

Patent Abolitionism

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*Patent reform. . . was unimportant, esoteric and dull. It was a subject for the hard-headed enthusiast, and demanded unfaltering attention rather than sparkling rhetoric.*¹

“Esoteric”? Undoubtedly. “Dull”? No comment. But, “unimportant”? Not! Today, everyone wants to be a patent law reformer. I give you Bezos.² Nader.³ Gore.⁴ Oprah.⁵

¹H.I. DUTTON, THE PATENT SYSTEM AND INVENTIVE ACTIVITY DURING THE INDUSTRIAL REVOLUTION, 1750-1852 at 57 (1984) (describing mid-nineteenth century British patent law reform).

²See, e.g., Scott Thurm, *Amazon.com Chief Executive Urges Shorter Duration for Internet Patents*, WALL ST. J. B3 (Mar. 10, 2000) (reporting on Bezos’ suggestions in his open letter on the Amazon.com website, which advocated term reduction for software patents, pre-grant oppositions, and other reforms).

³See, e.g., <www.cptech.org> (last visited Jan. 9, 2002) (home page of the Consumer Project on Technology).

⁴Meaning Al. See Douglas Kiker, *Gore Proposes Generic Drug Plan*, AP ONLINE, 1999 WL 28136946 (Nov. 8, 1999) (reporting that at a campaign stop at a pharmacy, candidate Gore remarked that “[p]atents are great” but that “unfair patent extensions” resulted in higher consumer

Alas for Bezos and his fellow luminaries – patent law reform remains a subject for hard-headed enthusiasts. Patent law has a long and complex history. Even patent law *reform* has a long history, and modern patent law reform efforts could benefit by taking careful account of that history. This paper examines one curious historical episode – the short-lived movement for patent abolition – and analyzes whether the history of this most radical of reforms can teach us anything about more temperate reforms of the modern patent system.

prices for pharmaceuticals, a problem that should be addressed by new legislation). For patent issues concerning the other Gore, *see* W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983) (patents relating to Gore-Tex technology).

⁵Actually, I’m not entirely sure about Oprah.

Nowadays, it's hard to find any rock-ribbed, dyed-in-the-wool patent abolitionists. Indeed, it's hard to find any patent abolitionists at all. Contemporary patent policy debates seem invariably to start from the premise that the patent system is a *fait accompli*.⁶ Even Machlup, who declared that he could not justify instituting a new patent system on economic grounds, allowed grudgingly that he would consider it irresponsible to abolish patent systems that had long existed.⁷ Likewise, scholars such as Shavell and Van Ypersele, who have studied the economics of reward systems, tend to offer them as adjuncts to, not replacements for, the patent system.⁸

⁶For a rare counterexample, see Brian Peckham, *Should the U.S. Patent Laws be Abolished?*, 11 J. CONTEMP. L. 389 (1985) (no).

⁷FRITZ MACHLUP, AN ECONOMIC REVIEW OF THE PATENT SYSTEM, STUDY NO.15 OF COMM. ON JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 85TH CONG., 2D SESS. (Comm. Print 1958). Machlup asserted that:

If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.

⁸Steven Shavell & Tanguy Van Ypersele, *Rewards Versus Intellectual Property Rights*, 44 J.L. & ECON. 525 (2001).

In truth, there never were very many patent abolitionists. In the U.S., no substantial patent abolitionist movement has ever emerged, although some late-19th century commentators warned that “the people might rise in their wrath” against the patent system,⁹ others feared imminent Congressional action,¹⁰ and still others thought that the Supreme Court was poised to take care of

⁹D.J. Brewer, *The Patent System*, 3 YALE L.J. 149, 157 (1894) (expressing “the strong conviction that unless some radical changes are made in the patent system as it exists to-day it will not be many years before the people rise in their wrath and abolish it altogether.”).

¹⁰*See, e.g.,* Chauncey Smith, *A Century of Patent Law*, 5 Q. J. ECON. 44, 58-9 (Oct. 1890):

It is undeniable that there has been, and doubtless still is in some parts of the country, a wide-spread hostility to the patent law. . . The writer was assured several years ago. . . that a large number of members of the House of Representatives were ready at any moment to vote for the repeal of the patent law. At every session of Congress bills are introduced providing, if not for the repeal of the law, at least for its amendment in such a way as to destroy or impair the value of patent property.

the job, through “judicial legislation.”¹¹ As experience has demonstrated, reports of the death of the U.S. patent system have always been greatly exaggerated. Even claims that the system is in mortal “distress” seem quaint in the current environment.¹²

Victorian England did have patent abolitionists, and they cut a wide swath -- for a short time. Serious debate over whether to abolish the British patent system extended for several years in the mid-nineteenth century. The British patent system emerged from this ordeal unchanged in some respects, fundamentally modernized in others.

¹¹*See, e.g.,* Avery v. Ever Ready Label Corp., 104 F.Supp. 913 (D. N. J. 1952) (reporting the views of some observers that the Supreme Court, in the course of its mid-twentieth century patent jurisprudence, “has deviated from well-established doctrines of patent law and may soon abolish the patent system by judicial legislation”).

¹²Abe Fortas, *The Patent System in Distress*, 53 J. PAT. OFF. SOC’Y 810 (1971); *cf.* Lawrence G. Kastriner, *The Revival of Confidence in the Patent System*, 73 J. PAT. TM. OFF. SOC’Y 5 (1991); *cf.* Mark D. Janis, *The Revival of Distress in the Patent System* (forthcoming) (positing that the patent system endures cycles of underprotection and overprotection, and accompanying cycles of distress and exuberance).

This paper explores the relevance to modern U.S. patent law of the nineteenth century patent abolitionism movement. The connection might not immediately be apparent. The British patent system of the early and middle nineteenth century – the “unreformed” patent system¹³ – differed materially from the modern U.S. system. The British patent system of the time was a registration system.¹⁴ Until 1852, the system lacked any central granting authority,¹⁵ and even afterwards, the Patent Office conducted no substantive patentability examination until reforms were enacted in the

¹³KLAUS BOEHM, *THE BRITISH PATENT SYSTEM: I. ADMINISTRATION 19-26* (1967) (referring to the “unreformed patent system” as subsisting until the passage of the 1852 Patents Act, or roughly between 1750 and 1850). Relevant statutes during this period include patents acts of 1835, 1839, and 1852. *See* 1835 Patents Act, 5 and 6 Wm. IV. c. 83; 1839 Patents Act, 2 and 3 Vict. c. 67; 1852 Patents Act, 15 and 16 Vict. c. 83. *text reprinted in* JOHN CORYTON, *A TREATISE ON THE LAW OF LETTERS-PATENT FOR THE SOLE USE OF INVENTIONS IN THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND* (1855) (see appendix at 275 (1835 Act); at 279 (1839 Act); at 294 (1852 Act)).

For a study of the origins of the British patent system and its history through the 18th century, *see, e.g.*, CHRISTINE MACLEOD, *INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM, 1660-1800* (1988).

¹⁴By contrast, after a relatively brief experiment with a patent registration system, the U.S. abandoned it in 1836 in favor of pre-grant examination. *See generally* EDWARD C. WALTERSCHEID, *TO PROMOTE THE PROGRESS OF SCIENCE AND THE USEFUL ARTS: AMERICAN PATENT LAW AND ADMINISTRATION, 1798-1836* (1998).

One key point in debates over reform of the British patent system in 1850-51 was whether to institute pre-grant examination. Thomas Webster, one of the proponents of this position, pointed with approval to the U.S. system in arguing for pre-grant examination. *See* MOUREEN COULTER, *PROPERTY IN IDEAS: THE PATENT QUESTION IN MID-VICTORIAN BRITAIN* 57 (1991). It is remarkable that even as early as the mid-nineteenth century, U.S. patent law was beginning to influence the course of British patent law, even though U.S. patent law had come into formal existence only a few decades before, borrowing from British law and antecedents.

For more on Thomas Webster’s positions in the patent reform and abolition debate, *see infra* Part II.

¹⁵Instead, applicants were required to negotiate an almost impossibly complicated journey through multiple government offices. *See infra* notes ____ and accompanying text.

1880's. Patent applicants were subject to pre-grant oppositions,¹⁶ and (prior to 1852) applications might also be derailed by a previously-filed caveat.¹⁷

¹⁶See W.M. HINDMARCH, A TREATISE ON THE LAW RELATING TO PATENT PRIVILEGES FOR THE SOLE USE OF INVENTIONS 377 (1846) [hereinafter HINDMARCH, PATENT PRIVILEGES] (describing the relatively restrictive pre-1852 opposition practice); THOMAS WEBSTER, THE NEW PATENT LAW: ITS HISTORY, OBJECTS, AND PROVISIONS 25-26 (4TH ED. 1854) [hereinafter WEBSTER, NEW PATENT LAW] (describing 1852 Act provisions authorizing “advertisement” of specifications and providing an opportunity for pre-grant opposition by interested members of the public). *See also id.* at 8 (explaining that the 1852 Act also incorporated a notion of provisional rights “thus affording a precedent for the principle that the legal right should date from the day of the application, unless justice to other parties required that it should be post-dated”).

¹⁷HINDMARCH, PATENT PRIVILEGES, *supra* note __, at 504 (explaining that a caveat was a filing expressing an inventor’s intent later to file a patent application and petitioning that no patent be granted on the invention without notice to the caveat filer). *See also* WEBSTER, NEW PATENT LAW, *supra* note __, at 25 (noting with approval that the 1852 Act abolished the caveat practice).

Not surprisingly, British patents of the time afforded relatively insecure rights.¹⁸ In addition to being subject to invalidity defenses in infringement actions,¹⁹ British patentees could be made defendants in *scire facias* actions, a remedy for the public (and the Crown) against defective patents.²⁰ Moreover, prior to 1852, British patentees could obtain an injunction against patent infringement only via a separate action at equity in the Chancery Court, and the Court ordinarily required that infringement of valid rights be established in a prior proceeding at the law courts.²¹

Surprisingly, in view of these important differences, much of the core agenda that motivated nineteenth century British patent law reform and (ultimately) abolitionist movements, has carried over to U.S. patent law reform agendas of both the twentieth and, now, the twenty-first centuries. Patent abolitionism may help give historical context for current patent reform efforts. It may also yield some lessons about the process of patent law reform, and, more generally, about the political

¹⁸Those rights included basic exclusive rights in making, using, and selling the patented invention for a 14-year term measured from the date of sealing. HINDMARCH, PATENT PRIVILEGES, *supra* note __, at 53-55 (exclusive rights); *id.* at 144 (term).

¹⁹*Id.* at 262.

²⁰*Id.* at 376-430 (describing *scire facias* actions in detail). *Scire facias* actions might be likened to declaratory judgment actions in form, but *scire facias* actions were not constrained by jurisdictional limitations that characterize modern declaratory judgment actions. Accordingly, they could readily be used to harass patentees. In response, a “Patentees’ Association” formed in the late 1700’s to resist “opulent manufacturers” who “have agreed to use very beneficial patent inventions [without authorization] and have subscribed large sums to attack the same by writ of Scire facias.” DUTTON, *supra* note __, at 37 (citing an anonymous circular found in the correspondence of James Watt). Evidently, James Watt was unimpressed with this early version of a patent owners’ lobby, calling the Patentees’ Association. a motley crew of “projectors and madmen, some of which I thought it a disgrace to keep company.” *See id.*

²¹For a description of the 1852 reform of this practice, *see* WEBSTER, NEW PATENT LAW, *supra* note __, at 36 (explaining that section 42 of the 1852 Act gave courts at common law the power to grant injunctions and an accounting in the case of infringement).

economy of patent systems old and new.

Part I considers reform initiatives in early nineteenth century British patent law that preceded the mid-Victorian abolitionist movement. Part II turns to the abolitionist movement itself, focusing on several aspects of that movement that are pertinent to modern patent reform discussions. Part III offers some general conclusions about the process of patent law reform, including a cautionary observation about the absence of evolution in patent reform agendas over the past century.

I. Precursors to Abolitionism: Administrative Reform and the “Heroic Inventor” Motif

Beginning in 1828, the London Journal of Arts and Sciences published a series of letters whose author, in the style of the times, identified himself by a pseudonym: “Vindicator.” Vindicator took on the British patent administration, which he excoriated -- in characteristically unsparing rhetoric -- as a system of “rank absurdity, oppression, and humbug.”²² Vindicator portrayed in excruciating detail the formal prerequisites for obtaining patent protection, and the fees accompanying each step. According to Vindicator, the procedures amounted to a “heterogeneous mass of antiquated pretensions – of fantastic operations – of absurd practices – and of legal impositions”

²²Letter XIII, On the Chancery Fees and Charges Upon Patents for Inventions, 3 LONDON J. ARTS & SCI. 1-8 (1829), *reprinted in* JEREMY PHILLIPS, CHARLES DICKENS AND THE ‘POOR MAN’S TALE OF A PATENT’ App. D p. 47 (1984). Phillips speculates that Vindicator was probably William Newton, editor of the London Journal of Arts & Sciences and a leading expert of the day on the British patent system. *Id.* at 9.

By no means was Vindicator the first agitator for patent law reform in the British patent system. For example, in the late 18th century, preeminent inventor James Watt made a variety of proposals for refinements to the patent law. *See* Eric Robinson, *James Watt and the Law of Patents*, 13 TECH. & CULTURE 115 (1972); *see also* BOEHM, *supra* note __, at 26-27 (remarking on Watt’s activities and noting that patent reform bills were introduced, without success, in 1793, 1819-1822, and 1826); DUTTON, *supra* note __, at 38 (discussing Watt’s proposals to maintain specifications in secrecy and to have them examined to ensure that they were sufficiently “comprehensible”).

which were “retained for the sole advantage of a few State officers and subalterns, in defiance of common sense, of common honesty, and of the universal feeling of society.”²³

Vindicator was not far wrong. British patent administration in the first half of the nineteenth century was truly Byzantine. Hindmarch, a barrister and patent treatise author,²⁴ described the procedures in a single sentence of alarming proportions:

²³Letter XVI, On the Fees and Charges Upon Chancery Patents for Inventions, 3 LONDON J. ARTS & SCI. 175-80 (1829), *reprinted in* JEREMY PHILLIPS, CHARLES DICKENS AND THE ‘POOR MAN’S TALE OF A PATENT’ App. D p. 51 (1984).

²⁴*See supra* note __ (citing Hindmarch’s treatise on Patent Privileges).

. . . a petition for the patent, verified by a solemn declaration, and left at the Home Office; a reference of the petition by the Secretary of State to the Attorney or Solicitor General; a report by one of those officers to the Crown in favour of the grant; a warrant under the sign manual to the Attorney or Solicitor General to prepare a bill for the patent; the preparation of the bill and two transcripts or copies of it in the Attorney General's Office, called the Patent Bill Office; the conversion of one of these copies of the bill into the Queen's Bill, upon its receiving the sign manual; the first bill being deposited in the Signet Office, a second copy is transformed into the Signet Bill by adding a few formal words to it, and sealing it with the seal of the Secretary of State; the Signet Bill being received in the Privy Seal Office, the remaining copy of the bill is in a similar manner converted into the Privy Seal Bill; the Privy Seal Bill is then delivered to the Lord Chancellor, and a patent made in the form contained in the bill.²⁵

Effectively, the patent applicant had to set in motion a chain of commands that commenced with the Queen and proceeded through a wilderness of bureaucracy:

. . . the Queen's Bill commands A., the signet officer, to command B., the Lord Keeper of the Privy Seal, that he command C., the Lord Chancellor, to make the intended grant. A. then issues the required command to B., who, in his turn, issues a command to C., and C. then directs his officers to prepare and seal a patent.²⁶

While this may appear to modern sensibilities as an early example of bureaucracies expanding to fill any void, Hindmarch suggested that this "cumbersome machinery" was probably the product of deliberate policy tracing back to the sixteenth century. During the reign of Henry VIII, it was considered important to limit the power of any individual officer of the Crown to confer valuable grants. Coke had explained as much in his "Institutes":

[S]uch was the wisdom of prudent antiquity, that whatsoever should passe the Great Seale should come through so many hands, to the end that nothing should passe that Great Seale,

²⁵W.M. HINDMARCH, OBSERVATIONS ON THE DEFECTS OF THE PATENT LAWS OF THIS COUNTRY; WITH SUGGESTIONS FOR THE REFORM OF THEM *2 (1851) [hereinafter HINDMARCH, SUGGESTIONS FOR REFORM].

²⁶*Id.* at *3.

that is so highly esteemed and accounted of in law, that as against law or inconvenient; or that anything should passe from the king anywayes, which he intended not, by undue or surreptitious meanes.²⁷

²⁷*Id.*, quoting Edward Coke, Commentary on the 28th Edw. 1, stat. 3, c. vi. (*Articuli super Chartas*,) 2 Inst. p. 555. The policy, as relevant to the patent grant, was embodied in a statute popularly known as the 1536 Clerks Act, 27 Hen. VIII. c. 11 (1535).

