The Hamiltonian Origins of the U.S. Patent System, and Why They Matter Today

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ABSTRACT: I revisit one of the earliest administrative functions of the United States government, the granting of patents, to show why the U.S. Patent Office fits so poorly with the contemporary model of an Executive Branch agency in the modern Administrative State. In parallel with other early "proto-agencies" the Patent Office participated in the most important job of the new national government: economic development. Because of the importance of this policy, and the limited power of the new federal government, Congress, courts, and the executive branch emphasized concerted action rather than separation of powers.

The Patent Office had been performing its basic function for nearly one hundred years when the modern "administrative revolution" began its sweep though the federal government. The modern administrative state was created to counterbalance the emergent power of large, concentrated industries; it had little relationship to the original Patent Office mandate from Hamiltonian times. As a consequence, contemporary administrative law is a poor fit for the Patent Office. Administrative law, especially the Administrative Procedure Act ("APA"), governs power relations between federal agencies and the industries they regulate, with courts often acting as referee. But the Patent Office grants government-sanctioned property rights to dispersed inventors in an extremely wide variety of industries, and lets private investment, transactions, and enforcement take over. Since its founding, the Patent Office has been charged not with regulating concentrated industry, but with handing out a small dollop of state power to dispersed parties in the form of individual property rights. Although some features of the modern administrative apparatus surely apply to the Patent Office it is overall best left to the looser-fitting understandings of the Hamiltonian economic development state.

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I. INTRODUCTION

I revisit one of the earliest administrative functions of the United States government, the granting of patents,¹ to show why the U.S. Patent Office fits so poorly with the contemporary model of an Executive Branch agency in the modern Administrative State. The Patent Office participated in the most important job of the new national government: building the institutional infrastructure to support and promote economic activity. It did this job in parallel with other "proto-agencies," such as the Post Office; the General Land Office (succeeding a division of the Treasury Department), which surveyed land and issued title to settlers; the Customs Service; and the Treasury Department's Coastal Trade Office. In these early years, the overriding policy of rapidly building out a robust national economy provided a unifying force that blurred the lines between legislature, courts, and the executive function, and even (at times) between citizen and state.²

INTRODUCTION

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^{1.} Cf. Jerry L. Mashaw, Recovering American Administrative Law: Federalist Foundations, 1787 - 1801, 115 YALE LJ. 1256, 1260 (2006) ("[T]]he first independent agency at the national level was not the ICC [Interstate Commerce Commission, created in 1887], but the Patent Office, created ninety-seven years earlier.").

^{2.} *Cf. id.* at 1277 ("[In its earliest years,] the national government's primary attentions were directed to defense and development. Land grants, protection of intellectual property, the creation of post offices and post roads, and the promotion of the carriage of goods by sea were all crucial to the creation of the new national market.").

The Patent Office had been performing its basic function for nearly onehundred years when the modern "administrative revolution" began in the federal government. This revolution, dating from the 1870s, was a response to the accumulation of private power and the complex problems brought on by rapid industrialization. The powerful federal agencies created during this era-beginning with the Interstate Commerce Commission, continuing with the Food and Drug Administration, and then later the "alphabet soup" of agencies from the 1920s to the 1940s-had much to do with counterbalancing the emergent power of large, concentrated industries and very little to do with the original Patent Office mandate from Hamiltonian times. As a consequence, contemporary administrative law is a poor fit for the Patent Office. Administrative law, and in particular its formalized instantiation in the Administrative Procedure Act ("APA"), is the culmination of legal oversight of the Regulatory State. It governs power relations between federal agencies and the industries they regulate, with courts often acting as referee. But the Patent Office grants government-sanctioned property rights to dispersed inventors in an extremely wide variety of industries, and then gets out of the way while private investment, transactions, and enforcement take over. As one of the original proto-agencies, the Patent Office is a creature of its time, charged not with regulating concentrated power but with handing out a small dollop of state power to dispersed parties in the form of individual property rights. Although some features of the modern administrative apparatus surely apply to the Patent Office (e.g., hiring practices and collective bargaining), the historical and "organic" interrelations between the Office and other branches of government are generally best left to the looserfitting understandings of the pre-APA world.

In practical terms, I am arguing in support of two propositions. First, we should not push for *Chevron* deference to Patent Office interpretations of the Patent Act. Second, we should respect the traditional role of Article III courts in the patent system by (a) continuing the practice of court review of individual Patent Office decisions (except when prohibited by statute), by (b) respecting the courts' ultimate authority in interpreting the Patent Act (i.e., bypassing the *Chevron* station), and by (c) supporting judicial innovations designed to adapt to changing conditions. Examples of adaptive innovations include the creation of the "invention" (later, obviousness) test in the 1850s, the calling into existence of the double patenting doctrine in the later 19th century, and other judicial innovations discussed later in this paper.

In my decidedly minority view, probably the best way to ensure that the Patent Office continues to promote economic activity under rapidly changing conditions is to honor the legacy of its original mission and its cooperative, interactive relationship with the other branches of government. We don't need so much to invent a modern administrative law for patents, in other words, as to breathe continuous life into the pre-APA common law style of patent system regulation that took shape under the guidance of Hamilton and his peers.

To lay a foundation for my views, Part II begins by providing some historical background regarding the Patent Office. Part III then outlines my suggested policy takeaways based on this historical background. Part IV concludes.

II. SOME HISTORY

The patent system was one of the earliest instruments of economic development put in place by the young United States. It represents a distinctly pre-twentieth century policy—one of the strands in the sturdy rope that pulled the early Republic forward into prosperity.³ But this system was the product of a much smaller and weaker state than the one we currently inhabit.⁴

In this Part, I describe the origins of the patent system and explain why these origins make this system such an odd fit in the modern administrative state. To do so, Section II.A begins by discussing Hamilton's influence on patents. Next, Section II.B outlines the early history of the Patent Office. Then, Section II.C examines the General Land Office, since it has a design similar to the Patent Office. Finally, Section II.D discusses generally the property strategy of economic development, as it was applied to inventions and land.

A. HAMILTON'S INFLUENCE ON PATENTS

Herb Hovenkamp has accurately described the situation:

^{3.} The great legal historian J. Willard Hurst described the entire 19th century American legal tradition in these terms. JAMES WILLARD HURST, LAW AND THE CONDITIONS OF FREEDOM IN THE NINETEENTH-CENTURY UNITED STATES 6 (1956) (stating that the most important "working principle" of American law in the 19th century was that "[t]he legal order should protect and promote the release of individual creative energy to the greatest extent compatible with the broad sharing of opportunity for such expression").

^{4.} As far as I know, the earliest patent scholarship on the topic in this section is John F. Duffy, *The FCC and the Patent System: Progressive Ideals, Jacksonian Realism, and the Technology of Regulation*, 71 U. COLO. L. REV. 1071, 1079–80 (2000):

[[]W]hile the Progressive-era regulatory agencies have gone from fashionable innovations to antiquated relics during the twentieth century, the patent system continues to thrive with much the same structure that it was given in 1836... [A]gencies created in the twentieth and later part of the nineteenth centuries were influenced by then-fashionable political and regulatory philosophies, which radically overestimated the abilities of public agencies. In contrast, the modern American patent bureaucracy was established during the Jacksonian era, which was nothing if not realistic about the abilities of government officers and institutions. [In addition,] the patent system provides further cause to check the enthusiasm of today's [regulatory agency] reformers. For agency abolitionists who seek to idealize the common law, the patent system provides a well-documented failure of the common law to regulate effectively without the assistance of an administrative agency.

At the beginning of the 19th century the United States was severely underdeveloped. Government intervention in the economy took the form of monopoly grants to encourage economic development, as well as tax breaks and other subsidies dedicated to the creation of infrastructure. The early American state also took a much heavier role in fostering innovation through the patent system, encouraging the actual development and deployment of patented devices and processes. Under the leadership of Chief Justice Marshall the Supreme Court facilitated the use of monopoly grants. It also furthered a strongly national and pro-regulatory interpretation of the Commerce Clause, designed to facilitate national development and limit state free riding and other self-interest.⁵

Hovenkamp's summary is borne out by Alexander Hamilton's Report on Manufactures, which he wrote (as Secretary of the Treasury) for Congress in 1791.⁶ At the outset, Hamilton makes reference to the rift between northerners, who advocated for finance and manufacturing, and southerners, who defended an agrarian economy.⁷ "The expediency of encouraging manufactures in the United States," Hamilton wrote, "which was not long since deemed very questionable, appears at this time to be pretty generally admitted."⁸ This might have been optimistic, as witnessed by later battles such as over the funding of the Bank of the U.S. But it did clear the way for Hamilton to marshal all the arguments he could in favor of manufacturing.

In paraphrasing an objection to favoring manufacturing over agriculture, Hamilton adverts to the most pressing issue: the shortage of labor in the new country. He writes:

The smallness of the[] population [of the United States] compared with their [i.e., the states'] territory—the constant allurements to emigration from the settled to the unsettled parts of the country —the facility, with which the less independent condition of an artisan can be exchanged for the more independent condition of a farmer, these and similar causes conspire to produce, and for a

^{5.} Herbert Hovenkamp, *Appraising the Progressive State*, 102 IOWA L. REV. 1063, 1068 (2017) (footnotes omitted).

^{6.} See ALEXANDER HAMILTON, REPORT ON MANUFACTURES (1791), http://www.constitution. org/ah/rpt_manufactures.pdf (citing to pagination in ALEXANDER HAMILTON, 4 THE WORKS OF ALEXANDER HAMILTON (Henry Cabot Lodge ed., 1904), http://oll.libertyfund.org/titles/ hamilton-the-works-of-alexander-hamilton-federal-edition-12-vols).

