affect the market, because states pick who they want to sue for alleged patent infringements. In one study of litigation, the most common suits were infringement actions by a state-run university against pharmaceutical companies trying to compete with a university licensee. ¹¹⁶ Other studies argue state university patent quality has declined dramatically since 1980. ¹¹⁷ Some university patents assert extremely controversial ownership over basic technology, and are ultimately invalidated. ¹¹⁸ But unilateral decisions by domestic sovereigns to disincentivize private research in favor of government-approved research, if they cannot be

^{113.} See also Nicholas Dernik, State Sovereign Immunity: States Use the Federal Patent Law System as Both a Shield and a Sword, 8 J. MARSHALL REV. INTELL. PROP. L. 134, 151, 153–54 (2008) (discussing use of sovereign immunity to impose costs on others while not bearing them themselves). But see Tejas N. Narechania, An Offensive Weapon?: An Empirical Analysis of the "Sword" of State Sovereign Immunity in State-Owned Patents, 110 COLUM. L. REV. 1574, 1601–02, 1612 (2010) (concluding state universities have become more successful at acquiring licenses than their private counterparts, while being less aggressive). The paper argues that state universities there is limited support for the notion that State universities are more aggressively patenting weaker patents. But to reach these conclusions, the paper measures favorable effect on known litigation via published litigation results, patenting aggressiveness via raw number of PTO filings, and patent weakness via number of applicant-provided IDS refs.

^{114.} For example, by creating risk of IPR invalidation, the AIA incentivized patentees to internalize the initial prosecution costs of obtaining higher quality patents, rather than externalizing costs by shifting the burden onto accused infringers to litigate invalidity, at potentially ruinous financial cost. But these cost considerations do not apply to entities immune to IPR. See, generally Patent Portfolio Evaluation: Are Your Patents "AIA-Ready"?, https://slwip.com/wp-content/uploads/2016/02/Are-Your-Patents-AIA-Ready-Bianchi.pdf [https://perma.cc/8U87-BAJK] (encouraging taking extra measures to review patents before acquisition or assertion because of the "new normal" created by the new risk of post grant proceedings); Sasha Moss et al., Inter Partes Review as a Means To Improve Patent Quality, 46 R STREET SHORTS 1, 3 (Sept. 2017), http://www.rstreet.org/wp-content/uploads/2017/09/RSTREETSHORT46.pdf [https://perma.cc/X6D8-F45R] (discussing how BRI facilitates direct rejection, which encourages higher quality patents in the future). In an ironic twist, IPRs (which might otherwise encourage patentees to internalize up-front prosecution costs to determine validity, rather than to externalize huge litigation costs onto society), when combined with sovereign immunity, give state governments (not the least capable or least well-heeled litigants) more financial incentive to externalize their costs of reasonably establishing patent validity.

^{115.} See generally Scott D. Nelson, Big Brother Stole My Patent: The Expansion of the Doctrine of State Sovereign Immunity and the Dramatic Weakening of Federal Patent Law, 34 U.C. Davis L. Rev. 271, 312–13 (2000) (arguing Florida Prepaid creates a market where infringement is easier and more profitable than innovating).

^{116.} Barker, supra note 110, at 185.

^{117.} See, e.g., Rebecca Henderson, Universities as a Source of Commercial Technology: A Detailed Analysis Of University Patenting, 1965–1988, REV. ECON. & STATISTICS 119, 126 (1998) (attributing the documented decline in state university patent quality to Bayh-Dole).

^{118.} See, e.g., Joe Mullin, The Web's Longest Nightmare Ends: Eolas' Patents Are Dead on Appeal, ARS TECHNICA (Jul. 22, 2013, 10:41 PM), https://arstechnica.com/tech-policy/2013/07/the-webs-longest-nightmare-ends-eolas-patents-are-dead-on-appeal/ [https://perma.cc/8WN7-BTJR] (discussing

checked, subverts Congress's ability to regulate domestic sovereignty to protect individuals and individual patent rights.

Sovereignty over patent matters can impair the ability for some states to protect their citizens. States have limited recourse to shield local businesses that are sued for the mere act of competing with businesses endorsed by a state or tribe armed with federal patents. The Framers emphasized that "states are guardians of liberty." Indeed, sovereignty was once seen to be predicated on responsibility. Eleventh Amendment immunities have been characterized as "vital" to preserve this federalism, as seen in *Seminole Tribe*. But allowing states and tribes to reach into a distant state to sue its citizens for federal patent infringement, while Congress is hamstrung from making the validity of these patents less difficult to rebut by trial, leaves citizens unprotected from the potentially ruinous costs of out-of-state lawsuits involving bogus federal patents.

Native American tribes have leveraged their sovereign immunity in the same way that states have done.¹²³ Tribes have even directly entered the business of litigating patents they did not develop¹²⁴: In 2017, a subsidiary of the Three Affiliated Tribes purchased a patent portfolio to directly sue Apple for patent infringement in a Delaware district court.¹²⁵ Indirectly too, in 2017, the St. Regis Mohawk Tribe rented their sovereignty to a holding company, which, now able

a highly controversial patent licensed out by UCSF, used to extract at least hundreds of millions of dollars in settlements before being held invalid).

^{119.} See Jefferson's language in the Kentucky Resolution, reprinted in RANDY E. BARNETT & HOWARD E. KATZ, CONSTITUTIONAL RIGHTS 480 (2013). For more on state and federal governments originally seen as servants to original sovereign individuals, see Barnett, *supra* note 19, at 1733–36.