Even applicants who succeeded in navigating this formidable bureaucratic maze attained patent protection of dubious value, at best, because at no stage in these extraordinarily cumbersome procedures did British patent authorities ever conduct a substantive examination of patentability.²⁸

In addition to being subjected to potential pre-grant oppositions, an inventor might have his granted patent attacked in the courts on a writ of *scire facias*, or, of course, by invalidity challenges offered as defenses in infringement proceedings.²⁹

Vindicator had put out a call for dramatic reform. Asserting that “[m]en of skill, intellect, sense, learning, and nerve, are in decided opposition to all attempts to bolster up this most rotten part of a decaying order of things,” he urged “public meetings, to petition Parliament for an effectual revision of patent laws and practice, and the adoption of an entire new system of protection to inventions. . . .”³⁰

Vindicator enjoyed partial vindication, eventually. In 1829, Parliament appointed a Select Committee of the House of Commons to review the patent system,³¹ eventually leading to the passage of the 1835 Patents Act,³² by all accounts a “timid measure” making no major reforms.³³ In 1851, Hindmarch’s work identified many of the same defects about which Vindicator had so vociferously

²⁸See *supra* note ____.

²⁹See *supra* note ____ (explaining the *scire facias* action and pre-grant opposition practice under nineteenth century British practice).

³⁰Letter XII, *supra* note ___, at 47.

³¹COULTER, *supra* note ___, at 44 (referring to the 1829 Committee).

³²1835 Patents Act, 5 and 6 Wm. IV. c. 83.

³³See BOEHM, *supra* note ___, at 27; see also WEBSTER, NEW PATENT LAW, *supra* note ___, at 3

complained: bewildering and burdensome procedures, delay, and stifling costs.³⁴

³⁴As to the last, *see* HINDMARCH, SUGGESTIONS FOR REFORM, *supra* note __, at *11 (“The enormous sums which inventors must pay to obtain patents for their inventions, form one of the greatest grievances of which they have to complain.”). Hindmarch called for a series of reforms. *See id.* at *54-*57, listing reforms ranging from the inclusion of foreign publications as prior art, granting third parties the right to a hearing in pre-grant oppositions, requiring a printed specification and “some clear or distinct claim or claims of invention,” and, perhaps most importantly, that “[a]ll the present preliminary proceedings for obtaining patents to be abolished.” *Id.* at *54.

Not until the 1852 Act did Britain finally discard its archaic procedures and reduce application filing costs (down to about 25 pounds, as compared to the 300 pounds for comparable U.K. protection).³⁵

But even the 1852 Act left much to accomplish.³⁶

³⁵BOEHM, *supra* note __, at 28-9.

³⁶The 1852 Act did not institute substantive pre-grant examination, and, despite centralizing patent operations in a Patent Office, did not apparently provide adequate administrative oversight, as made evident when large amounts of Patent Office funds were unaccounted for in 1864. *Id.* See also WEBSTER, NEW PATENT LAW, *supra* note __, at 42 *et seq.* (detailing numerous shortcomings remaining in the 1852 Act).

On the other hand, the “cardinal features” of the 1852 Act included:

1. Protection from the day of application
2. One patent for the United Kingdom.
3. Moderate cost.
4. Printing and publication of specifications.
5. One office of patents and specifications.

Id. at 41.

The complaints of early British patent reformers demonstrate that dissatisfaction with patent administration -- with patent acquisition procedures, fees, and the extent of public participation in the process -- is by no means a new theme in patent reform debates.³⁷ This alone should serve as a sobering reminder to students of twenty-first century patent policy that much of what we say about reforming patent administration has probably been said before, and many of the solutions that we propose have, in all likelihood, been proposed (and sometimes discarded) before, though obviously the social, economic, and legal contexts have varied.

The tepid legislative response that greeted early nineteenth century British patent reform efforts may also provide an important lesson about the patent reform process in general. One might infer that then, as now, abstract expressions of moral umbrage over the arcana of patent administration are likely to arouse the sympathies of politicians. Eventually, however, patent reform -- and even patent abolition -- did gain a foothold in the British legislative agenda. Although there are many reasons why this occurred, one reason that deserves further analysis is the emergence of what might be designated the "heroic inventor" motif. Charles Dickens was one of its progenitors.

³⁷Concerning patent fees, *see, e.g.*, VICTOR L. EDWARDS, PATENT OFFICE FEES -- A LEGISLATIVE HISTORY, STUDY NO. 13 OF COMM. ON JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 85 CONG., 2D SESS. 1-3 (Comm. Print 1958) (describing the fee structure under the patent acts of 1790, 1793, 1836, 1861, and recommendations in 1912); *id.* at 3-8 (describing the fee changes in 1922, 1927, and 1930); *id.* at 8-16 (describing various attempts to change fees from 1947 through 1957).

For more recent sample commentary, *see, e.g.*, Michael N. Meller, *Planning for a Global Patent System*, 80 J. PAT. & TM. OFF. SOC'Y 379, 380 (1998); Erwin F. Berrier, *Global Patent Costs Must be Reduced*, 36 IDEA J.L. & TECH. 473 (1996).

Concerning public participation in the examination process, *see, e.g.*, Mark D. Janis, *Rethinking Reexamination: Toward a Viable Administrative Revocation System for U.S. Patent Law*, 11 HARV. J. L. & TECH. 1 (1997) (commenting on newer proposals and tracing the history of legislative efforts to enact post-grant revocation procedures).

In 1850, Dickens published a short work entitled “A Poor Man’s Tale of a Patent”.³⁸ *A Poor Man’s Tale* is a narrative in the first person, told by the fictional “Old John.” By his own modest representation -- Old John remarks that he hopes “[i]t won’t be took as boastful in me” -- Old John was a man “of an ingenious turn.” He spins a classic tale of invention:

³⁸See PHILLIPS, *supra* note __, at 15-21 (full reprint of Dickens’ work).

I have been twenty year, off and on, completing an Invention, and perfecting it. I perfected of it, last Christmas Eve at ten o'clock at night. Me and my wife stood and let some tears fall over the Model, when it was done and I brought her in to take a look at it. . . . There it was, perfected of, on Christmas Eve. . . at ten o'clock at night. All the money I could spare I had laid out upon the Model; and when times was bad, or my daughter Charlotte's children sickly, or both, it had stood still, months at a spell. I had pulled it to pieces, and made it over again with improvements, I don't know how often. There it stood, at last, a perfected Model as aforesaid.³⁹

Old John's troubles begin when he resolves to seek patent protection for his invention.

Drawing on his savings,⁴⁰ Old John takes lodgings with Thomas Joy, an acquaintance in London, and proceeds on an epic journey through the British patent administration. In one memorable passage, he summarizes his odyssey in tones reminiscent of Vindicator:

Look at the Home Secretary, the Attorney-General, the Patent Office, the Engrossing Clerk, the Lord Chancellor, the Privy Seal, the Clerk of the Patents, the Lord Chancellor's Purse-bearer, the Clerk of the Hanaper, the Deputy Clerk of the Hanaper, the Deputy Sealer, and the Deputy Chaff-Wax. No man in England could get a Patent for an Indian-rubber band, or an iron-hoop, without feeing all of them. Some of them, over and over again. I went through thirty-five stages. I began with the Queen upon the Throne. I ended with the Deputy Chaff-wax.⁴¹

Old John ultimately succeeds in receiving his patent, but only after exhausting nearly all of his savings:

³⁹PHILLIPS, *supra* note __, at 16-7.

⁴⁰Specifically, on his "legacy of one hundred and twenty-eight pound ten. . .". PHILLIPS, *supra* note __, at 17. Says Old John:

Me and my wife never broke into that money yet. Note. We might come to be old and past our work. We now agreed. . .to make a hole in it – I mean in the aforesaid money – and Patent the invention.

Id.

⁴¹PHILLIPS, *supra* note __, at 20-21. Phillips speculates that Dickens may have been influenced, at least indirectly, by the Vindicator letters. *Id.* at 8-9.

I was quite wore out, patience and pocket. . .I had lodged at Thomas Joy's over six weeks, and the unopposed patent for my invention, for England only, had cost me ninety-six pound, seven, and eightpence. If I had taken it out for the United Kingdom, it would have cost me more than three hundred pound.⁴²

⁴²*Id.* at 19-20.

Obviously, Dickens' *Poor Man's Tale* is a direct and satirical commentary on the complexity and cost of the patent-granting procedures under pre-1852 British practice. Reforms under the 1852 Act followed shortly on the heels of the publication of the *Poor Man's Tale*,⁴³ and it seems safe to assume that Dickens' work had some small influence.

For modern U.S. patent reform discussions, however, Dickens' work may be of interest for quite different reasons. The *Poor Man's Tale* is surely one of the earliest examples in Anglo-American patent law of invoking the now-familiar motif of the heroic inventor. Dickens spends a good deal of the *Poor Man's Tale* constructing a romantic image of the independent inventor, from the tears over the prototype on Christmas Eve, to the plundering of the retirement savings, to the persistence in the face of an unyielding bureaucracy. Towards the close of the *Tale*, Dickens makes a direct appeal to the inventor-as-hero, when Old John laments:

Is it reasonable to make a man feel as if, in inventing an ingenious improvement meant to do good, he had done something wrong? How else can a man feel, when he is met by such difficulties at every turn? All inventors taking out a Patent MUST feel so. . .⁴⁴

Dickens was not alone in idealizing inventors and the process of invention. He was just peculiarly effective. Similar imagery, albeit with less emotional impact, appears elsewhere in the nineteenth century reform literature. For example, in arguing against excessive filing fees in his 1851 volume on patent law reform, Hindmarch observes:

⁴³See *supra* note __ (explaining the reforms in the 1852 Act).

⁴⁴PHILLIPS, *supra* note __, at 20.

This enormous cost of patents throws very many serious difficulties in the way of inventors. Such persons are seldom affluent, but on the contrary are generally in straitened circumstances, frequently very poor. Many intelligent workmen are possessed of very considerable inventive powers; but being unable to pay the cost of a patent for anything they may invent, they have no motive to turn aside out of the beaten track. . .⁴⁵

The invocation of the heroic inventor in the cause of patent reform is intriguing because, today, one hundred and fifty years later, the heroic inventor remains firmly entrenched in the modern U.S. patent law iconography. At first blush, this might seem counterintuitive in some respects. After

⁴⁵HINDMARCH, SUGGESTIONS FOR REFORM, *supra* note __, at *12 - *13. In tones that must surely resonate with contemporary high technology entrepreneurs, Hindmarch also gave an account of the perils of seeking venture capital financing:

And if an artisan should seek the assistance of a capitalist to enable him to obtain the means of procuring a patent, he must disclose the invention to the man of whom he is in fact asking a favour, and thus put himself wholly in the power of the capitalist, who may dictate his own terms respecting the assistance which he will afford, and the manner of doing it. In such cases poor inventors usually pay dearly for the assistance which they obtain; and it frequently happens that they fail to obtain any profit from their inventions. *Id.* at *13.

all, as Merges has written, the twentieth century witnessed a gradual “corporatization” of industrial research and development, and American patent law responded by the professionalization of the Patent Office,⁴⁶ the liberalization of the rules for correcting inventorship, and the rejection of a doctrine that would have penalized patentees for failure to “work” patented technology.⁴⁷

⁴⁶Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CAL. L. REV. 2187, 2216 (2000) (observing that corporate R&D departments tended to file more patent applications, precipitating a need for administrative reform to enable the Patent Office to handle the heavy application volumes.).

⁴⁷This occurred at the time that corporate entities were beginning to acquire patent protection for defensive purposes, and otherwise developing strategic patent portfolios. A requirement that patented technology be “worked” would have complicated, and might have thwarted, these efforts. *Id.* at 2219-21.

In other respects, however, it makes intuitive sense that the heroic inventor motif has lingered in U.S. patent policy debates. First, it is conceivable that the corporatization of R&D actually has reinforced the romantic appeal of the lone inventor.⁴⁸ Second, the heroic inventor motif, with its overtones of Jeffersonian self-reliance and Yankee ingenuity, may simply mesh uniquely well with the American perception of its own identity.⁴⁹ Third, the motif has an enduring rhetorical power in the context of patent law reform. Issues of administrative patent law reform, taken in the abstract, have been sufficiently arid to dull the mind of even the hardest headed patent reform enthusiast, much less politician with only the dimmest awareness of the patent system. To engage and impact more meaningfully the political process, patent reformers could reconceptualize a technical, procedural debate as a narrative on the plight of the independent inventor. This coupling of the technical objections with the romantic image of the lone inventor facing the bureaucracy might also supply the foundation for more ambitious substantive reform efforts.

⁴⁸Perhaps the same phenomenon occurred in Dickens' time. Nineteenth century observers experiencing the Industrial Revolution might surely have perceived that the day of the lone inventor -- as embodied in the local craftsmen of the pastoral economy -- was passing.

⁴⁹There is also some evidence that the independent inventor theme has played well outside the U.S. at various times. *See, e.g.,* PETER MEINHARDT, INVENTIONS PATENTS AND MONOPOLY 237-244 (1946) (suggesting reform legislation for the British patent system that would provide various forms of assistance to "small" inventors); *see also infra* text accompanying notes ___ - ___ (discussing second tier patent regimes).

The historical record of patent law reform yields a fair amount of anecdotal evidence to support this last claim of rhetorical power, a power that lingers over decades of American patent law reform. The U.S. Patent and Trademark Office (PTO) has done its share to contribute to this venerable literary tradition. A worthy exemplar appears on the PTO's Independent Inventor Resources website:

To paraphrase our Declaration of Independence [sic, National Anthem?], America is the land of the free, home of the brave, and haven for the independent inventor. Nowhere else in the world does a government exist that supports its independent inventors to the extent that we do. The independent inventor is America's natural resource.⁵⁰

Another example comes from mid-1960's symposium commentary from PTO officials in honor of the 175th anniversary of the U.S. Patent System. A symposium article published in the Journal of the Patent Office Society offered a poetic ode to the "Godly Inventor," commencing:

A spark ignites your restless mind,
A fearless soul, it starts to grind. . .⁵¹

While scholars may be hard pressed to take seriously these grinding minds⁵² and revisions to

⁵⁰Richard J. Apley, Director, USPTO Office of Independent Inventor Programs, <<http://www.uspto.gov/web/offices/com/iip/welcome.htm>>, visited Dec. 20, 2001. (Independent Inventor Resources Website of the USPTO)

For earlier incarnations of PTO programs on behalf of independent inventors, see Isaac Fleischmann, *The Patent Office and the Independent Inventor*, 47 J. PAT. OFF. SOC'Y 459 (1965) (detailing mid-1960's Patent Office efforts to assist independent inventors); Maurice A. Crews, *Problems of the Independent Inventor*, 41 J. PAT. OFF. SOC'Y 159 (1959) (Assistant Commissioner of Patents' introduction of a pamphlet designed for independent inventors and discussion of some "self-evident" problems faced by independent inventors who seek to use the patent system).

⁵¹Fleischmann, *supra* note __, at 465.

⁵²Or grinding souls, as it may be.

basic American scripture,⁵³ it seems significant that the PTO persists in its desire to offer homages to the heroic inventor. Whether purely the product of pragmatic considerations,⁵⁴ or considerations of political expediency, the heroic inventor and attendant symbolism lives on in American patent administration.

The heroic inventor motif also manifests itself in judicial opinions. Patent litigators present and past would, no doubt, consider it blindingly obvious that the heroic inventor motif matters in patent litigation, the hero-inventor being the quintessential protagonist in the patent infringement narrative. Writing in the mid-1950's, Judge Rifkind captured this notion with Dickensian felicity:

⁵³See PAULINE MAIER, AMERICAN SCRIPTURE: MAKING THE DECLARATION OF INDEPENDENCE (1997) (saying nothing whatever about the “land of the free, home of the brave”).

⁵⁴*E.g.*, to reduce the costs associated with assisting *pro se* applicants.

[I]n the eyes of the proponent of the patent, his client generally is the poor, famished, garret inventor pursuing for years his private faith in his particular vision of the new and useful; at the end of the first act he is the proud possessor of a diploma of achievement from the Patent Office; at the end of the second act, you find him complaining bitterly that a greedy corporation has kidnapped his brain child and its inheritance.⁵⁵

⁵⁵Simon H. Rifkind, *The Romance Discoverable in Patent Cases*, 37 J. PAT. OFF. SOC'Y 319, 322 (1955). Judge Rifkind also recorded his doubts that the romance of the hero-inventor motif had seeped into the general judicial consciousness:

[T]he same judges write both patent opinions and admiralty opinions. But the lay reader would never guess that fact. No sooner does a judge betake himself to an admiralty case, but he immediately fancies himself a latter day Conrad. His manuscript is redolent of resin and sea water, his paragraphs are resonant with whistles and general alarms. He tells a story of a burning cargo in a far off sea, of lifeboats launched in storms, of brave rescues, and sudden deaths. It is plain he enjoys the telling of the story. But not so when he ponders his patent cases. Then he writes only of claims and specifications, of prior art and anticipations. Of the inventor – nary a word.