^{7.} The best-known figure in this camp was Thomas Jefferson, whose idealized vision of the independent small farmer belies the reliance on slavery at the heart of 18th-century large-scale agriculture. RON CHERNOW, ALEXANDER HAMILTON 346 (2004). "Jefferson and Madison had a nearly visceral contempt for market values and tended to denigrate commerce as grubby, parasitic, and degrading.... Strangely enough for a large slaveholder, [Jefferson] thought that agriculture was egalitarian while manufacturing would produce a class-conscious society." *Id.*

^{8.} HAMILTON, *supra* note 6, at 192.

length of time must continue to occasion, a scarcity of hands for manufacturing occupation, and dearness of labor generally.⁹

The argument ran, in other words: There is a scarcity of labor available for manufacturing, so government ought not put effort into stimulating it. The time is not yet right to promote manufacturing. Hamilton turns the scarcity of labor argument around:

[T]he annual produce of the land and labour of a country can only be encreased, in two ways—by some improvement in the *productive powers* of the useful labour, which actually exists within it, or by some increase in the quantity of such labour: That with regard to the first, the labour of Artificers being capable of greater subdivision and simplicity of operation, than that of Cultivators, it is susceptible, in a proportionably greater degree, of improvement in its *productive powers*, whether to be derived from an accession of [s]kill, or from the application of ingenious machinery; in which particular, therefore, the labour employed in the culture of land can pretend to no advantage over that engaged in manufactures¹⁰

He concludes by saying that "the establishment and diffusion of manufactures have the effect of rendering the total mass of useful and productive labor in a community, *greater than it would otherwise be.*"¹¹ In just these few paragraphs, Hamilton put his finger on the shortage of labor, one of the most distinctive characteristics of the early American economy, and one made famous in later years by the economic historian H.J. Habakkuk.¹² Then after his insightful assessment, Hamilton moved quickly to a prescription that was, at the time, contrary to conventional thought. If you have a labor shortage, the best way to solve it is to get as much leverage as you can from each hour worked.¹³ "[T]he establishment and diffusion of manufactures"

^{9.} *Id.* at 194. Note that economic historians have come to see the abundance of open land as a less important factor than it was thought to be in the eighteenth century. *See generally* Peter Temin, *Labor Scarcity and the Problem of American Industrial Efficiency in the 1850's*, 26 J. ECON. HIST. 277 (1966) (discussing the importance of technology and innovation in the development of American industry in the 1850's).

^{10.} HAMILTON, *supra* note 6, at 197.

^{11.} Id. at 202.

^{12.} See generally H.J. HABAKKUK, AMERICAN AND BRITISH TECHNOLOGY IN THE NINETEENTH CENTURY (1962) (discussing the shortage of labor). Habakkuk also emphasized market growth as an important factor: "It was the interplay between constraints on the factor side [e.g., shortage of labor] and the prospects of expanding markets, the combination of frost and sunshine in the economic climate, which was the distinguishing feature of American development." *Id.* at 188. Contemporary economic historians have expanded the relative factor endowments approach to include many more institutional factors such as migration patterns, demography, and alternative labor systems (e.g., slavery, forced labor, free labor, etc.). *See* Robert C. Allen et al., *The Colonial Origins of the Divergence in the Americas: A Labor Market Approach*, 72 J. ECON. HIST. 863, 864–67 (2012).

^{13.} *Cf.* HAMILTON, *supra* note 6, at 221 ("Let it be supposed, that the difference of price, in two Countries, of a given quantity of manual labour requisite to the fabrication of a given article

does just that.¹⁴ Next, after identifying the critical problem of labor shortage and the common sense solution of automation, Hamilton points out that the private sector of the infant state was too small and weak to make the investments necessary to jump start the process of industrialization.¹⁵ Through this sequence of arguments, Hamilton makes the strongest possible case for mobilizing an activist economic development state.

In pursuit of this goal, Hamilton took an expansive view of the powers of the nascent federal government. In his Report on Manufactures, he proposed—in addition to patents—a government-funded technology development fund, encouragement of uniquely skilled immigrants,¹⁶ funding for infrastructure development, and other economic development schemes. Here is an excerpt from the Report:

The encouragement of new inventions and discoveries at home, and of the introduction into the United States of such as may have been made in other countries; particularly, those which relate to machinery.

This is among the most useful and unexceptionable of the aids which can be given to manufactures. The usual means of that encouragement are pecuniary rewards, and, for a time, exclusive privileges. The first must be employed, according to the occasion, and the utility of the invention or discovery. For the last, so far w[ith] respects "authors and inventors," provision has been made by law. But it is desirable, in regard to improvements, and secrets of

15. HAMILTON, *supra* note 6, at 284 ("In countries where there is great private wealth, much may be effected by the voluntary contributions of patriotic individuals; but in a community situated like that of the United States, the public purse must supply the deficiency of private resource. In what can it be so useful, as in prompting and improving the efforts of industry?").

is as 10; and that some *mechanic power* is introduced into both countries, which performing half the necessary labour, leaves only half to be done by hand, it is evident, that the difference in the cost of the fabrication of the article in question, in the two countries, as far as it is connected with the price of labour, will be reduced from 10[] to 5, in consequence of the introduction of that *power*. This circumstance is worthy of the most particular attention. It diminishes immensely one of the objections most strenuously urged, against the success of manufactures in the United States.").

^{14.} *Id.* at 202. Hamilton's diagnosis and prescription have both been validated (in retrospect) by historians. *See* Douglass North, *Industrialization in the United States, in* VI, Part II THE CAMBRIDGE ECONOMIC HISTORY OF EUROPE 673, 676 (H.J. Habakkuk & M. Postan eds. 1965) ("A third element [along with market growth due to immigration and settlement, and investments in human capital such as education and training] in the success of American manufacturing in the critical years [1790–1830] was the development of indigenous labour-saving innovations to cut costs. The result was a more capital-intensive industry at a very early stage which was able to compete successfully with lower-wage, more labour-intensive industries abroad.").

^{16.} And, to be fair, encouragement for the acquisition of craft technologies whose export was explicitly forbidden by foreign governments. *See* Doron Ben-Atar, *Alexander Hamilton's Alternative: Technology Piracy and the Report on Manufactures*, 52 WM. & MARY Q. 389, 398–400 (1995). It is interesting to note in this respect that this is the very behavior the U.S. now objects to, insofar as it is a policy pursued by the People's Republic of China. In that sense, before there was "Made in China 2025," there was "Made in the U.S. 1805."

extraordinary value, to be able to extend the same benefit to introducers, as well as authors and inventors; a policy which has been practised with advantage in other countries. Here, however, as in some other cases, there is cause to regret, that the competency of the authority of the National Government to the good which might be done, is not without a question. Many aids might be given to industry, many internal improvements of primary magnitude might be promoted, by an authority operating throughout the Union, which cannot be effected as well, if at all, by an authority confirmed within the limits of a single State.

But, if the Legislature of the Union cannot do all the good that might be wished, it is, at least, desirable that all may be done which is practicable. Means for promoting the introduction of foreign improvements, though less efficaciously th[an] might be accomplished with more adequate authority, will form a part of the plan intended to be submitted in the close of this report.¹⁷

Many of Hamilton's ideas were well ahead of their time. There was not much overlap between what he wanted and what the political majority in the new government would agree to fund right away. Hamilton wanted to encourage patents as part of a broader technology stimulation policy, including, in his mind, direct subsidies or premiums for investment in specific technologies. But there was no consensus for direct subsidies. Jefferson and Madison opposed them on general principles (small vs. big government; agriculture vs. manufacturing).¹⁸ Others in Congress opposed them as beyond the means of the cash-strapped new state.¹⁹ But in any event, there was agreement on the need for patents.

Even with respect to patents, however, Hamilton pushed against the limits set for the new government. He wanted to grant patents of importation, which are patents for inventions that were established overseas but new to the U.S.²⁰ He ran into opposition on this front too. There was a general

^{17.} HAMILTON, supra note 6, at 253 (emphasis omitted).

^{18.} Edward C. Walterscheid, *Patents and Manufacturing in the Early Republic*, 80 J. PAT. & TRADEMARK OFF. SOCY 855, 862–63 (1998) ("[T]he first patent petition presented to the first federal Congress in 1789 had requested financial assistance for the inventor which the House declined to do, not only because of 'the present deranged state of our finances' but also because of a doubt 'whether the Legislature has power, by the Constitution, to go further in rewarding the inventors of useful machines, or discoveries in sciences, than merely to secure to them for a time the right of making, publishing and vending them.' Five years later, another House Committee would take essentially the same position." (footnote omitted)).

^{19.} Id.

^{20.} See Sean M. O'Connor, The Lost "Art" of the Patent System, 2015 U. ILL. L. REV. 1397, 1470 ("[E]arly patent systems [outside the first one, in Venice in the fifteenth century] were designed to establish foreign arts into the domestic market. . . . [O]ther principalities needed to recruit foreign artisans (often from Venice!) or encourage domestic artisans to master and bring back a foreign art. Thus, these systems often focused on so-called patents of importation that gave

understanding among many in the U.S. at the time—influenced no doubt by a general presumption of limited state power—that only "new to the world" inventions should be patented.²¹ Patents of importation were disfavored.²²

Hamilton's reach greatly exceeded the new nation's grasp. Patents were in a way the small residual of Hamilton's original plan for government promotion of industry. Yet even though many policies proposed to accompany patents were shelved, the patent system of the early Federalist period bears the imprint of the energetic spirit from which it sprang. If it was one of few feasible promotion policies, it could at least be an aggressive one.

