

PATENT REFORM, THEN AND NOW

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2019 MICH. ST. L. REV. 431

ABSTRACT

One of the most significant legislative reforms of the U.S. patent system occurred in 1952. Prior to 1952, the patent system found itself languishing, undermined by a confusing nonstatutory patentability requirement called the “invention” requirement. In 1952, Congress and the President eliminated it. Today we find ourselves in a situation surprisingly similar to the one prior to 1952. The patent system again finds itself languishing, undermined by a new confusing nonstatutory patentability requirement, this one called the “inventive concept” requirement. Today, just like in 1952, there are ongoing calls for Congress and the President to eliminate it. Given the striking parallels between these two eras—and the success of legislative reform efforts in 1952—I have studied the forces behind the reform of 1952: the problems with the law of the day, the people and groups of people involved in reform efforts, and the circumstances and strategies they used to their advantage to create change. This study has led me to identify various factors that led to the success of those efforts in 1952. In parallel with the study of the history behind the Patent Act of 1952, I highlight the problems with the law today, the people and groups of people involved today in reform efforts, and the circumstances and strategies they might use to their advantage to create change. Moreover, drawing from the factors that led to the success of legislative reform efforts in 1952, I analyze how those same factors may contribute to the success of current legislative reform efforts—or hinder it.

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INTRODUCTION

One of the most significant legislative reforms of the U.S. patent system occurred in 1952. Prior to 1952, the patent system found itself languishing, undermined by a confusing nonstatutory “invention” requirement.¹ In 1952, Congress and the President eliminated it, replacing it with what ultimately became known as the “nonobviousness” requirement.² In 1966, the Supreme Court accepted what Congress and the President had done and applied the nonobviousness requirement rather than the invention requirement in a series of cases, providing the inventive community with a clear test for patentability.³

Today we find ourselves in a situation surprisingly similar to the one prior to 1952. The patent system again finds itself languishing, undermined by a new confusing nonstatutory “inventive concept”

1. See, e.g., NAT’L PATENT PLANNING COMM’N, THE AMERICAN PATENT SYSTEM, H.R. DOC. NO. 78-239, at 5 (1943) (“The most serious weakness in the present patent system is the lack of a uniform test or standard for determining whether the particular contribution of an inventor merits the award of the patent grant Novelty alone is not sufficient, nor is utility, nor is the final accomplishment. There must also be present some mysterious ingredient connoted in the term ‘invented’ The difficulty is that there is no accepted uniform standard among [the] several tribunals which can be applied in the same or similar cases No other feature of our law is more destructive to the purpose of the patent system than this existing uncertainty as to the validity of a patent The present confusion threatens the usefulness of the whole patent system and calls for an immediate and effective remedy.”).

2. See Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, 798 (codified as amended at 35 U.S.C. § 103 (2012)) (“A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”).

3. See generally *Graham v. John Deere Co.*, 383 U.S. 1, 3 (1966) (describing nonobviousness as a requirement of patentability); *United States v. Adams*, 383 U.S. 39, 48 (1966) (providing that nonobviousness is one of three tests of patentability that must be satisfied in a valid patent).

requirement.⁴ Today, just like in 1952, there are ongoing calls for Congress and the President to eliminate it.⁵ Even if they do so, however, it is not certain whether the Supreme Court will accept the elimination of the inventive concept requirement and apply a new statutory requirement in its place, let alone whether a new statutory requirement will provide the inventive community with a clear test for patentability.

Given the striking parallels between these two eras—and the success of legislative reform efforts in 1952—I have sought to understand exactly how the reform occurred in 1952, and therefore how similar reform might occur today. This effort required studying the forces behind the reform of 1952: the problems with the law of the day, the people and groups of people involved in reform efforts, and the circumstances and strategies they used to their advantage to create change. This study has led me to identify various factors that led to the success of those efforts in 1952, success in terms of the enactment of the legislation but also how that legislation ultimately supplanted the Supreme Court’s invention requirement with the nonobviousness requirement. Thus, what follows, first, is a description of this history, including these problems, people, groups, circumstances, strategies, and factors.⁶

After exploring this history and the lessons it teaches, I consider the present state of the patent system and, in particular, the Supreme Court’s recent creation of the inventive concept requirement.⁷ Tracking the study of the history behind the Patent Act of 1952, I similarly highlight the problems with the law today, the people and groups of people involved today in reform efforts, and the circumstances and strategies they might also use to their advantage to create change.⁸ Moreover, drawing from the factors that led to the

4. See, e.g., Jeffrey A. Lefstin, Peter S. Menell & David O. Taylor, *Final Report of the Berkeley Center for Law & Technology Section 101 Workshop: Addressing Patent Eligibility Challenges*, 33 BERKELEY TECH. L.J. 551, 561 (2018) (“The uncertainty and confusion resulting from the Court’s recent jurisprudence [adopting the ‘inventive concept’ requirement] create significant problems for many companies and investors contemplating research and development projects, . . . patent prosecutors, patent examiners, and patent jurists.”).

5. At least three organizations have proposed legislation that would eliminate the inventive concept requirement in favor of a different patentability test. See JOHN R. THOMAS, CONG. RESEARCH SERV., R44943, PATENTABLE SUBJECT MATTER REFORM 15–16 (2017) (summarizing these proposals).

6. See *infra* Part I.

7. See *infra* Section II.A.

8. See *infra* Section II.A.

success of legislative reform efforts in 1952, I analyze how those same factors may contribute to the success of current legislative reform efforts—or hinder it.⁹

My analysis leads to three important suggestions to modern day reformists. First, there is a clear need for legislative intervention, which will become a long-felt need the longer intervention is delayed, and so some measure of patience is in order. Second, the patent bar needs to consolidate forces, present one proposal, and speak with a unified voice. Third, to agree upon one proposal, reformists need to demonstrate flexibility and, if possible, adopt a prior judicial test that provides an objective standard.

Given how closely the problem with the patent system today mirrors the system's problem in 1952, I have organized this Article into just two Parts. Part I explores the history of the Patent Act of 1952 and the enactment of the nonobviousness requirement to replace the invention requirement.¹⁰ Drawing from this historical analysis, Part II then analyzes the present problems associated with the inventive concept requirement and similar strategies that may be used to replace it with a more appropriate requirement.¹¹

I. PATENT REFORM—THEN

The Patent Act of 1952 represented a significant accomplishment: the elimination of the Supreme Court's notorious invention requirement. This Part considers the forces behind the legislative reform of 1952—the problems with the invention requirement, the people and groups of people who sought to eliminate it, and the circumstances and strategies they used to accomplish this goal. Based on a detailed historical analysis, it identifies the factors that led to the success of legislative reform efforts in 1952, resulting in the elimination of the invention requirement.

A. Clear Need for Legislative Intervention

The first factor that contributed to the success of the legislative reform of 1952 was a clear need for legislative intervention. This clear need reflected several underlying circumstances: a long-felt need for improvement, problems emanating from the Supreme Court, lower

9. See *infra* Section II.C.

10. See *infra* Part I.

11. See *infra* Part II.

court and Patent Office confusion, identification of the precise problem by a national committee, and, finally, a sense of urgency.

1. *Long-Felt Need for Improvement*

Experts in the patent field had long known the patent system was not perfect in various respects. In 1936, for example, the *Journal of the Patent Office Society* marked the occasion of the 100th anniversary of the Patent Act of 1836—the genesis of the modern patent system—by recognizing that a large number of then-recent proposals for change suggested that there was room for improvement of the patent system.¹²

Leading up to around 1950, moreover, the calls for reform increased. Indeed, “[f]or some time there had been a movement to amend the patent laws, to modernize them, and to remove the obsolescent debris that had formed about them.”¹³ Looking back on this movement, L. James Harris in 1955 remarked that the “agitation had been quite formidable.”¹⁴ He explained that “[t]he courts of the United States during the past several decades ha[d] shown an increasing tendency to invalidate patents.”¹⁵ “The revisers,” he continued, “no longer content with carrying on the controversy that had continued down through the years, sought to improve the law.”¹⁶

12. See P.J. Federico, *One Hundred Years Old*, 18 J. PAT. OFF. SOC'Y 1, 4–5 (1936) (“The charge is frequently made that law, in general, is unable to keep pace with civilization and is always lagging behind progress in other fields of human endeavor. This same accusation has been made against patent law. And yet, because of its immediate contact with most things new, patent law is probably the most advanced branch of the law. Since it affects all the vital developments in invention and industry, it ought to become even more progressive. While closer study may show that some of the suggestions for change which have been offered in the past are ill-advised or unnecessary, yet others indicate real possibilities of pronounced value and should be further investigated. Nevertheless, whether these proposals for change are ill-advised or valuable, they do suggest, in the large number that are presented, that the present patent structure is open to criticism and that consequently there is unquestionably room for further improvement in the system.”).

13. L. James Harris, *Some Aspects of the Underlying Legislative Intent of the Patent Act of 1952*, 23 GEO. WASH. L. REV. 658, 658 (1955).

14. *Id.*; see also P.J. Federico, *Commentary on the New Patent Act*, 75 J. PAT. & TRADEMARK OFF. SOC'Y 161, 166 (1993) (“For some time there was agitation for a modern complete restatement and codification of all laws of the United States, inasmuch as the only prior codification, the Revised Statutes of 1874, had become generally outmoded on all subjects.”).

15. Harris, *supra* note 13, at 659.

16. *Id.* at 660.

Reflecting on these events much later, Giles Rich explained that two things irritated the patent bar and motivated the revisers.¹⁷ First was the invention requirement.¹⁸ Second was the patent misuse doctrine, which had effectively eliminated the patent law doctrine of contributory infringement.¹⁹ With respect to the first irritant, the invention requirement, Rich agreed with Harris: “The pressures to do something about this phantom requirement had been building up for some years because of a perceived antagonistic attitude on the part of the judiciary toward patents, frequently manifesting itself in holdings of invalidity for lack of ‘invention.’”²⁰ Section 103, in particular, “came to be because many in the patent bar sensed a long-felt need for improvement.”²¹

2. Problems Emanating from the Supreme Court

Importantly, both of the irritants of the patent bar—the invention requirement and the patent misuse doctrine—emanated from the Supreme Court. As a result, statutory amendment appeared the only viable solution.

a. The Invention Requirement

The long-felt need for improvement with respect to the invention requirement resulted not just from the actions of courts and judges

17. Giles S. Rich, *Giles S. Rich Addresses to the Giles Sutherland Rich American Inn of Court*, 3 J. FED. CIR. HIST. SOC’Y 120, 127 (2009) (“[P]rior to 1948 when I began this enterprise, there were two things that were bothering the patent bar.”).

18. *See id.* (“The first of them was called the requirement for ‘invention’: the way you determined when things [were] patentable and whether they were ‘inventions’ or not, which is how the courts and lawyers determined whether things were before 1953.”).

19. *See id.* (“The other one was contributory infringement, which we in the Bar thought, at least in New York, had been abolished as a practical matter by the Supreme Court’s *Mercoïd* decision[s] in 1944.”). With respect to contributory infringement, the problem was the Supreme Court’s *Mercoïd* decisions, *Mercoïd Corp. v. Mid-Continent Investment Co.*, 320 U.S. 661 (1944); *Mercoïd Corp. v. Minneapolis Regulator Co.*, 320 U.S. 680 (1944), where “Justice Douglas said, in effect, ‘We acknowledge there is this ancient doctrine of contributory infringement which is very useful, but when there is misuse and these two doctrines conflict, misuse must prevail. It’s in the public interest.’” Rich, *supra* note 17, at 127–28.

20. Giles S. Rich, *Why and How Section 103 Came to Be, in NONOBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY*, 1:206 (John F. Witherspoon ed., 1980).

21. *Id.* at 1:202.

generally, but from those of the Supreme Court specifically. The Court expressed an inability to provide guidance to lower courts and the Patent Office regarding how this requirement should be understood, but also paradoxically enforced the invention requirement with vigor to invalidate patent after patent.

In 1891, the Supreme Court recognized its inability to provide guidance to lower courts and the Patent Office regarding this requirement.²² The Court went so far as admitting it could not provide guidance on how to distinguish between situations where the requirement was met and situations where it was not met: “The truth is the word [invention] cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not.”²³

But beyond admitting it could not provide guidance on how to enforce the invention requirement, the Supreme Court also repeatedly invalidated patents using it.²⁴ The Court did so so frequently that Justice Jackson expressed his frustration in 1949 that “the only patent that is valid is one which this Court has not been able to get its hands on.”²⁵ Rich later suggested that the “trend of discontent began with the Supreme Court’s 1941 decision invalidating the patent in *Cuno Engineering Corp. v. Automatic Devices Corp.*”²⁶

22. See *McClain v. Ortmyer*, 141 U.S. 419, 427 (1891).

23. *Id.*

24. See *Jungersen v. Ostby & Barton Co.*, 335 U.S. 560, 572 (1949) (Jackson, J., dissenting) (noting the Supreme Court’s frequent invalidation of patents).

25. *Id.* (“It would not be difficult to cite many instances of patents that have been granted, improperly I think, and without adequate tests of invention by the Patent Office. But I doubt that the remedy for such Patent Office passion for granting patents is an equally strong passion in this Court for striking them down so that the only patent that is valid is one which this Court has not been able to get its hands on.”).