Id. at 329-30.

This is not to suggest, however, that the heroic inventor motif in patent litigation is confined to relatively superficial appeals to emotion. For example, Federal Circuit judges still periodically invoke the interests and imagery of the independent inventor in crafting and applying patent law rules.⁵⁶ In *Festo*,⁵⁷ Judge Linn argued that the Federal Circuit majority's rule on prosecution history estoppel "wrongfully sets in place a regime that increases the cost and complexity of patent prosecution to the detriment of individual inventors. . ."⁵⁸ and "discounts the intrinsic worth in treating more fairly the individual inventor whose patent right is under administrative scrutiny. . .".⁵⁹ Judges also on occasion debate whether various substantive patent law rules should be subject to exceptions or limitations for independent inventors: for example, the on-sale⁶⁰ and public use bars,⁶¹

⁵⁶The heroic inventor may be functioning in this context as a decisionmaking heuristic. On this phenomenon generally, see Hillary A. Sale, *Judging Heuristics*, __ HASTINGS L.J. __ (forthcoming 2002) (copy on file with author) (providing examples from securities litigation).

⁵⁷*Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558 (Fed. Cir. 2000), *cert. pending*, 121 S.Ct. 2519 (2001).

⁵⁸*Id.* at 620 (Linn, J., concurring in part and dissenting in part). Judge Linn worried that: [T]he majority's new rule will substantially increase the cost of obtaining patent protection, and may in fact become prohibitively high for individual inventors and start-up companies. . . . These increases in costs and complexity will also come at a time when greater prosecution investments may be hard for many applicants to justify because the commercial value of the inventions covered may not then be fully apparent. In my view, this will most detrimentally impact individual inventors and start-up companies. . . *Id.* at 624.

⁵⁹*Id.* at 628 (Linn, J., concurring in part and dissenting in part).

⁶⁰*E.g.*, *Special Devices, Inc. v. OEA, Inc.*, 270 F.3d 1353, 1356 (Fed. Cir. 2001). The Federal Circuit upheld the application of the on-sale bar to a transaction between arguably related entities, but seemed to suggest that the bar might not apply to cases in which "an individual inventor takes a design to a fabricator and pays the fabricator for its services in fabricating a few sample products."

⁶¹*E.g.*, *Lough v. Brunswick Corp.*, 86 F.3d 1113 (Fed. Cir. 1996). Reviewing whether an

independent inventor's pre-critical date uses of an invention were barring public uses or experimental uses, Judge Lourie, for the panel majority, acknowledged that relatively informal and "seemingly casual" activities undertaken by independent inventors might qualify as experimental use for purposes of 35 U.S.C. §102(b), but insisted that evidence of "the same basic elements that are required to validate any experimental program" must still be present. *Id.* at 1121. According to Judge Lourie:

The law does not waive statutory requirements for inventors of lesser sophistication. When one distributes his invention to members of the public under circumstances that evidence a near total disregard for supervision and control concerning its use, the absence of these minimal indicia of experimentation require a conclusion that the invention was in public use.

Id. at 1122.

Judge Plager dissented. He rendered a classic portrait of the lone inventor:

This is not a contest between. . . the two big competitors in this field, to see who can market a better [boat] engine. If it were, we could expect the combination of engineering and legal staffs on each side to be punctilious about observing the niceties of our prior opinions on how to conduct experiments so as to avoid any possible running afoul of the public use bar. No, this is a home-made improvement by a man with only a high school education who worked on boats and boat engines, including his own, where he kept encountering the problem. . .that [others] had failed to solve. He solved it by trial and error, with an ingenious bushing of his own design, and, on his grandfather's metal lathe, after several tries, fashioned a half-dozen prototype seals that looked like they might do the job.

Id. at 1123.

According to Judge Plager, the majority clearly should have taken account of the plaintiff's status as an independent inventor:

Of course it would have been better for all concerned. . . if [the inventor] had read our prior opinions before he became an inventor. Then he might have kept detailed lab notes setting out the problem and the possible solutions, and he wisely would have obtained written confidentiality agreements from those allowed to see or use his prototypes. Had he studied our cases first, he no doubt would have developed a detailed questionnaire for the persons to whom he provided the seals, and he would have insisted on periodic written reports. In other words, he would have put in the set of tight controls the majority would have wanted. Instead, he did what seemed appropriate in the setting in which he worked: he waited to hear from his test cases what problems might emerge, and, hearing none, at least none that convinced him he was on the wrong track, he accepted some friendly advice and proceeded to patent his invention.

Yes, he failed to conduct his testing, his experiments, with the careful attention we

and damages under the reasonable royalty methodology⁶² as well as other, more creative damages

lawyers, with our clean and dry hands, have come to prefer. But, under all the facts and circumstances, it is more likely than not that he was testing and perfecting his device, rather than simply making it available gratis to members of the general public for what the law calls "public use."

Id. at 1124.

⁶²*Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1109 (Fed. Cir. 1996) (observing that the use of a pure willing licensor/willing licensee model, without regard to other *Georgia Pacific* factors, "risks creation of the perception that blatant, blind appropriation of inventions patented by individual, nonmanufacturing inventors is the profitable, can't-lose course."), *quoting* *Fromson v. Western Litho Plate and Supply Co.*, 853 F.2d 1568, 1575 (Fed. Cir.1988); *but cf.* *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1580-81 (Fed. Cir. 1996) (cautioning against the use of a punitive "Panduit kicker" in calculating a reasonable royalty).

theories.⁶³

I do not mean to draw grandiose inferences here. I do not mean to imply that whenever a judge invokes heroic inventor imagery in a judicial opinion, or refers to the interests of the independent inventor, we should ascribe to that judge some discrete and uniform motivation for doing so. For all I know, judges may have no conscious motivation whatever for reverting to the heroic inventor narrative; they may simply perceive that they are reporting the facts of the cases before them. Whether out of necessity or desire, by continuing to link plaintiff-patentees with the independent inventor motif, judges ensure the motif's lingering relevance.

⁶³An examination of the inventor-as-hero phenomenon would hardly be complete without at least passing reference to the war of the windshield wipers, pitting Robert Kearns against the automobile industry. In *Kearns v. Chrysler Corp.*, 32 F.3d 1541 (Fed. Cir. 1994), one of Kearns' many cases, Kearns had prevailed on a claim against Chrysler for damages for Chrysler's past infringement, but additionally sought to have Chrysler enjoined from producing the infringing products for a predetermined future period, even though the infringed patents had expired. The post-expiration injunctive relief, Kearns reasoned, compensated him for the loss of true "exclusivity" under his patents. *Id.* at 1549. The Federal Circuit expressed sympathy with Kearns' complaint "that his patents have expired without his ever being able to exclude others from practice of his invention, especially since he is an individual inventor contending with a multitude of giant corporations," but refused the requested relief. *Id.* at 1551. *See also id.* at 1551, n. 11 (adding that "[t]he fact that Kearns has fired several of his attorneys and attempted to conduct massive multiple suits *pro se* may be relevant to his dilemma.").

The normative implications are unclear. Economists and others disagreed throughout the twentieth century about whether independent inventors or corporate R&D groups contributed more profoundly to technological innovation.⁶⁴ Historians have worried that the impulse to lionize individuals as inventor-heroes has the potential to cause mischief in the historical record.⁶⁵ Legal commentators have expressed suspicion that the independent inventor motif may have more prejudicial effect than probative value.⁶⁶

Federal Circuit judges might pause to reflect on these considerations. Perhaps they should resolve to become more cautious about deploying heroic inventor rhetoric in opinions. Or, judges

⁶⁴An oft-cited source in the early 1960's literature on the role of independent inventors at that time is JOHN JEWKES, DAVID SAWER, AND RICHARD STILLERMAN, *THE SOURCES OF INVENTION* (1958) (concluding that even as of the mid-twentieth century, inventors working independently of large organizations were still contributing significantly to technological progress). *See also* WILLIAM B. BENNETT, *THE AMERICAN PATENT SYSTEM: AN ECONOMIC INTERPRETATION* 197-98 (1943) (asserting that “it might be argued that the independent inventor assumes an ever greater importance as a larger portion of American patents spring from corporate research” because corporate research shuns risky, pioneering endeavors); GEORGE E. FOLK, *PATENTS AND INDUSTRIAL PROGRESS: A SUMMARY, ANALYSIS, AND EVALUATION OF THE RECORD ON PATENTS OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE* 144-162 (1942) (summarizing testimony on the role of independent inventors in the 1940's U.S. economy and concluding that encouraging independent inventors should continue as a focus of the U.S. patent system).

⁶⁵Louis C. Hunter, *The Heroic Theory of Invention*, in EDWIN T. LAYTON, *TECHNOLOGY AND SOCIAL CHANGE IN AMERICA* 25-46 (1973) (noting the tendency of historians to attribute important technological innovations to individual heroic figures, when in fact such innovations routinely have come about through the collective efforts of multiple contributors). Hunter uses the invention of the steamboat as an illustration of the phenomenon.

⁶⁶*See, e.g.*, John C. Stedman, *The U.S. Patent System and its Current Problems*, 42 TEX. L. REV. 450, 496 (1954), asserting that while “[t]here are frequent assertions that small business needs the patent system and gets more protection from it than big business, and defenders of the patent system rarely have difficulty rounding up ‘small business’ witnesses to testify whenever the patent system is under attack,” it remains unclear to what extent these assertions “are anecdotal rather than general, or based upon emotion rather than fact.”

might simply take a hard look at arguments that special rules or exceptions should apply to independent inventors, to ensure that such claims rest on a legitimate policy basis rather than a literary tradition.⁶⁷

⁶⁷While they are at it, it might also be advisable for judges to consider the potential emergence of a competing motif – the heroic infringer. Arguably, the *Cellpro* patent litigation qualifies as a narrative of this type. See *Johns Hopkins Univ. v. Cellpro*, 978 F. Supp. 184 (D. Del. 1997), in which Judge McKelvie, opining on damages, wrote:

One element of the strategy CellPro has adopted in this battle has been to hold itself out as a warrior in a twentieth-century holy crusade. It claims it is out to advance science, to save lives, to fight cancer, and improve the human condition. If it infringed Dr. Civin's patents, so it says, it was only to do good. That is the image CellPro seeks to project of itself in this litigation and elsewhere.

Id. at 196 (proceeding to comment that while there is “some truth” to the image that Cellpro sought to project, “[i]n other ways, however, this image is a facade constructed by the venture capitalists” who started Cellpro). Judge McKelvie was not amused, and imposed enhanced damages. Cellpro offered its take on the litigation in a popular book, RICK MURDOCK & DAVID

FISHER, PATIENT NUMBER ONE: A TRUE STORY OF HOW ONE CEO TOOK ON CANCER AND BIG BUSINESS IN THE FIGHT OF HIS LIFE (2000).

Law review commentary on the case focuses on the issue of march-in rights. Because a federally-funded research project had generated the inventions claimed in the Johns Hopkins patents, those patents were potentially subject to compulsory licensing under the “march-in” rights provisions of 35 U.S.C. §203(1). Cellpro petitioned the federal funding agency (the NIH) to exercise march-in rights, but the NIH declined after extensive administrative review. *See generally* Tamsen Valoir, *Government Funded Inventions: The Bayh-Dole Act and the Hopkins v. Cellpro March-in Rights Controversy*, 8 TEX. INTELL. PROP. L.J. 211 (2000); Barbara M. McGarey and Annette C. Levey, *Patents, Products, and Public Health: An Analysis of the CellPro March-In Petition*, 14 BERKELEY TECH. L. J. 1095 (1999).

In the context of patent reform through patent litigation, may be difficult to evaluate how much influence to attribute to the heroic inventor motif. In the context of patent reform through the legislative process, however, the influence and pervasiveness of the motif are more easily demonstrated.

Commentaries and legislative studies on U.S. patent law reform in the mid-twentieth century periodically acknowledged the interests of independent inventors, generally focusing on the cost and complexity of patent prosecution and litigation.⁶⁸ A mid-1950's legislative report⁶⁹ acknowledged the obstacles faced by independent inventors,⁷⁰ and concluded that:

⁶⁸See, e.g., David Rines, *Do We Need a Patent System?*, 51 J. PAT. OFF. SOC'Y 501 (1969) (answering yes, and lamenting that the expense of patent litigation might discourage independent inventors from disclosing their inventions via the patent system); A.J. Hayes, *The Independent Inventor's Interest*, 47 J. PAT. OFF. SOC'Y 298 (1965) (questioning rules for ownership of employee inventions and asserting that patent administration must be kept "as inexpensive and simple as possible"); FLOYD VAUGHAN, *THE UNITED STATES PATENT SYSTEM* 265 (1956) (identifying the expense of interference proceedings and litigation among the defects of the patent system that might frustrate the efforts of independent inventors).

A relevant legislative study is C.D. TUSKA, *INDEPENDENT INVENTORS AND THE PATENT SYSTEM*, STUDY NO. 28 OF COMM. ON JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 86TH CONG. 2D SESS. (Comm. Print 1961) (a largely inscrutable study attempting to gauge the patent activities of various independent inventors through analysis of selected tax cases involving licensing royalties and the like).

For commentary of more recent vintage, but in this same tradition, see, e.g., Donald Grant Kelly, *America's Inventors Have Arrived (And We Thought They Were "Invisible.")*, 80 J. PAT. & TM. OFF. SOC'Y 601 (1998) (describing progress on "inventor-friendly" patent legislation proposals).

⁶⁹REVIEW OF THE AMERICAN PATENT SYSTEM, S. REP. NO. 1464, 84TH CONG., 2D SESS. (1956).

⁷⁰The report related that:

The subcommittee heard an almost unanimous chorus of dissatisfaction from individual inventors. The normal market, investment, and business hazards attending any innovation – whether a new product, a new machine, or a substantive improvement – are already so large that the additional and. . . as they see it, unnecessary administrative and judicial hazards now incurred in securing and protecting a patent represent the straw that breaks

. . .the individual inventor. . .performs a vital and important function. The patent system is designed to encourage this type of inventor, and the patent statutes, Patent Office administration, and the patent system as a whole must be considered, and improved where necessary, in the light of this purpose.⁷¹

the camel's back.
Id. at 2.

⁷¹*Id.*

Similarly, in *Small Business and the Proposed Patent Reform Act of 1967*,⁷² one commentator identified several proposed reforms that would assertedly disadvantage independent inventors, including first-to-file provisions,⁷³ early publication coupled with pre-grant opposition and post-grant revocation,⁷⁴ and the proposed elimination of the 35 U.S.C. §102(b) grace period.⁷⁵ A

⁷²William E. Schuyler, Jr., *Small Business and the Proposed Patent Reform Act of 1967*, 36 GEO. WASH. L. REV. 122 (1967).

⁷³Schuyler argued that first-to-file provisions would force inventors to file earlier and more often, purely for defensive purposes. *Id.* at 125-6. Presumably this would generate increased patent prosecution costs, the burden of which would fall hardest on small business.

⁷⁴Pre-grant oppositions would contribute to delay in patent issuance. *Id.* at 127. In general, according to Schuyler, opposition and revocation proceedings favored the well-heeled -- those having the resources to monitor published patent applications routinely so as to identify targets for oppositions, to initiate opposition proceedings, and to respond when subjected to such proceedings on one's own applications. Small business lacked the resources to monitor and to initiate proceedings, but was likely to be subjected to such proceedings. *Id.* at 132-33.

reform that would have afforded applicants the option to file “preliminary” (provisional) applications likewise came under fire.⁷⁶

⁷⁵*Id.* at 131-32 (arguing that the lack of a grace period would be particularly problematic for small business because they are least likely to consult a patent lawyer until after some development effort -- and valuable time -- has been invested).

⁷⁶*Id.* at 129-30 (offering the familiar argument that the provisional application might not contain an adequate description to support claims in a subsequent regular application, exposing the applicant to possible invalidating intervening prior art). Of course, this would be equally true for large and small-entity applicants, assuming no disparity in the quality of counsel preparing the provisional application.

In some instances, pressure on behalf of independent inventors has led to proposals (and sometimes legislation) directly expressly at alleviating burdens of independent inventors. Perhaps the most obvious example is legislation providing that qualified “small entities” can receive reductions in government fees associated with patent prosecution.⁷⁷ Other recent initiatives have included proposals for subsidizing foreign patent filings⁷⁸ and fee-shifting for patent litigation against the federal government.⁷⁹

In other instances, it appears that lobbying efforts on behalf of independent inventors has

⁷⁷See 35 U.S.C. §41 (providing for a reduction in fees for independent inventors and other qualifying entities); 37 C.F.R. §§1.9; 1.27; 1.28 (procedures for establishing entitlement to reduced fees and correcting pertinent errors). The relevant regulations have recently amended to simply claims to small entity status. See 65 Fed. Reg. 54,659 (2000). See also *DH Technology, Inc. v. Synergystex Int’l, Inc.*, 154 F.3d 1333 (Fed. Cir. 1998) (vacating and remanding district court ruling that a patent was unenforceable where the patentee had erroneously paid small entity fees).