B. THE EARLY PATENT OFFICE: A PROTO-ADMINISTRATIVE AGENCY

The early history of the administrative patent function is a choppy one. The initial 1790 Act, with its heavyweight "examiner corps" of the Secretaries

21. On Hamilton's support for patents of importation, see Walterscheid, *supra* note 18, at 860–78. On the strong opposition to Hamilton's proposal, see Jeanne C. Fromer, *The Intellectual Property Clause's External Limitations*, 61 DUKE L.J. 1329, 1353–54 (2012) ("Although a draft of the Patent Act of 1790 provided for patents of importation, the final version of the law that Congress passed during its first session did not authorize them. The provision was removed on March 5, 1790, after debate in the House of Representatives. Representative Thomas Fitzsimons explained that it had been removed because of 'the Constitutional power being Questionable.' Correspondence reveals that James Madison—and possibly others—doubted the constitutionality of patents of importation because these patents seemed to lie outside of the means specified in the IP Clause, which allows patent rights to be conferred on inventors, not on importers of already-created inventions." (footnotes omitted)).

22. Walterscheid, *supra* note 18, at 862–63 ("Hamilton's proposal to use bounties to encourage the importation of new manufactures did not meet with favor. Both Jefferson and Madison looked askance at it, and the Congress refused to fund it. A patent bill introduced on March 1, 1792 contained a provision that monies obtained from patent fees should be used in part to procure and import useful arts or machines from foreign countries. This provision was rejected and never became law." (footnotes omitted)); *see also* Reutgen v. Kanowrs, 20 F. Cas. 555, 556 (C.C.D. Pa. 1804) (No. 11,710) (Washington, B., C.J.) (charging jury) ("Whether the invention is of European origin, and imported here by the plaintiff; or has, since the erection of his machine, been carried to Europe, is a question most proper for your determination. It is only necessary for me to state; that, if the invention was brought over, that is, if it appears that the plaintiff was not the original inventor, in reference to other parts of the world as well as America, he is not entitled to a patent. This point has been decided otherwise in England, in consequence of the expressions of the statute of Jac. I. [i.e., the Statute of Monopolies], which speaks of new manufactures within the realm.").

exclusive rights simply for the artisan to establish the existing foreign art in the domestic economy, regardless of whether he invented the art. The fact of local novelty meant an art established elsewhere was still an important kind of innovation in the domestic economy." (footnotes omitted)).

Cf. Jessica C. Lai, Myriad Genetics *and the BRCA Patents in Europe: The Implications of the U.S. Supreme Court Decision*, 5 U.C. IRVINE L. REV. 1041, 1064 n.160 (2015) ("Historically, most states [i.e., nations] had local novelty standards, meaning that one could 'invent' through being the first to import something. It did not matter that the invention already existed elsewhere because travelling from land to land used to be long and dangerous. Today, most states have universal novelty standards, as travel is no longer perilous and modern technology means that information travels differently.").

of State and War, and the Attorney General, quickly gave way to a pure registration system. From 1793 to 1836, inventors who sent the proper documents to the State Department received a patent. Fights between rival inventors as to who invented first were resolved by the District Courts. And patent validity was not reviewed until the patent owner tried to enforce the patent. The resulting system, whereby federal judges determine patent validity in the context of a defense to patent infringement, was and is a distinctive aspect of U.S. patent practice.²³

With the advent of real patent examination in 1836, the administrative side of U.S. patent law began to take shape. But the early period continued to influence the post-1836 scene, particularly with respect to the important role of courts in the system.²⁴ A good example is that under the 1793 Patent Act, one who believed a patent had been obtained fraudulently could have the patent invalidated by applying to a local federal district court and initiating an invalidity proceeding.²⁵

The use of courts as federal outposts was simply a function of the limited availability of federal institutions. The same is true of the copyright system. For instance, under the 1790 Copyright Act, works subject to copyright had to be deposited in the federal district court nearest the author's residence.²⁶ With so little federal power in toto, there was more concern with pulling together federal power than with the *separation* of powers. When I speak of a unitary conception of federal authority, this is what I have in mind.

In total, almost 10,000 patents were issued under the 1790 and 1793 Patent Acts. As might be expected from a pure registration system, patent quality was a serious issue.²⁷ Indeed, concerns with quality were the driving force behind the 1836 Patent Act and the creation of an administrative

^{23.} In most other countries, validity (even post-patent issuance) continues to be the province of the national patent office, with courts typically limited to patent enforcement issues (infringement, remedies, etc.). *See* ROBERT P. MERGES & SEAGULL HAIYAN SONG, TRANSNATIONAL INTELLECTUAL PROPERTY LAW 35–39 (2018) (introducing the European and Chinese patent systems).

^{24.} See Edward C. Walterscheid, To Promote the Progress of Useful Arts: American Patent Law and Administration, 1787–1836 (Part 1), 79 J. PAT. & TRADEMARK OFF. SOCY 61, 61 (1997) ("The Patent Act of 1836 is generally acknowledged to be the foundation for the modern patent examination system in the United States. It created the Patent Office, a corps of examiners, modern interference practice, administrative appeal practice, and the modern patent numbering system. But what is frequently forgotten or ignored is that the patent system it created came into existence predicated on—and in no small measure in reaction to—decades of prior administrative practice under a detailed statutory scheme which had received rather extensive judicial interpretation. Almost ten thousand patents had been issued by 1836. There thus was a significant background, both legal and administrative, against which to view the Act of 1836." (footnote omitted)).

^{25.} Act of February 21, 1793, 1 Stat. 318, 323 § 10 (1793).

^{26.} Act of May 31, 1790, 1 Stat. 124, 125 § 3 (1790).

^{27.} See generally Edward C. Walterscheid, *The Winged Gudgeon—An Early Patent Controversy*, 79 J. PAT. & TRADEMARK OFF. SOC'Y 533 (1997) (discussing early problems with the patent registration system, including the Patent Commissioner's published notice that registered patent was not innovative and was being used to extort licenses from "infringers").

examining corps. Even so, the important role of courts in determining patent validity during this period well illustrates the unitary government in action.²⁸ This tradition of court involvement left a lasting impression on the law as well.

One important judicial voice was that of Judge (later Justice) Joseph Story. Riding Circuit in New England, Justice Story might be said to have been the chief judge of the Circuit Court of Early Industrialization. He was a friend of patent rights. In one of his early cases, he rejected what he considered a formalistic defense to a charge of patent infringement:

[W]e think that the manifest intention of the legislature was, not to allow any defect or concealment in a specification to avoid the patent, unless it arose from an intention to deceive the public. There is no ground therefore, on which we can support this objection.²⁹

He sounded the same theme in a later case, this time explicitly evoking the constitutional design as a reason to favor the patent owner:

The constitution of the United States, in giving authority to congress to grant such patents for a limited period, declares the object to be to promote the progress of science and useful arts, an object as truly national, and meritorious, and well founded in public policy, as any which can possibly be within the scope of national protection. Hence it has always been the course of the American courts . . . to construe these patents fairly and liberally, and not to subject them to any overnice and critical refinements . . . and when the nature and extent of that claim are apparent, not to fritter away his rights upon formal or subtle objections of a purely technical character.³⁰

Courts were also not reluctant to interpret the Patent Act in ways that preserved inventors' rights, even when doing so in effect created new rights

^{28.} Jerry Mashaw, in his work on early administrative law, notes the presence of "mongrel" agencies and officers (including the original U.S. attorneys), noting that they were "outside of any departmental hierarchy." Mashaw, *supra* note 1, at 1291. He concludes:

[[]E]arly Congresses created departments and officers, charged them with administrative tasks, and subjected them to political supervision in a variety of ways that exhibit modest concern for rigid or formal conceptions of the separation of powers. While one can find individual expressions of doctrinaire, or even extreme, opinions on separation of powers questions in the debates, when Congress acted, it acted in a spirit of pragmatic compromise.

Id. at 1291-92.

^{29.} Whittemore v. Cutter, 29 F. Cas. 1120, 1122 (C.C.D. Mass. 1813) (No. 17,600).

^{30.} Ames v. Howard, 1 F. Cas. 755, 756 (C.C.D. Mass. 1833) (No. 326); *see also* R. KENT NEWMYER, SUPREME COURT JUSTICE JOSEPH STORY: STATESMAN OF THE OLD REPUBLIC 140 (1986) ("In these [patent] cases [Story] moved away from undue reliance on English law in the direction of an American patent law that would favor inventors and, following the spirit of the Constitution, serve national interest by promoting technological progress.... [H]e was identified by contemporaries as the pioneer in the liberalization of American patent law.").

or procedures. In one early case, a federal court refused to impose a general statute of limitations where the Patent Act had not specified one.³¹ In another, a court ratified the practice of surrendering a patent with a defective specification and receiving a corrected patent in return.³²

Even when judges ruled for the infringer, they seemed to do so reluctantly. In one New York case from 1836, the court wrote:

[T]o entitle a patentee to maintain an action for a supposed violation of his rights, his invention must be both useful and new; not that its usefulness is to be scanned with a critical eye, to ascertain a given amount of benefit to be derived from it, but the invention must be useful, as contradistinguished from that which is frivolous, or wholly worthless. If not frivolous, or entirely useless, the requirements of the law in this particular are complied with. With regard to the invention before us, it is clearly useful. This is proved by the testimony of witnesses on all sides. It is proved, also, by the great extent of the plaintiff's sales, by the favour of the public, which has been liberally bestowed upon it, and by the palpable imitations of the plaintiff's models in the case under consideration.³³

And yet, the court continued:

After a full view of this case, I am compelled most reluctantly to come to the conclusion that the plaintiff has undertaken to secure more than he has a right to claim, and in my view of the law he cannot recover. He should have patented his combination, and not his constituent parts. I regret this result the more because I consider that the plaintiff has invented a machine or contrivance ingenious in itself, and highly useful for the purposes to which it is to be applied. I would protect him if I could conscientiously do so under the views of the law which I have taken³⁴

Returning now to the Patent Office, the patent examiner corps grew from one examiner in 1836 to 24 by 1856.³⁵ The PTO drew celebrated scientists to the corps, and some individual examiners became something close to

^{31.} Parker v. Hallock, 18 F. Cas. 1127, 1127 (C.C.D. Penn. 1857) (No. 10, 735) (noting that the Patent Act did not include a statute of limitations for bringing suit). The 1952 Patent Act codified a six-month statute of limitations. Patent Act of 1952, Pub. L. No. 593, § 133, 66 Stat. 792 (1952).