^{120.} See generally Blackstone, supra note 10; GLANVILLE, supra note 11.

^{121.} See C. Vázquez, Eleventh Amendment Schizophrenia, 75 NOTRE DAME L. REV. 859, 860–61 (2000) (discussing the "state sovereignty" interpretation of the Eleventh Amendment as an increasingly prevalent strain of judicial construction). See also Welch v. Texas Dep't of Hwy. & Pub. Transp., 483 U.S. 468 at 474 (1987) ("We have been unwilling to infer that Congress intended to negate the States' immunity from suit in federal court, given 'the vital role of the doctrine of sovereign immunity in our federal system." (quoting Pennhurst v. Halderman, 465 U.S. 89 at 99 (1984))).

^{122.} Note that some argue patents should not be less difficult to challenge, but assertions about optimal patent "strength" or "quality" are really normative policy decisions. For instance, to the extent some argue that patent rights need to be more irrebuttable to protect inventors, to further prevent issuance errors, the system would have to somehow fund more enhanced examination, at the expense of higher fees or costs that narrow the pool of Americans who can actually afford to receive (or challenge) patents. But this Note focuses more on who should be able to make this policy, rather than what it should optimally be.

^{123.} For example, the Miami Tribe of Oklahoma successfully evaded judicial review of their patent infringement by raising a sovereign immunity defense. Home Bingo Network v. Multimedia Games, Inc., No. 1:05-CV-0608, 2005 WL 2098056 (N.D.N.Y. Aug. 30, 2005). Note the similarity of the court's deference to the tribe's sovereignty here, to the Supreme Court's deference to state sovereignty in *Florida Prepaid*, even though this case preceded *Bay Mills*.

^{124.} This business is often attributed to Patent Assertion Entities (PAEs), entities that use patents primarily to obtain licensing fees, rather than supporting transfer or commercialization of technology. For more on the effects of PAEs and Non-Practicing Entities (NPEs), see *Stanford NPE Litigation Dataset*, STAN. L. SCH., https://law.stanford.edu/projects/stanford-npe-litigation-dataset/ [https://perma.cc/G8AE-2E4X].

^{125.} MEC Resources LLC is wholly owned by the Three Affiliated Tribes, a coalition of Native American tribes in North Dakota. See Joe Mullin, "IP" as in "Indigenous Peoples"—Apple Is Being Sued for Patent Infringement by a Native American Tribe, ARS TECHNICA (Sep. 27, 2017, 8:11 AM), https://arstechnica.com/

to retain ownership of its patents without having to worry about IPR invalidation, then filed infringement suits against Amazon and Microsoft. Later that year, when the tribe used the same sovereignty rental maneuver to IPR-proof Allergan's patent portfolio, it was able to secure a \$13.5 million fee and up to \$15 million in annual royalties. Hu non-patent owners may be paying the price. As the cost of the sovereign-shielded drugs have more than doubled since 2008, pharmaceutical companies have spoken out against the sovereignty rental strategy, and ominously warned that patent incentives ought to reward innovation, not other types of activity. Les

Thus, state and tribal sovereign immunity potentially has the power to shape or impair congressionally-set innovation policy. Shifting incentives change the form of innovation. Scholars have argued that effectively incentivizing innovation relies on predictability and uniformity in application between different parties. ¹²⁹ But after the cases of intentional state infringement presented in *Florida Prepaid* were held to be insufficiently serious to justify abrogation, congressional patent power, when it implicates state sovereign immunity, seems to be limited only to reacting to more demonstrably serious or systematic wrongs. ¹³⁰

But some problems are subtle. Influential states and tribes have the power to affect patent and innovation policy for everyone. With the phenomenon dubbed "horizontal aggrandizement," powerful states use their influence to seize more federal benefits, and avoid more than their fair share of costs—in effect reducing

 $tech-policy/2017/09/apple-is-being-sued-for-patent-infringement-by-a-native-american-tribe/ \ [https://perma.cc/R6BG-MFUV].$

126. Joe Mullin, *Native American Tribe Sues Amazon and Microsoft over Patents*, ARS TECHNICA (Oct. 18, 2017, 6:50 PM), https://arstechnica.com/tech-policy/2017/10/native-american-tribe-sues-amazon-and-microsoft-over-patents/ [https://perma.cc/MW7U-W2VQ].

127. Joe Mullin, *Drug Company Hands Patents Off to Native American Tribe to Avoid Challenge*, ARS TECHNICA (Sep. 12, 2017, 8:40 AM), https://arstechnica.com/tech-policy/2017/09/how-a-native-american-tribe-ended-up-owning-six-key-patents-on-an-eye-drug/ [https://perma.cc/HTH8-PSP7].

128. Pharma Industry Faces Hypocrisy Charge Over Patents, Fin. TIMES (Nov. 1, 2017) https://www.ft.com/content/ad85104e-bd86-11e7-b8a3-38a6e068f464.

129. Unpredictability can be corrosive to use of patents in business practice. See, e.g., Ian D. McClure, From a Patent Market for Lemons to a Marketplace for Patents: Benchmarking IP in Its Evolution to Asset Class Status, 18 CHAPMAN L. REV. 759 at 759–64 (2015) (discussing a practitioner's view of patents being treated as a straight asset class, and how marketplaces and negotiations are eroded by unpredictable litigation, as well as uncertainty in patent quality and value). 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, 1402–03, 1464–66 (1999) (arguing state sovereign immunity from patents can lessen incentives for innovation, especially given international scope of patent system, and how state sovereign immunity may be a TRIPS violation). While acknowledging the dangers in undermining incentives to innovate, especially to smaller entities, Prof. Menell argues that states face other legal and non-legal pressures that make them less likely to significantly undermine individual patent rights. See id. at 1402–03, 1447.