⁷⁸The “SBIR and STTR Foreign Patent Protection Act of 2001.” See *Legislation/Patents: Bill Would Fund Patent Costs of Small Businesses*, 62 PAT. TM. & COPYRIGHT. J. (BNA) 369 (Aug. 17, 2001) (reporting on S. 1323, introduced August 2, 2001). SBIR refers to the Small Business Innovation Research program; STTR refers to the Small Business Technology Transfer program. The bill would offer to grants for foreign patent filings, in exchange for a portion of royalties.

See also J. Douglas Hawkins, *Importance and Access of International Patent Protection for the Independent Inventor*, 3 U. BALT. INTELL. PROP. L.J. 145, 146 (1995) (asserting that the independent inventor “is still responsible for a disproportionate amount of input in the invention process” and arguing that fees for PCT filings must be controlled to facilitate the acquisition of foreign patent protection by independent inventors).

⁷⁹JUST COMPENSATION OF PATENT OWNERS FOR UNLICENSED USE BY UNITED STATES, H.R. REP. NO.104-373, 104TH CONG., 1ST SESS. (1995) (report to accompany H.R. 632, whose purpose was “to help small business, independent inventors and nonprofit organizations recover the legal costs associated with defending their patents when the Federal government is found liable for taking them,” e.g., under application of 28 U.S.C. §1498(a).).

See also *Patent Law Revision Part 2: Hearings before Comm. On Judiciary, Subcomm. On Patents, Trademarks and Copyrights*, 90th Cong., 2d Sess. 616 (1968) (statement of Henry J. Cappello, NSBA consultant) (proposing establishment of a special patent litigation fund to defray attorney’s fees for independent inventors initiating patent infringement actions).

materially affected general patent legislation. For example, provisions enacted as part of the 1999 reform package on the publication of pending patent applications 18 months after filing⁸⁰ allow applicants to opt out of the publication regime if they certify that they have not and will not file foreign applications in jurisdictions requiring publication 18 months after filing.⁸¹ These provisions bear the unmistakable influence of lobbying on behalf of independent inventors.

That lobbying effort included liberal reference to the heroic inventor. For example, William P. Parker, President of the Vermont Inventors Association, testified on disadvantages of the early publication provisions:

⁸⁰See 35 U.S.C. §122(b) (publication); 35 U.S.C. §154(d) (provisional rights to compensation for unauthorized exploitation of inventions claimed in published patent applications).

⁸¹35 U.S.C. §122(b)(2)(B)(i).

[O]thers are able to view and assess an invention before the actual inventor can either commercialize it or even know if it will be granted a patent. For a large corporation with a legal staff and financial resources, such early review poses no threat. But for the individual inventor, early publication can lead to ruin. Often he will have spent five years of his life between conceiving the idea and acquiring a patent. He uses the money that might have been spent on a car, a house, or his child's education to bring his idea to fruition. Unlike the corporation, he has no budget for legal counsel should his ideas be stolen. The rules for publication must reflect this discrepancy.⁸²

Early publication, according to Parker, might unwittingly confer a substantial benefit on “idea thieves.” Upon early publication of a patent application claiming a commercially valuable invention:

[t]he idea-thieves can make money from the idea before the patent even issues and when they are challenged, are in a better position financially to defend themselves than the legitimate owner. Worse, if this party is in a foreign country or is a large corporation, then the inventor's recourse is virtually hopeless.⁸³

⁸²*The Omnibus Patent Act of 1997: Hearings on S. 507 and H.R. 400 (S. Hrg. 105-95) Before Comm. on Judiciary, 105th Cong., 1st Sess. 49 (1997) (prepared statement of William P. Parker).*

⁸³*Id.* Parker proceeded to recommend that the individual inventor have the option to withhold publication if the application was not being submitted overseas, and urged that “[e]arly publication would be more acceptable to individual inventors if it occurred 3 months after the second office action.” *Id.* Parker also argued that a provisional rights provision giving inventors a right to collect a royalty for unauthorized use of a published application would not adequately compensate the individual inventor (because he envisions a scenario where multiple unlicensed competitors flood the market and undermine the true inventor's marketing strategy). Provisional rights provisions giving the inventor the right to collect “substantial” damages would be more

acceptable.

Testimony the 1990's legislative debate addressing the impact of proposed patent law reforms on independent inventors and small business was among the most caustic in recent memory.⁸⁴ Congress' response extended beyond compromising the publication regime. In a rather transparent gesture that sought, perhaps, to mollify independent inventors, Congress labeled the reform package the American Inventors Protection Act of 1999, even though it contained numerous reforms that independent inventors opposed.⁸⁵ Moreover, the Act commenced with a title on "Inventor's Rights," concerning restrictions on Invention Promotion businesses, which had attained a notorious reputation

⁸⁴ See, e.g., *Impact on U.S. Exporters of the New GATT Patent Accord: Hearing Before House Comm. on International Relations, Subcomm. On International Economic Policy and Trade*, 104th Cong., 1st Sess. (1995), which included discussion of an agreement between Ron Brown, then the Secretary of Commerce, and Japanese officials under which the Clinton administration agreed to press for certain U.S. patent reforms (including early publication of patent applications and reexamination reform) while the Japanese would institute certain reforms to the Japanese patent system. David L. Hill, President of the "Patent Enforcement Fund, Inc.," likened early publication and reexamination reform as memorialized in the bilateral agreement to "an attack on the U.S. economy which in the long-term would be comparable to the military attack from Japan at Pearl Harbor." *Id.* at 46-7. See also *id.* at 68-77, an article appended to Hill's prepared statement, entitled "The Putsch to Enfeeble the Independent U.S. Inventor" (characterizing proposals for early publication, reexamination reform, and first-to-file as being "targeted to weaken the position of the independent inventor" and thereby undermine the U.S. economy); *id.* at 98-109, the written statement of Ronald J. Riley, Advisory Board President, Alliance for American Innovation (similar in tone and content). See also *Changes in U.S. Patent Law and their Implications for Energy and Environment Research and Development: Hearing before the House Comm. on Science, Subcomm. On Energy and Environment*, 104th Cong., 2d sess. 197 (1996) (Statement of Salvatore J. Monte, executive of a specialty chemical company) ("Laying open patents after 18 months opens the small inventor to patent flooding tactics and challenges from deep-pocketed Japanese industrial cartels").

⁸⁵ Some found irony here. E.g., Phyllis Schlafly, Don't Fall for Phony Patent Reform, <<http://www.inventionconvention.com/inventorsvoice/urgentalerts/080199schlafly.html>>, visited December 20, 2001:

This bill is called the American Inventors Protection Act, but should be called the Inventors Elimination Act. The independent inventors would be squeezed out and their inventions stolen from them, all for the benefit of the foreigners and the giant corporations.

for preying on independent inventors.⁸⁶

⁸⁶The relevant provision is now codified at 35 U.S.C. §297 (imposing disclosure requirements on “invention promoters,” recognizing a civil cause of action for customers who are defrauded by such promoters, and providing optional statutory damages in such civil actions).

Sympathy for the plight of the independent inventor is also offered as one of the principal motivations underlying proposals for second tier patent systems in various parts of the world.⁸⁷ Second tier systems generally promise less cumbersome pre-grant procedures (and correlative savings in time and cost), little or no substantive pre-grant examination, and softened patentability requirements (particularly a diminished threshold for obviousness).⁸⁸

In the new Australian “Innovation Patent” regime, one example of a second tier regime, applicants can file applications online, and pay relevant fees online with a credit card. IP Australia represents that most innovation patents will be granted within one month of application filing.⁸⁹ All of this, according to IP Australia, is “designed to suit the needs of Australian small to medium

⁸⁷See generally Mark D. Janis, *Second Tier Patent Protection*, 40 HARV. INT’L L. J. 151 (1999) (criticizing second tier patent proposals); *but cf.* Uma Suthersanen, *Incremental Inventions in Europe: A Legal and Economic Appraisal of Second Tier Patents*, 2001 J. BUS. L. 319 (2001) (offering a cautiously optimistic assessment).

⁸⁸An example is the Australian “Innovation Patent.” See Janis, *Second Tier*, *supra* note ___, at 167-73 (describing relevant proposals); Anne Duffy, *Australia: Patents -- Patents Amendment (Innovation Patents) Act 2000*, 23 EUR. INTELL. PROP. REV. (Vol. 4) N37-39 (2001) (describing the legislation as enacted).

⁸⁹See “The Innovation Patents Kit” www.ipaustralia.gov.au <last visited Jan. 2, 2002>.

sized enterprises (SMEs) and individuals and help reduce the risks involved in research and development.”⁹⁰

In debating second tier patent regimes, modern patent policymakers are – no doubt unwittingly – again invoking Dickens. At the conclusion of the *Poor Man’s Tale*, Dickens’ protagonist, Old John, is bidding goodbye to his carpenter friend, Thomas Joy, after Old John’s patent ordeal, when Thomas Joy (spontaneously, it would seem) delivers a full-fledged legislative proposal – for a second tier patent system:

Thomas said to me when we parted, ‘John, if the laws of this country were as honest as they ought to be, you would have come to London – registered an exact description and drawing of your invention – paid half-a-crown or so for doing of it – and therein and thereby have got your patent’.

⁹⁰*Id.* In previous work, I have expressed doubts about these claims. See Janis, *Second Tier*, *supra* note __, at 178-88 (questioning whether second tier systems will enhance independent inventor potential to obtain meaningful, enforceable patent rights).

My opinion is the same as Thomas Joy. . .⁹¹

One cannot help but expect that, for the foreseeable future, patent law reform debates will continue to revert periodically to narratives about the heroic inventor.

II. The Abolitionist Movement: Essential Themes and their Modern Counterparts

⁹¹PHILLIPS, *supra* note __, at 21.

The patent reform efforts in the 1820's and 1830's, and the flurry of activity in 1850-51 leading to the passage of the 1852 Act,⁹² gradually transformed into a full-fledged movement emphasizing patent law abolition over patent law reform. The patent abolitionist debate drew in a wide range of interests, among them patent professionals, academics, inventors, and business owners.⁹³ The flavor of the debate, if not its full political complexity, can be captured by understanding it as a dialogue between leading figures: Robert Macfie, an ardent abolitionist, and Hindmarch and Webster, a pair of patent lawyers who supported reform but opposed abolition.⁹⁴

⁹²The approach of the Great Exhibition of 1851 gave added urgency to the patent law reform agenda of 1850-51. *E.g.*, COULTER, *supra* note __, at 39. For general background on the Great Exhibition, *see, e.g.*, JEFFREY AUERBACH, *THE GREAT EXHIBITION OF 1851* (1999). For an interesting brief account focusing on international trade implications, *see* John Kemper, *Internationalism and the Search for a National Identity: Britain and the Great Exhibition of 1851* (2000) <<http://britishhistory.about.com/gi/dynamic/offsite.htm?site=http://www.stanford.edu/group/ww1/spring2000/exhibition/paper.htm>> (visited Jan. 9, 2002).

⁹³*E.g.*, COULTER, *supra* note __, at 91-2.

⁹⁴While it might be supposed that the debate would have pitted abolitionists against defenders of the status quo (rather than abolitionists versus reformers), in fact there were few defenders of the status quo. *See, e.g.*, Victor M. Batzel, *Legal Monopoly in Liberal England:*

The Patent Controversy in the Mid-Nineteenth Century, 22 BUS. HIST. 189, 190 (1980).

Robert Andrew Macfie, a sugar refiner who also served in the House of Commons during part of the time period when abolition was being debated,⁹⁵ was singlehandedly responsible for a good share of the pro-abolition literature,⁹⁶ and his compiled works, among their other merits, preserve for posterity a cornucopia of insulting quotations and inflamed rhetoric about the patent system.⁹⁷

⁹⁵*Id.* at 59-60 (Macfie's sugar manufacturing interests); *id.* at 136 (Macfie's election to the House of Commons in 1868); *id.* at 160 (Macfie's unsuccessful bid for re-election in 1874, when Disraeli's conservative government came into power).

⁹⁶Included among Macfie's compendious bibliography on the subject of patent reform are numerous original writings and compilations of others' works. *See* R.A. MACFIE, COPYRIGHT AND PATENTS FOR INVENTIONS: PLEAS AND PLANS FOR CHEAPER BOOKS AND GREATER INDUSTRIAL FREEDOM, WITH DUE REGARD TO INTERNATIONAL RELATIONS, THE CLAIMS OF TALENT, THE DEMANDS OF TRADE, AND THE WANTS OF THE PEOPLE (1879) (2 vols.) (collecting excerpts from many sources) [hereinafter MACFIE, COPYRIGHT AND PATENTS]; ROBERT ANDREW MACFIE, RECENT DISCUSSIONS ON THE ABOLITION OF PATENTS FOR INVENTIONS IN THE UNITED KINGDOM, FRANCE, AND THE NETHERLANDS (1869) (collecting letters, papers, and speeches by Macfie and others) [hereinafter MACFIE, RECENT DISCUSSIONS]; ROBERT ANDREW MACFIE, THE PATENT QUESTION UNDER FREE TRADE: A SOLUTION OF DIFFICULTIES BY ABOLISHING OR SHORTENING THE INVENTORS' MONOPOLY, AND INSTITUTING NATIONAL RECOMPENSES (1864) [hereinafter MACFIE, PATENT QUESTION] (incorporating Macfie's 1863 report to the Congress of the Association for the Promotion of Social Science, as well as extracts from various works authored by others). Of related interest is R.A. MACFIE, FREE-TRADE IN MANUFACTURES (2d ed. 1881) (compilation of materials from various sources). The full title gives a glimpse of Macfie's characteristic style and tone: CRIES IN A CRISIS, ANENT FREE-TRADE IN MANUFACTURES SHATTERED BY CONCESSIVE TREATIES AND AGGRESSIVE BOUNTIES THAT FAVOUR FOREIGN AIMS UPON OUR INDUSTRIES AND SHIPPING: AND ANENT THE EMPIRE AND EMIGRATION, PARLIAMENT AND ITS PROCEDURE.

⁹⁷According to Macfie:

I am sure that nobody can go over the evidence. . . without becoming convinced that the trade and manufactures of this country are seriously obstructed, fettered, retarded, harassed, and burdened, sometimes demoralised, often wronged, or even robbed, by the multitude and vexatious character of Patents. . .

MACFIE, RECENT DISCUSSIONS, *supra* note __, at 61. In similar tones, Macfie quotes a paper presented by J. Stirling, entitled "Patent Right," as proclaiming that "[t]he whole history of Patents is a long-continued story of litigation and disappointment; and the more admirable the invention, the greater is the certainty of difficulty and loss." MACFIE, RECENT DISCUSSIONS, *supra* note __, at 121.

The *piece de resistance* comes from Lord Granville, who is supposed to have remarked in

Hindmarch, a leading patent law commentator⁹⁸ and barrister, published a slim volume in 1851 specifically devoted to patent law reform;⁹⁹ Webster, another barrister, was also a prominent treatise writer¹⁰⁰ and took a substantial role in abolition debates.¹⁰¹

the Upper House in 1851 that:

The only persons who derive any advantage from the law of Patents are the lawyers. Except, perhaps, warrants for horses, there is no subject which gives such an opportunity for roguery as the Law of Patents.

MACFIE, RECENT DISCUSSIONS, *supra* note __, at 212-213.

⁹⁸See *supra* note __ (citing Hindmarch's patent treatise).

⁹⁹See *supra* note __ (citing Hindmarch's book on patent law defects).

¹⁰⁰See *supra* note __ (citing Webster's treatise on the 1852 Act); see also THOMAS WEBSTER, ON PROPERTY IN DESIGNS AND INVENTIONS IN THE ARTS AND MANUFACTURES (1853); THOMAS WEBSTER, THE LAW AND PRACTICE OF LETTERS PATENT FOR INVENTIONS: STATUTES, PRACTICAL FORMS, AND DIGEST OF REPORTED CASES (1841).

¹⁰¹The intellectual property bar, a major force in modern U.S. patent policy debates, apparently organized in Britain beginning in the early 1880's, too late to influence the abolitionist debate, although individual lawyers such as Webster certainly made themselves heard. See COULTER, *supra* note __, at 133.

The patent abolitionism debate in Britain extended predominantly from the 1860's to the early 1870's, gradually losing its abolitionist character and becoming, again, a reform movement,¹⁰² due in part, no doubt, to the onset of a severe economic depression.¹⁰³ Parliament formed numerous study committees during the period, and, from 1875 on until the passage of the 1883 Act, debated

¹⁰²COULTER, *supra* note __, at 160-61 (asserting that organizations continued to apply pressure for patent abolition into the 1870's, abolitionist fervor in the Parliament dissipated gradually by the mid-1870's).

¹⁰³DUTTON, *supra* note __, at 29 (asserting that with the onset of the mid-1870's Great Depression and the "emergence of protectionism," the patent abolitionist movement suddenly collapsed; "intense international rivalry now made the patent system perfectly respectable once more."). Coulter sees the decline of the abolitionist movement as more gradual. *See* COULTER, *supra* note __, at 160-61.