^{32.} Day v. Goodyear, 7 F. Cas. 240, 240 (C.C.N.D.N.Y. 1850) (No. 3,678) ("The surrender of Goodyear's original patent for vulcanized rubber, of June 15th, 1844, and the reissued patent, December 25th, 1849, was legal, and the reissued patent is not void upon its face."). This practice was later codified and is now referred to as patent reissue. *See* 35 U.S.C. § 251 (2012).

^{33.} Stanley v. Hewitt, 22 F. Cas. 1043, 1044 (C.C.E.D.N.Y. 1836) (No. 13,285).

^{34.} Id. at 1046.

^{35.} Kara W. Swanson, *The Emergence of the Professional Patent Practitioner*, 50 TECH. & CULTURE 519, 526 & n.25 (2009).

celebrities. Meanwhile, examination had the desired effect: The validity rate fluctuated throughout the 19th century but was always well above the 100% Patent Office validity rate implicit in the pre-examination period.³⁶ Neutral, technical, less politicized examination was the product of a professional examiner corps, which was one of the first federal civil service functions governed by formal examination and hiring procedures.³⁷





While the creation of a formal patent bureaucracy in 1836 changed the way inventors acquired patents, the basic design of the patent system remained intact. As before, the essential feature of the system was to award a form of property right to individual inventors. In this sense, the patent system had much in common with another crucial early policy for economic development: distribution of public land to individual proprietors. The bureaucracy created for this latter task was the General Land Office. Because land policy had a similar design, and was administered through a parallel,

^{36.} *Id.* at 526 ("The rejection rate would continue to fluctuate between 25 and 67 percent throughout the antebellum period." (citing ROBERT C. POST, PHYSICS, PATENTS, AND POLITICS: A BIOGRAPHY OF CHARLES GRAFTON PAGE 25, 29 (1976))).

^{37.} Kara W. Swanson, *The Surprisingly Engrossing History of Patent Examiners*, SLATE (May 7, 2014, 10:03 AM), https://slate.com/technology/2014/05/patent-examiners-have-a-fascinatinghistory.html ("Patent commissioners resented political meddling in their hiring and used a different approach to hire examiners who would spark less inventor resentment yet have relevant skills. In 1869 the patent office became one of the first federal offices to use written examinations to screen potential hires, seeking to replace reliance on elite credentials and scientific reputation with standardized proof of 'general knowledge.' These hires rejected a little more than one-quarter of patent applications, and the commissioner boasted that Americans were saved from the inefficiency of 'worthless patents,' and could instead invest thousands of dollars 'with scarcely a reading' of a patent, knowing it to be valid. The *New York Times*, too, now praised patent examination as the chief virtue of the U.S. system.").

^{38.} See LEVIN H. CAMPBELL, THE PATENT SYSTEM OF THE UNITED STATES: A HISTORY 48 (1891); Swanson, supra note 35, at 526.

early agency, it is worth taking a look at the land distribution system in some detail.

C. The General Land Office

Though organized land sales had always been a part of the colonial and early Federalist period, a formal and bureaucratized land distribution function—the General Land Office—was formed in 1812.³⁹ It was established as part of the Treasury Department, which made sense.⁴⁰ Its function was to stimulate economic development, but the sale of land was also an important source of funding for the young U.S. government.⁴¹ The structure of the Office did not change in 1812; it continued to consist of many district offices located in areas where active settlement (and thus land purchases) were located.⁴²

In 1812, the districts were concentrated in the "Old Northwest" (largely Ohio and Indiana), Missouri (as far west as St. Louis), and the region around New Orleans (a function of the Louisiana Purchase).⁴³ District offices surveyed all the public lands made available by westward expansion. This function was aided immeasurably by the development of standardized surveying instruments and techniques. The most notable was the use of the standard 22-yard measuring chain, which formed the basis of all land plots beginning in northeastern Ohio.⁴⁴ This standardized measure formed the basis of the land plots that were surveyed, recorded, and subdivided for sale. It is the foundation of the land "section" of 640 acres,⁴⁵ which is still the basic measure of land area in the rural U.S.

Land was sold to settlers in section and partial section sizes. Purchases were financed with loans that were often subsidized by the government. District agents were paid partly in salary and partly through sales commissions.⁴⁶ Prices varied, especially because speculators often bought large (town-sized) parcels and subdivided them for final sale. Official prices were low, by design; a Congressional ordinance from 1784 set the price at \$1.00 an acre, with the district offices responsible for handing out title and

^{39.} See MALCOLM J. ROHRBOUGH, THE LAND OFFICE BUSINESS: THE SETTLEMENT AND ADMINISTRATION OF AMERICAN PUBLIC LANDS, 1789–1837, at 52–53 (1968).

^{40.} See id. at 51-52.

^{41.} See id. at 50–52, 59, 61 (describing the organization of the General Land Office and land sale revenues after its formation).

^{42.} Id. at 27-31.

^{43.} Id. (describing the land office locations and depicting a map of the land office districts).

^{44.} ANDRO LINKLATER, MEASURING AMERICA: HOW THE UNITED STATES WAS SHAPED BY THE GREATEST LAND SALE IN HISTORY xix (2002). Indeed, the corner of the baseline for the first plots surveyed in Ohio was called The Place of Beginning and bears an historical marker to this day. *Id.* at 2, 71.

^{45.} Id. at 180.

^{46.} ROHRBOUGH, supra note 39, at 31.

collecting payments.⁴⁷ The policy had its intended effect: the handing out of many small parcels to many small purchasers.⁴⁸ By 1832, for example, the General Land Office was giving out 40,000 land patents per year throughout the country.⁴⁹

Despite the order imposed by standardized lot sizes and a centralized bureaucracy, land settlement was chaotic. Conflicting and overlapping claims were common. Land was often first settled by squatters, or by those who took their title by grant from Native Americans or a foreign government.⁵⁰ Preemption statutes often permitted squatters who had developed land to purchase it; the Preemption Act of 1841, for instance, offered occupants the right to buy up to 160 acres for \$1.25 per acre.⁵¹

Because conflicting titles were common, various dispute resolution mechanisms were put in place to sort things out. Early on, the Treasury Department established Boards of Commissioners, which were empowered to hear evidence of conflicting land claims and award title to the proper claimant.⁵² These regional boards were interposed between the local district offices and the General Land Office in Washington. Despite great efforts to staff them with experts and clothe them with authority, decisions of the commissioners (and related disputes) often found their way into the federal courts.⁵³

When resolving issues in federal court, the general rule was that the award of a land patent was strong evidence of the accuracy of the factfinding that led to it. As the Supreme Court said in 1839,

50. Sometimes by purchase, more often by sheer conquest of one sort or another. See STUART BANNER, HOW THE INDIANS LOST THEIR LAND: LAW AND POWER ON THE FRONTIER 150-90 (2005).

51. The Preemption Act of 1841, 27th Cong., ch. 16 §§ 9–10 (1841) (repealed 1891).

^{47.} LINKLATER, *supra* note 44, at 73. Large blocks of land were sold in the 1780s to developers for less-as little as 25 cents an acre. *Id.* at 81.

^{48.} There were also large grants, both to town developers beginning in the early 19th century, and then for railroad rights of way later. *See* Robert L. Rabin, *Federal Regulation in Historical Perspective*, 38 STAN. L. REV. 1189, 1195–96 (1986) ("The federal contribution to this pro-growth, booster spirit was foremost in the area of land grant policy. Between 1850 and 1870, the U.S. government offered grants-in-aid for railroad construction of alternate sections of right-of-way on either side of a rail line. The total acreage granted has been estimated to have reached the awesome figure of 180 million acres—an area larger than the entire Old Northwest. In addition to this dramatic gesture in support of the railroads, the government initiated a series of land sales and grants for settlement purposes, the most renowned being the Homestead Act of 1862, which granted a standard allotment of 160 acres of land to settlers who agreed to a set of homesteading conditions. . . . From the first surge of enthusiasm for westward expansion and commercial development, an infectious, pro-growth spirit was evident and there was no noticeable disposition at any level of government to maintain a hands-off policy regarding entrepreneurial activity." (footnotes omitted)).

^{49.} ROHRBOUGH, *supra* note 39, at 257.

^{52.} ROHRBOUGH, *supra* note 39, at 38–39.

^{53.} See Jerry L. Mashaw, Reluctant Nationalists: Federal Administration and Administrative Law in the Republican Era, 1801–1829, 116 YALE L.J. 1636, 1696–1719 (2007) (discussing extensive body of Land Office decisions).