130. Note the parallel between the courts' requirement for systematic abuse to trigger abrogation of sovereignty in the context of both state waiver and national independence from England, but in the former, a lack of a morally binding social compact between a sovereign and the people in *all* states, legitimizing renting sovereignty to patent trolls and favored licensees for example.

the sovereign powers of weaker domestic sovereigns.¹³¹ State and tribes can and have selectively sponsored NPEs, sometimes pejoratively referred to as "patent trolls"¹³²—even when the activity of "trolling" has been shown to discourage innovation, ¹³³ chill investment, and kill startups.¹³⁴

When sovereignty is leveraged to benefit domestic governmental actors at the expense of individuals and other domestic sovereigns, the result can be curtailing individual patent rights beyond the patent bargain that Congress provided for. But even after the Court decisions enhancing sovereign immunity, the Constitution still provides mechanisms for the federal government to restrict state and tribal immunity to patent litigation.

III. HARMONIZING SOVEREIGNTY AND PATENTS

When used to enable controversial local government action that undermine individual and national interests of a national patent system, the broad scope of the current sovereignty privilege seems to be at tension with the idea of "the People" as the superior sovereign. Yet Courts, state and tribal entities, and Congress have tools to limit the scope of sovereign immunity so that Congress alone shapes patent policy.

A. Judicial Adjustments

Rejecting *Hans* and returning to the Eleventh Amendment's text would eliminate state immunity in federal court for suits initiated by a citizen against his state—thereby, allowing Congress, rather than states, to make the normative policy decisions about what patent system we are subject to. Currently, some Justices might be willing to overrule settled precedent in order to return to better follow the Constitution's text, but even originalist Justices may be unwilling to overturn long-settled precedent.¹³⁵

^{131.} See Lynn A. Baker & Ernest A. Young, Federalism and the Double Standard of Judicial Review, 51 DUKE L.J. 75, 115 n.188, 117—21 (2001) (describing "horizontal aggrandizement"—some ways states can leverage differences between states to extract more benefits from the Federal government, or deprive other states from other benefits). See also id. at 121–28 (discussing further conflict). In a more extreme example, patent trolls, which some states have supported, by eroding trust in the patent system, have been shown to reduce the value of all existing patents.

^{132.} See, e.g., supra notes 118 & 126.

^{133.} James Bessen, *The Evidence Is in: Patent Trolls Do Hurt Innovation*, HARV. BUS. REV. (2014), https://hbr.org/2014/07/the-evidence-is-in-patent-trolls-do-hurt-innovation [https://perma.cc/D57G-3R9Y]; Daniel P. McCurdy, *Patent Trolls Erode the Foundation of the U.S. Patent System*, SCIENCE PROGRESS 78 (2009), https://www.scienceprogress.org/wp-content/uploads/2009/01/issue2/mccurdy.pdf [https://perma.cc/9XXE-SMVM].

^{134.} See Joe Mullin, New Study Suggests Patent Trolls Really Are Killing Startups, ARS TECHNICA (Jun. 11, 2014, 8:55 PM), https://arstechnica.com/tech-policy/2014/06/new-study-suggests-patent-trolls-really-are-killing-startups/ [https://perma.cc/8K2E-CGVM]. See also Stephen Kiebzak et al., The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity, 45 RESEARCH POLICY 218, 230 (2016).

^{135.} *Compare* McDonald v. City of Chicago, 130 S. Ct. 3020, 3062 (Thomas, C., concurring) (discussing the history and shortcomings of substantive due process jurisprudence, and how "a return to [original] meaning would allow this Court to enforce the rights the Fourteenth Amendment is designed

Short of reversing *Florida Prepaid*, courts can block some of the abusive sovereignty rental being used to evade IPRs. For instance, the contractual transfer or assignment of ownership itself can be held invalid as a matter of contract law. ¹³⁶ In the *Allergan* case, Judge Bryson questioned whether Allergan should even be allowed to join St. Regis Mohawk Tribe at all, "or whether the assignment of the patents to the Tribe should be disregarded as a sham." ¹³⁷ Later, in 2018, the Patent Trial and Appeal Board (PTAB) rejected a motion to join the St. Regis Mohawk Tribe as a codefendant in an Allergan IPR, finding Allergan was still the de-facto sole owner for patent purposes. ¹³⁸

At the Federal Circuit, the *Allergan* court justifiably had "serious concerns about the legitimacy of the tactic . . . to rent—the Tribe's sovereign immunity in order to defeat the pending IPR," ¹³⁹ a stratagem which would enable anyone to defeat IPRs by "employing the same artifice." ¹⁴⁰ Echoing the concerns about state and tribal evasion of national legislation, Judge Bryson emphasized how "Allergan's tactic, if successful, could spell the end of the PTO's IPR program, which was a central component of the America Invents Act of 2011." ¹⁴¹ In a later case, it held that IPRs were like reconsiderations of public franchise grants, which were outside the scope of tribal immunity. ¹⁴²

to protect with greater clarity and predictability than the substantive due process framework has so far managed") with McDonald, 130 S. Ct. at 3050 (Scalia, J., concurring) ("Despite my misgivings about Substantive Due Process as an original matter, I have acquiesced in the Court's incorporation of certain guarantees in the Bill of Rights 'because it is both long established and narrowly limited."").