26. Rich, *supra* note 20, at 1:206 (citing *Cuno Eng’g Corp. v. Automatic Devices Corp.*, 314 U.S. 84 (1941)). The cause of this “trend of discontent” may be traced to President Roosevelt in 1938. As noted by George Frost, “[i]n 1938, President Roosevelt sent a message to the Congress suggesting that one cause of the continued economic malaise was the patent system.” George E. Frost, *Judge Rich and the 1952 Patent Code—A Retrospective*, 76 J. PAT. & TRADEMARK OFF. SOC’Y 343, 343 (1994). President Roosevelt requested “a thorough study of the concentration of economic power in American industry and the effect of that concentration upon the decline of competition” and suggested “[a]mendment of the patent laws to prevent their use to suppress inventions, and to create industrial monopolies.” Franklin D. Roosevelt, Message to Congress on Curbing Monopolies (Apr. 29, 1938), <https://www.presidency.ucsb.edu/node/209657> [<https://perma.cc/CK7X-WC2S>]. A year later, in 1939, President Roosevelt nominated Justice Douglas to the Supreme Court. The author of the majority opinions in the *Cuno* and *Mercoid* decisions, and an important concurring opinion in *Great Atlantic & Pacific Tea Co. v. Supermarket*

The *Cuno* decision certainly galvanized support for a legislative amendment addressing the invention requirement. In an opinion by Justice Douglas, the Court “used the expression ‘flash of creative genius’ in holding a patent invalid for lack of invention.”²⁷ “This aroused considerable comment and many articles were written about the so-called new standard of invention, and even some lower courts were convinced that there had been a change.”²⁸ “As usual, the patent bar overreacted with a flood of articles condemning the new ‘flash of genius’ requirement, which it assumed to be a more stringent test than mere ‘invention.’”²⁹ The “impact of the Supreme Court’s expression was considerable,” so considerable that “[e]ventually various bills were introduced in Congress dealing with the subject.”³⁰

b. The Patent Misuse Doctrine

The Supreme Court also created problems using the patent misuse doctrine. As explained in the *Harvard Law Review* in 1953:

[I]n the last few decades the Court has been more sympathetic to the policy of the antitrust laws than tolerant of the limited monopoly granted by the patent laws. The gradual erosion of the doctrine of contributory infringement, the undermining of the . . . rule that a patentee can control his licensee’s resale price, and the intimations that abuse of the patent right is a per se violation of the antitrust laws, are indicative of the Court’s narrow view of the patent grant.³¹

Each of these problems—erosion of contributory infringement, undermining the ability to control resale prices, and creation of per se antitrust violations—resulted from the Court’s decisions in the so-called *Mercoïd* cases in 1944 addressing the patent misuse doctrine.³²

Equipment Corp., 340 U.S. 147 (1950), Justice Douglas would do much to spur enactment of the Patent Act of 1952.

27. P.J. Federico, *Origins of Section 103*, 5 APLA Q.J. 87, 87 (1977).

28. *Id.*

29. Rich, *supra* note 20, at 1:206–07.

30. Federico, *supra* note 27, at 87.

31. *Contributory Infringement and Misuse—The Effect of Section 271 of the Patent Act of 1952*, 66 HARV. L. REV. 909, 918 (1953). Frost explains that “[b]y the end of the war, the Antitrust Division of the Department of Justice under an activist Assistant Attorney General had launched a major program against alleged patent abuses.” Frost, *supra* note 26, at 343. Moreover, “[t]he Supreme Court at that time was conspicuously anti-patent and became progressively more hostile through the 1940’s.” *Id.* “The bottom line is that by about 1950 the Patent System was in real trouble, and the outlook was grim.” *Id.*

32. See generally *Mercoïd Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661 (1944); *Mercoïd Corp. v. Minneapolis Regulator Co.*, 320 U.S. 680 (1944).

In these opinions, also written by Justice Douglas, the Supreme Court “narrowed the doctrine of contributory infringement close to the vanishing point” using “decidedly critical” language.³³ No doubt as a result, these decisions “reverberated through the discussions of patent lawyers of the time—all were shocked, many were uncertain on what it meant, and all agreed that the Court had gone too far.”³⁴ As a result, “[b]ills relating to contributory infringement were also introduced in Congress.”³⁵

In short, by

the late 1940s there was discontent in the patent bar. The practical value of patents was being downgraded. The courts were, on average, applying a too stringent test for “invention,” and the Supreme Court in the *Mercoïd* cases virtually had eliminated the useful doctrine of contributory infringement by expanding the overriding misuse doctrine.³⁶

Something had to be done legislatively given these problems created by the Supreme Court.

3. Lower Court and Patent Office Confusion

While the Supreme Court created the problems, the impact of the confusion regarding the invention requirement fell on the lower courts and the Patent Office.³⁷

One of these lower court judges was Learned Hand.³⁸ In a 1948 dissent from a decision of the Second Circuit, Hand noted “the whole approach to the subject [of the invention requirement] has suffered a shift within the last decade or so, which [he] recognize[d] that [he] should accept as authoritative.”³⁹ Nevertheless, he “confess[ed] himself] baffled to know how to proceed,” if he was “at once to profess to apply the system as it is, and yet in every concrete instance . . . to decide as though it did not exist as it is.”⁴⁰ Despite his confusion, he concluded that “so far as [he was] able to comprehend those factors

33. Frost, *supra* note 26, at 343–44.

34. *Id.*

35. Federico, *supra* note 27, at 87.

36. Giles S. Rich, *Congressional Intent—or, Who Wrote the Patent Act of 1952?*, 1 PAT. PROCUREMENT & EXPLOITATION: PROTECTING INTELL. PROP. RTS. 61, 63–64 (1963).

37. See, e.g., *Harries v. Air King Products Co.*, 183 F.2d 158, 162 (2d Cir. 1950); see also *Jungersen v. Baden*, 166 F.2d 807, 812 (2d Cir. 1948) (Hand, J., dissenting), *rev'd sub nom. Jungersen v. Ostby & Barton Co.*, 335 U.S. 560 (1949).

38. See *Jungersen*, 166 F.2d at 812 (Hand, J., dissenting).

39. *Id.*

40. *Id.*

which have been held to determine invention, and to which at least lip service continues to be paid, the combination in suit has every hallmark of a valid patent.”⁴¹ In 1949, the Supreme Court affirmed the majority’s decision to the contrary, but it was that case that elicited Justice Jackson’s statement that “the only patent that is valid is one which this Court has not been able to get its hands on.”⁴² Justice Jackson concluded his dissenting opinion with the statement that he “agree[d] with the opinion of Judge Learned Hand below.”⁴³ Perhaps not surprisingly, in 1950, one year after the Supreme Court affirmed the majority’s decision invalidating the relevant patent, Hand authored another opinion, this one for a unanimous panel of the Second Circuit, calling the issue of “whether there is a patentable invention . . . as fugitive, impalpable, wayward, and vague a phantom as exists in the whole paraphernalia of legal concepts If there be an issue more troublesome, or more apt for litigation than this, we are not aware of it.”⁴⁴

Many years later, Rich suggested that, beyond reviewing court decisions, “if you want to see how the ‘invention’ question was handled, look in texts such as *Walker on Patents* or *Corpus Juris* under the heading ‘Invention’ where you will find a couple of dozen factors listed for determining the presence or absence of this phantom.”⁴⁵ I did just that.

I reviewed *Walker on Patents*, Deller’s Edition, published in 1937, with its pocket supplement dated 1949.⁴⁶ Its section on the invention requirement spans no less than 144 pages, describing—primarily with long quotations from numerous cases—various aspects of the requirement. The section addressing the invention requirement begins with an attempt to describe the requirement generally.⁴⁷ According to the author, it required “creative mental conception as distinguished from the ordinary faculties of reasoning upon materials supplied by a special knowledge, and the facility of manipulation

41. *Id.*

42. *Jungersen*, 335 U.S. at 572 (Jackson, J., dissenting).

43. *Id.*

44. *Harries v. Air King Prods. Co.*, 183 F.2d 158, 162 (2d Cir. 1950). Later, after enactment of the Patent Act of 1952, Hand, reflecting on the previous era, remarked that “‘invention’ became perhaps the most baffling concept in the whole catalogue of judicial efforts to provide postulates for indefinitely varying occasions.” *Lyon v. Bausch & Lomb Optical Co.*, 224 F.2d 530, 536 (2d Cir. 1955).

45. Rich, *supra* note 20, at 1:208.

46. *See generally* WALKER ON PATENTS 109–253 (Deller’s ed. 1937 & Supp. 1949).

47. *See id.* at 109–11.

which results from its habitual and intelligent practice by those skilled in the art.”⁴⁸ The author also stated, circularly, that invention “must be the product of some exercise of the inventive faculties.”⁴⁹ These descriptions highlight the lack of clarity regarding how the invention requirement was met.

Judge Rich’s suggestion, however, referenced the factors identified in *Walker on Patents*, and there were many.⁵⁰ The treatise described a first set of initial factors as “considered in determining invention” or “evidence of invention”:

- character, condition, or progress of art to which invention relates, long-felt want, and nature of want supplied;
- utility, economy, efficiency, or other advantage;
- long experimentation, prompt and general adoption, recognition of validity of patent;
- turning failure into success, the last step wins; and
- successful efforts of patentee after failure of others.⁵¹

After listing these factors, *Walker on Patents* resorted to definition by example, listing many “specific cases illustrating determination of presence or absence of invention.”⁵² The author summed up the analysis of these cases by highlighting the lack of any positive governing guideline—“there is no affirmative rule by which to determine the presence or absence of invention in every case”—and instead introducing a list of negative rules indicating what does not constitute invention:

[I]t has been settled that the ideal line which separates things invented from things otherwise produced can never be concisely defined; and that there is no affirmative rule by which to determine the presence or absence of invention in every case; and that such questions are to be determined by means of several negative rules which operated by a process of exclusion. Each of those rules applies to a large class of cases, and all of them are entirely authoritative and sufficiently clear. To formulate those rules, and to state their qualifications and exceptions, and to classify and cite the adjudged cases from which those rules, qualifications, and exceptions are deducible, is the scope of several sections which follow.⁵³

48. *Id.* at 111.

49. *Id.* at 113.

50. See Rich, *supra* note 20, at 1:208.

51. See WALKER ON PATENTS, *supra* note 46, at 119–124.

52. *Id.* at 124.

53. *Id.* at 136.

These negative rules included the following propositions (among others), which I understand Rich to have considered to be additional factors:

- Mere skill is not invention;
- It is not invention to substitute superior for inferior materials;
- It is not invention to so enlarge and strengthen a machine that it will operate on larger materials than before;
- It is not invention to change the size or degree of a thing, or of any feature or function of a machine or manufacture;
- Where a change of form is within the domain of mere construction, it is not invention; and
- Mere reversal of parts, producing no new result, does not constitute invention.⁵⁴

Other listed *prima facie* exclusions include “unification or multiplication of parts,” “portable devices,” “manual converted to mechanical operation,” “change of proportion,” “duplication of parts,” “omission of parts,” “substitution of equivalents,” “combinations,” “aggregation,” and “new use.”⁵⁵ A factor indicative of the presence of an invention was saved for last: commercial success.⁵⁶

The definitions, factors, and negative rules in *Walker on Patents* indicated a lack of clarity regarding how to apply the invention requirement in any positive manner other than to distinguish between creativity and the ordinary faculties of reasoning by those skilled in the relevant field of technology by considering all of the relevant circumstances. Perhaps even more salient, though, was the pocket supplement and, specifically, the portion collecting all of the cases addressing the invention requirement and separating them into those finding invention and those finding no invention.⁵⁷

Two things associated with the pocket supplement stand out. First, in the section covering the invention requirement, the first entry declared that “[t]he quality which constitutes invention is

54. *See id.* at 138, 179, 187, 189, 194–95.

55. *Id.* at 196, 198–99, 205, 207, 209, 211, 218, 226.

56. *See id.* at 234.

57. *See id.* at 71–90 (Supp. 1949). It is perhaps telling that the earliest case in either list is the Supreme Court’s decision in *Hotchkiss v. Greenwood*, 52 U.S. 248 (1850). *See id.* at 246.

indefinable.”⁵⁸ Second, more remarkable was the update to the lists of cases finding either an invention or no invention. The pocket supplement collected cases between 1937 and 1949. The list of cases finding an invention during that time period spanned about four pages, while the list of cases during that time period finding no invention spanned about fifteen pages.⁵⁹ The pages contained hundreds of citations. These lists, moreover, separately identified Supreme Court cases. The lists indicated during that time period the Supreme Court found only one patent compliant with the invention requirement, while eighteen times found a patent in violation of the invention requirement.⁶⁰ Thus, while confusion in the lower courts reigned, the outcome of disputes generally—and particularly at the Supreme Court—overwhelmingly favored the invalidation of patents as not meeting the invention requirement.

I also reviewed the 1951 edition of the *Corpus Juris* text referenced by Rich.⁶¹ It too included a separate section devoted to the invention requirement, this one spanning a full 100 pages.⁶² Like *Walker on Patents*, *Corpus Juris*, with a similar preliminary qualification, attempted to define in positive terms the requirement of invention. After conceding that “[t]he word ‘invention’ is not susceptible of precise definition,” it stated that, “[i]n general, invention requires the exercise of inventive or creative faculties, and a complete invention necessitates not only a mental act but also the reduction of the idea to practice.”⁶³ Buried deep in this treatise, however, one can also find a description of a nonobviousness requirement: “The test generally applied in distinguishing invention from mechanical skill is whether what was produced was obvious to persons skilled in the art and acquainted with the common knowledge in that art at the date the art or instrument was created.”⁶⁴ *Corpus Juris* went on to explain that,

[i]f the solution of the problem demonstrated by the method or device claimed to have been invented was obvious or would readily occur to those

58. *Id.* at 13 (Supp. 1949) (quoting *Warren Telechron Co. v. Waltham Watch Co.*, 91 F.2d 472, 473 (1st Cir. 1937)).

59. Compare *id.* at 71–75 with *id.* at 75–90.

60. Compare *id.* at 71 with *id.* at 75–76. The latter list of cases, of course, includes *Cuno* and *Jungersen*, discussed above.

61. See 69 C.J.S. *Patents* §§ 50–70 (1951).

62. See *id.* (evidencing that §§ 50–70 on the invention requirement span from pages 247 to 346). Compare this to novelty (53 pages) and utility (6 pages). See *id.* §§ 19–42, 43–49.

63. *Id.* § 53(a).

64. *Id.* § 55.

skilled in the art to which it relates at the time of its conception, its production is held to involve only mechanical skill and not invention.⁶⁵

But in addition to these statements there are numerous, indeed hundreds, of other statements attempting to identify what qualifies or does not qualify as an invention.⁶⁶ The statements of what do not constitute invention resembled those discussed in *Walker on Patents* (e.g., duplication of parts, omission of parts, making parts integral or separate).⁶⁷ But *Corpus Juris* also identified “Particular Facts Evidencing Invention or Lack Thereof”: novelty, utility, commercial success, satisfaction of long-felt want, unsuccessful efforts of others, public acquiescence in validity, imitation, experiments, and independent production by others.⁶⁸

In the end, these texts identified so many descriptions, factors, and negative rules that it is unsurprising that decisionmakers felt unconstrained. Rich recalled that, “in general, judges did whatever they felt like doing according to whatever it was that gave the judge his feelings—out of the evidence coupled with his past mental conditioning—and then selected those precedents which supported his conclusions.”⁶⁹ Moreover, “Patent Office examiners and Board of Appeals members did the same.”⁷⁰

4. Identification of the Need for Reform

While in the patent community there was a long-felt need for reform based on the problems created by the Supreme Court and unleashed on (and through) the lower courts and the Patent Office, the significance of these problems likely first resonated with the political branches of the government upon publication of the first “Kettering Report.”⁷¹ Just five days after the bombing of Pearl Harbor in 1941, President Roosevelt issued an Executive Order establishing the National Patent Planning Commission and authorized it “to conduct a comprehensive survey and study of the American patent system” and

65. *Id.*

66. *See id.* §§ 50–70.