A patent is evidence in a Court of law of the regularity of all the previous steps to it. The Court are [sic] bound to presume the acts of commissioners intrusted by laws of Congress to inquire into claims to lands, regular; and the decisions of these commissioners are in Courts of law binding and effectual.⁵⁴

In another case, plaintiffs claimed land included in a town site in Alabama. The district land office refused to issue title to plaintiffs and, instead, sold the town lots according to general practice under the land office law. The Court agreed with the actions of the land office:

From the earliest date of the legislation of Congress on this subject, there have been appropriations to the public use, made by withdrawing from this mass certain portions of territory for public seminaries, towns, salt springs, mines, and other objects; and the particular land in controversy was appropriated under a previous law, to wit, the act of April, 1820, for the site of a town. We, therefore, think, that it was not included in the right to appropriate vested in the complainants55

The following case also illustrates the discretion granted to local commissioners, likely based on the theory that they were closest to the facts of each case. In this case, the Supreme Court held that local land commissioners had adopted a reasonable interpretation of the Congressional Act aimed at settling title to lands in Mississippi that were acquired as part of the Louisiana Purchase:

The certificate granted in the case before us, is sufficient evidence that the commissioners west of [the] Pearl river [in Mississippi] adopted a more liberal construction [than that given the Act in question by other local district offices]; such as we think they were warranted in adopting, and such as, we think, is manifestly sanctioned by Congress, in the Act of 1806.

It is the opinion of this Court, that the commissioners were authorized to hear evidence as to the time of the actual evacuation of the territory by Spanish troops, and to decide upon the fact....

We are bound to presume that every fact necessary to warrant the certificate, in the terms of it, was proved before the commissioners; and that, consequently, it was shown to them . . .

Upon the whole, it is the unanimous opinion of this Court, that the Supreme Court of the state of Mississippi has not misconstrued the

^{54.} Bagnell v. Broderick, 38 U.S. 436, 446 (1839) (citation omitted).

^{55.} Chotard v. Pope, 25 U.S. 586, 590 (1827).

Act of Congress, from which the rights of the parties are derived; and that the judgment of the Supreme Court be affirmed.⁵⁶

The result here was to eject the defendant from any effective title to the land in question. This ejection was notwithstanding the defendant's acquisition of title at a regular Land Office land auction in 1810—one year before the date of the plaintiff's official land title (or patent).57 The reasoning was that local Land Office commissioners had awarded the plaintiff a certificate in 1807, showing that the plaintiff's claim took effect at the time Spanish forces evacuated the area in controversy.58 The certificate was based on a finding that plaintiff's claim was operative on the official Spanish evacuation date in 1798.59 Thus the local district Land Office, when it converted the 1807 certificate into formal title to plaintiffs in 1820, had in effect ratified the award of the 1807 certificate. This 1807 certificate was based on the land commissioner's findings related to the facts as they existed in 1798.60 The 1807 certificate precluded the defendant's purchase of title at a regular land auction in 1819, even though that certificate was not ratified in actual title to the plaintiffs until 1820.61 The same theme of deference to local acts and local knowledge is evidenced in other cases as well.62

The limited cases reviewing actions of the land office did not (as was customary) state anything akin to a modern standard of review. Nonetheless, as we have seen, the Supreme Court usually affirmed the actions of the various land offices when they were challenged.

One reason for this high level of deference is that the Land Office, as well as the Patent Office, both used the language and apparatus of property. Both these agencies made *grants*, rather than the modern-day "determinations" or "rulings." This is important. Property-granting agencies gave state-backed rights to individual right holders. The actions the agencies performed

61. Id. at 661-63.

62. See, e.g., United States v. Arredondo, 31 U.S. 691, 727 (1832) ("[The U.S. has] submitted to the principle which prevails as to all public grants of land, or acts of public officers, in issuing warrants, orders of survey, permission to cultivate or improve, as evidence of inceptive and nascent titles, which is; that the public acts of public officers purporting to be exercised in an official capacity and by public authority, shall not be presumed to be an usurped, but a legitimate authority, previously given or subsequently ratified, which is equivalent. If it was not a legal presumption that public and responsible officers claiming and exercising the right of disposing of the public domain, did it by the order and consent of the government, in whose name the acts were done, the confusion and uncertainty of titles and possessions would be infinite, even in this country; especially in the states whose tenures to land depend on every description of inceptive, vague and inchoate equities, rising in the grade of evidence, by various intermediate acts, to a full and legal confirmation, by patent, under the great seal.").

^{56.} Ross v. Doe, 26 U.S. 655, 668-69 (1828).

^{57.} Id. at 656-57, 662.

^{58.} Id. at 663, 669.

^{59.} Id. at 667.

^{60.} Id. at 660-63.

resulted in entitlements rather than regulatory decisions.⁶³ They gave out state-backed rights; they did not make dispositions of permitted activities under general regulatory statutes. The language of grant meant a high degree of deference. Under the common law (which was engrafted onto these administrative grants), facts recited in a grant were (and in many cases still are) strong or conclusive evidence of the accuracy of the statements in them. Courts used the language of settled expectations, of certainty of title. Ministerial acts in service of property grants were given wide latitude. Put simply, the language of grants carried with it a high degree of deference.

D. INVENTIONS AND LAND: THE PROPERTY STRATEGY

This brief comparison of Patent Office and General Land Office yields several useful insights. First, notice the similarity in evolution and structure. Regional district offices grew under the Land Office, as did the central administration. Patent examiners grew in number, and supervisory examiners began to appear. Officials experienced in the granting procedure were drafted onto expert dispute resolution boards—proto administrative courts, in many ways. And then courts sat in review in cases that warranted their oversight.

Most importantly, it is not only the goal of the patent system (public encouragement of economic growth), but also the *mechanism* it employs that makes it comparable to the Land Office. Patents are individual property rights granted by a centralized government to widely dispersed creators and owners. These exclusive grants give private patent owners the right to invoke the power of the state to exclude others from making or using those things covered by the owners' claims. A patent, as with other IP rights as well as legal title to individual parcels of land, gives a small dollop of state power to a private owner. Patent grants are, in this sense, a highly decentralized policy mechanism. Although patent grants are conferred by a central (federal) authority, they are enforceable only if and when a private owner decides. Thus, there are two crucial earmarks of the patent system: (1) it is a creature of an older, more unitary conception of government-three branches pulling together toward a common goal; and (2) it affects economic activity by making individual property grants to private owners. Both of these make it distinct from the functioning of most modern administrative agencies,

^{63.} On the nature of these entitlements, see generally Robert P. Merges, *What Kind of Rights are Intellectual Property Rights?*, *in* THE OXFORD HANDBOOK OF INTELLECTUAL PROPERTY LAW (Rochelle C. Dreyfuss & Justine Pila eds., 2017) (explaining that patents are full-blown property rights, but this does not mean that patents may only be invalidated by an Article III federal court, and it should not mean that normal patent invalidations are governmental "takings" either). *See generally* Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365 (2018) (validating the idea that administrative patent revocations are not unconstitutional but leaving open the takings issue).

charged as they are with regulating, reviewing, and structuring private activity in the interest of the common welfare.

1. Instrumental (Not Reified) Property

This emphasis on property grants makes it tempting to argue, from our vantage point, that intellectual property rights reflect a classical liberal vision of political economy-that patents were born in an essentially libertarian state, giving them an essentially libertarian character. From this would follow a number of propositions, including that patent property may not be revoked except by an Article III judge.⁶⁴ These views are tempting, but historically inaccurate. The better view is to see patents as one of many expedient policies wheeled into place under the felt necessities of their time of origin. They were one way to join the limited powers of the newborn state to private effort and private capital. They were one device by which a cash-strapped little country tried to jumpstart the engine of economic development. They were in this sense the opposite of a libertarian instrument. They were in no way born of a desire to hold back the power of the state, leaving room for the private sector. The state had little power to hold back. One thing the state did have was the authority of a nationwide court system. By allowing individual patent owners to deploy this enforcement network, the government encouraged investment and economic development. Patents were born of an intense spirit of pragmatism. To see them any other way, especially as an expression of some high theory about preventing Leviathan or a runaway state, is anachronism pure and simple.

I think in fact that this pragmatic strain found expression in other legal fields touching on property rights. The best example is the power of the state to *take away* property: eminent domain. Though today this practice is a

^{64.} See, e.g., Oil States Energy, 138 S. Ct. at 1380 (Gorsuch, J., dissenting) ("Until recently, most everyone considered an issued patent a personal right—no less than a home or farm—that the federal government could revoke only with the concurrence of independent judges. But in the statute before us [on Inter Partes Review under the America Invents Act of 2011] Congress has tapped an executive agency, the Patent Trial and Appeal Board, for the job. Supporters say this is a good thing because the Patent Office issues too many low quality patents; allowing a subdivision of that office to clean up problems after the fact, they assure us, promises an efficient solution. And, no doubt, dispensing with constitutionally prescribed procedures is often expedient. Whether it is the guarantee of a warrant before a search, a jury trial before a conviction-or, yes, a judicial hearing before a property interest is stripped away-the Constitution's constraints can slow things down. But economy supplies no license for ignoring these-often vitally inefficient-protections."). This view is wrong: bad policy, on top of inaccurate history. There is very little room in the U.S. patent system for "vitally inefficient" procedures or the logic that would support them. Id. On the importance of administrative patent validity proceedings for a well-functioning patent system, see generally Joseph Farrell & Robert P. Merges, Incentives to Challenge and Defend Patents: Why Litigation Won't Reliably Fix Patent Office Errors and Why Administrative Patent Review Might Help, 19 BERKELEY TECH. L.J. 943 (2004) (emphasizing the role of administrative patent review in maintaining the incentive structures underlying the patent enforcement system).

fraught, politically inflected battleground, in the Federalist period and throughout much of the 19th century, it was just another policy tool of a prodevelopment state. During these periods, state governments were not at all shy about taking private property in service of economy-building projects such as mill-dams, canals, roads, and then rail lines.⁶⁵

To summarize, in the Hamiltonian state there was no consensus at all around a sanctified view of property let alone around a small "nightwatchman" state. The consensus was around doing whatever it took to promote economic development. If that meant giving out property rights (as with patents), fine; if it meant taking away property rights to facilitate "infrastructure," that was fine too.