136. Judge Bryson's order to join the tribe also raised the question of whether the patent assignment itself was validly transferred, to the extent that the Tribe could be considered the patentee. *See* Motion to Join, *supra* note 4, at *5 ("[T]he Court has serious reservations about whether the contract between Allergan and the Tribe should be recognized as valid, rather than being held void as being contrary to public policy"). Further, joining the Tribe could be blocked on the grounds that Allergan received "substantially all" the patent rights, obviating the need to add the Tribe as co-plaintiff at all. *See id.* at *6–7; *see* Neochord v. University of Maryland, Baltimore, IPR2016-00208 (May 23, 2017) (holding that the state university can assert sovereign immunity if it retains *some* legal rights—it amounted to transferring "less than 'substantially all' rights to" even to an exclusive licensee).

- 137. Joe Mullin, *Judge Throws Out Allergan Patent, Slams Company's Native American Deal*, ARS TECHNICA (Oct. 16, 2017, 7:16 PM), https://arstechnica.com/tech-policy/2017/10/judge-throws-out-allergan-patent-slams-companys-native-american-deal/[https://perma.cc/3KU7-TW8B].
- 138. The "party that has been granted all substantial rights under the patent is considered the owner regardless of how the parties characterize the transaction that conveyed those rights." Decision Denying the Tribe's Motion to Terminate, *Mylan Pharmaceuticals v. St. Regis Mohawk Tribe*, IPR2016-01127, IPR2016-01128, IPR2016-01129, IPR2016-01130, IPR2016-01131, IPR2016-01132 at 19 (Feb. 23, 2018) (quoting Speedplay, Inc. v. Bebop, Inc., 211 F.3d 1245, 1250 (Fed. Cir. 2000)), https://cdn. patentlyo.com/media/2018/02/6ffa896caa1.pdf [https://perma.cc/XE3R-T7BF] Note the court was careful not comment on whether the transaction was a sham. *Id.* at 35 n.11.
 - 139. Order Granting Motion to Join, supra note 4, at *4.
 - 140. *Id*.
- 141. *Id.* Recall the discussion of how powerful sovereigns could hypothetically render the patent system unconstitutional by exerting unchecked market pressure.
- 142. St. Regis Mohawk Tribe v. Mylan Pharmaceuticals Inc., 896 F. 3d 1322 (2018) (finding that "IPR is more like an agency enforcement action than a civil suit brought by a private party, and we conclude that tribal immunity is not implicated," and in particular finding that "IPR is an act by the agency in reconsidering its own grant of a public franchise" of a patent).

Judicial checks on immunity's misuse only apply in limited situations. The Federal Circuit's approach is limited to IPRs, not litigation in state or federal courts, and is subject to Supreme Court determinations about whether patents are like public franchises. The PTAB's approach of holding transfers of ownership invalid as IPR-evading only works with demonstrably sham transactions. Approaches to infer de facto ownership only succeed when "all substantial rights" are held by a party. Although in the Allergan situation, the motion to join the tribal codefendant came before the judge only because Allergan transferred bare ownership after the IPR was initiated, it is unclear how a "sham transaction" argument would work out if the transfer had happened long before the IPR, or only some rights were transferred. The tools available to ferret out bogus transfers may be limited to certain cases where obvious abuse can be shown, and these tools are grounded in judicial discretion. Further, both the PTAB's and Federal Circuit's approaches do not directly address more subtle problems involving market distortion, chilling effects, and patent policymaking being appropriated by non-congressional actors.

Courts could help restore Congressional control over patents simply by demuddying the legal waters. Courts could clarify the heightened congruence requirement to help Congress avoid the uncertainty over what must be shown to abrogate state sovereign immunity. Alternately, by emphasizing the limited legislative scope of patents, courts could mitigate the effects of state and tribal patent misuse. For instance, John Thomas has described how patents can implicate constitutionally protected individual rights, and how courts could use the nondelegation doctrine to stop patent misuse. ¹⁴³

Domestic sovereign immunity may have some advantages, such as encouraging state universities to perform useful research.¹⁴⁴ But the benefits of immunity need not be lost even if the sovereign immunity defense for patents were contracted. Scholars have proposed other ways to protect researchers, like creating more robust user privileges such as expanding the experimental-use or regulatory-approval exceptions for academic research.¹⁴⁵ These proposals have the added benefit of allowing Congress, rather than local governments, to make the normative policy choices over which types of innovation to incentivize and over where

^{143.} See John R. Thomas, Liberty and Property in the Patent Law, 39 HOUSTON L. REV. 569, 610–19 (2002) (discussing particularly the possibilities of using the nondelegation doctrine to provide individuals recourse in the Bill of Rights in situations where private appropriations implicate protected constitutional rights). By focusing on the legislative function of patents, authorized only by the consent of the people, he proposes using the nondelegation doctrine to refocus judicial review on securing the rights of individuals.

^{144.} See, e.g., Jennifer Polse, Holding the Sovereign Universities Accountable for Patent Infringement after Florida Prepaid and College Savings Bank, 89 CAL. L. REV. 507, 525–26 (2001).