67. *See id.* § 55.

68. *Id.* § 70(d).

69. Rich, *supra* note 20, at 1:208.

70. *Id.*

71. *See* CHARLES F. KETTERING, THE AMERICAN PATENT SYSTEM: REPORT OF THE NATIONAL PATENT PLANNING COMMISSION, H.R. DOC. NO. 78-239 (1943) [hereinafter Kettering Report].

to determine whether the system might be improved.⁷² President Roosevelt named Charles F. Kettering, an inventor and the director of General Motors research, as the Chairman of the Commission.⁷³

In its first report, transmitted to Congress on June 18, 1943, the Commission made several findings and recommendations.⁷⁴ For purposes of the present discussion, it is significant to note three. First, the report found as “[t]he most serious weakness in the present patent system . . . the lack of a uniform test or standard for determining whether the particular contribution of an inventor merits the award of the patent grant.”⁷⁵ Stated alternatively, the Commission took the position that “[o]ne of the greatest technical weaknesses of the patent system is the lack of a definitive yardstick as to what is invention.”⁷⁶ The Commission explained that, beyond novelty and utility, “[t]here must also be present some mysterious ingredient connoted in the term ‘invented.’”⁷⁷ “The difficulty,” the Commission noted, “is that there is no accepted uniform standard among [the] several tribunals which can be applied in the same or similar cases.”⁷⁸ Beyond highlighting the lack of a uniform standard, however, the Commission also found the problem to be significant.⁷⁹ The Commission stated that “[n]o other feature of our law is more destructive to the purpose of the patent system than this existing uncertainty as to the validity of a patent,” and “[t]he present confusion threatens the usefulness of the whole patent system and calls for an immediate and effective remedy.”⁸⁰ Finally,

72. *Id.* at VII. The Executive Order authorized the Commission

to conduct a comprehensive survey and study of the American patent system, and consider whether the system now provides the maximum service in stimulating the inventive genius of our people in evolving inventions and in furthering their prompt utilization for the public good; whether our patent system should perform a more active function in inventive development; whether there are obstructions in our existing system of patent laws, and if so, how they can be eliminated; to what extent the Government should go in stimulating inventive effort in normal times; and what methods and plans might be developed to promote inventions and discoveries which will increase commerce, provide employment, and fully utilize expanded defense industrial facilities during normal times.

Id.

73. *See id.*; *see also* Rich, *supra* note 20, at 1:207.

74. *See* Kettering Report, *supra* note 71.

75. *Id.* at 5.

76. *Id.* at 10.

77. *Id.* at 5.

78. *Id.*

79. *See id.*

80. *Id.* at 462–63.

the Commission suggested legislation would be appropriate and recommended a particular legislative solution.⁸¹ “A promising improvement,” explained the Commission, “would be for Congress, by legislative enactment, to lay down a reasonable, understandable test by which inventions shall be judged both from the standpoint of the grant of the patent and the validity of the patent thereafter.”⁸² As for its proposal, the Commission recommended “the enactment of a declaration of policy that patentability shall be determined objectively by the nature of the contribution to the advancement of the art, and not subjectively by the nature of the process by which the invention may have been accomplished.”⁸³

The Commission later issued second and third reports in January and September 1945 respectively.⁸⁴ The third report addressed the patent misuse doctrine, on which the Supreme Court had focused in the *Mercoid* cases in the intervening year and a half since the Commission’s first report.⁸⁵ The Commission effectively expressed its disagreement with the Court’s handling of the patent misuse doctrine, stating that “the Commission feels that the prevention or penalization of . . . wrongful use should not jeopardize the patent itself nor incur a departure from the sound principle of patent protection.”⁸⁶

5. Sense of Urgency

While the Kettering Report laid the groundwork for later reform efforts by communicating to the President and Congress in clear terms some of the problems caused by the Supreme Court and the need for legislative action with respect to the invention requirement, ultimately a sense of urgency motivated the patent community to lobby Congress. Two of the Court’s cases created this urgency.

81. *See id.* at 463.

82. *Id.*

83. *Id.*

84. *See* CHARLES F. KETTERING, GOVERNMENT-OWNED PATENTS AND INVENTIONS OF GOVERNMENT EMPLOYEES AND CONTRACTORS: SECOND REPORT OF THE NATIONAL PATENT PLANNING COMMISSION, H.R. Doc. No. 22 (1st Sess. 1945); CHARLES F. KETTERING, THIRD REPORT OF THE NATIONAL PATENT PLANNING COMMISSION, H.R. Doc. No. 283 (1st Sess. 1945) [hereinafter Third Kettering Report].

85. *See generally* *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661 (1944); *Mercoid Corp. v. Minneapolis Regulator Co.*, 320 U.S. 680 (1944).

86. Third Kettering Report, *supra* note 84, at 603.

The first case, which I have already discussed, was *Cuno Engineering Corp. v. Automatic Devices Corp.* in 1941.⁸⁷ The patent community so disagreed with Justice Douglas's "flash of creative genius" test it "drove patent lawyers up the wall"⁸⁸ and created a long-simmering "sense of urgency that something be done."⁸⁹ Thus, "[t]he atmosphere having become charged up with discontent like a thunderstorm, two bills were introduced in the 79th and 80th Congresses and hearings were held on them in 1948 and 1949."⁹⁰

The second case galvanizing the patent community was *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*—yet another case decided with a problematic opinion by Justice Douglas, this one a concurring one—in 1950.⁹¹ Rich later explained that "what persuaded the Coordinating Committee to replace the case law with a statutory provision was the Supreme Court's opinion, and Mr. Justice Douglas's concurring opinion [in the case, which were] published in the *New York Times* on the very day in 1950 the [Drafting] Committee was having a meeting."⁹² Indeed, Rich remembered that day vividly because he read the opinions aloud to the Drafting Committee, the small group of patent lawyers working on reform legislation, and it was the Court's language, not so much its decision, that motivated the reformers.⁹³ In the words of George Frost, "[t]he ruling, and particularly a vitriolic opinion castigating the Patent Office, was something of a bombshell. The event convinced the [Coordinating] Committee that the codification bill had to retain a section addressing what was then the requirement for 'invention,' even at the risk of jeopardizing passage of the bill."⁹⁴ Indeed, the Court's "reasoning is what clinched the decision to enact a statutory substitute that would make more sense, would apply to all kinds of inventions, would

87. See *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84 (1941).

88. Giles S. Rich, *Laying the Ghost of the "Invention" Requirement*, 1 AIPLA Q.J. 24, 30 (1972).

89. Harris, *supra* note 13, at 674.

90. Rich, *supra* note 20, at 1:208.

91. Federico, *supra* note 27, at 95 (citing *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147 (1950)) ("The A&P case[,] . . . which was decided by the Supreme Court on Dec. 4, 1950, also served to stimulate some of this activity.").

92. Rich, *supra* note 88, at 32.

93. See *id.* ("The decision may have been all right, but we considered what was said in the opinions to be typical of all that was wrong with the patent law's 'invention' requirement.").

94. See Frost, *supra* note 26, at 346; see also Rich, *supra* note 36, at 70 ("I have always felt that it clinched the determination to include in the bill what is now 35 U.S.C. § 103, in order to get rid of the vague requirement of 'invention.'").

restrict the courts in their arbitrary, *a priori* judgments on patentability, and that, above all, would serve as a uniform *standard of patentability*.”⁹⁵ While the nonobviousness requirement already appeared in the pending legislation, “there was . . . a small faction in favor of leaving things as they were, with no statutory provision on the subject and the determination of the presence or absence of ‘invention’ left entirely to the courts with no statutory guide or standard.”⁹⁶ The opinions in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, however, “clinched the determination to include in the bill what is now 35 U.S.C. § 103, in order to get rid of the vague requirement of ‘invention.’”⁹⁷

B. Involvement of the Patent Bar

Another factor that led to the success of the legislative reform was the involvement of the patent bar.⁹⁸ Both Congressmen⁹⁹ and patent lawyers¹⁰⁰ recognized the need for the involvement of the bar. As a result, the Patent Act of 1952 “was written basically . . . by patent lawyers drawn from the Patent Office, from industry, from private practice, and from some government departments.”¹⁰¹ These authors, “in turn, drew upon the combined judgment of organizations of patent lawyers in a most remarkable way. They got the bill together, refined it, and presented it to the legislature to be enacted.”¹⁰² Leaders emerged, conducted scholarly research, exercised good judgment, drafted clear legislation, and organized and consolidated the interests of the bar.¹⁰³

95. See Rich, *supra* note 88, at 33.

96. See Rich, *supra* note 36, at 70.

97. *Id.*

98. See *id.* at 65.

99. *Id.* (“I fear some of my legal brethren back home, patent lawyers, knowing that I would never take a patent case in my life, would shudder a little if I were to sit in judgment on a problem of this nature. . . . We would, necessarily, rely on a staff, on a competent and sufficient staff to do the spade work.”)

100. Rich, *supra* note 17, at 126 (“The National Council of Patent Law Association were told about this by Federico and said, ‘We had [better] get aboard. We don’t want the Patent Office solely writing this bill. The Patent Bar had better [be] in it.’”); *id.* at 130 (“The Patent Bar felt that wasn’t too good either, and thought that because it doesn’t see things just the way the Patent Office does all the time, maybe the Patent Bar had better get involved in this.”).

101. Rich, *supra* note 36, at 73.

102. *Id.*

103. See *id.*

1. Leadership

Several individuals emerged to lead the effort that led to enactment of the Patent Act of 1952.¹⁰⁴ Four in particular, Henry “Red” Ashton, P.J. “Pat” Federico, Giles Rich, and Paul Rose “deserve respect and credit not only for those endless hours that went into the effort, but equally for the judgments that led to passage of” the Act.¹⁰⁵ “They indeed accomplished what was nearly impossible—restoration of the patent law to substantially the condition that existed before the administrative and judicial onslaught of the 1940s.”¹⁰⁶

a. Henry Ashton

Ashton led the effort to reform the patent system. A lawyer at the firm of Fish, Richardson, and Neave in New York, Ashton served as the President of the American Patent Law Association and, as a result, automatically as Chairman of the National Council of Patent Law Associations.¹⁰⁷ “At that time the National Council did little beyond supporting a legislative information service for its members—the two dozen regional patent law associations whose presidents were the council.”¹⁰⁸ Ashton, however, saw a new role for the National Council when, in November 1949, Federico showed him a draft of the patent reform legislation.¹⁰⁹ He called a meeting of the National Council of Patent Law Associations to try to coordinate the efforts of the various associations with respect to Federico’s amendments.¹¹⁰

As Rich recalls, the first meeting took place on February 8, 1950, with twenty-three people present “representing 17 patent law associations, from Los Angeles to Boston.”¹¹¹ Orchestrated by Ashton, “[t]wo things were done, according to a well-conceived plan.”¹¹² “First, those present or designated alternates were constituted a Coordinating Committee,”¹¹³ which in general terms would “help the Congress draft a new Patent Act.”¹¹⁴ Second, a “two-man Drafting

104. See Frost, *supra* note 26, at 356.

105. *Id.*

106. *Id.*

107. See Rich, *supra* note 17, at 130.

108. Rich, *supra* note 36, at 66.

109. See *id.*

110. See *id.* at 67.

111. *Id.*

112. *Id.*

113. *Id.*

114. Rich, *supra* note 17, at 130.

Committee [would] be appointed,” with Ashton designating “Paul Rose and Giles Rich to be that committee.”¹¹⁵

While not formally part of the Drafting Committee, Ashton became a “virtual third member,” participating in revision work and meeting with Federico in Washington to consolidate ideas.¹¹⁶ Indeed, when the Drafting Committee met, “it always included Henry Ashton, Pat Federico, and usually two or three others, including House subcommittee counsel Murray Bernhardt or later L. James (Lou) Harris.”¹¹⁷ Ashton also testified in Congress, giving the main presentation for the Coordinating Committee.¹¹⁸ Then, after passage of the Act, Ashton and Rich drafted the Revision Notes.¹¹⁹

Rich later credited Ashton for being instrumental in passage of the Act.¹²⁰ In his words, “it . . . would not have been passed by now if it hadn’t been for our good friend, Henry Ashton, Chairman of the Coordinating Committee, who kept everyone working until final passage on the 4th of July, 1952.”¹²¹

b. P.J. Federico

Federico served as the principal draftsman of the Patent Act of 1952.¹²² He ended up serving in that role after a long period during which he gained significant experience in the field of patent law and in law reform efforts.¹²³ A patent examiner, Federico began serving as an Associate Editor of the *Patent Office Society Journal* in 1932 and became its Editor-in-Chief in 1935.¹²⁴ The same year, 1935, he became Assistant Chief of Division 43 of the Patent Office; in 1940 he became a “Principal Examiner,” i.e., Chief of the Division; in 1946 he became a Law Examiner; and in 1947 he became an “Examiner-in-Chief

115. Rich, *supra* note 36, at 67–68; *see also* Rich, *supra* note 17, at 130.

116. Rich, *supra* note 36, at 68–69.

117. Rich, *supra* note 20, at 1:211.

118. *See* Frost, *supra* note 26, at 345; *Patent Law Codification and Revision: Hearings on H.R. 3760 Before Subcomm. No. 3 of the H. Comm. on the Judiciary*, 82d Cong. 21 (1951) [hereinafter *Hearings on H.R. 3760*].

119. *See* Rich, *supra* note 36, at 73.

120. *See* Giles S. Rich, *The New York Patent Law Association*, 3 J. FED. CIR. HIST. SOC’Y 104, 115 (2009).

121. *Id.*

122. *See* Giles S. Rich, *P.J. (Pat) Federico and His Works*, 64 J. PAT. OFF. SOC’Y 3, 5 (1982).