Concerning the Great Depression of the mid-1870's (and the debate among economists as to whether it really existed), *see* LEWIS C.B. SEAMAN, VICTORIAN ENGLAND: ASPECTS OF ENGLISH AND IMPERIAL HISTORY 1837-1901 262 *et seq.* (1973) (commenting on the existence of a "Great Depression" in the British economy beginning in about 1873); SIDNEY POLLARD, BRITAIN'S PRIME AND BRITAIN'S DECLINE: THE BRITISH ECONOMY 1870-1914 235 *et seq.* (1989) (discussing political dimensions of the late 19th century British depression).

a multiplicity of legislative reform packages.¹⁰⁴

The abolitionism debate proceeded outside Parliament as well. The National Association for the Promotion of Social Science, formed in 1857, held annual congresses at which addresses, papers, and debates on patent law reform and abolition were regularly featured. Macfie and Webster figured prominently in such debates, extending over a period of some fifteen years.¹⁰⁵

¹⁰⁴*Id.*

¹⁰⁵*Id.* at 111-13.

Just as it drew in a wide range of interested parties, the patent abolition debate also encompassed a wide range of substantive patent issues. Three of them are particularly relevant to modern patent reform. The first concerns alleged defects in the judicial administration of the patent system, especially the role of juries and the use of generalist judges in patent litigation.¹⁰⁶ The second involves baseline philosophical justifications for the grant of patent rights, juxtaposing natural rights against utilitarianism.¹⁰⁷ Finally, the third involves the intersection between patents and international trade, extending both to “free trade” arguments and to primitive steps towards patent law harmonization.¹⁰⁸

A. Judicial Administration: The Jury; Specialized Courts

¹⁰⁶*See infra* Section __.A.

¹⁰⁷*See infra* Section II.B.

¹⁰⁸*See infra* Section II.C. Utilitarianism and free trade have been called “the two dominant ideologies of the mid-Victorian era.” COULTER, *supra* note __, at 73.

Many of the high-profile patent cases of the past decade have directly or indirectly centered around fundamental disputes over the judicial administration of the patent system.¹⁰⁹ Two classes of disputes have occupied center stage: disputes over (1) the role of the jury in patent litigation, particularly as to enforcement issues; and (2) the efficacy of the Court of Appeals for the Federal Circuit, and, more generally, the desirability of creating “expert” tribunals for patent cases and their proper roles in the federal judiciary. Documents from the British patent controversy illustrate that by the middle of the nineteenth century, patent scholars were already debating these same issues of judicial administration – identifying similar problems, and proposing similar solutions.

Writing in 1851, Hindmarch reported that “[m]any persons obtain an opinion that the courts

¹⁰⁹That the jury issue has preoccupied modern patent jurists hardly need be recounted. From *Lockwood*, to *Markman*, to *Hilton Davis*, and now – less directly – to *Festo*, the Federal Circuit has been locked in a battle over the extent to which the jury should participate in the patent system. See, e.g., *In re Lockwood*, 50 F.3d 966, 976 (Fed. Cir. 1995), *vac’t & rem’d*, 116 S.Ct. 29 (1996); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995), *aff’d* 517 U.S. 370 (1996); *Hilton Davis Chemical Co. v. Warner-Jenkinson Co., Inc.*, 62 F.3d 967 (Fed. Cir. 1995), *rev’d & rem’d* 520 U.S. 17 (1997).

Scholarly commentary has been abundant. A very small sample of relevant articles treating various aspects of the general problem includes, e.g., Philippe Signore, *On the Role of Juries in Patent Litigation (Part 1)*, 83 J. PAT. & TM. OFF. SOC’Y 791 (2001); Michael A. Sartori, *An Economic Incentives Analysis of the Jury’s Role in Patent Litigation*, 79 J. PAT. & TM. OFF. SOC’Y 331 (1997); Allen N. Littman, *The Jury’s Role in Determining Key Issues in Patent Cases*, 37 IDEA J.L. & Tech. 207 (1997); Kenneth R. Adamo, *Reforming Jury Practice in Patent Cases: Suggestions Towards Learning to Love Using an Eighteenth Century System while Approaching the Twenty-First Century*, 78 J. PAT. & TM. OFF. SOC’Y 345 (1996); Mark D. Janis, *Judge and Jury Roles in Equivalents Analysis*, *Commentary on Malta v. Schulmerich Carillons*, 74 J. PAT. & TM. OFF. SOC’Y 621 (1992).

The Federal Circuit has also taken the topic up at its judicial conferences. See, e.g., *Fourteenth Annual Judiciary Conference of the United States Court of Appeals for the Federal Circuit*, 170 F.R.D. 534 (1996) (discussing the challenges raised by the use of juries in patent trials) See also Paul R. Michel & Michelle Rhyu, *Improving Patent Jury Trials*, 6 FED. CIRCUIT B.J. 89 (1996) (judicial perspective).

of law of this country are not fitted to determine questions respecting patent rights. . .”¹¹⁰

Of course, this objection to the efficacy of the “courts of law” might be understood as a commentary on the competency of judges to decide the relevant questions of patent law, on the juries to decide relevant questions of technological fact, or both.

Some apparently found fault with the judges, and contended “that peculiar tribunals ought therefore to be erected with exclusive jurisdiction over all suits respecting patents. . .”¹¹¹ Webster also noted the division over the question of specialized tribunals, and seemed to imply that he favored them. Sounding remarkably like a modern-day commentator on the relationship between district courts and the Federal Circuit in modern U.S. patent matters, Webster observed:

Concerning litigation on patents, opinion is divided between a special tribunal or some modification of the existing system. It may be observed, that the real trial of a patent case lies in the court of appeal, and the chief question remaining is the mode of trial at the preliminary stage, so as best to ascertain the facts for the consideration of the court.¹¹²

¹¹⁰HINDMARCH, SUGGESTIONS FOR REFORM, *supra* note ___, at *19.

¹¹¹*Id.*

¹¹²TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE 886 (1863) (George W. Hastings, ed.) [hereinafter NAPSS TRANSACTIONS 1863] (reporting Webster’s oral comments).

However, as Hindmarch saw it, judges had performed capably in resolving legal questions in patent cases.¹¹³ Thus, the complaint must really be about the competency of juries, and here, according to Hindmarch, “there can be no doubt that juries are rarely, if ever, found to be fully competent” to decide the fact questions in patent cases. Jury incompetence sprang both from intrinsic factors and the jury’s probable lack of education: “In the absence of a thorough understanding of the facts brought before them in [patent] cases, juries are too prone to be swayed more by appeals to their feelings and prejudices than by their reason. . .”.¹¹⁴

They were also too prone to be swayed by “experts.” Consider the following exchange, before a House of Commons committee in 1871, between Macfie and Webster:

Macfie: You have told the Committee in very apt language, that at present a trial [in a patent case] is a speculation on the ignorance of the judge and jury; have you any cases that would illustrate that?

Webster: I think almost every case, where there is any complication at all in an invention, which requires experts to explain it to the judge and jury, is a speculation, because you have the plaintiff starting with a number of scientific witnesses, and there is a kind of practical difficulty in the defendant’s way, if he does not call the same number of scientific witnesses. . . The present system has this great vice in it, that it allows witnesses to give evidence with

¹¹³HINDMARCH, SUGGESTIONS FOR REFORM, *supra* note __, at *19 (“The complaint. . .cannot apply to the mode in which *the law* respecting patent privileges has in modern times been expounded by our judges, for they have uniformly given the most favourable interpretation to the law of which it was capable in favour of the rights of patentees; and although there have long been many acknowledged defects in the law, the legislature alone could apply the necessary remedies.”).

¹¹⁴*Id.*

regard to matters of opinion rather than matters of fact; and that would be checked at once by a judge with skilled assessors. . . ¹¹⁵

¹¹⁵MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 374 (Vol. 2 - Patents) (extracts from the 1871 Report of the Committee of the House of Commons on Letters Patents). *See also* comments of Sir Roundell Palmer, who advocated outright abolition of the British patent system:

In dealing with Patent cases in a court of law there was generally a vast array of witnesses to be examined, consisting of mechanics, chemists, and scientific men of all sorts on one side and the other. Then there were the jury, who knew nothing of the subject, and the judge, who might be placed in a worse position, because he might imagine he understood all about it when he did not. . . .[I]t might very easily happen that an ingenious professional witness might so argue the case under the form of giving evidence as to lead the judge to think that he really knew all about it when such was not in reality the fact.

Quoted in MACFIE, RECENT DISCUSSIONS, *supra* note __, at 107.

Arguments about the cost of patent trials ran in parallel with arguments about competency.

The “great expense” of patent trials had been offered as another reason for creating patent tribunals separate from the general courts of law.¹¹⁶

Hindmarch recognized a fundamental problem with both the competency and cost arguments: even if they were valid, they could not be confined to patent cases alone. Even in the nineteenth century, other types of civil cases involved complex factual questions. Likewise, “the great expense of law proceedings is not confined to patent suits: and patentees have no greater claim for relief in this respect than many other classes of persons.”¹¹⁷

¹¹⁶*Id.* at *20. Hindmarch expressed skepticism that the creation of an alternative, expert tribunal for patent cases would reduce the costs of patent litigation. *See id.* at *21 (“[T]hose who advocate the institution of a special tribunal. . . seem to forget that the expense of it would be great; probably much more in proportion to the business to be done, than the total amount of costs in patents actions tried in our courts of law. . .”).

¹¹⁷*Id.*

Hindmarch seemed unwilling to accept the proposition that juries would never be competent to handle patent cases. He thought that the “unfitness” of juries arose from “the limited nature of the education of the people, more particularly as to matters of science and art,”¹¹⁸ and contended that as education on such subjects became “more and more general,” juries would become better suited to decide cases involving technological facts.¹¹⁹

¹¹⁸*Id.*

¹¹⁹*Id.*

These issues appeared prominently in the U.S. patent reform agenda for a century and a half following the British patent controversy. The project to create a patent-focused court of appeals in the U.S. consumed nearly a century, and stands as perhaps the most commonly-repeated reform suggested in the entirety of the twentieth century patent reform literature.¹²⁰ The debate continues today over the success of the Federal Circuit experiment, the role of the Supreme Court in the modern U.S. patent system, and the desirability of expert patent trial courts.¹²¹

¹²⁰The literature on this issue is immense. For an exhaustive survey of legislative efforts to create a patent court of appeals from 1887 through 1957, see MARGARET M. CONWAY, SINGLE COURT OF PATENT APPEALS – A LEGISLATIVE HISTORY, STUDY NO. 20 OF THE COMM. OF THE JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 85TH CONG., 2D SESS. 2-9 (1959).

For scholarly commentary from the first half of the twentieth century, *see, e.g.*, Fritz Von Briesen, *The Confusion of Patent Courts in the United States*, 5 THE BRIEF 358 (1905) (discussing the idea of a single court of patent appeals); Edmund Wetmore, *Patent Law*, 17 YALE L.J. 101 (1907); Raymond Barnett, *The Proposed Court of Patent Appeals*, 6 MICH. L. REV. 441 (1908); *Report of Patent Committee to National Research Council*, 1 J. PAT. OFF. SOC'Y 341 (1919); Edwin J. Prindle, *Proposal of a Single Court of Patent Appeals and Draft of a Bill Therefor*, 13 J. PAT. OFF. SOC'Y 438 (1931); Charles L. Reynolds, *In Favor of a Single Court of Patent Appeals*, 13 J. PAT. OFF. SOC'Y 596 (1931); Elliott J. Stoddard, *Comments on Mr. Lane's Letter as to the Bill for a Court of Patent Appeals*, 14 J.P.O.S. 188 (1932); Evan A. Evans, *Shall the United States Have a Special Patent Court of Appeals?*, 36 U. ILL. L.REV. 643 (1942); William R. Woodward, *A Reconsideration of the Patent System as a Problem of Administrative Law*, 55 HARV. L.REV. 950 (1942); Charles F. Meroni, *Comments and Observations Concerning Recommendations in Report of the National Patent Planning Commission*, 26 J. PAT. OFF. SOC'Y 117 (1944); William H. Davis, *Proposed Modifications in the Patent System*, 12 LAW AND CONTEMP. PROBS. 796 (1947). *Cf.* Wallace R. Lane, *Why a Single Court of Patent Appeals is Not Necessary*, 13 J. PAT. OFF. SOC'Y 569 (1931); Frank E. Liverance, *An Alternative for a Single Court of Patent Appeals*, 14 J. PAT. OFF. SOC'Y 816 (1932); Simon Rifkind, *A Special Court for Patent Litigation? The Danger of a Specialized Judiciary*, 37 ABA J. 425 (1951).

For more recent commentary, see sources cited in Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 392 nn. 22-28 (2001).

¹²¹An example can be found in John B. Pegram, *Should There be a U.S. Trial Court with a Specialization in Patent Litigation?*, 82 J. PAT. & TRADEMARK OFF. SOC'Y 766 (2000) (proposing that the Court of International Trade be given subject matter jurisdiction over patent cases in parallel with existing jurisdiction in the district courts).

The U.K. has an ongoing experiment with expert patent tribunals of first instance, the

Similarly, while some might believe that the controversy over patent jury trials is a late twentieth-century phenomenon in U.S. patent law, it is not difficult to find expressions of judicial discontent over the use of juries in U.S. patent cases over the entire course of the twentieth century. Consider the unmasked skepticism, and air of resignation, evident in the jury charge in a 1901 patent infringement case:

It is a very mistaken system of jurisprudence that leaves the decision of the issues of fact that arise in a patent case to a jury. In the very nature of things, it is extremely awkward and difficult, and many times practically impossible, for 12 laymen, untrained in the examination of the intricate questions which so frequently arise in patent causes, without any facilities for taking notes, and with no opportunity for the lengthened reflection which is frequently necessary to reach a wise conclusion in cases of this kind,-- I say it is many times practically impossible for them to dispose of such questions. Nevertheless the law does allow the trial of these issues by a jury, and we have one to try here.¹²²

Ruling on a petition for mandamus directing a district judge to reinstate jury demands in a patent infringement, Judge Sobeloff of the Fourth Circuit expressed similar sentiments several decades later:

Patents County Court. Richard Price, *Patent Litigation In England- A Quiet Revolution*, 17 EUR. INTELL. PROP. REV. 290 (1995) (noting early success and popularity of the Patents County Court); John N. Adams, *Choice of Forum in Patent Disputes*, 17 EUR. INTELL. PROP. REV. 497 (1995) (discussing history of Patents County Court).

¹²²*Int'l Tooth Crown Co. v. Hanks Dental Ass'n*, 111 F. 916, 917 (S.D.N.Y. 1901) (Lacombe, Circuit Judge, charging jury); *rev'd on other grounds*, *Hanks Dental Ass'n v. Int'l Tooth Crown Co.*, 130 F. 1022 (2d Cir. 1904).

We are neither oblivious of nor insensitive to the contentions that the jury trial is a cumbersome and unwieldy mechanism for dealing with the complex factual settings and intricate legal framework of patent cases. We cannot dispute the assertion that the trial of all patent cases to juries would add significantly to the congestion of district court dockets. However, we are compelled to echo the words of Judge Frank, speaking for the Second Circuit in *Bereslavsky v. Caffey*, 161 F.2d 499, 500 (2d Cir. 1947):

It is of no moment that we believe that trial by a jury of a patent suit is usually undesirable, since it is well settled that such a trial may be demanded where the sole claim is for money, if the demand be timely, as we hold it was here.¹²³

Judges have written frankly about the need to rein in juries in patent cases through post-trial motion practice:

The complex issues of validity, infringement, and accounting in patent cases do not often lend themselves today to proper determination by a lay jury, and it may frequently be necessary, in jury trials of patent cases, for the Court to set aside the jury verdict and render judgment *non obstante veredicto* in the interest of justice. . . . A lay jury which might be able to satisfactorily resolve the issues involved in a trademark case could become hopelessly lost in an attempt to resolve the more complex issues of a patent case involving complicated mechanical inventions. . . .¹²⁴

In a scattering of other cases, courts express these same general frustrations and seek a variety of solutions.¹²⁵

¹²³*Tights, Inc. v. Stanley*, 441 F.2d 336, 344 (4th Cir. 1971).

¹²⁴*Railex Corp. v. Joseph Guss & Sons, Inc.*, 40 F.R.D. 119, 124-5 (D.D.C. 1966).