^{145.} See generally Joshua D. Sarnoff & Christopher M. Holman, Recent Developments Affecting the Enforcement, Procurement, and Licensing of Research Tool Patents, 23 BERKELEY TECH. L.J. 1299, 1303–20, 1350–66 (2008), http://scholarship.law.berkeley.edu/btlj/vol23/iss4/41310–20 (discussing in detail the history, theory, and different a range of proposals to better protect academic research including, but not limited to, expanding experimental use).

and when public research should be encouraged to the detriment of private research.¹⁴⁶

B. State and Tribal Waivers

In addition to judicial modifications, states and Indian tribes can waive their sovereignty privileges over patents. Waiver can be either express, through legislation, or implied, through the voluntary actions of the state or tribe. However, with a voluntary waiver—whether express or implied—state and tribal governments can change course and unilaterally start asserting immunity later. Using immunity's on-off switch, states and tribes might keep Congress from legislating to curb perceived abuse of immunity. For example, states might temporarily waive immunity to protect their post-*Florida Prepaid* heightened presumption of sovereignty from patent issues, especially if they believe legislation or precedent is about to erode their immunity more permanently.

Congress can also encourage states and tribes to voluntarily waive sovereignty. The *Ex Parte Young* doctrine permits congressional legislation to hold state and tribal officials personally liable for their domestic sovereign's patent infringement, even when they are operating in their official capacity. ¹⁴⁷ Carlos Vázquez has proposed a legislative solution to expose state governors to lawsuits arising from state patent infringement, in order to incentivize states to amend their state constitutions to voluntarily surrender sovereign immunity in patent cases. ¹⁴⁸ Although in *Seminole Tribe*, the *Young* doctrine was recharacterized as a "narrow exception" to state sovereign immunity, ¹⁴⁹ the rationale relied upon by the Court in *Seminole Tribe* contrasts with the *Young* Court's analysis emphasizing

^{146.} The broad power and perverse market incentives contrast with the broad outcome-dependent congressional powers authorized by the IP Clause. States under the current regime are free to harass non-licensees. To say that Congress cannot get involved until it can affirmatively prove a nightmare is coming true is naïve—insofar as it needs those powers to define the contours of the patent system to promote innovation, not render the IP clause a nullity—to do its job. The original meaning of the IP clause and Eleventh Amendment reaffirms the view that Congress has power to pick what type of patent system we all share, and what patent system it ought to transform into, from amongst the buffet of historical and theoretical options.

^{147.} See Ex parte Young, 209 U.S. 123, 167–68 (1908) (holding that it is acceptable to sue state officials from enforcing unconstitutional state legislation, even when the state is shielded by sovereign immunity).

^{148.} See Carlos Manuel Vázquez, What is Eleventh Amendment Immunity?, 106 YALE L. J. 1683, 1806 (1997). See also James L. Lovsin, A Constitutional Door Ajar: Applying the Ex Parte Young Doctrine to Declaratory Judgment Actions Seeking State Patent Invalidity, 2010 U. ILL. L. REV. 265 at 308–09 (2010) (discussing how the Ex Parte Young doctrine can be used to justify citizen suits for patent invalidity against the state, which "vindicates the federal patent right to exclude, deters states from seeking excessively broad patents, ensures robust access to the public domain, and counterintuitively promotes state patent licensing. Thus, the door open 'establish[es] fair relationships and just recourse.""), at 284 n.168 (discussing tribal law cases in support of broader interpretation of the Ex Parte Young doctrine).

^{149.} Seminole Tribe of Fla. v. Fla., 517 U.S. 44 at 44, 76 (1996). See generally Vicki Jackson, Seminole Tribe, the Eleventh Amendment, and the Potential Evisceration of Ex Parte Young, 72 N.Y.U. L. Rev. 495, 495–500 (1997).

safeguarding the ability to protect federal interests from encroachment by states after *Hans*. ¹⁵⁰

Voluntary waivers pose some risks. For example, since tribes and states can withdraw them, perhaps capriciously, express waivers contain some amount of risk of future reversal that may have some chilling effect on innovation and entrepreneurship. Even an apparent waiver may not be judicially recognized if made by the wrong government official or entity¹⁵¹: Express (and implied) waivers are also limited by lower court disagreement over whether a state university is even able to waive its own sovereign immunity.¹⁵²

Moreover, even without express acquiescence, a state's voluntary¹⁵³ (non-coerced) actions can rise to a level where courts are might constructively infer a waiver. In *Parden v. Terminal Railway*, Alabama's voluntary participation in an industrial activity already being regulated by the federal government amounted to a waiver of sovereign immunity.¹⁵⁴ But the Rehnquist Court distinguished *Florida Prepaid* from *Parden* by emphasizing how the proposed surrender of sovereignty in *Florida Prepaid* became coercive when it failed to preserve meaningful choice for states to participate in the patent system or

^{150.} See also Nathan C. Thomas, Withering Doctrine of Ex Parte Young, 83 CORNELL L. REV. 1068, 1077–81, 1110–15 (1998) (discussing the history of the Ex Parte Young doctrine, the Federal and State interests at play, and analyzing use of the doctrine as a safeguard against encroachment of States after becoming unfettered from the Constitution after Hans, and how the Seminole Court created problems in its construed limits on the Ex Parte Young doctrine).