123. *See id.*

124. *See id.* at 4. As part of his work, Federico published a book commemorating the centennial of the Patent Act of 1836, authoring several chapters. *See id.*

which made him a member of the Board of Appeals, the position and title he retained until he retired in May 1970.¹²⁵

Prior to his work on what became the Patent Act of 1952, Federico participated in numerous efforts to reform intellectual property law.¹²⁶ In 1943 he chaired a committee to revise the Rules of Practice in Patent Cases, and in 1947 he chaired another committee to revise the Trademark Rules of Practice.¹²⁷ His law reform work even extended overseas to West Germany following World War II when he helped that country to rewrite its patent law.¹²⁸ Back in the United States, he ultimately became “the man who was sent up to the Congress whenever bills affecting the patent system were given hearings; he was the man who gave technical advice about patent laws, here and abroad, to the State Department.”¹²⁹

Federico ultimately “was the man, when the time finally came, who single-handedly drafted the first version of the Patent Act of 1952.”¹³⁰ He testified in support of the legislation,¹³¹ later drafted the House and Senate Reports relating to the legislation,¹³² and after its passage compiled and published his “‘Commentary on the New Patent Act,’ which appear[ed] as the preface to the U.S. Code Annotated, Title 35.”¹³³ According to Federico, the Commentary “should be considered only as a survey of the patent statute, with the main objective of pointing out the changes which have been made by the new act.”¹³⁴ That said, the Commentary proved to be an important resource to courts as they sought to understand the intentions of the drafters of the Patent Act of 1952.¹³⁵

125. *Id.* The Patent Office in those days gave the title of “Examiner-in-Chief” to members of the then-Patent Board of Appeals. John H. Barton, *Non-Obviousness*, 43 IDEA 475, 485 (2003).

126. *See Rich, supra* note 122, at 4.

127. *See id.*

128. *See id.* at 5.

129. *Id.*

130. *Id.*

131. *See Hearings on H.R. 3760, supra* note 118.

132. *See Rich, supra* note 36, at 73.

133. Federico, *supra* note 27, at 97.

134. Federico, *supra* note 14, at 162 (republishing Federico’s Commentary).

135. *Symbol Techs., Inc. v. Lemelson Med.*, 277 F.3d 1361, 1366 (Fed. Cir. 2002) (alteration in original) (citations omitted) (“Shortly after the passage of the Act, P.J. Federico, one of its original drafters, gave a series of lectures across the country to educate patent groups about the new Act. The lectures were transcribed, edited, and published. Prior to publication, Federico ‘submitted drafts of the commentary to [Henry] Ashton and the Drafting Committee for suggestions’ The Drafting Committee consisted of Judge Giles S. Rich, late of this court, and Paul Rose.

No doubt Federico filled his leadership role in reform efforts because of his experience and seniority at the Patent Office combined with his law reform expertise. But he also served in this role because, according to Rich, “nobody had a more profound knowledge of the subject than” Federico, who was a “veritable archeologist of patent law.”¹³⁶ This would prove the perfect combination of experience given that the House counsel requested his assistance both codifying existing patent law and amending it as appropriate.¹³⁷

Rich later declared that “a monument ought to be erected to Mr. P.J. Federico of the Patent Office for the work that he did on this law over the years and the contributions he made from his vast knowledge of patent law.”¹³⁸ In a similar vein, Rich also sought to give Federico recognition for his labor over the years in government service, declaring that “[p]oliticians may come and politicians may go and in the process get most of the publicity in governmental affairs, but it is people like Pat who make government work.”¹³⁹

c. Giles S. Rich

Rich grew up around patent law.¹⁴⁰ His father practiced patent law in Rochester, New York, where his “most famous client was George Eastman, founder of the Eastman Kodak Company.”¹⁴¹ Indeed, “[t]he bustling industrial city of Rochester and the law offices of Church and Rich formed the backdrop of the bulk of . . . Rich’s childhood.”¹⁴² “As a child, [Rich] would talk to draftsmen, inspect models, and learn how to make patent drawings,” and “[o]ne of his main pleasures as a youth was touring . . . factories and seeing manufacturing processes first hand.”¹⁴³

In 1929, Rich joined his father’s firm, then called Williams, Rich & Morse and located in New York City, where Rich practiced both

Federico’s commentary is an invaluable insight into the intentions of the drafters of the Act.”).

136. Rich, *supra* note 122, at 5.

137. See Rich, *supra* note 36, at 65–66.

138. Rich, *supra* note 120, at 115.

139. Rich, *supra* note 122, at 3.

140. See Philip C. Swain, *A Brief Biography of Giles Sutherland Rich*, 3 J. FED. CIR. HIST. SOC’Y 9, 10 (2009).

141. *Id.*

142. *Id.*

143. *Id.* at 10–11.

patent prosecution and patent litigation.¹⁴⁴ Rich also served as a member of the Patent Law and Practice Committee of the New York Patent Law Association.¹⁴⁵ As part of that committee, in the late 1940s he “played a critical role” in “drafting a bill to revive the doctrine of contributory infringement” after the Supreme Court’s *Mercoïd* decisions.¹⁴⁶ He had previously written a treatise-like five-part article addressing the issues that ended up underlying the *Mercoïd* case,¹⁴⁷ and he also served as an adjunct professor of patent law at Columbia University.¹⁴⁸

In November 1949, Rich was one of the few individuals Federico showed an early draft of the patent reform legislation.¹⁴⁹ Later, when the House subcommittee decided to print what were called the “Federico amendments” to the patent law, Alexander C. Neave, who had recently become chairman of the Patent Law and Practice Committee of the New York Patent Law Association, a post Rich had relinquished after two years, learned that Henry Ashton intended to call a meeting of the National Council of Patent Law Associations.¹⁵⁰ Neave notified Worthington Campbell, then-President of the New York Patent Law Association, that “it would be also desirable for Giles Rich to go because he was able to go over the draft when it was left [in New York City] by Mr. Federico, which was at a time when I was so jammed up that I could not do it.”¹⁵¹

144. *Id.* at 14. During his time practicing in New York City, Rich wrote twice to the *New York Times*, once an editorial and once a letter to the editor. See Giles S. Rich, *Patents and the Courts: One of Judge Rich’s Early Publications on the Patent System* (1936), 3 J. FED. CIR. HIST. SOC’Y 84, 84–85 (2009).

145. See Swain, *supra* note 140, at 17.

146. *Id.*

147. See generally Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws (I)*, 24 J. PAT. OFF. SOC’Y 85 (1942); Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws (II)*, 24 J. PAT. OFF. SOC’Y 159 (1942); Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws (III)*, 24 J. PAT. OFF. SOC’Y 241 (1942); Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws (IV)*, 24 J. PAT. OFF. SOC’Y 328 (1942); Giles S. Rich, *The Relation Between Patent Practices and the Anti-Monopoly Laws (V)*, 24 J. PAT. OFF. SOC’Y 422 (1942).

148. See Dale Carlson, President’s Speech on Behalf of Judge Rich at the 89th Annual NYIPLA Judges Dinner 22 (Mar. 25, 2011).

149. See Rich, *supra* note 36, at 66.

150. *Id.* at 67.

151. *Id.* (quoting Letter from A. Neave to W. Campbell). Rich had previously been the person at NYPLA “responsible for explaining to Congressional committees several bills that the [organization] had introduced in Congress to legislatively overrule the Supreme Court’s *Mercoïd* cases that effectively abolished the doctrine of contributory patent infringement.” Dale L. Carlson, *A Richly Rewarding Association:*

As discussed above, at the first meeting of the National Council Rich became a member of both the Coordinating Committee and the Drafting Committee.¹⁵² He served in this role for the next two-and-a-half years.¹⁵³ In addition to his work on the Drafting Committee, he testified in favor of the legislation.¹⁵⁴ Moreover, as explained by Philip Swain,

[t]wo crucial features of the Patent Act of 1952 owe their origins to Rich's work on the Drafting Committee. First, Rich was instrumental in reviving the law of contributory infringement and restraining the law of patent misuse through Sections 271(b), (c), and (d) of the Patent Act. Second, and perhaps more importantly in the long run, it was Rich's idea to replace the definition of 'invention' with 'nonobviousness' in Section 103 of the statute, which creates as an objective test for patentability.¹⁵⁵

In short, Rich is credited for the success of the Patent Act of 1952 in correcting patent law's two most significant problems, the patent misuse doctrine and the invention requirement.¹⁵⁶ But it was drafting § 103 to eliminate the invention requirement that was later deemed his greatest accomplishment, and the one in which he took the most pride.¹⁵⁷

The NYIPLA as His Springboard, 3 J. FED. CIR. HIST. SOC'Y 101, 102 (2009). It was during these years he learned of another bill to define the invention requirement. Rich, *supra* note 17, at 125 ("It became my duty to come down to Washington and explain this bill [on contributory infringement] to committees in successive Congresses over two or three years, which I did. Somebody else had hatched up a bill to define the term, 'invention,' in what was the 'requirement for invention' in those days."). During 1950 and 1951, Rich served as the organization's President. See Carlson, *supra* at 102.

152. See *Patent Law Codification and Revision: Hearings Before Subcomm. no. 3 of the Comm. on the Judiciary H.R. 23*, 82d Cong. (1951) [hereinafter *Hearings on H.R. 23*].

153. See Rich, *supra* note 36, at 68.

154. See *Hearings on H.R. 23*, *supra* note 152.

155. Swain, *supra* note 140, at 19; see also Giles S. Rich, *Giles S. Rich's Speech at the 75th Annual Dinner of the NYIPLA*, 3 J. FED. CIR. HIST. SOC'Y 134, 134–35 (2009) ("[I]t was this association[,] . . . through what was then called the Committee on Patent Law and Practice of the then NYPLA, on which I was servicing, that conceived of the idea of replacing the requirement of 'invention' with a defined nonobviousness provision and putting it in the statute.").

156. *Special Session of the United States Court of Appeals for the Federal Circuit, In Honor of the Honorable Giles S. Rich*, 137 J. FED. CIR. HIST. SOC'Y 137, 146 (2009) ("Judge Rich, in reality, was the creator and the author of the key provisions . . . which were Section 103, Obviousness, and Section 271, Infringement of Patent . . .") [hereinafter *Special Session*].

157. Neil A. Smith, *Remembrances and Memorial: Judge Giles S. Rich, 1904–1999*, 14 BERKELEY TECH. L.J. 909, 913 (1999) ("By far Judge Rich's great accomplishment, and there were many, in which he took the most pride, was drafting

Rich eventually became a judge on the Court of Customs and Patent Appeals and, later, the U.S. Court of Appeals for the Federal Circuit.¹⁵⁸ For his contributions to the patent system, he was named “the father of modern patent law,”¹⁵⁹ “the most famous patent jurist in the world,”¹⁶⁰ “perhaps the greatest patent jurist ever,”¹⁶¹ the “preeminent patent lawyer, jurist, scholar, student of patent law ever,”¹⁶² and, simply, “Mr. Patent Law.”¹⁶³ Senator Orrin Hatch said of Rich that he “contributed as much, if not more, than anyone else in [the twentieth] century to the development of U.S. patent policy and the promotion of American innovation.”¹⁶⁴

d. Paul Rose

Compared to the others who led the successful effort to enact the Patent Act of 1952, less is known about Rose. A Washington patent attorney working as senior counsel for Union Carbide Corporation, Rose served as the Patent Law Revision Committee Chairman of the American Patent Law Association during the time in question.¹⁶⁵ He also served as an adjunct professor of patent law at George

Section 103 of the new Patent Act, which defined the standard of non-obviousness in the patent law.”).

158. See Donald R. Dunner, *Giles Sutherland Rich*, 9 FED. CIRCUIT B.J. 71, 72 (1999).

159. Janice Mueller, *A Rich Legacy*, 81 J. PAT. & TRADEMARK OFF. SOC’Y 755, 756 (1999).

160. See Swain, *supra* note 140, at 9.

161. See Dunner, *supra* note 158, at 73.

162. Bart Barnes, *Giles S. Rich Dies at 95*, WASH. POST (June 11, 1999), https://www.washingtonpost.com/archive/local/1999/06/11/giles-s-rich-dies-at-95/cef021c8-cddd-40f6-b647-ad37785e131c/?noredirect=on&utm_term=.4dc2e241bf71 [<https://perma.cc/UTV4-VPJ5>] (reporting statement of Donald R. Dunner); see also *Special Session*, *supra* note 156, at 138 (reporting statement of Chief Justice Rehnquist that Rich “was widely regarded as one of the preeminent patent law jurists in the country”).

163. Swain, *supra* note 140, at 25; see also Barton, *supra* note 125, at 489 (stating that “[t]he Supreme Court’s position is clearly not that of Judge Rich” and criticizing his views). That is not to say that everyone agreed with Judge Rich’s stewardship of the law of non-obviousness.

164. Orrin Hatch, *Tribute to Judge Rich*, 3 J. FED. CIR. HIST. SOC’Y 152, 152 (2009).

165. Rich, *supra* note 20, at 1:211; Rich, *supra* note 17, at 131–32; Carlson, *supra* note 148; Charles E. Miller & Daniel P. Archibald, *Beware the Suppression of District-Court Jurisdiction of Administrative Decisions in Patent-Validity Challenges Under the America Invents Act*, 95 J. PAT. & TRADEMARK OFF. SOC’Y 124, 134 n.33 (2013).

Washington University.¹⁶⁶ As discussed above, Rose joined with Rich on the two-man Drafting Committee formed by the Coordinating Committee of the National Council of Patent Law Associations.¹⁶⁷ In this role he reviewed Federico's draft legislation, proposed changes, and met with Federico, Rich, and Ashton to consolidate their ideas.¹⁶⁸ He also testified in support of the legislation on behalf of the American Patent Law Association.¹⁶⁹

e. Others

Other members of the patent bar contributed to the success of the reform movement. George E. Folk, for example, the retired head of the AT&T Patent Department and Patent Advisor to the National Manufacturers Association, as well as his assistant Fred Foulk, provided great help to the Coordinating Committee.¹⁷⁰ And while the leaders of the reform movement came from the patent bar, others also contributed. Several Congressmen, for example, played pivotal roles in obtaining passage of the Patent Act of 1952. Representative Joseph Bryson served as Chairman of the House Committee on Patents, Trademarks, and Copyrights and introduced various versions of legislation into Congress.¹⁷¹ Senator Alexander Wiley ensured that the Bill passed the Senate on the consent calendar on the last day of the term in 1952.¹⁷² Various other members of the government played important roles in the process that led up to the enactment. Charles Zinn, for example, served as the Law Revision Counsel of the House Subcommittee, and he and C. Murray Bernhardt, another

166. Carlson, *supra* note 148.

167. Rich, *supra* note 36, at 67–68.

168. *Id.* at 68–69; Rich, *supra* note 17, at 131–32.