¹²⁵*Great Plains Chem. Co., Inc. v. Micro Chemical, Inc.*, 549 F.Supp. 1348 (D. Colo. 1982) (asserting that “[t]his case is a monument to the risk of futility in asking a jury to decide a complex patent case” and referring to proposals to create a special patents court). *See also* *General Tire & Rubber Co. v. Watkins*, 331 F.2d 192, 197-98 (4th Cir. 1964) (no abuse of discretion to deny jury trial where party had waived rights, especially in view of “the technicalities involved in determining the issues of patent validity and infringement, the experience of the court in patent cases, the difficulties to be encountered in instructing a jury, and the doubtful ability of jurors with only ordinary experience to comprehend the complex issues and to reach a correct conclusion.”); *Dual Mfg. & Eng’g, Inc. v. Burris Indus., Inc.*, 619 F.2d 660, 667 (7th Cir. 1980) (remarking that the case “is an excellent illustration of the wisdom of this court’s observation that

‘members of the Patent Bar have wisely avoided jury trials in patent litigation’” and offering recommendations on the use of special verdicts on obviousness “because of the troublesome questions which seem to arise frequently where a complex patent case is submitted to a jury of lay people”) (*citing* *Panther Pumps & Eqpt. Co. v. Hydrocraft, Inc.*, 468 F.2d 225, 228 n.9 (7th Cir. 1972)); *but cf.* *Medtronic, Inc. v. Catalyst Research Corp.*, 547 F.Supp. 401, 406 n.3 (D. Minn. 1982) (questioning whether detailed special verdict questions “would merely confuse the jury and further complicate their task” and asserting that “[t]he problem of submitting highly technical and complex questions-in any fashion-to a lay jury remains a peculiar difficulty in patent cases.”).

It should be sobering to modern-day patent law reformers that, a full one hundred and fifty years after the British patent controversy, basic normative questions about the allocation of adjudicative authority between judge and jury and the efficacy of expert tribunals remain unresolved. Claims that modern patented technology is inherently too complex for juries to comprehend simply echo the claims of Webster, Hindmarch, and others from decades ago. Perhaps these claims have been correct all along, and policymakers have failed to fashion adequate responses. Perhaps, on the other hand, the lesson is that the jury system is more resilient than we sometimes think, and we should guard against overreacting to claims that particular new technologies are too complex for lay juries.

B. Natural Rights v. Utilitarianism

By its very nature, patent abolitionism cut to the core of the patent system. It stimulated a popular discussion over the fundamental philosophical justifications for the patent grant, and in many ways anticipated twentieth century theoretical scholarship on justifications for the patent system. The patent abolitionist movement thus has made a substantial intellectual contribution to modern patent law reform.¹²⁶

¹²⁶For recognition of this contribution, see Fritz Machlup & Edith Penrose, *The Patent Controversy in the Nineteenth Century*, 10 J. ECON. HIST. 1 (1950). Scholarly treatments of the patent abolitionist movement are rare, and, to my knowledge, Machlup & Penrose is the only article to explore rigorously how pro- and anti-patent forces argued fundamental justificatory theories of the patent system. I need not repeat their analysis here; rather, in this brief section of the present article, I limit my analysis to a few pertinent observations, particularly on scholarly

work that has been undertaken in the several decades since the Machlup & Penrose work.

1. Natural Rights Justification

If Macfie was to present a convincing case for the abolition of the patent system, he obviously needed to rebut any moral rights justification for patents (i.e., that version of a natural rights argument holding that society has a moral obligation to recognize an inventor's natural right in his or her invention).¹²⁷ In part, Macfie made his attack indirectly. Presumably unwilling to take on the entrenched Continental vision of a moral rights justification for copyright, Macfie simply expounded at length on the inherent differences between the creative arts – appropriately the objects of property under a natural rights regime according to Macfie – and inventions, to which no claim of property could be made merely as a matter of moral right. As Macfie summarized the argument:

Those things that belong to the province of patent right are in their nature capable of being independently discovered or originated, in the same identical form, by a plurality of persons. . . It is otherwise with things that belong to the province of copyright. . .¹²⁸

¹²⁷*Id.* at 10 (articulating the moral rights argument); *id.* at 14 (noting that Macfie was a “severe critic of the theory of natural property rights in inventions”).

¹²⁸R. A. Macfie, *The Patent Question*, TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE 818, 821 (1864) (George W. Hastings, ed.).

Pro-patent advocates, however, did not necessarily flock to the defense of the moral rights justification. Although others attributed to him the view,¹²⁹ Webster did not defend the patent system on a pure moral rights basis. Webster's paper on the "Patent Right" argued

that, of all acquired rights, that of an inventor to his own creation may be most truly called his own; his claims being that of the first occupant, the foundation of all property. But when he has given his invention to the world, the right to restrain others from copying it is a matter of municipal regulation: in this country the grant of a patent is an act by grace of the crown, and it may be made on such conditions as the crown chooses.¹³⁰

This was a conventional approach distinguishing between undisclosed ideas (which could belong to the idea holder as a matter of natural right) and disclosed inventions (as to which the grant of exclusive rights was a matter of "the grace of the crown," not a matter of moral obligation). There has been little effort since Webster and Macfie's day to revive a pure moral rights version of a natural

¹²⁹*Patent Law*, TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE 884, 890 (1863) (George W. Hastings, ed.) (remarks of Mr. Ringworth). Ringworth stated:

I must enter my protest against the whole theory laid down. I differ from those who think, like Mr. Webster, that there is any inherent right on the part of the inventor.

¹³⁰*Id.* at 885.

rights justification for patents, particularly in the U.S., in the face of the instrumental ambitions expressed in the U.S. Constitution.¹³¹

2. Incentive to Disclose

¹³¹U.S. Const., Art. I § 8 cl. 8 (“...to promote the progress of...useful arts). Cf. Adam Mossof, *Rethinking the Development of Patents: An Intellectual History*, 1550-1800, 52 HASTINGS L.J. 1255 (2001) (asserting that the natural rights justification played a more significant role in the early development of patent systems than contemporary scholars have acknowledged, and suggesting that natural rights arguments be accorded some respect in modern patent policy debates).

Having discarded the moral rights justification for patents, the abolitionists could then move on to address instrumental justifications.¹³² One of the justifications discussed frequently during the course of the abolition debate was whether, and to what extent, the patent grant provided an incentive to disclose inventions. Webster, not surprisingly, employed the disclosure function in defense of the patent system:

But as an inventor might, if he liked, keep his invention to himself, or practise it in secret, the object was to induce him to disclose it. If that system were done away with, the, instead of disclosure, we should have secret tribunals, of which we had now forgotten the history.¹³³

¹³²For a summary of instrumental justifications for the patent right as articulated in modern intellectual property theory, see, e.g., Rebecca S. Eisenberg, *Patents and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1024-1030, 1036-1044 (1989).

¹³³NAPSS TRANSACTIONS 1863, *supra* note __, at 890. However, even Webster recognized the limitations of the incentive to disclose theory. Testifying before the House of Commons, he admitted that “as a general rule, with reference to mechanical inventions, it is quite impossible” to maintain such inventions in secrecy because “the result shows the means.” MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 335 (extracts from Commons’ Committee’s Report of 1871, Evidence of Mr. Webster). Webster elaborated:

The power of secrecy must be limited, I think, to chemical patents in this day. I do not think people can work much in closed rooms now-a-days, and we should scarcely ever

Id. have such a case as that of Crumpton of Nottingham making lace in a closed room, and people getting up to the windows to find out the process. . .

Macfie acknowledged the legitimacy of the disclosure function,¹³⁴ but wondered whether the patent system was really inducing it, and whether many inventions, by their very nature, would be disclosed anyway upon legitimate commercialization.¹³⁵ And, of course, disclosure might be extracted by less conventional means. In response to the question, “Would the absence of Patents for inventions, in your judgment, have any effect in producing secret trades. . .?”, Macfie quoted one commentator as answering, “I know this, that no trade can be kept secret long; a quart of ale will do wonders in that way.”¹³⁶ Scholars continue to debate the extent to which patent systems induce disclosure, and it seems doubtful that any general answer is likely to emerge.

3. Incentive to Invent

Webster articulated the now-familiar incentive theory under which the patent grant supplies an incentive to invent (or to invest in research and development) and an antidote to uncontrolled free-riding:

Who would go to the expense of making elaborate machines, of which patterns could be taken by any other person the next day? Without the patent laws, all these inventions could not subsist, as men could not be found to go the expense of starting them.¹³⁷

¹³⁴MACFIE, PATENT QUESTION, *supra* note __, at 23 (“The expediency. . . may be assumed of some means to stimulate the publishing or specifying of inventions.”).

¹³⁵This is one of several familiar objections to the incentive to disclose theory. *See* Machlup & Penrose, *supra* note __, at 26 (cataloguing objections to the incentive disclose theory raised in the course of the abolitionist movement). Modern scholars have voiced similar objections. *See, e.g.*, Eisenberg, *supra* note __, at 1028-29.

¹³⁶MACFIE, RECENT DISCUSSIONS, *supra* note __, at 56 (quoting Richard Roberts).

¹³⁷NAPSS TRANSACTIONS 1863, *supra* note __, at 890.

The abolitionist attack on the incentive to invent justification was not especially satisfactory. Certainly, abolitionists would have experienced difficulty mustering a convincing argument that the patent system had retarded the progress of innovation (or even reduced its rate of acceleration), given the unprecedented flowering of technology in the course of the Industrial Revolution.¹³⁸ So abolitionists generally conceded that the patent system had induced innovation, but argued either that the patent reward was disproportionate to the innovation induced, or that innovation was “overstimulated.”

One commentator who adopted this latter view used the U.S. patent system as an example of the dangers of an overheated patent system:

¹³⁸DUTTON, *supra* note __, at 29 (noting that proponents of the patent system could argue that the recent decades had witnessed remarkable technological expansion, all during a time when the patent system existed).

Invention may be even over-stimulated. In all her arrangements, Nature provides for a due equilibrium of powers and tendencies. . . But if. . . we give a factitious impulse to the inventive faculty, we destroy the natural equilibrium of capacities, and foster a scheming, fanciful turn of mind, at the expense of thoroughness and a patient working out of sound ideas. This result has actually occurred in the United States, where the factitious value attached to invention has tended to produce an almost total sacrifice of solid workmanship to a flimsy ingenuity.¹³⁹

The arguments that the patent system offered disproportionate awards seemed to have a firmer foundation, but seemed only to prove that reform was needed, not abolition. For example, consider another Macfie argument:

Mr. Webster . . . told us that the theory of the patent law is that a monopoly is given for a limited time, till the public are instructed in the new manufacture or new method of manufacture. But the misfortune is, that the patent retards the use by the public of whatever is patented. . . . We must remember that, now-a-days, the hindrance of fourteen years is very serious, so rapid is now the race of competition.¹⁴⁰

¹³⁹MACFIE, RECENT DISCUSSIONS, *supra* note __, at 119-120 (quoting from a presented paper of J. Stirling entitled “Patent Right”).

¹⁴⁰*Is the Granting of Patents for Inventions Conducive to the Interests of Trade?*, TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE 661, 665 (1865) (George W. Hastings, ed.) [hereinafter NAPSS TRANSACTIONS 1865]. One wonders how Macfie would have felt about the rapidity of the twenty-first century “race of competition.”

This argument is a familiar one today; economists have frequently asserted that the *ex ante* incentive structure of the patent system could be fine-tuned by optimizing the patent term – not by throwing out patents altogether.¹⁴¹ Legislative efforts to revise the patent term, either in its absolute length or by starting the term at the earliest effective filing date (or both), are legion, extending throughout the twentieth century, culminating in the U.S. adoption the twenty-year term in compliance with the TRIPs agreement.¹⁴²

Macfie’s argument might also be met by another familiar reform proposal: providing “fair use” or “experimental use” exceptions to infringement. Interest among scholars in such a response is mounting.¹⁴³

¹⁴¹See, e.g., Andrew W. Horowitz & Edwin L.-C. Rai, *Patent Length and the Rate of Innovation*, 37 INT’L ECON. REV. 785 (1996).

¹⁴²For a review of relevant legislation, see MARGARET M. CONWAY, EXPEDITING PATENT OFFICE PROCEDURE – A LEGISLATIVE HISTORY, STUDY NO. 23 OF THE COMM. ON THE JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS OF THE COMM. OF THE JUDICIARY, 86TH CONG. 2D SESS. 10-22 (Comm. Print 1960) (discussing dozens of legislative proposals dating from 1875 to 1957 calling variously for term reductions or for terms of 20 years measured from the filing date). See also PRESIDENT’S COMMISSION ON THE PATENT SYSTEM, TO PROMOTE THE PROGRESS OF USEFUL ARTS, REPORT TO COMM. ON THE JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 90TH CONG., 1ST SESS. 33 (1967) (Recommendation XVII, recommending a 20-year term measured from earliest effective filing date).

Scholarly commentary on these and related proposals is voluminous. See, e.g., W. Houston Kenyon, Jr., *Sore Spots in the Patent System*, 24 J. PAT. OFF. SOC’Y 458, 471-75 (1942) (suggesting patent term measured from application date); B. Russell, *Improvement of Our Patent Systems*, 15 J.PAT.OFF.SOC’Y 666 (1933) (suggesting 20 year term); George H. Willits, *Proposed Patent Legislation: Why it is Needed, the Advantages of the Proposed Legislation and the Objections to it*, 12 J. PAT. OFF. SOC’Y 313, 392 (1930) (same); Arthur C. Fraser, *Patent Law Reforms*, 8 J. PAT. OFF. SOC’Y 461, 468 (1926) (suggesting 20-year term);

Of course, this merely scratches the surface, leaving aside important issues such as term extensions for pharmaceuticals. See 35 U.S.C. §§155-56.

¹⁴³See Mark D. Janis, *Sustainable Agriculture, Patent Rights, and Plant Innovation*, ___ IND. J. GLOBAL LEG. STUD. ___ n. 51 (forthcoming 2002) (collecting relevant sources).

Macfie also argued that the incentive structure provided by the patent system had resulted in a profusion of patents. He offered what surely has now become a classic businessperson's lament:

In the manufacture with which I am connected – the sugar trade – there are somewhere like 300 or 400 patents. Now, how are we to know all these 400 patents? How are we to manage continually, in the natural process of making improvements in manufacture, to know which of these patents we are at any time conflicting with? So far as I know, we are not violating any patent; but really, if we are to be exceedingly earnest in the question, probably we would require to have a highly paid clerk in London continually analysing the various patents; and every year, by the multiplication of patents, this difficulty is becoming more formidable.¹⁴⁴

One might well sympathize with Macfie on this point, but again the answer was reform, rather than abolition. Given the lack of substantive pre-grant examination, it is not surprising that the patent system of Macfie's day experienced a fundamental patent quality problem.¹⁴⁵

Macfie endorsed yet another argument about skewed patent incentives that is also of modern interest. According to this argument, in the early days of British patent grants, patent "monopolies" were tolerated (i.e., deemed to create monopolies, but not of the "odious" variety), because craftsman were so isolated, and communication was so primitive, that government need to provide a stimulus to ensure the introduction of new technologies to the realm. There was then a "wide open field to

¹⁴⁴NAPSS TRANSACTIONS 1865, *supra* note __, at 666. Macfie was apparently fond of citing the 300-400 figure, including in testimony before the House of Commons. One such instance drew a response from Webster: "The Honourable Member for Leith [Macfie] mad a notable admission, that out of 400 sugar patents, he was not aware of any one being obstructive." MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 334 (extracts from Commons' Committee Report 1871, Evidence of Mr. Webster).

¹⁴⁵Webster thought as much. *Id.* at 664. And this is all quite apart from the larger question of whether a multiplicity of patents in a given art area is a bad thing at all for participants in that art area.

invention” and a danger that innovations would be lost if not recorded by a centralized authority.¹⁴⁶

Because those conditions were no longer present, the argument continued, the patent system was no longer necessary.¹⁴⁷

¹⁴⁶William Hawes, *On the Economical Effects of the Patent Laws*, TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE 830, 833 (1864) (George W. Hastings, ed.).

¹⁴⁷*See also* MACFIE, PATENT QUESTION, *supra* note __ at 37 (presenting the argument that England was willing to tolerate exclusive patent rights in order to stimulate the development of new industries, but it was not foreseen that privileges would eventually be granted in large numbers in areas where industry (domestic) was already well established).

In one respect this argument is consistent with what has now become a longstanding tradition, in which commentators of any given era proclaim that the patent system of their time was actually designed for the conditions of a previous age, and should therefore be reviled as anachronistic and scuttled or reformed. Learned Hand called the U.S. patent system of the 1930's "archaic;"¹⁴⁸ in the 1940's, Frankfurter declared the system "obsolete;"¹⁴⁹ in the mid-1950's, the Senate Subcommittee on Patents, Trademarks, and Copyrights reported that the patent system needed to be "adjusted to modern conditions;"¹⁵⁰ in the later 1950's, Professor Melman asserted that the patent system was so

¹⁴⁸Texas Co. v. Sinclair Refining Co., 87 F.2d 690, 693 (2d. Cir. 1937) (Learned Hand) ("Courts have always discouraged efforts to dress up [minor] advances. . . as invention; that discouragement was never more proper than at the present time, at least while the patent law remains as archaic as it is.").