^{151.} See, e.g., Owen v. City of Independence, 445 U.S. 622, 656–58 (1980) (holding a municipality cannot assert sovereign immunity to avoid liability for its violations of the Fourteenth amendment). The Court notes that the Fourteenth Amendment is different since States are considered to have surrendered this sovereignty. Some scholars have argued states cannot assert immunity when hearing disputes in their own state courts. Louis E. Wolcher, Sovereign Immunity and the Supremacy Clause: Damages Against States in Their Own Courts for Constitutional Violations, 69 CAL. L. REV. 189, 314–16 (1981) (concluding that sovereign immunity cannot be used to shield against challenges about the state acting unconstitutionally, and should be heard in state court, because the states also have a duty to protect the Constitution).

^{152.} *Compare* In re Snyder, 228 B.R. 712 at 717–18 (Bankr. D. Neb. 1998), *with* In re Innes, 207 B.R. 953, 954 (Bankr. D. Kan. 1997). These were "virtually identical" bankruptcy cases with a state university accepting new funds in express exchange for waiving immunity, that came out opposite ways. *See* Gil Seinfeld, *Waiver-in-Litigation: Eleventh Amendment Immunity and the Voluntariness Question*, 63 Ohio St. L.J. 871, 893 (2002) (discussing same).

^{153.} See College Savings Bank v. Florida Prepaid Postsecondary Expense Board, 527 U.S. 666, 683 (1999) (holding only voluntary waivers of sovereign immunity are valid). Coercive waivers, which cut against voluntariness, were also held unconstitutional in New York v. United States. 505 U.S. 144, 176, 187–88 (1992) (holding the "take title" provision was unconstitutionally coercive).

^{154.} Parden v. Terminal Railway of the Alabama State Docks Department, 377 U.S. 184, 184, 196–98 (1964) (finding constructive waiver for a suit made under FELA, where the regulation created a private right of action, and where the state had then voluntarily begun operating a railroad, the very activity regulated by the federal statute). But see 527 U.S. at 680–82 (finding mere participation in a federally-regulated activity (the so-called *Parden* rule) was insufficient to amount to a waiver because it failed to preserve meaningful choice for states to participate in the activity or not, and was thus de facto involuntary and coercive). See generally Kit Kinports, *Implied Waiver After Seminole Tribe*, 82 MINN. L. REV. 793, 793–96, 831–32 (1998) (discussing the optimistic state of pre-*Florida Prepaid* implied waiver jurisprudence).

not.¹⁵⁵ Thus, while judicial discretion to generally ascertain whether activity is sufficient to constitute an "implied waiver" has been curtailed after *Florida Prepaid*,¹⁵⁶ in some specific cases, the actions of the state during litigation are still enough to amount to a waiver to counterclaims for invalidity. As a result, after *Florida Prepaid*, although courts have found waiver in some state activity,¹⁵⁷ they have found no waiver in other state initiatives,¹⁵⁸ notably even to IPR counterclaims to infringement litigation that it itself initiated.¹⁵⁹

Where it is unclear what is sufficient to amount to implicit waiver of sovereign immunity, scholars have suggested legislation to condition or qualify state access to federal courts based on a voluntary waiver of their Eleventh Amendment protections. However, if Congress is affirmatively involving itself, other, less uncertain legislative approaches are available to protect individual patent rights and support its national innovation goals.

C. Legislative Approaches

As already suggested, Congress can legislate to abrogate domestic sovereign immunity for IPRs and patent litigation. For Native American tribes, the legislative avenues are not encumbered by the Eleventh Amendment. For instance, in response to the Allergan fiasco, lawmakers have already proposed a bill to specifically curtail Native American tribal sovereign immunity for IPRs. 161

Given how the Court has interpreted the Eleventh Amendment, however, congressional approaches for abrogating state sovereign immunity in patent cases are less certain. Like with the PPVPRCA, Congress could use its Fourteenth Amendment powers to ensure due process is provided for patent owners or those being attacked by sovereign-backed patents. To do so, first, it must identify

^{155.} See *Fla. Prepaid*, 527 U.S. at 635. A counter argument could be that other states have engaged in the same bad behavior, so they have a coercive pressure to also act badly, but these types of lethal collective action problems in patents undercut arguments for sovereign immunity in the patent sphere.

^{156.} See Xechem Int., Inc. v. University of Texas, 382 F.3d 1324, 1331 (Fed. Cir. 2004) (reaffirming that participation in the patent system is not constructive waiver). A patent is also not a "gift or gratuity" from the Federal government, but a "carefully crafted bargain that encourages both the creation and public disclosure of new and useful advances in technology." *Id.* (quoting Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 63 (1998)). *See also* Seinfeld, *supra* note 150, at 871–75.

^{157.} See Vas-Cath v. University of Missouri, 473 F.3d 1376 at 1385 (Fed. Cir. 2006) (finding that the State University had waived its immunity by voluntarily initiating interference proceedings).

^{158.} See Tegic Communications Corp. v. University of Texas System, 458 F.3d 1335, 1344–45 (Fed. Cir. 2006) (finding when a State files suit in one state, it has not waived sovereign immunity to suits in other states, and that a covenant to sue does not constitute waiver by market entry). See also Xechem, 382 F.3d at 1329 (holding that entering into multiple contracts and research agreements was still not enough to amount to constructive waiver because, under Fla. Prepaid, this waiver occurs when the state invokes federal court jurisdiction on its own initiative, or upon a "clear declaration" of intent to submit to federal jurisdiction).

^{159.} See Order Dismissing Petition for IPR Based on Sovereign Immunity, Covidien LP v. University of Florida Research Foundation, IPR2016-01274 (Jan. 25, 2017).