III. SO WHAT? A BIT OF PATENT EXCEPTIONALISM

I couldn't in good conscience ask a legal academic audience to read all of the foregoing history without suggesting at least a few normative implications. Ours is ultimately a practical field, and many of us reserve extensive reading with no "payoff" for our leisure time. In this spirit, I offer two policy takeaways. First, fewer rules and more cases. Second, *Skidmore*, *Chevron* less. I take them in that order.

A. FEWER RULES, MORE CASES

The unitary origins of patent law leave a good deal of ultimate policymaking to courts. Details of patentable subject matter; novelty; nonobviousness; enablement/written description; claim interpretation and infringement; inequitable conduct; and remedies are all worked out under either general statutory provisions or long-accepted common law precedent. Rulemaking in these areas would involve the PTO in crafting binding regulations covering the details of all these issues. It is this prospect of notice-and-comment, drafting, hearings, and final promulgation—the "full APA Monty"—that I think would be a mistake.⁶⁶

^{65.} The best account of this is by my colleague, the eminent legal historian Harry Scheiber. *See generally* Harry N. Scheiber, *Property Law, Expropriation, and Resource Allocation by Government: The United States, 1789–1910, 33* J. ECON. HIST. 232 (1973) (calling attention to deliberate government efforts to take private property as a means of spurring economic growth, especially during the 19th century).

^{66.} The present practice of taking public comments in service of non-binding PTO directives or "Guidelines" (on utility, patentable subject matter, nonobviousness, and the like) don't bother me at all. For examples of proposed Guidelines and other matters on which the Patent Office has sought public comments, see *Comments from the Public in Response to Specific Requests by the USPTO*, USPTO, https://www.uspto.gov/patent/laws-and-regulations/comments-public-response-specific-requests-uspto (last visited Apr. 30, 2019). Patent Office Guidelines as informed by these comments can inform courts but cannot bind them. *See, e.g.,* Koninklijke Philips Elecs. N.V. v. Cardiac Sci. Operating Co., 590 F.3d 1326, 1336 (Fed. Cir. 2010) ("The PTO lacks substantive rulemaking authority."); Merck & Co. v. Kessler, 80 F.3d 1543, 1550 (Fed. Cir. 1996) ("Because Congress has not vested the Commissioner [of Patents] with any general substantive rulemaking power, the 'Final Determination' [i.e., Patent Office statutory

One reason I do not think we need formal rulemaking in patent law goes to the basic rationale for executive agencies over courts. The usual countermajoritarian objections to courts vs. the elected branches of government do not, it seems to me, apply very aptly to this subject matter. I may be wrong (yet again), but I don't think many people give all that much thought to patent policy. I'm not worried about a countermajoritian patent policy because I don't think there is much likelihood of a majoritarian policy. Courts have charted the course in this field for a long time. There has been, as far as I know, few sustained waves of protest against the patent system as it stands. So maybe, in this case, we should leave well enough alone. I recognize there is a benefit to creating a consistent and well-placed counterweight to the Federal Circuit, which some feel has amassed too much power over the direction of the patent system.⁶⁷ Yet I believe that the virtues of efficiency outweigh these concerns.

There is a second reason, perhaps more persuasive to some. Rulemaking is (relatively) inefficient and slow.⁶⁸ This is by design; it is a feature of administrative government (all that public input), not a bug. But when it comes to shaping the rules of patent law—particularly patent *doctrine*—this seems unnecessarily complex and perhaps restrictive. Each doctrine involves enormously complex tradeoffs. There are data that bear on many of the issues, to be sure (though the net social welfare equation regarding patent law has proven frustratingly insoluble).⁶⁹ More to the point, there are interest groups on both sides of almost every issue. There are more than enough "veto players" to make patent rulemaking a very long and perhaps hopelessly hamstrung process. The hearings on substantive patent issues proposed for inclusion in the America Invents Act bear this out. In fact, while the Patent Office has conducted hearings on substantive doctrinal issues from time to time (e.g., utility in the 1990s, remedies prior to the AIA in 2011, and subject matter more recently), changes in doctrine at the detailed level very rarely

interpretation] at issue in this case cannot possibly have the 'force and effect of law,'" (quoting Chrysler Corp. v. Brown, 441 U.S. 281, 302 (1979))). They are a good way to get data and feedback into the patent system without having the status of binding substantive rules in the field.

^{67.} Sapna Kumar, Patent Court Specialization, 104 IOWA L. REV. 2511, 2519–28 (2019).

^{68.} There is a large literature discussing this. See, e.g., Thomas O. McGarity, Some Thoughts on "Deossifying" the Rulemaking Process, 41 DUKE L.J. 1385, 1391 (1992) ("To some extent, the fact that the air and waters of the United States are still polluted, workplaces still dangerous, motor vehicles still unsafe, and consumers still being deceived is attributable to the expense and burdensomeness of the informal rulemaking process."); Aaron L. Nielson, Sticky Regulations, 85 U. CHI. L. REV. 85, 90 (2018) ("In short, regulatory scholars have overlooked the value of [ossification,] what I call sticky regulations: regulations that cannot be changed or rescinded quickly."). See generally Jason Webb Yackee & Susan Webb Yackee, Testing the Ossification Thesis: An Empirical Examination of Federal Regulatory Volume and Speed, 1950–1990, 80 GEO. WASH. L. REV. 1414 (2012) (providing empirical data).

^{69.} See generally ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY (2011) (offering an enormously verbose and idiosyncratic solution to this conundrum).

emerge from deliberative hearing-based procedures.⁷⁰ Maybe, you are thinking, that's because everyone knows the courts will ultimately hash it out; maybe anemic rulemaking and legislation are the result of judicial hegemony, rather than a good rationale for it. Or maybe you are thinking: too bad. If deliberation takes more time, and the system has to live with stalemates more often, that's the cost of doing business in a democracy.

Fair enough points. But I, for one, would prefer to stick with what we know has worked—what emerged from the early days of the patent system and what we have lived with since.

In any event, litigation followed by common law-type case decisions are more efficient in the short run. The diagrams below illustrate the two approaches to shaping legal rules: Figure 1 illustrates the federal rulemaking process and Figure 2 illustrates the litigation process. The advantages of litigation are apparent just from the relative simplicity of the process as compared to rulemaking.

^{70.} I speak here of the post-1952 era. The 1952 Act itself was passed (1) in an earlier era, when K street lobbying had not reached many areas of IP law, and (2) Congress deferred to experts in technical fields more readily than it does today.



Figure 1. Federal Rulemaking Process71

Now contrast this administrative procedure with the present situation under the current PTO-litigation scheme. Application of the law—including the occasional doctrinal innovation—takes place mostly at the PTAB, District Court, and Federal Circuit level. The Supreme Court occasionally weighs in. The overall flow of events looks like this:

^{71.} MAEVE P. CAREY, THE FEDERAL RULEMAKING PROCESS: AN OVERVIEW 2 (2013), https://digital.library.unt.edu/ark:/67531/metadc227990.

Figure 2: Litigation Process



At a simple visual level, you can see how much simpler the current litigation process looks compared to the rulemaking process. It has fewer steps, involves fewer formal procedures, and thus can move fairly quickly. This is important in itself and relates closely to the points I make in the next Section.

B. SKIDMORE, CHEVRON LESS

Despite the stupid title (get it?), I am serious about not giving the PTO the high degree of deference required under *Chevron*. Given the firepower arrayed against this idea, it seems foolish to defend it.⁷² Only some kind of committed contrarian would take that on.

So here goes. The argument proceeds in two parts. The first has to do with the nature of PTO factfinding regarding patent validity determinations —the chief administrative functions of the Patent Office. Efficiency dictates flexible review standards, I argue, depending on the particular role of the courts in a given patent quality process.⁷³ The second places validity in the broader context of the patent system. It is in the nature of a "seamless web" argument: adjustments in validity need to be weighed against and integrated with many other patent doctrines, especially those doctrines bearing on patent enforcement (infringement, remedies, defenses, etc.). Because validity

^{72.} See Melissa F. Wasserman, *The Changing Guard of Patent Law:* Chevron *Deference for the PTO*, 54 WM. & MARY L. REV. 1959, 2008–09 (2013) ("Even taking into consideration the Federal Circuit's specialization, this Section concludes that the PTO is more likely than the appellate court to possess the prerequisite characteristics necessary to adjust the patentability standards towards an optimal innovation level.").

^{73.} This is consistent (I think) with scholarship describing PTAB cases as non-formal agency adjudications under the APA-so-called Type B agency adjudications. *See, e.g.,* Christopher J. Walker & Melissa F. Wasserman, *The New World of Agency Adjudication,* 107 CALIF. L. REV. (forthcoming 2019), *available at* https://ssrn.com/abstract=3129560.

is only one part of a broader system and because courts (unlike the PTO) deal with validity *as well as* enforcement-related doctrines, courts need to have the ultimate say with respect to validity doctrines. This is so overall balance can be maintained in the patent system.

1. Validity Determinations and the Overall System of Patent Quality Assurance

As I said earlier, patents are creatures of agency action, but they are special creatures. They are property rights, issued by the state, after a prescribed set of administrative procedures. Patent examination is universally acknowledged to be limited in its scope. For practical reasons, the Patent Office cannot devote too much time to any single patent application. Patent examination is designed to be a relatively coarse screen: It sifts out the most easily identifiable invalid patents. But it does not screen out all invalid patents. That task is left to two more stages or screens in the patent process: post-grant Patent Office review and district court litigation. Each of these successive screens gets a bit tighter, sieving out more and more invalid patents. What is left, when the rare patent passes through all three screens, is the refined gold of the patent system. A thrice-tested patent, still standing at the conclusion of this obstacle course, is presumably a truly valid patent.