169. Frost, *supra* note 26, at 345; *Hearings on H.R. 3760*, *supra* note 118.

170. See Rich, *supra* note 17, at 131 (“[T]he Coordinating Committee was augmented by representatives of other Associations in the National Council, a lot of other people like the Army and the Navy, the Aircraft Manufacturers Association, and most importantly the NAM[,] . . . which had a Patent Committee. The NAM took a very great interest in the work and the Chairman of their Patent Committee, sort of by custom, was the retired head of the AT&T Patent Department His name was George E. Folk and he had an assistant he brought to all of the meetings too. His name was Fred Foulk. They were of great help because they had lots of dough and they reproduced everything that we wanted reproduced, mimeographing, and doing revisions of the bill, time after time.”); George E. Folk, *The Relation of Patents to the Antitrust Laws*, 13 L. & CONTEMP. PROBS. 278, 278 n.* (1948) (providing biographical details about George E. Folk).

171. See Federico, *supra* note 27, at 93, 95.

172. See Rich, *supra* note 17, at 132.

subcommittee counsel, had the good judgment to put patent reform on the agenda and request Federico's assistance.¹⁷³ Zinn contributed to the simplicity of the language in the legislation¹⁷⁴ and later wrote a commentary on the Act.¹⁷⁵ The Commissioner of Patents, Lawrence C. Kingsland, had the good judgment to give Federico six months or longer to serve as a technical assistant to the House Committee and write the legislation.¹⁷⁶ Bernhardt and later Harris (who also served as subcommittee counsel) often met with the Drafting Committee to join in their work.¹⁷⁷ Harris also later published his own article describing the intent behind the Act.¹⁷⁸

2. Scholarly Research

A significant contribution of the patent bar to the reform effort involved scholarly research. At the center of this research stood Federico. Even as an Associate Examiner, Federico conducted research and wrote papers on the history of the U.S. patent system.¹⁷⁹ But his most important work with respect to the reform efforts related specifically to the invention requirement.

In 1950, Federico published an article in the *Journal of the Patent Office Society* entitled *The Concept of Patentable Invention*.¹⁸⁰ This article plumbed the depths of the history of the invention requirement and, in some respects, turned common knowledge on its head.¹⁸¹ In the face of the prevailing view that the invention requirement derived its force from the use of the term "invention" in either the Constitution or the statute, Federico's research showed that the invention requirement "may have developed in a somewhat

173. See Federico, *supra* note 27, at 88–89; Rich, *supra* note 36, at 65–66.

174. See Rich, *supra* note 120, at 105.

175. See Charles J. Zinn, *Commentary on New Title 35, U.S. Code 'Patents'*, 1952 U.S.C.C.A.N. 2507, 2508.

176. See Federico, *supra* note 27, at 89; see also Rich, *supra* note 17, at 126.

177. See Rich, *supra* note 20, at 1:211.

178. See Harris, *supra* note 13, at 661–62.

179. See, e.g., P.J. Federico, *Origin and Early History of Patents*, 11 J. PAT. OFF. SOC'Y 292 (1929) ("This is the first of a series of several papers on the history of our patent system. The present paper discusses the origin of patents and the early history of patents in England. A second paper will treat of the patents granted in the American colonies and a third of the patents granted by the individual states. Subsequent papers will trace the development of our present patent system and institution.").

180. See generally P.J. Federico, *The Concept of Patentable Invention*, 32 J. PAT. OFF. SOC'Y 118 (1950).

181. See generally *id.*

different manner.”¹⁸² He suggested that “the words ‘invented or discovered’ used in the opening phrase of the statute merely refer to the question of authorship or originality, meaning that the person must be the author of the invention, and not have copied it from some other source.”¹⁸³ Instead, he suggested, the invention requirement referred to the “degree or character or quantity of newness” and “may be a derivation of the statutory requirement for novelty [as] shown by the frequent use of the expression ‘patentable novelty’ or ‘patentable difference over the prior art.’”¹⁸⁴ In this regard, Federico “attempt[ed] to discover when and how the concept of invention as we use it today developed.”¹⁸⁵ Studying “*Hotchkiss v. Greenwood*, [which was] usually cited as the first case to make the requirement,” he discovered that the opinion “places the matter on the basis of novelty, the new machine cannot be distinguished from the old one, hence is the same, is not novel.”¹⁸⁶ Likewise he found “[a] few published decisions before 1850 show[ing] that patents were refused or held invalid using such phrases as ‘in all essentials anticipated,’ ‘nothing essentially new,’ ‘substantially alike,’ ‘not materially different,’ and sometimes simply ‘not patentable.’”¹⁸⁷ He concluded that “there is one thing we cannot escape and that is the fundamental axiom that something new and different cannot be patented merely because it is new and different, and without regard to the quantum of novelty.”¹⁸⁸ This was the purpose of the invention requirement.

182. *Id.* at 119.

183. *Id.*

184. *Id.* at 120. This work clearly formed the basis for Federico’s later *Commentary*. See Federico, *supra* note 14, at 182 (“The use of the word ‘invented’ in this phrase has been asserted as the source of the third requirement under discussion. However, a different origin, with which the language and arrangement in the new code are in harmony, has also been stated. This is that the requirement originally was an extension of the statutory requirement for novelty.”).

185. Federico, *supra* note 180, at 121.

186. *Id.*

187. *Id.*

188. *Id.* Again, this idea is reflected in Federico’s later *Commentary*. See Federico, *supra* note 14, at 181 (“The newness, that is the difference over what was previously known, must be sufficient in character, or in quantity, or in quality, in order that the new thing may be patented. This requirement has commonly been referred to as the requirement for the presence of invention; when the requirement is not present it is stated that the subject matter involved lacks invention The inventor may indeed have made an invention in the psychological sense, but it would nevertheless not be patentable if the quantum of novelty over the prior art material of which he may have been in total ignorance was not sufficient. This requirement for invention with which we are here concerned is more of a legal concept than a psychological one.”).

Federico also may fairly be said to have engaged in scholarly activity when he drafted the Patent Act of 1952. This work involved two steps. First, for the codification effort, he collected and studied “all the Acts of Congress dealing with patents, from the Revised Statutes of 1874 to the date of preparation,” and then “reorganiz[ed these materials] into a comprehensive restatement of the patent statutes.”¹⁸⁹ Second, for the reform effort, he collected and studied

(1) all the bills relating to patents which had been introduced in Congress during the preceding twenty-five years, (2) the reports of various official investigating committees such as the Science Advisory Board (1935), the Temporary National Economic Committee (1941) and the National Patent Planning Commission (1943, 1944, 1945), (3) reports and recommendations of private groups such as bar associations, and (4) miscellaneous sources such as books and articles in periodicals.¹⁹⁰

3. *Early Reform Proposals*

Early in reform efforts, before the formation of the Drafting Committee or even the request by the subcommittee counsel for Federico to put together a draft bill, various groups came forward with draft legislation to clarify the invention requirement and overturn *Cuno* (as well as to overturn the *Mercoid* cases). At that point it was important simply to call for change. An early bill, for example, called for a statutory test for invention focusing on whether what was claimed to be an invention filled a long-felt want.¹⁹¹ Another bill sought to overturn *Cuno* by inserting into the statute a statement that the patentability of claimed inventions would be determined

189. Federico, *supra* note 14, at 167.

190. *Id.*

191. Rich, *supra* note 17, at 129 (“The first one adopted one of the so-called tests for ‘invention.’ The question of ‘invention’ . . . was left to the courts to decide that if it filled a long felt want, then it amounted to invention provided that the skill of the art to which the invention pertained did not supply such want. Well, the New York Patent Law Association had taken a firm stand against that on the ground that if you put just one of the dozen or so tests you could find in ‘Walker on Patents’ into the statute, that would imply that the others didn’t apply anymore.”); Rich, *supra* note 20, at 1:208–09 (“One of the bills (Gamble, H.R. 4061, 80th Cong., 1st Sess.) was entitled ‘A BILL To establish a criterion of invention . . .’ and the gist of it was to amend the statute (R.S. 4886) by adding rather involved provisions saying, in effect, that the claimed subject matter amounts to ‘invention’ if there is a showing of long-felt want not supplied by the skill of the art and that the state of the art was unable to fill the want. We in New York did not like that bill at all. We feared that to enact as statutory law only one of the pro-invention tests would be worse than nothing. Beside which, we felt the proposal was unduly restrictive in saying the art had been unable to fill the want.”).

objectively by the nature of the contribution to the advancement of the arts and not subjectively by the nature of the mental process by which the invention had been made.¹⁹² While neither proposal gained support, the die had been cast.¹⁹³

4. *Organization and Consolidation*

One of the most significant factors leading to the success of the patent bar's involvement was its organization and consolidation. Credit for this task goes to Ashton, who after publication of Federico's preliminary draft called the meeting of the National Council, created the Coordinating Committee that included bar leaders from across the United States, and formed the Drafting Committee composed of Rich and Rose.¹⁹⁴ The Coordinating Committee, which "contained some of the best patent brains in the United States,"¹⁹⁵ proved instrumental in the process. Harris, the subcommittee counsel, later remarked that "[p]robably no other title incorporates the thinking of so many qualified technical men throughout the country as does this revision.

192. See Rich, *supra* note 17, at 129 ("The second invention bill . . . said, 'Patentability of inventions and discoveries including discoveries due to research and improvements thereof shall be determined objectively by the nature of the contribution to the advancement of the arts and not subjectively by the nature of the mental process by which the invention have been made.' That seemed to have a little thought in it that was worth pursuing and . . . the New York Association . . . took the idea and made a counter proposal which later on became the last sentence of the first paragraph of present section 103."); Rich, *supra* note 20, at 1:209 ("The other bill (Hartley, H.R. 5248, 80th Cong., 1st Sess.) was entitled 'A BILL to declare the national policy regarding the test for determining invention' and would have added to the statute, R.S. 4886, a sentence reading: 'Patentability of inventions and discoveries, including discoveries due to research, and improvements thereof, shall be determined objectively by the nature of the contribution to the advancement of the art, and not subjectively by the nature of the mental process by which the invention or discovery, or the improvement thereof, may have been accomplished.' You will sense that this was the National Patent Planning Commission's proposal with trimmings in the form of an injection referring to inventions resulting from research, rather than flashes of genius, and specific reference to improvement inventions.").

193. Giles S. Rich, *The Vague Concept of "Invention" as Replaced by Sec. 103 of the 1952 Patent Act*, 46 J. PAT. OFF. SOC'Y 855, 864 (1964) ("The outcome of those bill to determine invention, and one or two other bills, was that Congress got interested in revising and codifying the patent law and did so."). For a complete review of the various proposals and bills and their revisions leading to the Patent Act of 1952, see generally Federico, *supra* note 27.

194. See Federico, *supra* note 27, at 93 ("After the publication of the Preliminary Draft, the National Council of Patent Law Associations formed a Coordinating Committee to consider the Draft and coordinate recommendations.").

195. Rich, *supra* note 17, at 126.

And a large share of that cooperation was the result of the efforts of the Coordinating Committee.”¹⁹⁶

The Coordinating Committee “gave intensive consideration” to the pending legislation and “was extremely helpful to the House Committee in coordinating the comments from the Patent Bar and offering valuable suggestions of their own.”¹⁹⁷ Later, after voting to support the 1951 bill, it formed an Advisory Committee “of about ten members to act at the forthcoming hearings.”¹⁹⁸ Rich later explained that “[t]he Coordinating Committee chairman and representatives spoke with a united front on behalf of the patent bar, organized as never before or since.”¹⁹⁹

In this way, the Coordinating Committee indeed allowed the patent bar to speak with one voice, uniting the political capital of the patent bar behind particular proposals and preventing the appearance of dissension. As described by Philip Swain, “it was critical that the patent bar was kept under control by the Coordinating Committee, so that no single association . . . could directly assert its influence over the development of the bill.”²⁰⁰ “Instead, the various associations all spoke through the Coordinating Committee at the hearings.”²⁰¹ This proved particularly important because some in the patent community and even on the Coordinating Committee disapproved of addressing the invention requirement in the pending legislation.²⁰² Rich went so far as to describe the ability of the Coordinating Committee to keep the patent bar “under control” and speak with one voice as “[t]he secret of this whole project which made it a success.”²⁰³

196. Harris, *supra* note 13, at 661.

197. See Zinn, *supra* note 175, at 2508.

198. Rich, *supra* note 36, at 71.

199. *Id.* at 72.

200. Swain, *supra* note 140, at 18–19.

201. *Id.*; see also Federico, *supra* note 14, at 168 (“Hearings were held on H.R. 3760 in June, 1951 . . . Representatives of Government departments, representatives of bar and other associations, and private individuals appeared at the hearing and presented their views of the changes in the law proposed by the bill. As a result of the hearings and further material received by the Subcommittee, the bill was again revised and reintroduced as H.R. 7794, on May 12, 1952.”).

202. Rich, *supra* note 88, at 32 (“In December, 1950, the bar was far from unanimous in thinking that the statute should deal with the requirement for ‘invention,’ not even the members of the Committee agreed. There are always those who prefer the *status quo*, with which they have learned to live, no matter how ridiculous it may be.”).

203. Rich, *supra* note 17, at 131.

C. Good Drafting

As another factor leading to the success of their endeavor, Federico and the Drafting Committee engaged in good drafting, which involved hard work, good judgment, clarity, flexibility and willingness to improve, and, in the end, adoption of a prior judicial construct incorporating an objective standard.

1. *Hard Work*

First, Federico and the Drafting Committee did the necessary and time-consuming hard work.²⁰⁴ Federico put in significant time and effort creating the first draft of the legislation. As discussed above, his work progressed in two laborious steps involving the collection and analysis of a large volume of material, including prior statutes, proposed amendments, reports, recommendations, books, and articles.²⁰⁵ In this manner for six months he labored to produce his proposed codification and revision, combining the first step of codification with the second step of reform in one proposed statute.²⁰⁶ Then, over a series of additional months, the Drafting Committee studied Federico's draft, compiled and studied lists of proposed changes, solicited and organized comments, met and consolidated ideas, and prepared reports of their conclusions.²⁰⁷ In the final two years, the Drafting Committee shaped the legislation into its final form as it collected comments from the patent bar and testified in congressional hearings.²⁰⁸

204. See Frost, *supra* note 26, at 356 (noting that “Henry Ashton, Pat Federico, Giles Rich and Paul Rose . . . deserve respect and credit . . . for those endless hours that went into the effort”).