^{160.} See Seinfeld, *supra* note 150, at 924–29 (proposing laws to create "presumed authorization" or "a certification requirement" to allow states to clearly define where it consents to federal jurisdiction and where it implicitly waives its sovereign immunity).

^{161.} S. 1948, 115th Cong. § 1 (2017). As of August 2018, it has not passed.

conduct "transgressing the Fourteenth Amendment's substantive provisions, and then must tailor its legislative scheme to remedying or preventing such conduct." In *Florida Prepaid*, the Court held that the eight patent infringement suits filed against states over 110 years was insufficient evidence of a pattern of state patent abuse—thus, Congress could not pass legislation to abrogate all state immunity over patent infringement suits. But as patent litigation has increased since *Florida Prepaid* was decided in 1999, more evidence shows both state patent infringement and state involvement in the patent system has increased, and recent scholarship has more fully explored the implications of market distortion, controversial licensing activity, and the sovereignty rental business to avoid patent litigation and IPRs. Today, a legislative solution to open states to patent infringement or invalidity suits may fare differently.

The *Florida Prepaid* majority indicated that Congress could lawfully abrogate state immunity in specific cases if Congress both provides a "clear statement" of its intent to do so, as well as meets the heightened congruence requirement. For instance, the majority expressed openness to a "pattern of patent infringement by the States," amounting to "a pattern of constitutional violations." But a major conspiracy to commit widespread patent infringement is a high bar, and a hard thing to prove. The developments since *Florida Prepaid* may be enough, ¹⁶⁶ but as the *Florida Prepaid* dissent argues, the Court might simply invent new requirements preventing abrogation. ¹⁶⁷

Legislation under section 5 of the Fourteenth Amendment is still possible, but the accepted role of federal legislation is limited. Courts have held that Congress cannot abrogate Eleventh Amendment immunity by finding a Fourteenth Amendment cause of action if a state remedy is available, unless that remedy is *so* inadequate as to violate due process.¹⁶⁸ And even if Congress *could* abrogate, proposed legislation must still be passed. The Intellectual Property Protection Restoration Act (IPPRA) of 2002, (a successor to the Draft IPPRA of 1999 and

^{162.} Fla. Prepaid, 527 U.S. at 627-28.

^{163.} Id. at 640.

^{164.} See Narechania, supra note 113, at 1585–86. Meanwhile, patenting and research investment at public universities has not increased as much as at private universities, id. at 1598–99. But states have become more actively and heavily involved in the patent system. See Barker, supra note 110, at 95.

^{165.} See Fla. Prepaid, 527 U.S. at 640 ("identified no pattern of patent infringement by the States, let alone a pattern of constitutional violations").

^{166.} See Polse, supra note 144, at 523–25 (discussing in more detail the modern sovereignty doctrine, and the Court's foreclosure of Congress's power to limit State immunity to patent suits).

^{167.} See discussion of Stevens's argument in Florida Prepaid that the Court made up "unfair" requirements, supra note 57, and accompanying text. After the "clear statement" requirement was invented in Atascadero, Congress complied and then tried to abrogate sovereignty again in Florida Prepaid, only to be rebuffed for not meeting a heightened congruence requirement.

^{168.} See Pennington Seed, Inc. v. Produce Exch. No. 299, 457 F.3d 1334, 1340 (Fed. Cir. 2006) (rejecting the argument that the only remedy was inadequate, even when the only body able to hear claims, the Arkansas Claims Commission, was unable to issue injunctions, conduct discovery, or award over \$10,000). "While these remedies may be 'uncertain' or 'less convenient,' or may 'undermine the uniformity of patent law,' these attributes are not sufficient to show that the patentee's due process rights have been violated." *Id.* at 1340–41 (internal citations omitted).

2001) introduced by Senator Leahy, would have abrogated state sovereign immunity to patent suits, but it was ultimately not passed. 169

Alternately, Congress can use one its other enumerated powers to limit state sovereignty.¹⁷⁰ By conditioning acceptance of *new* federal funds on a waiver, Congress can pass laws using its Spending Clause powers¹⁷¹ to negotiate with states and tribes to voluntarily open themselves up to patent suits.¹⁷² However, if the incentive is too high, or too many conditions are attached, courts might find that withholding the "gift" is coercive.¹⁷³

Additional regulations can limit both how patents are used and the impact that patents have. For instance, studies of the rise and successes of robust FDA regulatory exclusivities by John Thomas suggest that the underlying patent system would change to be more responsive and fair to different subject matter areas by using specific regulatory exclusivities, rather than using a one-size-fits-all patent system alone (e.g. treat pharma patents differently from high-tech patents).¹⁷⁴ Introducing extra regulatory "layers" that are immune from sovereign immunity claims can keep encouraging innovation while solving or mitigating patent-based sovereignty rental problems, while also sidestepping *Florida Prepaid's*

^{169.} See Robert T. Neufeld, Closing Federalism's Loophole in Intellectual Property Rights, 17 Berkeley Tech. L.J. 1295, 1310–20 (2002).

^{170.} Scholars have theorized about potential legislation to abrogate state sovereign immunity using the Contracts Clause or Commerce Clause. See Vázquez, supra note 144, at 1749–50 (discussing the possibility of using Contracts Clause powers to abrogate state sovereign immunity, but arguing that these powers, even supplemented by the Necessary and Proper Clause, appear to be rejected after Seminole Tribe). See, e.g., Baker & Young, supra note 131, at 98 (pushing back against an expansive reading of Garcia, since the holding was based on particulars of the common law background, and finding the Court's openness to "case-by case" development could lead to a standard to judge whether immunity from the Commerce Clause should apply).