In a similar vein, a 1930's-era reform commission, addressing the question of whether a system of compulsory licensing should be introduced into U.S. patent law, observed:

There has been enormous change in technique and commercial practice in the last hundred years. The patent system at its inception contemplated an individual inventor, given a monopoly for 17 years as a reward and stimulant for invention, and to enable funds to be obtained from commercialization. This simple situation no longer obtains. What was originally a self-sufficient patent to an individual for 17 years has developed into a patent structure or assemblage of patents, giving a substantially permanent monopoly in an advancing art to an industry or a group of industries. The justification for the extension in a democratic country of an absolute monopoly to an invention, in lieu of maintaining it secret, no longer applies generally.

Science Advisory Board, *Report of the Committee on the Relation of the Patent System to the Stimulation of New Industries*, reprinted in 18 J. PAT. OFF. SOC'Y 94, 103 (1936).

¹⁴⁹Marconi Wireless Telegraph Co. v. United States, 320 U.S. 1, 63-4, 63 S.Ct. 1393, 1422 (1943) (Frankfurter, J., dissenting):

I have little doubt, in so far as I am entitled to express an opinion, that the vast transforming forces of technology have rendered obsolete much in our patent law. For all I know the basic assumption of our patent law may be false, and inventors and their financial backers do not need the incentive of a limited monopoly to stimulate invention.

¹⁵⁰REVIEW OF THE AMERICAN PATENT SYSTEM, *supra* note ___, at 1. As the report proceeded to explain:

When the patent laws were first drawn, invention and discovery were almost exclusively the product of the efforts of individuals working alone. Today, invention and discovery are

“obsolete” that it no longer was fulfilling its Constitutional purpose to promote progress in the useful arts,¹⁵¹ sparking a spirited response from the patent bar.¹⁵²

largely the work of research laboratories. . .
Id.

¹⁵¹SEYMOUR MELMAN, THE IMPACT OF THE PATENT SYSTEM ON RESEARCH, STUDY NO. 11 OF COMM. ON JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 85TH CONG., 2D SESS. 57 (Comm. Print 1958). Melman reasoned that “changes in the ways of producing knowledge,” among other factors, resulted in the patent system having “lost the effectiveness that it may once have had as a way of promoting science and the useful arts.” *Id.*; see also *id.* at 62 (declaring that the patent system no longer served its Constitutional purpose).

Melman did not make clear whether he supported the outright abolition of the patent system, however. Certainly he seemed dismissive of the notion that any modest reforms could

The obsolescence argument offered in the British patent controversy is also ironic when juxtaposed against modern arguments on international patent policy. Some scholars today take the position that the introduction of a full-fledged patent system into a developing economy is actually counterproductive,¹⁵³ exactly the opposite of the position taken by the abolitionists.

4. Reward Systems

restore the usefulness of the patent system:

The effort to operate a patent system formulated for the technological conditions of a century ago has proved to be increasingly awkward. The problems of patent-system operation, however, do not stem primarily from the administrative shortcomings or from the absence of ingenuity among the able attorneys, judges, and Patent Office staffs who administer the system. Rather, they stem from the inability to apply the conceptions of a bygone era to the contemporary conditions under which technical knowledge is produced. *Id.* at 61-2.

¹⁵²Patent Law Association of Los Angeles, *Our Patent System Works: A Reply to the Melman Report*, 42 J. PAT. OFF. SOC'Y 295 (1960). The authors also questioned whether it was accurate to draw such a sharp distinction between modes of invention in the 19th century and the 20th, discounting “the romanticized and largely fictionized [sic] picture of the struggling inventor of the past century, alone in his garret with his experiments.” *Id.* at 304.

¹⁵³*See, e.g.,* A. Samuel Oddi, *TRIPs – Natural Rights and a “Polite Form of Economic Imperialism*, 29 VAND. J. TRANSNAT'L L. 415 (1996).

Perhaps of greatest interest to modern scholars is Macfie's proposed alternative to the patent system: a reward system administered by the government. According to Macfie, a reward system would be "on the whole, wise and fair" as a substitute for "monopoly" patent rights; indeed, it would provide superior ex ante incentives because the reward, unlike royalties under a patent license, "is prompt and is sure; the bird is in the hand."¹⁵⁴

Reward systems substitute the complexities of substantive patent examination with the complexities of calculating an optimal award amount. Perhaps the weakest aspect of Macfie's reward argument was his failure to articulate a viable formula for calculating appropriate awards. Macfie gives little reassurance in providing simply that the reward payment would be calculated not in accordance with the amount that a patentee might extract by way of license fees if exclusive rights

¹⁵⁴MACFIE, PATENT QUESTION, *supra* note __, at 24-5. Macfie's invocation of wisdom and fairness might suggest to some that his reward proposal was not based purely on utilitarian concerns. It is plausible to propose that Macfie would have agreed even with a normative version of Lockean labor theory (i.e., that an inventor *should* receive rewards for his labor), but would simply have argued that the patent system provided too generous a reward (i.e., a greater reward than the concerns of justice would have dictated). See Machlup & Penrose, *supra* note __, at 17-19 (describing views of various anti-patent advocates on the labor-reward theory). See generally Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 296-329 (1988) (thorough exploration of the Lockean labor-reward theory for various forms of intellectual property).

were granted, but rather by “what is fair, considering utility, cost of preliminary trials, originality, probability of others making the same discovery, &c.”¹⁵⁵

¹⁵⁵*Id.* at 41.

Macfie also offered an alternative proposal that combined notions of exclusive rights, compulsory licensing, and a reward system. Under this proposal, a patentee would enjoy exclusive rights (but subject to compulsory licensing) for a term of three years from grant, after which the government would undertake a “valuation” and subsequently pay the patentee in accord with the calculated value, after which any patent rights would cease. Under a further alternative, the government would have the option of undertaking the valuation at a later time.¹⁵⁶

John Stuart Mill provided the standard economic argument in response to simple reward system proposals: patent rights should be superior to a simple reward system because under a patent system, the market (through payment of license fees) determines the amount of the reward.¹⁵⁷ Webster added that patented technology often did not come into general use until more than three years had passed, such that Macfie’s valuation scheme might not be practicable.¹⁵⁸

Curiously, however, Webster ultimately expressed tentative agreement with Macfie’s optional reward scheme, at least insofar as it relied upon the principle of compulsory licensing. Foreshadowing a debate that continues to the present day, Webster clearly favored the aggressive use

¹⁵⁶Macfie, *The Patent Question*, NAPSS TRANSACTIONS, *supra* note ___, at 829.

¹⁵⁷MACHLUP & PENROSE, *supra* note ___, at 20 (quoting Mill). Scholars have now elaborated on these simplified propositions. *See infra* text accompanying notes ___ - ___.

¹⁵⁸NAPSS 1863 TRANSACTIONS, *supra* note ___, at 885.

of compulsory licensing schemes to curb potential abuses of patent rights.¹⁵⁹

¹⁵⁹*See, e.g.*, NAPSS 1863 TRANSACTIONS, *supra* note __, at 885; NAPSS 1865 TRANSACTIONS, *supra* note __, at 664.

Theoretical analysis as to the efficacy of reward systems continues in scholarly circles today.¹⁶⁰ Indeed, given the definitive political failure of the abolitionist movement by the late 1870's, Macfie might be pleasantly surprised at the extent to which his writings continue to inform modern scholarly debate. In their recent study of the economics of reward systems, Shavell and Ypersele cite Macfie's work to illustrate the historical precedent for reward system proposals and the basic outlines of those proposals.¹⁶¹ Shavell and Ypersele develop an economic model to test whether patent systems are superior from a social welfare standpoint to either pure reward systems or an optional system in which the innovator chooses between the patent grant and the reward grant. While they found that they were unable to prove that pure reward systems are unambiguously superior to patent

¹⁶⁰Michael Abramowicz, *Perfecting Patent Prizes*, SSRN Law & Economics Working Paper Series, <<http://papers.ssrn.com/abstract=292079>> (visited Jan. 4. 2002); Shavell and Ypersele, *supra* note __; F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697, 705-17 (2001) (critiquing prize proposals).

¹⁶¹Shavell and Ypersele, *supra* note __, at 526-27.

systems,¹⁶² they concluded that an optional reward system would outperform a patent system,¹⁶³ even under circumstances where the government's information relevant to calculation of the reward is relatively poor.¹⁶⁴

¹⁶²*Id.* at 530. They conclude that a patent system could be superior to a reward system, because the patent system “effectively harnesses the private information of the innovator about the value of an innovation,” but that the reward system could also be superior to the patent system, because the incentive to innovate is optimized (assuming that the reward equals the actual social surplus afforded by the invention) and there is no monopoly pricing, and hence no deadweight loss due to such pricing. Thus, no general argument favoring one system over the other can be made.

¹⁶³*Id.* at 530-31 (an optional reward system is “unambiguously” superior to patents because expected social welfare is improved when the innovator chooses the reward (e.g., by avoiding deadweight loss associated with monopoly pricing)).

¹⁶⁴*Id.* at 541.

Others have pointed up practical and theoretical limitations on the Shavell and Ypersele model;¹⁶⁵ it is not my object to propose a resolution on the merits of this debate. It is remarkable, however, that the arguments of a Victorian-era British sugar refiner retain relevance in twenty-first century law and economics scholarship on patent theory.

C. Harmonization or Abolition?: Patents and the Interface with Free Trade

While it may be that Robert Macfie held firm in his belief in the theoretical arguments he had raised in support of abolishing the patent system, his motivation for pressing so aggressively for abolition seems to have sprung in no small part from pragmatic business considerations. Macfie was a domestic sugar refiner, an occupation which, even in the Victorian era, required an understanding of international competitiveness. Of particular concern to Macfie was the impact of British patent rights on competition in the trans-Atlantic sugar trade, especially competition between domestic sugar refiners and colonial producers in the British West Indies.¹⁶⁶ Macfie generalized this narrow and self-

¹⁶⁵See, e.g., Abramowicz, *supra* note __, at 17-25. Like Shavell and Ypersele, Abramowicz also makes reference to Macfie's early arguments in support of a reward system. *Id.* at 4, n. 14.

¹⁶⁶For background on the 19th century sugar trade, see R. W. BEACHEY, THE BRITISH WEST INDIES SUGAR INDUSTRY IN THE LATE 19TH CENTURY 40-60 (1957) (describing the sugar trade and the Continental sugar bounty system). See also S.N. BROADBERRY, THE PRODUCTIVITY

serving claim into a variety of patent proposals linking patent rights to free trade and exploring international patent law harmonization.

1. Free Trade

RACE: BRITISH MANUFACTURING IN INTERNATIONAL PERSPECTIVE, 1850-1990 200 (1997)
(discussing briefly the fall of the British sugar refining industry in the 1880's, in the context of the international competitiveness of British industry overall).

Free trade principles¹⁶⁷ probably formed the “main ideological influence” behind the abolitionist movement.¹⁶⁸ While anti-patent sentiment drew from a variety of motivations, it is clear that free trade was a recurring theme, even finding its way into the title of one of Macfie’s numerous abolitionist tracts.¹⁶⁹

The free trade element of the abolitionist movement traces at least as far back as the debates over passage of the 1852 Act.¹⁷⁰ Patent reform proponents argued that the British patent right should

¹⁶⁷Concerning the free trade movement generally, *see, e.g.*, ANTHONY HOWE, FREE TRADE AND LIBERAL ENGLAND 1846-1946 chs. 3-5 (1997); Oliver Macdonagh, *The Anti-Imperialism of Free Trade*, 14 ECON. HIST. REV. 489, 490-93 (1962) (defining free trade by explaining its political context). On the rise of protectionism in Britain in the late 1870's, *see, e.g.*, BENJAMIN H. BROWN, THE TARIFF REFORM MOVEMENT IN GREAT BRITAIN 1881-1895 9-28 (1943).

¹⁶⁸DUTTON, *supra* note __, at 24.

¹⁶⁹*See supra* note __ (citing Macfie’s “Patent Question Under Free Trade”).

¹⁷⁰*See supra* note __ (referring to the 1852 Act).

extend not only across England, Scotland, and Ireland¹⁷¹ but also to British colonies. The principal advocates for this reform were domestic British sugar refiners, including Macfie, who took the view that domestic refiners were, in effect “taxed” by the patent system, while West Indies refiners could operate free of it and compete in British domestic markets.¹⁷² As Macfie phrased the argument several years later:

¹⁷¹See WEBSTER, NEW PATENT LAW, *supra* note __, at 3 (reporting that some considered the 1835 Act insufficient for its failure to institute a patent that extended across England, Scotland, and Ireland).

¹⁷²See COULTER, *supra* note __, at 59-60 (reporting the views of sugar refiners). Moreover, whereas one might expect that the domestic disadvantages of this “tax” could be alleviated by the imposition of import duties on foreign or colonial refiners, Great Britain had eliminated the sugar bounty system under the principle of free trade. *Id.* at 169-71 (explaining briefly the bounty system).

Inventions, which are made the subject of patent in this country, very soon become known in other countries, and not many weeks elapse before other countries adopt what is detailed in the specifications of Great Britain. The result, therefore, is that while we British manufacturers stand with our arms folded, waiting till the expiration of the fourteen years, our rivals abroad do or may at once step in, use the inventions, and compete with us in our own markets; at any rate, they get too frequently the use of inventions free, for which we alone pay, or are expected to pay, the inventors' rewards.¹⁷³

Ultimately, the sugar refiners failed; the 1852 Act did not extend the patent right to British colonies.¹⁷⁴ But Macfie had his argument, and was more than willing to advance it in the name of patent abolition.¹⁷⁵

¹⁷³*Is the Granting of Patents for Inventions Conducive to the Interests of Trade?*, NAPSS TRANSACTIONS 1865, *supra* note __, at 666 (reporting comments of Macfie).

¹⁷⁴Nor did this view prevail in debates that led to passage of the 1883 Act after the abolitionist movement had subsided. COULTER, *supra* note __, at 167.

¹⁷⁵*Id.* at 72 (suggesting that although the 1852 reform effort failed, one result was the emergence of Robert Macfie as a leader in the burgeoning patent abolitionist movement).

In addition, from Macfie's perspective, the free trade argument grew stronger in the course of the 1860's, because the disharmony among patent laws became more acute. In particular, Holland had abolished its patent system in 1869, Switzerland had no patent system, and France, Germany, and Belgium all were engaged in abolitionist debates.¹⁷⁶ The prospect of competition from Continental manufacturers operating free of any patent rights certainly would have added to Macfie's sense of urgency to remove the "crying evil" brought about by the patent system.¹⁷⁷

Contemporary commentators disagreed on whether the anti-patent argument in fact reflected a proper interpretation of free trade principles. One of the major detractors was John Stuart Mill, who expressed "real alarm" that if the anti-patent movement succeeded, it would "enthron[e] free stealing under the prostituted name of free trade."¹⁷⁸ But aside from theoretical objections, Macfie's free trade argument could be met by pragmatic rejoinders. Webster supplied two.

One of Webster's rejoinders was an economic argument: even if the domestic producer was forced to pay the "tax" in the form of patent license fees, the domestic producer received in exchange the benefit of the invention, which presumably was equal to or in excess of the license fee; otherwise, the producer would decline to adopt the patented technology:

¹⁷⁶See, e.g., DUTTON, *supra* note __, at 29 ("The fact that Switzerland and Holland had abolished their patent systems in 1863 and 1869 gave the British movement an impetus which it never previously had."); COULTER, *supra* note __, at 90. Macfie's compilations include numerous "extracts" from Dutch, French, German, and Belgian commentators and officials. See, e.g., MACFIE, RECENT DISCUSSIONS, *supra* note __, at 185 (official communication from Count Von Bismarck to the North German Parliament); *id.* at 164-180 (discussions in France); *id.* at 197-229 (discussions in Holland).

¹⁷⁷MACFIE, PATENT QUESTION, *supra* note __, at 33.

¹⁷⁸JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY 932 (1872), *cited in* Machlup & Penrose, *supra* note __, at 9 n. 32.

Macfie: [T]ake the sugar manufacture, a manufacture which is carried on upon the same principle, and for the same markets, in the colonies and in the United Kingdom; [the non-uniformity of patent rights] tended to make manufacturers of sugar in one part of the empire gain advantages on the one hand, or bear burdens on the other hand, that their competitors, also subjects of the Queen, were not partakers of or liable to?

Webster: No doubt, theoretically that was so; but I take it that the advantage derived from the succession of improvements was such that that would disappear, and that sugar can be made at Liverpool or Leith quite as cheaply as anywhere in the colonies by reason of the subsequent improvements.¹⁷⁹

Another rejoinder revealed that Macfie's argument rested on a mistaken assumption as to the state of the law of infringement – although, in Macfie's defense, the law had apparently changed in the course of the abolitionist debate, as reflected in the following exchange:

Macfie: [When England, Scotland, and Ireland had separate patent systems,] monopoly having been granted in England, but not in Scotland or Ireland, there was nothing then to prevent an English consumer, notwithstanding the monopoly in England, from being supplied from Scotland and from Ireland, with articles made according to the invention in those two countries. . .[and] there was no restriction on importation into England of articles manufactured free of patents in the two sister countries, was there?