205. Federico, *supra* note 14, at 167.

206. Rich, *supra* note 36, at 66 (“[D]uring the next six months he proceeded to produce a proposed codification and revision, combining amending with codifying and at the same time including for consideration by the committee some more radical proposals, such as maintenance fees, patents of addition, etc.”).

207. See Rich, *supra* note 17, at 131; Rich, *supra* note 36, at 68–69 (“After digesting the materials received and exercising our own judgments thereon, we compiled lists of proposed changes on which we had the benefit of Mr. Federico’s comments. We also had a virtual third member of the Drafting Committee in Mr. Ashton. After two months of this revision work, Messrs. Ashton, Rich, and Rose met in Washington to consolidate their ideas, with the assistance of Mr. Federico.”).

208. See generally Rich, *supra* note 17, at 131 (describing the work of the Drafting Committee from 1950–1952).

2. *Good Judgment*

During this process the drafters also made thoughtful choices, exercising good judgment.²⁰⁹ For example, as Federico later explained, with respect to the old invention requirement, “the first intention was to state explicitly and separately the requirement in its own right and not as derivative from other expressions by strained meanings and fictions.”²¹⁰ Rich similarly explained that “[t]he first policy decision underlying § 103 was to cut loose altogether from the century-old term ‘invention.’”²¹¹ He went on to explain that “[i]t really *was* a term impossible to define, so [they] knew that any effort to define it would come to naught.”²¹² “Moreover, it was felt that so long as the term continued in use, the courts would annex to it the accretion of past interpretations, a feeling history has shown to be well founded.”²¹³

3. *Clarity*

In addition to hard work and good judgment, Federico and the Drafting Committee chose the concepts and the words describing them carefully, always seeking clarity. Thus, beyond avoiding the term “invention”²¹⁴ for the first sentence of what became § 103 they borrowed the term “obviousness” from proposals made by two

209. Frost, *supra* note 26, at 356 (“The 1952 Patent Code was brought into being only by the sustained effort of Judge Rich and others of the New York Patent Law Association over a period of some five years, and the support of others after about 1950 But success required something more—good judgment.”).

210. P.J. Federico, *Further Comments and Observations on the Origin of Section 103*, in NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY, 1:303 (John F. Witherspoon, ed., 1978).

211. Rich, *supra* note 88, at 26, 33–34.

212. *Id.* at 34.

213. *Id.*

214. See Rich, *supra* note 193, at 864–65 (“The presence or absence of ‘invention’ is not mentioned. The use of the term was, in fact, carefully avoided with a view to making a fresh start, free of all the divergent court opinions . . . about ‘invention.’”); Rich, *supra* note 20, at 1:189–91 (“All of the trouble people were trying to remedy by these bills attached to the undefinable term ‘invention,’ as the name of a third requirement for patentability. ‘Why don’t we get away from this troublesome term altogether?’ I asked. ‘Let’s not use it at all and say what we really mean, and speak in terms of a requirement for *patentability*, saying how it shall be determined.’”); *id.* at 1:189 (“The first change the Coordinating Committee made in the Federico draft of section 103—and I am sure it was my doing, no objections being heard—was to change the title so that it read ‘non-obvious subject matter’ instead of ‘lack of invention.’”).

witnesses in 1949.²¹⁵ Federico and the Drafting Committee carefully considered the words to describe this nonobviousness test.²¹⁶ The phrase “though the invention is not identically disclosed or described”²¹⁷ and the terms “identically,”²¹⁸ “ordinary,”²¹⁹ and “prior art”²²⁰ all received careful attention. Conceptually, moreover, the time, characteristics of the fictitious hypothetical person, and what must have been obvious were all carefully conceived and identified.²²¹

4. Flexibility and Willingness to Improve

The construction of the second sentence of what became § 103 likewise demonstrated good drafting in another sense: the fact that the drafters were willing to change their proposal significantly to improve

215. Rich, *supra* note 20, at 1:190 (“As to the source of the test of obviousness which he incorporated, he tells us in his new article [it] ‘. . . was a synthesis of numerous equivalent expressions which had been used and the words and phrases used had been frequently used and were in the common stock of patent law terminology. In fact at the 1949 hearings two witnesses made proposals which included the phrase “obvious to one skilled in such art.”’ The two witnesses were, as a matter of possible interest, Fritz Lanham of Lanham Act fame, by that time retired from Congress and lobbying for National Patent Council, an organization headed by Mr. Anderson of Anco windshield-wiper blade fame, an ardent promoter of a sound patent system, and a Mr. C.E. Beach, a consulting engineer.”).

216. See, e.g., Federico, *supra* note 210, at 1:303.

217. *Id.*

218. *Id.* (“The word ‘identically’ was inserted . . . to emphasize and sharpen the distinction between matters which are in fact anticipated and those which are not.”).

219. *Id.* at 1:304 (“The original wording referred to the ‘ordinary’ person skill in the art[,] . . . but the *ordinary* got shifted to a better place later on.”); Rich, *supra* note 20, at 1:191 (“The first paragraph was changed in substance only by placing the word ‘ordinary’ in its proper place and adding ‘at the time the invention was made.’”).

220. Rich, *supra* note 20, at 1:191 (“One last change, made by the Coordinating Committee at the suggestion of the Bar Association of the City of New York Patent Committee is worth noting. The versions of section 103 in the two bills preceding the final one referred back either to ‘the material specified in section 102’ or ‘the prior art set forth in section 102.’ It was proposed to change this reference to refer simply to ‘the prior art’ so as to include *all* prior art, not merely the anticipatory art named in section 102. That change was made.”).

221. *Id.* at 1:189–90 (“Federico’s first paragraph of draft section 23 . . . contains all of the elements of the first sentence of the present section 103 with the exception of restriction to the time the invention was made.”); Rich, *supra* note 88, at 34 (“The unobviousness is *as of a particular time* and to a *particular* legally fictitious, technical *person*, analogous to the “ordinary reasonable man” so well known to courts as a legal concept But *that* is not all; *what* must have been obvious is “*the subject matter as a whole*.”).

it.²²² Rich presented a counterproposal at one point suggesting that, to overrule *Cuno*, the sentence state that “patentability shall be determined by the nature of the contribution to the advancement of the art not by the nature of the process by which such contribution may have been accomplished.”²²³ Federico adopted it with some modifications.²²⁴ This counterproposal’s focus on “contribution to the advancement of the art,” however, later seemed to support “the statement in the concurring opinion of the *Great A & P* case in regard to pushing ‘back the frontiers of chemistry, physics and the like; to make a distinctive contribution to scientific knowledge.’”²²⁵ Thus, “it was not surprising to find growing support for transforming the phraseology (especially the elimination of the term ‘contribution’) of this second paragraph into the short, but pithy second sentence reading, ‘Patentability shall not be negated by the manner in which the invention was made.’”²²⁶ This change eliminated the danger that the prior language might be deemed a positive requirement of how patentability shall be determined and therefore restrict patentability, when the only goal was to eliminate the “flash of creative genius” test derived from *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*²²⁷

More generally and beyond changes impacting the substance of the legislation, the drafters proved to be flexible, incorporating changes that eliminated controversy, provided clarity, and dropped unnecessary language. The drafters, for example, made every effort “to compromise differences so as to remove as much controversy as possible about the bill and at the same time to preserve the

222. See Rich, *supra* note 20, at 1:189.

223. *Id.*

224. *Id.* (“Federico also tells us that his second paragraph was based on the N.Y.P.L.A.’s counterproposal o [sic] the Hartley bill and, indeed, he took that language with only one substantial change. He inserted the word ‘mental’ to modify the expression ‘process by which such contribution may have been accomplished.[.]’ (It was later removed.) He also pluralized ‘process.’ But notably he did not talk about ‘invention’ or any requirement therefore.”).

225. Harris, *supra* note 13, at 677 n.28.

226. *Id.*

227. Rich, *supra* note 20, at 1:191 (“The second paragraph, which became the second sentence of the present law, was considerably simplified. Its real purpose being to knock out ‘flash of genius’ holdings, there was no need for a positive statement saying how patentability *shall* be determined, a statement also felt to be dangerous as possibly restrictive, and it was reduced to a simple statement of how it shall *not* be *negated*.”).

substance.”²²⁸ In the end, Federico and the Drafting Committee also spent significant time polishing and refining their language.²²⁹ Later reflecting upon this effort, Rich remarked that “[t]he words of the statute are the tools of the law and should be kept clean and bright and sharp,”²³⁰ and that “[t]he ultimate reason for writing section 103 into the statutory law was that the requirement for invention was a lead razor which could not take an edge and could be nothing other than a blunt instrument. Section 103 was enacted as a much better tool for the job.”²³¹ Zinn and the Judiciary Committee contributed to the effort to seek clarity, as well as conciseness.²³² At the conclusion of those efforts, Zinn gave the resulting legislation high praise, stating his belief that “[t]he statutory patent law is one of the most concise and brief of all branches of federal legislation.”²³³

5. Adoption of Prior Judicial Standard

The drafters chose to adopt prior judicial standards rather than create new standards out of whole cloth. The obviousness rationale for denying patentability traces its origin at least to Thomas Jefferson in

228. Rich, *supra* note 36, at 74; *see also* Harris, *supra* note 13, at 660 (“[W]ith the help of the experts [the revisers] executed the delicate cutting and changing, always carefully maintaining the sound basic principles of our patent system.”); Federico, *supra* note 14, at 168 (“The preliminary draft was widely distributed and many reports were received by the Subcommittee. As a result of the comments received from the patent bar, the public and other interested groups, it was decided to omit many of the proposed changes as being obviously too controversial for inclusion in one bill. Taking into consideration the suggestions and criticisms and other comments which had been received, a bill was prepared and introduced in the 81st Congress, H.R. 9133, dated July 17, 1950. This bill was widely distributed (over six thousand copies were sent out) and again comments were solicited and received. As [a] result, the bill was revised and reintroduced in the 82nd Congress as H.R. 3760, April 18, 1951.”).

229. Rich, *supra* note 20, at 1:190 (“The final chapter of the writing of Section 103 was simply its polishing up and the refinement of language . . .”).

230. *Id.* at 1:192.

231. *Id.*

232. Giles S. Rich, *Selected Speeches of Giles S. Rich: The New York Patent Law Association*, 3 J. FED. CIR. HIST. SOC’Y 103, 105 (2009) (“The language has been cleared up. And according to modern practice, if a thing can be said in one word, it is not said in four or five. Charles Zinn, the codification counsel of the House Judiciary Committee contributed greatly to this simplicity . . .”); Harris, *supra* note 13, at 675 (“The Judiciary Committee attempted to express the subjective concept clearly and simply in as objective terms as possible.”).

233. Zinn, *supra* note 175, at 2509.

1791.²³⁴ In 1850, however, the Supreme Court “firmly grafted [the concept] onto the statute in the form of case law . . . in *Hotchkiss v. Greenwood*.”²³⁵ As explained by Rich, “[t]he gist of *Hotchkiss v. Greenwood* is that the Supreme Court, like Jefferson, sensed that Congress had not included in the statute a necessary limitation on the grant of patents and added that condition itself.”²³⁶ In adopting the nonobviousness test from *Hotchkiss*, the drafters selected one of many articulations of the standard of invention identified in the Supreme Court’s cases. This approach no doubt reduced the controversy associated with their proposal.²³⁷ Likewise, even the second sentence of what became § 103—or at least the idea behind it—found precedence in a decision of Justice Story in 1825.²³⁸ In *Earle v. Sawyer*, he explained that

[i]t is of no consequence whether the thing [claimed] be simple or complicated; whether it be by accident, or by long, laborious thought, or by an instantaneous flash of mind, that it is first done. The law looks to the fact, and not the process by which it is accomplished.²³⁹

This too likely reduced the sting of overturning *Cuno* given that it directly contradicted any requirement of a “flash of creative genius.”

234. Rich, *supra* note 88, at 28 (“By 1791 [Thomas Jefferson] had discovered that something was missing from the law; too many people were trying to patent trifles. So he proposed an amendment adding as a defense to a patent that ‘The invention is so unimportant *and obvious* that it ought not to be the subject of an exclusive right.’”).

235. *Id.* at 29.

236. *Id.*

237. By not expressly excluding other articulations of the standard of invention (other than the “flash of genius”), however, the drafters eventually encountered resistance to the exclusion of these other articulations. *See id.* at 36 (“When, as was the case with the ‘requirement for invention,’ the century’s accumulation of judicial precedents range from A to Z in strictness and Congress, looking at the situation under the guiding light of Kettering’s statement that *this is no yardstick and the greatest technical weakness of the patent system*, determines to make a yardstick and says the measure shall be ‘M,’ right in the middle of the range, it behooves everyone concerned with administering that law to follow the measure ‘M’ and to stop flitting about arbitrarily from A to Z, ignoring what Congress has done.”).

238. Federico, *supra* note 210, at 1:304 (“I should add a word about the second sentence of Section 103 . . . I will only add that the thought was not new in patent law. As long ago as 1825 Justice Story said: ‘It is of no consequence whether the thing be simple or complicated, whether it be by accident or by long, laborious thought or by an instantaneous flash of the mind, that it was done. The law looks to the fact, and not the process by which it was first done.’”).

239. *Earle v. Sawyer*, Fed. Case No. 4247; 4 Mason 1; 1 Robb Pat. Case 490 at 256 (D. Mass.) (Story, J.).

6. Adoption of an Objective Standard

Beyond adopting prior judicial standards, the drafters attempted to select a standard that did not permit purely subjective decision-making but instead channeled the analysis into questions with objectively verifiable answers.²⁴⁰ The invention requirement notoriously allowed for subjective decision-making.²⁴¹ According to Rich, “[e]veryone realized it was subjective.”²⁴² Indeed, “[t]he essence of being a patent lawyer or examiner—or a judge in a patent case—was to know an invention when you saw one.”²⁴³ This subjectivity, moreover,

left every judge practically scott-free [sic] to decide this often controlling factor according to his personal philosophy of what inventions *should* be patented, whether or not he had any knowledge of the patent system as an operative socioeconomic force. This was too great a freedom because it involves national policy which should be declared by Congress, not by individual judges²⁴⁴

As Rich also described, “[t]he requirement for ‘invention’ was the plaything of the judges who, as they became initiated into its mysteries, delighted to devise and expound their own ideas of what it meant, some very lovely prose resulting.”²⁴⁵ Indeed, “we went through periods of too much leniency and too much strictness, depending primarily, just as now, on what judges thought and the mood of country.”²⁴⁶

In the face of the subjective question of invention and these problems it created, the drafters (with the help of the House Judiciary

240. See Rich, *supra* note 88, at 31.

241. See *id.*

242. *Id.* (“What it all came down to, in final analysis, in the Patent Office or in court, was that if the Office or a judge was persuaded that an invention was *patentable* (after hearing all the praise by the owner and all the denigration by the opposition) then it *was* an ‘invention.’ How that decision was reached was rarely revealed. Everyone realized it was subjective.”).