^{171.} U.S. CONST. art. I, § 8, cl. 1.

^{172.} See Fla. Prepaid v. College Savings Bank, 527 U.S. 627, 686 (1999) (emphasizing that this conditional waiver is possible).

^{173.} See Seinfeld, *supra* note 150, at 913–15 (discussing how courts analyze whether something is unduly coercive or not, noting the distinction of express waivers that state a cost vs. waivers that force the judiciary to impose a normative value judgment on the cost of sovereign immunity; and arguing that conditioning right to litigate in federal court on waiver of immunity does not constitute an unlawfully coercive condition). Coercive gifts were held unconstitutional more recently in NFIB v. Sebelius, 567 U.S. 519 (2012). *See also* Randy E. Barnett, *A Weird Victory for Federalism*, SCOTUSBLOG (Jun. 28, 2012, 12:56 PM), https://www.scotusblog.com/2012/06/a-weird-victory-for-federalism/ (last visited April 18, 2018).

^{174.} See John R. Thomas, The End of Patent Medicines: Thoughts on the Rise of Regulatory Exclusivities, 70 FOOD & DRUG L.J. 39, 53 (2015). See generally John R. Thomas, The Question Concerning Patent Law and Pioneer Inventions, 10 BERKELEY TECH. L. J. 35, 35–40, 95–97 (1995); for discussion of different fields and industries with different needs interacting with patents very differently, see Allison, supra note 112, at 1074–75, 1140. But see DAN L. BURK AND MARK A. LEMLEY, THE PATENT CRISIS AND HOW THE COURTS CAN SOLVE IT, (2009) (analyzing how the fundamentally different forms of innovation and patent needs in different fields, leads to problems with uncertainty, patent thickets, different single theories for damages calculation that are inappropriate for different industries, disincentivization, fragmented conceptions of patent theory, and industry-driven attempts at appropriating national patent theory, under a unitary patent regime, and how courts, can solve these problems by tailoring the existing law to recognize industry speciation). Note the professor's proposal is not inconsistent with congressional supremacy.

legislative hurdles. Furthermore, national-level regulatory policymaking promises another route to be more responsive to the reality of the changing needs of the patent system as technology and national policy goals evolve.

CONCLUSION

Thomas Jefferson, discussing balancing the creation of patent incentives against the "embarrassment of an exclusive patent," was writing about national interests and the impact on individuals—the people—to suffer the monopoly of a patent holder, not about the embarrassment to states by holding them responsible for their bad behavior. But under the current formulation of sovereign immunity, when it comes to patents, the rights and privileges of individuals have been superseded by state and tribal interests. The problems, sometimes embarrassingly, speak for themselves.

What about future Allergans, trying to compete against state/tribe-sponsored incumbents? Sanctioned market distortion allows a handful of states and tribes to impose their normative choices on everyone; they, not a competitive marketplace, decide who wins and who loses. State-approved patent trolling erodes trust in all patents: Commoditizing sovereignty rental does not reward all innovators—it rewards more government.

Congress can balance patent policy, incentives to innovate, and the relationship between individuals, states, and tribes. Since diminishment of one sovereign can become enhancement of others under horizontal aggrandizement, today, when sovereigns with more universities, patents, and/or abuse can extract more concessions, excluding tribes from sovereignty-based patent privileges should perhaps be considered as part of a broader policy decision that also encompasses states. Further, just as any unauthorized expansion of tribal sovereignty would be an affront to state sovereignty,¹⁷⁷ unauthorized expansion of state or tribal sovereignty encroaches on individual sovereignty. To address the sovereignty-rental arbitrage problem, legislation like the PPVPRCA and the IPPRA provides an approach to address undesirable state and tribal overreach into patent policy.

But sovereignty rental will not be the last patent problem that implicates constitutional concerns. Whichever solution is considered, beginning the inquiry instead with individual rights, including patent rights, helps illuminate the role of government to accordingly respect and secure them, and to make policy decisions about what type of *national* patent system we share. The common doctrinal basis underlying the legal and moral structure of American sovereignty, as codified in the IP Clause and Bill of Rights, based on "popular sovereignty" and presumption

^{175.} Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in Founders Online*, NATIONAL ARCHIVES, https://founders.archives.gov/documents/Jefferson/03-06-02-0322 [https://perma.cc/4323-PXQB].

^{176.} But see generally Mossoff, supra note 97 (arguing against the Jeffersonian concept of patents vs. a patent privilege).

^{177.} See Michigan v. Bay Mills Indian Community, 134 S. Ct. 2024 at 2045 (2014) (Thomas, C., dissenting).

of individual liberty, animates the relationship between governments and the People whom they serve. Ultimately, a national Congress was delegated normative patent policymaking powers to define the contours of state, tribal, and individual patent rights, and should decide whether aggrandizement of one power at the expense of the others best serves its innovation plan and its duties to its citizens. As new developments challenge established patent law and public policy, looking back to the historical record and original public meaning analysis can be a useful tool to help bring context and emphasis back to the sovereignty that belongs to individuals, even as our scientific anabasis leads the world into the new technologies and new challenges of the shared progress of science and useful arts.