Patent examination, then, is quite unlike a typical expert factfinding exercise by a canonical agency of the Administrative State. It is therefore a mistake to defer overmuch to patentability decisions by the PTO. The deference required by contemporary administrative law, in other words, may be counterproductive in this context. In some sense, then, the Supreme Court's *Zurko* decision took the patent system in the wrong direction.⁷⁴ Fortunately, at the end of the day, this did not make much difference out in the world.

My main point, however, is not a close reading of *Zurko* and its caselaw cousins. It is that in the patent field, the issue is less which branch of government ought to have the ultimate say on important issues of policy. It is that the PTO, the PTAB, and the courts (in particular the Federal Circuit) each have a separate task to perform in an overall system designed to ensure patent quality in as efficient a way as possible. When court review is rare relative to PTO decision making (as it is for normal patent prosecution, for example), the Federal Circuit may want to scrutinize the cases that come to it very closely. Little deference is due the PTO because excessive deference would blunt the impact of the Federal Circuit's role in the process. Few cases mean each one should be looked at carefully. It is akin to a quality control stage in a manufacturing process; few items from the production line are sampled, but those that are must be looked at carefully. Court review can (and

^{74.} Dickinson v. Zurko, 527 U.S. 150, 154-65 (1999).

should) take account of the appropriateness of PTO decisions *given their place* in the overall scheme of PTO-PTAB-court quality control.

Intense scrutiny may not be necessary for the review of *Inter Partes* Review ("IPR") proceedings.⁷⁵ More and more it appears that the Federal Circuit docket is filled with IPR appeals. If this continues and if the ratio of Federal Circuit appeals to PTAB IPR decisions remains high, the Federal Circuit might not need to scrutinize each case as closely. It is more likely to catch significantly errant trends even with fairly deferential review, given that it examines a larger portion of the underlying decisions. In other words, this process results in a higher sample rate, which points to less fine-grained scrutiny of each case.

Courts in patent cases need to review Patent Office decisions more carefully because that is integral to the design of the patent system. The PTO is a high-volume system for handing out individual property rights. The Federal Circuit by design reviews only a fraction of all PTO decisions. Because of that, the Federal Circuit has traditionally taken a close look at those decisions it does review. This is not a case of political second-guessing or the exercise of higher-order political power on the direction of an agency's decisions. It is a question of efficient mechanism design. It is less a political issue and more of a workflow issue. Less politics, and more engineering. (Appropriate enough for the Patent Office.)

It all adds up to this: The Federal Circuit needs flexibility in deciding on what terms it will review PTO cases. The court needs to adjust its review procedures depending on how best to achieve the overall goal of patent quality. Just as in the early days of the patent system, it should continue to see the patent system as a unitary structure. It should adapt and accommodate accordingly. Procedural straightjackets dictated by a desire for symmetry or full assimilation are simply contrary to this historically-based approach.

^{75.} For an important recent empirical study, finding evidence that the PTAB is indeed exercising a quality control function, see Michael D. Frakes & Melissa F. Wasserman, *Patent Trial and Appeal Board's Consistency-Enhancing Function*, 104 IOWA L. REV. 2417, 2420 (2019):

[[]W]e find evidence that applications reviewed by restrictive examiners—i.e., inherently rejection-prone examiners—are more likely to ultimately have a rejection that is appealed and reversed than applications reviewed by non-restrictive/lenient examiners. This result is encouraging from a uniformity-inducing perspective to the extent that one would not believe that PTAB's reversal function would lead to convergence in behavior if, for some reason, the Board were targeting its rejection-reversal activities on examiners who were already rejecting at very low rates. Similarly, we find evidence that applications reviewed by lenient examiners—i.e., inherently grant-prone examiners—are more likely to be associated with a patent issuance that is the subject of a PTAB challenge than applications reviewed by more restrictive examiners.

2. Patent Law is a Seamless Web; Or At Least, A Tightly Intertwined Body of Rules

I argue for retaining the traditional court-as-last-word structure that emerged from the early days of patent law. The second point I want to make is that giving the PTO interpretive dominance in the area of validity doctrine will undermine the ability of courts to maintain an overall balance in the fabric of patent law. The balance, that is, between inventors, competitors, future inventors, and the public at large. This second argument has three steps:

- 1. The PTO issues patents but has nothing to do with patent enforcement.
- 2. Enforcement takes place in the courts, so courts are the logical place to locate interpretive authority for statutory issues related to enforcement (claim interpretation, infringement, remedies, defenses, etc.).
- Because patent rules and doctrines are interrelated in complex ways, it is best to leave ultimate interpretive authority to the courts on virtually *all* statutory and doctrinal matters in the patent field.⁷⁶

Start with the elementary idea that the net strength of a patent results from the aggregate of all the rules and doctrines affecting that patent. Some relate to validity; some to purely statutory factors such as the patent term; some from the remedies the patent might bring in a lawsuit; some from the defenses an infringer might assert; and so on. This much has been well understood since at least Louis Kaplow's 1984 article.⁷⁷

Notice that validity issues are but a subset of the total package. Now, consider that all the *other* rule-types (or "policy levers") are unrelated to validity. Assume next some shock to the patent system: a new technology where there is little accessible prior art (such as the software field in the 1990s); an exogenous shift in the law such as a new Supreme Court case (e.g., related to patentable subject matter); or simply an increase in the volume of patent applications or litigation. A wise custodian of the system might want

^{76.} There is a Hurstian dimension to this.

A working society means relationships which must be kept in some minimum balance and requires fulfillment of some minimum functions of reciprocity and mutual restraint. The order which law helps create and keep is not a static condition. It is a moving equilibrium, product of continuous adjustment to diverse pressures and to the constant press of changed circumstance.

JAMES WILLARD HURST, LAW AND ECONOMIC GROWTH: THE LEGAL HISTORY OF THE LUMBER INDUSTRY IN WISCONSIN 1836-1915, at 427 (1964).

^{77.} See generally Louis Kaplow, *The Patent-Antitrust Intersection: A Reappraisal*, 97 HARV. L. REV. 1813 (1984) (discussing and providing a practical solution to the conflict between antitrust and patent law).

the freedom to make adjustments on margins unrelated to the new development. Such adjustments may complement, offset, or adjust to the new development. The way the patent system has evolved, courts have wide latitude to do just that. No set of rules or doctrines is off-limits when it comes to making adjustments.

Some examples—admittedly extreme—will show what I mean. After (and perhaps in response to) a rapid increase in issued patents, the Supreme Court created a new requirement for patentability. The 1851 case *Hotchkiss v. Greenwood* added a new "invention" (later, nonobviousness) test to the list of patent validity requirements.⁷⁸ This added a new hurdle for patentees and helped cut down on the number of trivial patents. The Supreme Court emphasized this purpose in the opinion.⁷⁹

In a series of cases in the late 19th century, the Supreme Court developed a new patent invalidity doctrine.⁸⁰ "Double patenting," as it came to be known, prevents a patentee from obtaining two patents for the same claimed subject matter.⁸¹ This came after (and perhaps in response to) a growth in the volume of interrelated patent applications that were being filed. These filings took place in an era when large, organized corporate research groups were growing, and when the patent bar was become more professionalized and sophisticated.

In response to strategic patent prosecution strategies, the Federal Circuit resuscitated (and arguably expanded) an older doctrine called prosecution history laches. Some applicants kept patent applications alive for decades, waiting for the relevant technologies to mature and for industries to sink costs into product designs covered by the patent applications.⁸² Then the applicant would permit the application to issue as a patent—and sue everyone in sight.⁸³ Relying on long-forgotten Supreme Court cases, the Federal Circuit put a stop

The double patenting doctrine has never expressly been codified in the patent statutes. Succeeding patent statutes have, however, provided that an inventor of a new product or process may obtain "*a* patent" therefor, and early Supreme Court decisions found it to be implicit from this statutory scheme that "two valid patents for the same invention cannot be granted either to the same or to a different party."

81. See, e.g., Miller v. Eagle Mfg. Co., 151 U.S. 186, 197 (1894) ("[T]wo valid patents for the same invention cannot be granted either to the same or to a different party."). See generally 3A DONALD S. CHISUM, CHISUM ON PATENTS § 9.02 (2018) (describing genesis of double patenting, and its eventual codification in patent statutes).

82. Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found., LP, 422 F.3d 1378, 1385 (Fed. Cir. 2005); *see also* MOSAID Techs. Inc. v. Samsung Elecs. Co., 362 F. Supp. 2d 526, 551–52 (D.N.J. 2005).

83. See Symbol Techs., 422 F.3d at 1380 (describing patent issued in 1990 based on original application filed in 1954: a prosecution period of 36 years).

^{78.} Hotchkiss v. Greenwood, 52 U.S. 248, 267 (1851).

^{79.} Id. at 265.