243. *Id.* at 30 (“The requirement for ‘invention’ was at one and the same time a hard reality and a great mystery. Really, it was an absurdity You knew it by intuition, presumably from experience which, of course, judges passing on its presence or absence did not always have. The essence of being a patent lawyer or examiner—or a judge in a patent case—was to know an invention when you saw one yet there was no formal ordination. It was as easy as becoming a bird watcher. Judges, *ex officio*, were instant experts on the question.”).

244. Rich, *supra* note 193, at 865.

245. Giles S. Rich, *Principles of Patentability*, 28 GEO. WASH. L. REV. 393, 404 (1960).

246. Rich, *supra* note 88, at 31.

Committee) “attempted to express the subjective concept clearly and simply in as objective terms as possible.”²⁴⁷ The nonobviousness inquiry does just that; it requires the objectively verifiable identification of the prior art, differences between the prior art and the claimed invention, and level of ordinary skill in the technical field.²⁴⁸ “While the ultimate decision as to . . . what would be obvious to him is subjective, it is one definite proposition on which evidence can be adduced.”²⁴⁹

D. Legislative Stewardship

Another factor contributing to the success of reform efforts was legislative stewardship, and by that I primarily mean avoiding political intervention by opponents of the legislation and engaging in political intervention to win support for the legislation. As a preliminary matter, however, the avoidance of the appearance of politics no doubt contributed to the success of the reform efforts. Philip Swain, for example, has stated that “it was crucial that Congress initiated the bill itself: this lent the bill a great deal of credibility, and generally underscored the importance of the project.”²⁵⁰ Yet, as shown below, the lack of any appearance of politics should not be mistaken for the absence of politics. In the words of George Frost, “[l]egislation is politics. Politics is the art of the possible. The remarkable thing is that

247. Harris, *supra* note 13, at 675.

248. Rich, *supra* note 245, at 406 (“The question will, of course, be asked, ‘What difference does it make, it must still be a subjective decision?’ True, but now the statute provides a standard according to which the subjective decision must be made. There is a vast difference between basing a decision on exercise of the inventive or creative faculty, or genius, ingenuity, patentable novelty, flashes, surprises and excitement, on the one hand, and basing it on unobviousness to one of ordinary skill in the art on the other. It is possible to determine what art is involved, what type of skill is possessed by ordinary workers in it, and come to some conclusion as to what ‘ordinary skill’ would be at a given time. This may present knotty problems but it is a definite pattern of thinking and does not leave the Patent Office or the courts free to conclude that a thing is not patentable for any old reason and then stand on the proposition that something indefinable and impalpable called ‘invention’ was not involved. At least they have to talk in terms of obviousness to a man of ordinary skill in the art.”).

249. *Id.*

250. Swain, *supra* note 140, at 18.

the [Patent Act of 1952], with the significant legislative changes contained, was passed at all.”²⁵¹

1. *Avoiding Political Intervention*

On the one hand, legislative stewardship involved avoiding political intervention by opponents of the legislation. A motivating factor in Federico drafting the legislation—and thus one of the keys to the success of the entire enterprise—was fear that the Antitrust Division of the Department of Justice would draft it.²⁵² Rich later reported that Federico told Commissioner Kingsland, “[i]f we don’t get aboard this thing the Department of Justice Antitrust Division is going to do it and that would be a disaster.”²⁵³ It would have been a disaster because, in those days, the Department of Justice “was taking exactly the opposite position from the majority of the Bar, saying patents are monopolies and you can’t use patents to monopolize things that the patents don’t cover.”²⁵⁴ Thus, “Federico . . . accepted the task of codification . . . in part because he feared that if the Patent Office did not adopt the project, then the Department of Justice Antitrust Division would attempt to draft the codification[, which] would almost certainly have spelled the demise of contributory infringement.”²⁵⁵ Indeed, with respect to the attempt to overturn the *Mercoïd* cases and other issues, the main opponent was the Department of Justice and, in particular, its Antitrust Division.²⁵⁶ Nevertheless, the House committee relied upon the testimony of Rich

251. Frost, *supra* note 26, at 356; *see also id.* (“Plainly the authors of the Code had to be selective. They managed to make important changes, probably the most that could have been made at the time.”).

252. *See* Rich, *supra* note 17, at 126 (“[T]he Congressional Committee called up people who were there and said ‘Listen, we’ve got all these bills about patents so why don’t we take up Title 35 as our next codification project?’ . . . Federico . . . went back to the Commissioner and told him about this, and said, ‘Look, if the Patent Office doesn’t do this job, the Antitrust Division is going to do it. And we had better do it.’”); Rich, *supra* note 122, at 7 (“I have to rate P.J. Federico’s work on the Patent Act of 1952 as one of his greatest contributions, not only in his drafting of legislation but in his seizing the opportunity, when it was proposed in Congress, to keep the project in the hands of experienced patent lawyers.”).

253. Rich, *supra* note 17, at 130.

254. *Id.* at 128.

255. Swain, *supra* note 140, at 18.

256. *See* Harris, *supra* note 13, at 681 (noting the Department of Justice’s objection to the presumption of validity); *id.* at 693 (noting the Antitrust Department’s objection to the contributory infringement provision).

to reject the Antitrust Division's objection to the contributory infringement provisions in Federico's proposal.²⁵⁷

In addition to taking control of the drafting of the legislation—which also allowed for the close interaction of Ashton, Federico, Rose, and Rich with the House subcommittee counsel—the reformers also took advantage of a parliamentary strategy to avoid controversy and debate: they placed the bill on the consent calendar of the House and Senate.²⁵⁸ As explained by Philip Swain,

the fact that the bill was successfully placed on a consent calendar cut through much of the red tape that typically slows the progress of any given bill. Items on a consent calendar do not take a vote of the whole Congress, and there are no floor debates. Rather, those bills placed on a consent calendar pass automatically so long as none of the congressmen designated as “watchers” finds anything wrong with the bill. The fact that this bill was primarily a codification of existing law made the bill less conspicuous, and allowed it to pass in this way.²⁵⁹

While placing the bill on the consent calendar made it less conspicuous, “to get it enacted promptly without a long debate it had to be kept noncontroversial.”²⁶⁰

2. Engaging in Political Intervention

On the other hand, legislative stewardship also involved engaging in political intervention when necessary and appropriate. Two examples of political intervention will paint the proper picture.

257. *Id.* at 694 (“The committee, however, after much deliberation and after convincing itself that the enforcement of certain patents without resort to the doctrine of contributory infringement was practically impossible, included it in the statute.”).

258. *See* Smith, *supra* note 157, at 912 (“You got it on a Consent Calendar at the appropriate moment, and that meant no floor debate. It was because of this little technique that you got a new patent statute when you did.”). Rich later explained: “The consent calendar works this way—they have a half dozen watchers from each side of the aisle and when the bill comes up, if no watcher finds anything wrong with it, it gets passed automatically. There was no floor debate. It was never on the floor.” *See* Rich, *supra* note 17, at 132. For Congressman Crumpacker’s description of the use of the consent calendar, see S.J. Crumpacker, *The Patent Act of 1952—A Congressional Perspective*, in SUMMARY OF PROCEEDINGS, PATENT SYMPOSIUM, SECTION OF PATENTS, TRADEMARK AND COPYRIGHT LAW 140, 143–144 (American Bar Center, Chicago, 1962).

259. Swain, *supra* note 140, at 19.

260. Rich, *supra* note 88, at 35; Rich, *supra* note 17, at 132 (“You think that Congress enacted the Patent Act of 1952. Congress as a whole didn’t know a thing about the Patent Act of 1952. Most of them had never heard of it. Why? Because it was put on a consent calendar. It was a codification of the law. It wasn’t controversial. You didn’t take a vote of the whole Congress.”).

The first example relates to the political work necessary to start the legislative process. As George Frost explained, “[g]aining Congressional attention, getting the bills introduced, and motivating the hearings was no small accomplishment” given that “[m]any federal judges, officials in the Administration, members of Congress, and academics had no use for the patent system.”²⁶¹ Rich once told a story about how the reformists were able to have one of their bills introduced into Congress. A member of their group, Charlie Walker, had a friend named Cliff Case who was a member of the House of Representatives from New Jersey.²⁶² Walker and Rich took Case to lunch to explain the bill to him, after which he indicated “it looked good to him and he would be glad to introduce” it.²⁶³ Case, however, explained that bills were introduced “all the time but that doesn’t get you anywhere.”²⁶⁴ He proposed to “arrange a little function down in Washington and invite the members of the committees on patents to come to dinner” so that Walker and Rich could “explain [the] bill to them.”²⁶⁵ Rich explained what happened at the meeting:

So he set up the party at the Metropolitan Club and the Senate Committee on Patents Chairman was there and several members of the House Committee were there and we all came and we all had a few drinks and sat down to a good dinner. . . . Walker and [Robert] Byerly and I told about our bill. They put the bill down for a House hearing in about three weeks.²⁶⁶

The need to have this dinner and its success caused Rich later to remark that this “was [his] first legislative experience and lesson about how you really get things done . . . in Washington.”²⁶⁷

The second example relates to the political work necessary to end the legislative process by securing a final vote passing the relevant bill. Federico told the tale in bland terms, explaining that on July 3, 1952, a Senator objected to the final bill, removing it from the consent calendar and placing it as the bottom of the list of all pending bills, but on the next day, July 4, it “passed by unanimous consent, the Senator

261. Frost, *supra* note 26, at 345. As Frost explained, “[o]nly a small corps of relatively conservative individuals on Capitol Hill had the least interest in curtailing the onslaught.” *Id.*

262. See Rich, *supra* note 17, at 128.

263. *Id.*

264. *Id.*

265. *Id.*

266. *Id.* at 128–29. Walker, Byerly, and Rich drafted the bill seeking to overturn the *Mercoid* cases. *Hearings before Subcommittee No. 4 of the Committee on the Judiciary, on H.R. 3866, 81st Cong. 2* (1950).

267. Rich, *supra* note 17, at 128–29.

who had had it reconsidered not raising any objection.”²⁶⁸ Rich and Representative Shepherd J. Crumpacker of Indiana told the far more interesting, complete story.

Senator William Langer from North Dakota objected to the bill on behalf of a constituent “with a small dress shop or something like that who was trying to get a trademark registered and was having trouble with it.”²⁶⁹ In response, Federico contacted Senator Langer to explain that the constituent simply needed a good trademark lawyer; Senator Langer “took the lady and [Federico] to dinner [where Federico] . . . no doubt explained all the niceties of the trademark law . . . but more important at the moment . . . was able to explain the purposes of the Patent Act to the Senator”;²⁷⁰ Representative Crumpacker identified and called another constituent of Senator Langer in Wisconsin “from a pay station in the Capitol and while in a telephone booth undertook to explain the entire Patent Act to him”;²⁷¹ Ashton called clients in North Dakota and told them, “[f]or God’s sake get a hold of your Senator and tell him this is a good bill. It really ought to be passed”;²⁷² Representative Crumpacker “pressed into service Francis Thomas . . . a most resourceful gentleman,” in the hope of getting the bill taken up the next day;²⁷³ and Senator Wiley did put the bill back on the consent calendar the following day.²⁷⁴ “[T]his time Senator Langer, having been fixed up, kept quiet and the bill passed.”²⁷⁵

E. Article and Speaking Campaign

Another significant factor contributing to the success eliminating the invention requirement was the campaign, primarily by Federico and Rich, but to a lesser extent by others substantively involved with the drafting of the Patent Act of 1952, to write and speak about what exactly the legislation did and why. In his

268. Federico, *supra* note 14, at 169.

269. Rich, *supra* note 17, at 132.

270. Crumpacker, *supra* note 258, at 148.

271. *Id.*

272. Rich, *supra* note 17, at 132.

273. Crumpacker, *supra* note 258, at 148.

274. *See* Rich, *supra* note 17, at 132.

275. *Id.*; Rich, *supra* note 122, at 8 (“[W]hen one nameless Senator (out of deference to Pat’s dislike for embarrassing anyone in print, I omit his name) almost killed the Bill on July 3, . . . it was Pat who pacified him by solving a trademark problem which was bothering one of the Senator’s constituents so that he kept quiet on July 4 and let the bill go through. Pat called on him the next day to thank him.”).

characteristically understated way, Federico, writing in the third person although he was discussing his own activities, later explained that, “[a]fter the law was enacted, several of the persons involved gave talks or wrote articles explanatory of the new Title 35, Patents, of the U.S. Code.”²⁷⁶

1. *Federico, Zinn, and Harris*

Indeed, Federico wrote his influential Commentary,²⁷⁷ which was originally published in the annotated version of Title 35 by West Publishing Company.²⁷⁸ This Commentary, however, represented a compilation of numerous speeches Federico gave shortly after passage of the 1952 Patent Act. As explained in the Commentary itself, he gave “talks [ranging from] several series of three or four lectures covering the entire act in detail to single shorter ones for a more general nature or dealing with only particular phases of the act.”²⁷⁹ Federico gave these talks to the Los Angeles Patent Law Association, the Patent Law Association of Chicago, the New York Patent Law Association, the Patent Section of the American Bar Association, and the American Patent Law Association.²⁸⁰ Besides Federico, subcommittee counsel Zinn wrote his own commentary.²⁸¹ Subcommittee counsel Harris too wrote an article.²⁸² Significantly, in these articles and speeches, the writers stressed the important changes the Act had made to the law, including both replacing the invention requirement with the nonobviousness requirement and the elimination of the “flash of creative genius” test.²⁸³

276. Federico, *supra* note 27, at 96.

277. See generally Federico, *supra* note 14.

278. *Id.* at 161 n.*.

279. *Id.* at 162.