Webster: [answering no, acknowledging a theoretical problem but doubting whether the problem ever in fact manifested itself]

Macfie: Then under free trade, that which was formerly done as between Scotland and Ireland, on the one hand, and England, on the other, is being regularly done as between any foreign countries that have not patents and the whole of the British Islands, is it not?

Webster: Yes; no doubt.

Macfie: So that an article patented in this country can be manufactured in Switzerland

¹⁷⁹MACFIE, COPYRIGHT AND PATENTS, *supra* note ___, at 339 (extracts from Commons' Committee's Report of 1871, Evidence of Mr. Webster).

[where no patent system existed] or Holland [which had abolished its patent system], and sent to this country?

Webster: Yes.

Macfie: But would the law prohibit the sale in this country of articles made in those two countries according to the principles of any patents existing in this country?

Webster: Yes; that has been decided, within the last month, by the House of Lords. That is assuming that they were proved to be made according to the system that was patented in this country.¹⁸⁰

These exchanges suggest that Macfie's effort to turn free trade principles to the cause of patent abolitionism may have failed on their own merits. Regardless, events ensuing a short time after this exchange demonstrated that Macfie made a strategic error when he linked the anti-patent movement to free trade. The British economy slid into depression, reviving protectionist impulses at the expense of free trade policies. By 1874, much had changed, including the British domestic political scene. Macfie lost his seat in the House of Commons, and the abolitionist movement lost its place in the domestic political agenda.

Despite its failure, Macfie's free trade argument was, in one respect, ahead of its time, in that

¹⁸⁰*Id.* at 341-42 (extracts from Commons' Committee's Report of 1871, Evidence of Mr. Webster). Having apparently received the wrong answer, Macfie changed the issue, shifting to questions about the difficulty of proving that a product imported into Britain had been manufactured overseas using a British patented process. The current U.S. patent statute reflects similar concerns. *See* 35 U.S.C. §271(g) (liability for importation of products made by patented processes); 35 U.S.C. §295 (presumption that product was made by patented process).

it sought to link international trade policy with national patent policy. Macfie, representing a business concern based in an advanced economy and operating in an internationally-competitive market, argued on the basis of free trade principles that the absence of patent systems in some countries (countries capable of participating in the export trade, but not necessarily having developed economies) gave those countries an advantage; accordingly, patents should be abolished. Perhaps he would have thought it an ironic twist that in the late twentieth century, global business concerns in developing economies also saw the absence of patent systems in some developing countries as antithetical to international trade, and suggested that patent systems meeting TRIPs minimum standards be established.

2. International Patent Harmonization

As noted above, Macfie perceived that variations among patent regimes from country to country had the potential to impose unfair “taxes” on domestic industry in those countries where patent rights had to be respected, and thus Macfie saw patent systems as obstructing “free trade.” While Macfie’s favored solution was to abolish patent systems where they existed, it was not his only proposal. Macfie appeared to recognize that if lack of uniformity among patent laws created the problem, harmonization (or unification) of patent laws provided one solution:

How inconvenient and hurtful, to inventors and to the public, is the diversity of laws now prevailing! How great a facility to inventors, if a Patent registered in one country were recognised in all others; and to both inventors and manufacturers, if a specification published in one were made officially known in all.¹⁸¹

¹⁸¹MACFIE, PATENT QUESTION, *supra* note __, at 32. Macfie also reported on others’ arguments for harmonization-related reforms – for example, Michel Chevalier’s argument that the scope of the prior art should extend worldwide. Chevalier asserted that the scope of prior art should reach “even to the antipodes,” explaining, with startling prescience, that in some far-flung “young communities” such as California, “[i]nventive genius is very active and very well-

directed.” MACFIE, PATENT QUESTION, *supra* note __, at 57 (translation of M. Michel Chevalier on the Law of Patents, taken from the introduction to the *Rapports des Membres de la Section Francaise du Jury International sur l’ensemble de l’Exposition*, 1862).

Macfie proposed as much, although only as an alternative to outright abolition, and seemingly with considerably less vigor. Macfie's proposal was a utopian one: he called, as so many others have in succeeding years, for a patent of world-wide effect, apparently contemplating not merely harmonized national laws but a truly unified international system.¹⁸² Even then Macfie recognized that it was probably "vain to hope that the countries of Europe and America, with their colonies, will speedily agree to an international system,"¹⁸³ and so pressed his reward system as a more viable alternative.¹⁸⁴

In another of many ironies, the patent abolitionist movement had very direct consequences for the international patent harmonization agenda. At the very time when "the controversy between patent and anti-patent forces throughout Europe was still bitter,"¹⁸⁵ plans for another international exposition, the International Exposition at Vienna in 1873, generated pressure for international patent cooperation, and ultimately led to the first international conference on patents, the Vienna Patent Congress of 1873. Some 158 participants from 13 countries, including the U.S., Britain, and several

¹⁸²NAPSS TRANSACTIONS 1863, *supra* note __, at 884 (reporting on Macfie's paper "Patents Internationally Considered").

¹⁸³He probably had no idea how correct he was. Although interest in substantive patent law harmonization again seems to be on the rise, efforts to create a Community patent regime have again stalled. *See* Results of the Internal Market Council Brussels, Community Patent, MEMO/01/4510 (Dec. 12, 2001), <http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action=gettxt=gt&doc=MEMO/01/4510|RAPID&lg=EN&display=> (visited Dec. 22, 2001) (reporting the most recent failure of the EU's Council of Internal Market Ministers to reach agreement on proposals that would create a Community Patent).

¹⁸⁴NAPSS TRANSACTIONS 1863, *supra* note __, at 884.

¹⁸⁵EDITH TILTON PENROSE, THE ECONOMICS OF THE INTERNATIONAL PATENT SYSTEM 46 (1951).

countries from the Continent, gathered at the Congress.¹⁸⁶

¹⁸⁶*Id.* (noting that despite the impressive attendance, the conference was not an official diplomatic conference).

Webster participated in the Vienna Congress, and was elected a Vice President (along with five others), a member of the Executive Committee, and, after the Congress, a member of an unofficial British committee formed to explore further cooperative efforts with the Executive Committee.¹⁸⁷ Macfie submitted his views to the Congress by letter.¹⁸⁸ Participants at the Congress endorsed patent protection in principle, and resolved to press ahead to create an international treaty on patents.¹⁸⁹ The Congress also endorsed the principle of compulsory licensing. Webster, still an advocate of compulsory licensing despite his general support for the patent system, defended this principle “warmly.”¹⁹⁰ The influence of the patent abolitionist debate was clear.¹⁹¹

The patent abolitionist movement subsided, but the international patent movement took hold.¹⁹² Discussions at the Vienna Patent Congress led to further discussions in Paris, and in 1883, several nations signed the Paris Convention, regarded as the first international patent treaty.¹⁹³

¹⁸⁷COULTER, *supra* note __, at 174-76.

¹⁸⁸MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 141-47 (reprinting extracts from Webster’s Report to the Royal Commission of the Vienna Universal Exhibition, 1873).

¹⁸⁹PENROSE, *supra* note __, at 46-48.

¹⁹⁰MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 147 (reprinting extracts from Webster’s Report to the Royal Commission of the Vienna Universal Exhibition, 1873).

¹⁹¹PENROSE, *supra* note __, at 47 (crediting the anti-patent movement with creating awareness of the potential abuses of the patent system, and thereby facilitating acceptance of the principle of compulsory licensing).

¹⁹²Coulter reports that both anti-patent and pro-patent forces approved of the agreements made in Vienna; the anti-patent forces saw at least the prospect of eliminating the disharmony in patent protection, easing their concerns over unfair advantages in international trade. COULTER, *supra* note __, at 176.

¹⁹³For an account of the origins of the Paris Convention, *see* STEPHEN P. LADAS, I PATENTS, TRADEMARKS, AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION ch. 4 (1975); *see also* COULTER, *supra* note __, at 176-80.

III. Patent Law Reform and the Patent Law Reformatory

Surprisingly, many of the significant elements of the modern U.S. patent law reform agenda have antecedents in British patent abolitionism. The abolitionism literature therefore can (and should) inform modern U.S. debate, at least in a few modest ways. First, modern reform proponents who seek to invoke core arguments about the limitations of juries, or the efficacy of expert tribunals, in patent litigation; the foundational justifications for systems of exclusive property rights as compared to reward systems; or the notion that domestic patent policy interacts with considerations of global trade, can find the positions staked out with clarity in the abolitionism literature. Even arguments about Congressional diversion of PTO surplus fees have nineteenth century British counterparts.¹⁹⁴

Second, those of us who dabble in U.S. patent law reform might take away from the abolitionism literature a general lesson in humility. As frequently as we may invoke the exigencies

¹⁹⁴For an argument about fee diversion in the nineteenth century British patent system, see MACFIE, COPYRIGHT AND PATENTS, *supra* note __, at 378 (extracts from Commons' Committee's Report of 1871, Evidence of Mr. Webster):

[T]here is a surplus fund of [pounds] 60,000 a year, which we call the Inventors' Fee Fund, and there is the accumulative fund of [pounds] 750,000 more than that, accumulating at the rate of [pounds] 50,000 or [pounds] 60,000 a year, which I say is inventors' money, and ought not to go into the Consolidated Fund. I say let the inventor have the benefit of it in the shape of a proper Patent Office. . .

For a sample of recent discussions on the fee diversion issue in the U.S., see, e.g., *Union Chief Assails Diversion of PTO Fees*, 61 PAT. TM. COPYRT. J. (BNA) 600 (2001) (noting that President Bush's PTO budget proposal diverts a record \$207 million and that H.R. 110 has been introduced in an attempt to curb annual fee diversion); *New Bills Would Implement Madrid Protocol, Curb PTO Fee Diversion*, 61 PAT. TM. COPYRT. J. (BNA) 420 (2001) (discussing the introduction of H.R. 740 which would prevent future fee diversion); *PTO Funding Falls Short of Goal Sought by Senate*, 61 PAT. TM. COPYRT. J. (BNA) 7 (2000) (stating that H.R. 4942 withholds \$161 million from PTO's estimated income and is diverting the fee income to other general programs); *Panel Approves PTO Funding Bill with Fee Diversion*, 60 PAT. TM. COPYRT. J. (BNA) 122 (2000) (noting that the House Judiciary Committee has approved H.R. 4034, which would end the yearly diversion of fees, but that such legislation is unlikely to be enacted).

of new technology and new economic circumstances as motivation for patent law reform, many of our reform proposals return to decidedly old themes. In 1894, one commentator, writing in the Yale Law Journal, outlined the three major defects of the then-existing U.S. patent system:

First, that there is little reliance to be placed on the patent itself; second, that the time which it takes to carry on a suit to enforce any patent rights is great; and third, that the expense of such litigation is enormous.¹⁹⁵

¹⁹⁵Brewer, *supra* note __, at 149.

According to the author, several reform measures ought to be taken in view of these complaints, including arriving at a satisfactory definition of the standard of “invention,” and incorporating an *inter partes* element to the *ex parte* examination system.¹⁹⁶

The Yale paper could have been written at nearly any point in the twentieth century. Among some serious scholars, its core observations would still ring true today. Indeed, in 2000, John Barton wrote a brief article in *Science* entitled “Reforming the Patent System.”¹⁹⁷ He advocated reform of the nonobviousness standard and weakening of the presumption of validity,¹⁹⁸ and incorporation of a more robust *inter partes* reexamination scheme into U.S. law.¹⁹⁹

¹⁹⁶The author also would have limited or even barred the use of expert testimony in patent litigation *Id.* at 155 (recounting complaints that such experts might charge sums as outrageous as \$50 per day). The author rejected suggestions that the term of the patent be severely limited, to ten years, as Congress was then considering. *Id.* at 150 (discussing the relevant legislation).

¹⁹⁷John H. Barton, *Reforming the Patent System*, 287 *SCIENCE* 1933 (2000).

¹⁹⁸*Id.* at 1933.

¹⁹⁹*Id.* at 1934. Professor Barton also suggested that “broad basic patents on fundamental research processes” might deter follow-on research, and could be subjected to a compulsory licensing regime. *Id.* at 1933-34.

The Roosevelt administration in both the 1930's²⁰⁰ and 1940's,²⁰¹ the Johnson administration in the 1960's,²⁰² and the Bush administration in the early 1990's²⁰³ all ordered special commissions to study patent law reform.²⁰⁴ The table below illustrates the common themes among reform commissions over the decades,²⁰⁵ reflecting a high level of congruence with the reform themes of the British patent abolitionist movement.

Reform Proposal	Committee on the Relation of	National Patent Planning	President's Commission on	Advisory Commission on
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²⁰⁰Science Advisory Board, *Report of the Committee on the Relation of the Patent System to the Stimulation of New Industries*, 18 J. PAT. OFF. SOC'Y 94 (1936). The Science Advisory Board formed the Committee in response to a request from the Secretary of Commerce "for a broad policy program for the stimulation of new industries in this country." *Id.* at 94. Vannevar Bush, then the Dean of Engineering at MIT, chaired the Committee, which was composed primarily of representatives from large corporations. *Id.*

²⁰¹THE AMERICAN PATENT SYSTEM: REPORT OF THE NATIONAL PATENT PLANNING COMMISSION, 78th CONG., 1ST SESS. (1943), *reprinted in* 25 J. PAT. OFF. SOC'Y 456 (1943). President Roosevelt established the Commission by executive order.

²⁰²"To Promote The Progress of . . . Useful Arts" In An Age of Exploding Technology, Report of the President's Commission on the Patent System, 90th Cong. 1st Sess. Doc. No. 5 (Feb. 2, 1967) (Comm. On Judiciary; Subcomm. On Patents, Trademarks, and Copyrights). President Johnson established the Commission in 1965. *Id.* at ii. The Commission included public members as well as representatives from the Departments of Commerce and Defense, and the Small Business Administration and the National Science Foundation. *Id.* at iv.

²⁰³THE ADVISORY COMMISSION ON PATENT LAW REFORM: A REPORT TO THE SECRETARY OF COMMERCE (1992). The Secretary of Commerce established the Advisory Commission in 1990. Members included lawyers, administrators from academia, and corporate executives. *Id.* at 5. The representative from the Association of University Technology Managers declined to sign the final report. *Id.* at iii.

²⁰⁴In addition, Congress commissioned a series of studies on the patent system in the late 1950's. Several of those studies are cited in this article. *See, e.g., supra* note __ and accompanying text.

²⁰⁵I have not included each reform suggested in each commission report. Where I have left a blank, the commission did not report any recommendations on the topic.

	the Patent System to the Stimulation of New Industries (1936)	Commission (1943)	the Patent System (1967)	Patent Law Reform (1992)
reform of obviousness standard; presumption of validity	recommended	recommended		
opposition/ revocation		considered & rejected	recommended ex parte pre- and post-grant	recommended reform
Pre-grant publication	recommended	not considered	recommended	recommended
Single appellate patent court	recommended	recommended		n/a
patent trial courts	recommended the use of technical advisors		recommended the use of “Civil Commissioners”	recommended
compulsory licensing	considered & rejected	considered w/o recommendation		
20-year term		recommended	recommended	recommended
first-to-file			recommended	recommended

Obviously, these isolated examples of scholarship and of reform commission publications do not alone support a broad claim that U.S. patent law reform over the past century has been an exercise in reiteration. But it seems worthwhile to ask a few hard questions about the content of the patent law reform agenda. Are these repeated themes of twentieth century U.S. patent law reform

simply the inevitable themes of any patent law reform? Or have we become imprisoned in a kind of patent law reformatory, in which patent law reform is little more than a repackaging of old debates?

This last query in turn presents an important set of questions about the nature of the patent law reform process generally. Reflecting on the patent abolitionism literature and subsequent U.S. patent law reform efforts through 1950, Machlup and Penrose concluded, rather tartly, that “little, if anything, has been said for or against the patent system in the twentieth century that was not said equally well in the nineteenth.”²⁰⁶ Perhaps some would hold this up as the ultimate moral of the patent abolitionism story: abolitionism failed, patent law reform ever since then has stagnated, and a perpetual intellectual malaise has settled over the process.

I am attracted to a more optimistic bottom line lesson. Batzel argues that in the face of radical “solutions” and theoretical arguments offered in the abolitionist debate, the patent system survived because reformers pushed “pragmatic administrative reforms”²⁰⁷ that strengthened the credibility of the patent system. The process became one of reciprocal adjustment at an incremental level; as the patent system reformed, attitudes about the patent system adjusted; “[c]ustom and a growing sense of traditional practice” were “solidifying the place of patents in industrial England.”²⁰⁸

And so in the United States patent system of the twenty-first century. The history of the British abolitionism movement should give pause to current U.S. patent policymakers. It should temper our enthusiasm for dramatic patent law reform through legislation, and encourage healthy skepticism about proposals that, when viewed in historical context, merely repackage century-old

²⁰⁶Machlup & Penrose, *supra* note __, at 10.

²⁰⁷Batzel, *supra* note __, at 198.

²⁰⁸*Id.* at 199.

debates.