^{80.} See 3A DONALD CHISUM, CHISUM ON PATENTS § 9.02 (1978 & Supp. 2019) (quoting Miller v. Eagle Mfg. Co., 151 U.S. 186, 197 (1894)):

to it in two cases from 2002.⁸⁴ The dissent in one case pointed out that the patent statute did not prohibit the practice of filing endless continuation applications, but the Federal Circuit disregarded that argument in the face of the felt need for a solution under these circumstances.⁸⁵

After the Federal Circuit opened the floodgates to software and business method patents, the Supreme Court made it harder to obtain an injunction after winning a patent infringement case.⁸⁶ The doctrinal adjustment in the area of remedies, in other words, was necessitated by the growing availability of this new class of patents. The patents were ripe for exploitation by patent assertion entities: They were broad and covered valuable commercial fields, such as e-commerce and mobile telephony. The resulting business models that developed, explicitly mentioned by the Supreme Court concurrence, were what led to the revision in the rules of patent injunctions.⁸⁷

Perhaps less successfully, the Supreme Court has recently decided a series of cases that significantly narrow the law of patentable subject matter. Again, this appears to be at least in part a response to the issuance of very broad and basic patents in areas such as business methods.⁸⁸

In addition to these examples of adjustment and counterbalancing, it is worth noting that a fair number of doctrines in patent law are completely creatures of the common law. Patent exhaustion, inequitable conduct, assignor estoppel, and other doctrines were developed exclusively by courts. It could be argued that these doctrines undermine my point. Being strictly

85. See In re Bogese, 303 F.3d 1362, 1370 (Fed. Cir. 2002) (Newman, J., dissenting). See generally Michael T. Hawkins, Comment, Prosecution Laches in the Wake of Symbol Technologies: What Is "Unreasonable and Unexplained" Delay?, 87 MINN. L. REV. 1621 (2003) (describing early origins of prosecution laches and patent bar reaction to its rediscovery).

86. See eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 394 (2006).

87. This is evident from Justice Kennedy's concurrence. *See id.* at 396–97 (Kennedy, J., concurring) ("An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent. When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest." (citation omitted)).

88. See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 212–27 (2014) (discussing how risk management scheme patent claims were too abstract to qualify for patent approval); Gottschalk v. Benson, 409 U.S. 63, 67–68 (1972) (stating that "abstract intellectual concepts are not patentable"); Rubber-Tip Pencil Co. v. Howard, 87 U.S. 498, 507 (1874) (stating that "[a]n idea of itself is not patentable").

^{84.} See 4A DONALD S. CHISUM, CHISUM ON PATENTS § 13.05 ("In two 2002 decisions, Symbol Technologies, Inc. v. Lemelson Medical, Education & Research Foundation (2002), and In re Bogese (2002), the Federal Circuit recognized the concept of 'prosecution history laches,' relying on pre-1952 Supreme Court case law." (citations omitted) (citing Gen. Talking Pictures Corp. v. W. Elec. Co., 304 U.S. 175 (1938); Crown Cork & Seal Co. v. Ferdinand Gutmann Co., 304 U.S. 159 (1938); Webster Elec. Co. v. Splitdorf Elec. Co., 264 U.S. 463 (1924); Woodbridge v. United States, 263 U.S. 50 (1923)).

creatures of common law, they would be available to courts even in the presence of a strong *Chevron* regime. They are not statutory interpretations but, instead, purely judge-made creations. I would resist the idea that this means *Chevron* is workable for the other, statute-based areas of patent law. I think the common law doctrines are merely the purest expression of a broader paradigm running through this body of law. Court-based doctrinal adjustments—and, as we have seen, innovations—are part of the tradition and fabric of the patent system. Common law doctrines show in extreme form a more general "design principle" that permeates the field.

These examples argue for preserving the court-based policy-making approach that has been in place from the earliest days of the patent system. In my view, interpreting the Patent Act fell to the courts for good reason, and they have done a fairly good job (with some noteworthy exceptions). Many say this traditional arrangement no longer makes sense.⁸⁹ The Patent Office, as an expert agency, ought to have the same clout in the patent field as in other areas where complex technology-related decision making is called for —the EPA, for example. Some truly exceptional scholars have argued that the time has come to fully assimilate the PTO into the post-APA era.⁹⁰

A number of administrative law scholars have argued forcefully that the Federal Circuit is out of step with the mainstream of American law in ignoring the APA when reviewing PTO decisions. These critiques are motivated by laudable policy goals. They express, through another avenue, the same sort of frustration that the Supreme Court often shows with the Federal Circuit. They argue, as the Court does at times, that the Federal Circuit suffers from a bad case of "patent exceptionalism."⁹¹ Much of the thrust of the Supreme Court's intervention into patent law since the late 1990s has been aimed at correcting this.

Again, this is a program with laudable aims. But I would separate the exceptionalism critique into two parts, defending only one. With respect to substantive law, the Supreme Court is surely correct. Patent courts,

^{89.} Wasserman, *supra* note 72, at 1973 ("Unlike most notable agencies, the PTO lacks significant substantive rule-making authority. Federal statutes give the Agency the authority to make rules that 'govern the conduct of proceedings in the Office.' The Federal Circuit has repeatedly interpreted this grant as primarily enabling the PTO to make rules on a variety of procedural matters. Thus, the Agency does not possess the power to issue binding rules that carry the force of law on the core issues of patentability, like obviousness or novelty." (quoting 35 U.S.C. $\S 2(b)(2)(A)$ (2012) (footnotes omitted))); *see also id.* at 1977–78 ("This [Article] argues that an application of administrative law principles to the new and modified postgrant review proceedings triggers *Chevron* deference for the PTO's interpretation of ambiguous terms of the Patent Act announced during these proceedings.").

^{90.} See, e.g., Jonathan S. Masur, *Institutional Design and the Nature of Patents*, 104 IOWA L. REV. 2535, 2555 (2019) ("Properly viewing patents as regulatory licenses changes the equation substantially. First, from functional first principles, each patent grant by the PTO is a regulatory determination that allowing the applicant to have a patent will produce greater social good than harm.").

^{91.} For an excellent account of this concept, see Tejas N. Narechania, *Certiorari, Universality, and a Patent Puzzle*, 116 MICH. L. REV. 1345, 1349 (2018) (describing "patent exceptionalism").

culminating with the Federal Circuit, got far off base in constructing a series of patent-specific rules. On topics such as what behavior is "willful" and what equitable standards govern the grant of injunctions, the Federal Circuit had gotten out of alignment with the main currents of U.S. law. These common law-inflected topics are ones that all federal appeals courts deal with, and there is no reason for patent law to have digressed into a series of doctrinal backwaters and eddies.

But court-agency matters are different. Exceptionalism is built in, historically; and it continues to make sense. Both history and institutional design demand a certain degree of exceptionalism. I thus depart from those who would assimilate Federal Circuit review of PTO decisions into the large body of APA-dominated case law.

My reasons are clear enough. They spring from the earliest days of the patent system. The PTO and the courts are meant to cooperate, to jointly form a rational division of labor in the grant and review of patent rights. The oversight function of courts is, as I've said, different than that for court review of rulemaking in the Administrative State. For many issues, the primary concerns of the APA do not apply. Democratic process concerns, issues of capture, and the like, have relevance but are not the driving force behind the PTO-court division of labor. And, quite clearly (to me anyway), the contemporary political battles over the power of the executive (acting through agencies) and the courts are largely irrelevant. To restate: The PTO is by no means an exemplar of the runaway power of the executive branch. It was born—and bears the unmistakable imprint of—a much earlier set of concerns. It is not a creature of Brandeis or the APA; it is a creature of a much earlier (and much weaker) Hamiltonian state.

IV. FINAL THOUGHTS

The respect I've shown for origins should not be confused with the idea that the patent system ought to stay stagnant. That would be absurd: A system designed to promote innovation must itself adapt to changing conditions. My point is not that we embrace an obsession with "patent originalism;" it is instead to channel necessary institutional innovations into the original and traditional design of the patent system. To make this point, I use the example of administrative review of issued patents. Fortunately, the Supreme Court in a recent case recognized the logic and wisdom of these administrative review procedures, despite some antiquarian arguments that the procedures themselves represent administrative overreach.⁹² As the Court held, these new procedures were a necessary Congressional response to contemporary conditions. The goal of the procedures, in keeping with the long history of our patent system, is to promote efficient and effective private property rights

^{92.} Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1378 -79 (2018).

covering significant inventions. The Court therefore permitted Congress to allow administrative revocation of patents and to limit court review with respect to some aspects of these procedures. In doing so, it properly kept faith with the Hamiltonian *structure* of the patent system as I describe it here.

As I said before, these observations point directly to a normative argument. Except where Congress makes its intentions exceedingly clear, the Patent Office and the courts ought to adhere to the Hamiltonian origins of the patent system. These branches ought to resist any urge to conform the patent system to other regulatory agencies. In rulemaking, statutory deference, and the other myriad spaces where modern administrative law is made, we all ought to respect the older provenance and distinct institutional origins of the patent system. Each branch plays a separate role, as with other administrative agencies. But each branch ought to carry out its role with respect for the distinct origins and structure of the patent system.

In thinking about PTO-court interactions, let us remember the ABCs of the U.S. government at the time of the founding. It was a (1) small, (2) unitary, federal government organized around the theme of (3) economic development. Patents, along with land distribution, were part of the "property strategy" that constituted one important instrument for economic development. The patent system as we know it bears the imprint of this older, pre-Administrative State era. It has functioned fairly well with this initial imprint, and there are some good reasons to leave things this way. Although the "administrative revolution" may finally be coming to the patent system, I for one would look for guidance in the older, original Revolution and its aftermath. The patent system came out of this new state—the one that was "young, scrappy and hungry."93 This young system marshaled state power behind the goal of economic development. Many features of patent law and the patent system took form within this structure. It is difficult to alter it fundamentally, such as by treating the Patent Office as a typical post-Progressive Era administrative agency. And even if the structure could be changed, why do it? The patent system worked fairly well for that young country. The country may not be so young now, but an effective patent system can help keep it scrappy and hungry. It's comforting to think that keeping intact the old, yet sturdy bones of the patent system would make old Alex proud.

^{93.} LIN MANUEL-MIRANDA, MY SHOT (Hamilton Soundtrack 2015).