280. *Id.*

281. See generally Zinn, *supra* note 175.

282. See generally Harris, *supra* note 13.

283. Zinn, *supra* note 175, at 2512 (“There are several important changes of substance made in [Part II of the patent statute] with which the practitioner should become familiar.”); *id.* at 2513 (“The second sentence of this section providing that patentability shall not be negated by the manner in which the invention was made eliminates the ‘flash of genius’ concept that has been considered as an essential element of patentability since the *Cuno* case The patentability of an invention resulting from arduous experimentation will not be negated solely because it does not meet that concept.”); Federico, *supra* note 14, at 180 (“The Committee Report[s] state, in the general part, that one of the two ‘major changes or innovations’ in the new statute consisted in ‘incorporating a requirement for invention in section 103.’”); *id.* at 212 (“Paragraphs (b), (c) and (d) of section 271 are of considerable importance

2. Rich

Rich also spoke and wrote about the importance of the Act.²⁸⁴ Shortly after passage of the Act, he spoke to the New York Patent Law Association, explaining that “[s]ection 103 is one of those matters of major importance: The statutory inclusion of a requirement for invention That is not new law, but we have it here where the courts can’t crawl away from it.”²⁸⁵ He likewise stressed that “the last clause of Section 103 is intended to lay the ghost of the ‘flash of genius’ furor That is, long toil stands on an equal footing with flashes [of genius].”²⁸⁶

Almost all of Rich’s influential speeches and articles, however, came after 1956, when he became a judge on the Court of Customs and Patent Appeals. One of Judge Rich’s first significant speeches after he joined the bench, *Principles of Patentability*, took place in his hometown of Rochester, New York, as well as Dayton, Ohio, in 1959, and he published it the following year.²⁸⁷ Significantly, in that speech he explained that the 1952 Act eliminated the invention requirement to “free the law and lawyers from bondage to that old and meaningless term.”²⁸⁸ In 1963, he published another article, this one entitled

and the Committee Report characterizes them as one of the major changes or innovations in the title.”); Harris, *supra* note 13, at 674 n.62 (citation omitted) (“The Hearings on these bills in the 80th and 81st Congress indicate that they were drawn mainly to eliminate the so-called ‘flash of creative genius’ requirement and, as a result of a proposal made by The National Patent Planning Commission that a provision be enacted as a declaration of policy, they were intended ‘to lay down a reasonably understandable test by which inventions shall be judged.’”).

284. Swain, *supra* note 140, at 19 (“In the years following the passing of the Patent Act, Rich began a speaking-and-writing campaign aimed toward educating the patent lawyers and judges about the changes entailed by the Patent Act.”).

285. Rich, *supra* note 120, at 108.

286. *Id.* Rich, however, spent significantly more time discussing the codification of contributory infringement under § 271. *Id.* at 113–14.

287. See Rich, *supra* note 245, at 393 n.*.

288. *Id.* at 405 (“Nowhere in the entire act is there any reference to a requirement of ‘invention’ and the drafters did this deliberately in an effort to free the law and lawyers from bondage to that old and meaningless term. The word ‘invention’ is used in the statute only to refer to the thing invented. That is why the requirement of ‘invention’ should be referred to, if at all, only with respect due to that which is dead. . . . [W]hat we have today, and have had since January 1, 1953, is a requirement of *unobviousness*, rather than a requirement of ‘invention.’”); see also *id.* (“Though one may call section 103 ‘codification’ it took a case law doctrine, expressed in hundreds of different ways, and put it into statutory language in a single form approved by Congress. In such form it became law superior to that which may be derived from any prior court opinion.”). For a description of all Judge Rich’s speeches

*Congressional Intent—or, Who Wrote the Patent Act of 1952.*²⁸⁹ His purpose was “to convey an accurate picture of how the 1952 Act came to be written; who wrote it; how it was done; and the relative roles of the actual authors and the Congress” with the “hope[] . . . that the knowledge will be of practical use to patent practitioners in helping to keep the patent system on a straight and efficacious course.”²⁹⁰ Specifically, he sought to rebut the idea that the Act merely codified the invention requirement rather than eliminating it.²⁹¹ Then, the next year, in 1964, Judge Rich gave his most important speech, which while entitled *The Vague Concept of ‘Invention’ as Replaced by Section 103 of the 1952 Patent Act* has come to be known as the *Kettering Address*. Below I discuss the significance of the *Kettering Address* in the context of the Supreme Court’s 1966 decision in *Graham v. John Deere*.²⁹² For now, I merely note that, again, Judge Rich stressed the views of the drafters of the Act and, in particular, their intent, which was to replace the invention requirement with the nonobviousness requirement and to eliminate the “flash of creative genius” test.²⁹³

between 1959 and 1964, see John K. Witherspoon, “*Turning the Corner*”: A Tribute to Giles Sutherland Rich, 3 J. FED. CIR. HIST. SOC’Y 157, 158–59 (2009). For example, in 1960 and 1961 he gave speeches at the John Marshall Law School, at George Washington University Law School, and in Toledo, Ohio. *Id.*

289. See generally Rich, *supra* note 36.

290. *Id.* at 61–62.

291. This purpose is made clear in the conclusion of the article, where Judge Rich stated that

if legislative intent is to be found anywhere in the legislative body, it is in the views expressed by committees as found in their hearings and reports. That one legislator, who knows nothing of the details and who has only one vote, stands to ask one question of another legislator, who also knows nothing of the details and who gives a noncommittal answer, is no expression of “legislative intent.”

Id. at 77–78. Judge Rich made this statement to rebut the argument, which had been adopted by some courts, that the floor exchange indicated the Patent Act of 1952 merely codified the invention requirement. See *id.* at 76 n.21 (emphasis added) (describing this exchange and stating that “[a]ny senator or representative who got as far as reading the title of the bill would see it was a bill ‘to revise and codify the laws’”).

292. See *infra* Subsection I.F.2.

293. Rich, *supra* note 193, at 870 (“From the viewpoint of the writers of the law, [Judge Learned Hand’s] *Bausch & Lomb* opinion was the first to comprehend their true intent.”); *id.* at 869 (“[T]he 1952 Patent Act was intended by their fellow legislators to replace the ‘standard of invention’ . . .”); *id.* at 867–68 (“Following a phrase casually dropped by the Supreme Court in *Cuno v. Automatic*, in 1941, that ‘the new device, however useful it may be, must reveal the flash of creative genius,’ some courts took off on a quest for such a flash and, not finding it, invalidated patents.

Around the same time as the Supreme Court's decision in *Graham*, Judge Rich focused his efforts on ensuring the Patent Act of 1952 received proper application in the lower courts. To do so, from 1965 to 1971 he lectured to new judges about patent law at an orientation school run by the Federal Judicial Center.²⁹⁴ He also provided the new judges with written notes corresponding to his lectures, and these notes included several statements highlighting how the invention requirement had been replaced by the nonobviousness requirement.²⁹⁵

In the words of Donald Dunner, Judge Rich “labored heavily . . . to inject some clarity into a then very muddled patent law—substituting . . . the concept of obviousness . . . for the quite useless ‘invention’ standard”—and then “embarked on a crusade to educate his colleagues on the bench . . . as well as the members of the bar in the proper use and application of the patent law.”²⁹⁶ “Indeed, it was in his role as a teacher to bench and bar that he made some of his most significant contributions, not only through the opinions he wrote but through countless lectures he gave and articles he wrote creating the gospel according to St. Giles.”²⁹⁷

The last sentence of section 103 stopped this abruptly with the legislative command: ‘Patentability shall not be negated by the manner in which the invention was made.’”).

294. Frost, *supra* note 26, at 352 (“The generation of judges that was on the federal bench in 1952 was gradually replaced by new judges. The new judges attended an orientation school designed to acquaint them with the varied and important duties laid upon them. Judge Rich was instrumental in lecturing to the new judges.”); Hatch, *supra* note 164, at 152 (“He in turn shared his knowledge and intellect with students . . . as a lecturer on patent and copyright law as part of the Federal Judicial Center’s training program for newly appointed judges from the program’s inception in 1965 until 1971.”).

295. Giles S. Rich, *Seminars for Newly Appointed United States District Judges*, FEDERAL JUDICIAL CENTER, 1970 and 1971, 515–16 (citations omitted) (“NOTA BENE: 35 U.S.C. § 103 is a new *statutory replacement* of a *case law* rule, developed over a century, that to be patentable an invention must involve a mystical quality known as ‘invention.’ A century’s worth of opinions on the subject are still being cited but they are all obsolete, at least in their terminology. The judicial investigation today is to determine section 103 unobviousness, not the presence or absence of ‘invention.’ There is always *an* invention before the court; the issue is its *patentability*.”); *id.* at 532 (“Pitfalls to Avoid in Opinions Dealing With Patents . . . Talking of a standard of ‘invention’—standard is unobviousness.”); *id.* at 533 (“Avoid the expression ‘alleged inventions.’ There is always *an* invention, whether or not it is patentable. This hedging expression is a throwback to the pre-1953, pre-section 103 era when patentability required the presence of ‘invention’—that mystical something.”).

296. Dunner, *supra* note 158, at 71.

297. *Id.*

F. Judicial Recognition

As already mentioned, some of the speeches focused on educating judges. That was, of course, because the success of the effort to eliminate the invention requirement required judicial recognition. At first it did not look promising. Indeed, as Judge Rich later reported using a particularly dramatic metaphor naming the Act a bastard child, courts did not interpret § 103 consistently with the hopes and dreams of its drafters.²⁹⁸ Instead, undeterred, in case after case courts continued to apply the invention requirement.²⁹⁹ And then Learned Hand decided a case in 1955.

1. *Learned Hand*

As Judge Rich recalled, “[t]he very first judicial recognition of what was intended by § 103 was Judge Learned Hand’s opinion for the Second Circuit Court of Appeals in *Lyon v. Bausch & Lomb*.”³⁰⁰ In that opinion, Judge Hand confronted the question of whether the court “should construe § 103 as restoring the law to what it was when the Court announced the definition of invention, now expressly embodied in § 103, or whether we should assume that no change whatever was intended.”³⁰¹ Judge Hand noted that the invention would have been

298. Rich, *supra* note 20, at 1:203 (“This child of unknown parentage but many ancestors, was rejected, in its early days, by court after court with a passion akin to old-fashioned abhorrence of illegitimacy, especially of infants not of their own creation, and, with rather poor prospects of survival, was taken in and nourished by a kindly CCPA.”).

299. George Frost discusses three from 1953. Frost, *supra* note 26, at 348 (“Three decisions in 1953 illustrate the underwhelming reception the Code initially received.”); *see also* Gen. Motors Corp. v. Estate Stove Co., 203 F.2d 912, 915 (6th Cir. 1953) (“We fail to see the basis upon which the conclusion can be drawn, as argued by appellee, that the Patent Act of 1952 provides a new test of patentability, in so far as the issue of patentability in the instant case is concerned; and the legislative history appears to afford no support to appellee’s view that a new test as to ‘obviousness’ has been embodied in the Act.”); *In re O’Keefe*, 202 F.2d 767, 772 (C.C.P.A. 1953) (quoting *In re Bisley*, 197 F.2d 355, 363 (C.C.P.A. 1952)) (“[T]he conception of a new and useful improvement must be considered along with the actual means of achieving it in determining the presence or absence of invention.”); *New Wrinkle, Inc. v. Watson*, 206 F.2d 421, 422 (D.C. Cir. 1953) (“Nothing in these slight variations in procedure is sufficient to give rise to invention. Our conclusion would be the same under any plausible view of the criteria for invention laid down by the new Patent Act which became effective while this appeal was pending.”).

300. Rich, *supra* note 88, at 36 (citing *Lyon v. Bausch & Lomb Optical Co.*, 224 F.2d 530 (2d Cir. 1955)).

301. *Lyon*, 224 F.2d at 535.

valid “twenty or thirty years ago . . . [under] the accepted standards of that time,” but within twenty or twenty-five years before the Act of 1952 “it is almost certain that the claims would have been held invalid.”³⁰² After recognizing that the requirement of “‘invention’ became perhaps the most baffling concept in the whole catalogue of judicial efforts to provide postulates for indefinitely varying occasion,” Hand concluded that “a legislature, whose will the courts have undertaken to proliferate, must be free to reinstate the courts’ initial interpretation, even though it may have been obscured by a series of later comments whose upshot is at best hazy.”³⁰³

Judge Hand’s decision turned heads and met criticism.³⁰⁴ But he stuck to his guns. Five years later, in 1960, he issued another opinion, this one in *Reiner v. I. Leon Co.*, reaffirming his earlier analysis and indicating that he understood the underlying reason for § 103,³⁰⁵ “to change the slow but steady drift of judicial decision that had been hostile to patents.”³⁰⁶ “Congress deliberately meant to restore the old definition,” said Hand, “and to raise it from a judicial gloss to a statutory command.”³⁰⁷ Beyond recognizing what Congress did, he also provided a compelling analysis of the nonobviousness of the claimed invention he confronted, reversing a finding of invalidity.³⁰⁸

In his *Kettering Address*, Judge Rich later praised these opinions as “realistically apprais[ing] and appreciat[ing] what section 103 had

302. *Id.* at 534–35.

303. *Id.* at 536–37.

304. *See Patents—In General—Prior Inventor’s Early Abandonment of Invention Prevents Finding of a Public Use; Patent Act of 1952 Held to Repudiate Recent Supreme Court Standards of Inventiveness*, 69 HARV. L. REV. 388, 390–91 (1955) (“The court in the instant case assumed that these Supreme Court decisions had replaced the standards of *Hotchkiss v. Greenwood* with stricter, if undefined, criteria; but it held that the earlier standards were restored by the 1952 act. It seems more likely, however, that the recent Supreme Court cases reflect a change of attitude in applying the standards rather than a change in the standards themselves Although § 103 . . . abolished the ‘flash of genius’ test if it ever existed, that test was not in issue in the present case. It is doubtful that § 103 made any other changes in the standard of inventiveness It is difficult to see why Congress would adopt the standard utilized by the Supreme Court and at the same time would tacitly repudiate the Court’s recent application of that standard.”); *see also 1952 Patent Act Held to Change Standard of Invention*, 55 COLUM. L. REV. 1231, 1234 (1955) (“In spite of the hope expressed by the Revisor the new standard of invention has not been helpful in clarifying the law. It appears to have caused even more confusion than existed previously since no other court has agreed with the instant court in its interpretation.”).

305. *See Rich, supra* note 88, at 37.

306. *Reiner v. I. Leon*, 285 F.2d 501, 503 (2d Cir. 1960).

307. *See id.*

308. *See id.* at 503–04.

done, namely, to restore the law to what it had been 20 or 30 years earlier.”³⁰⁹ Despite Judge Hand’s desire for the Supreme Court to take one of his cases to resolve the issue he addressed, it did not do so.³¹⁰ Thus, while helpful, nationwide recognition of the elimination of the invention requirement would have to wait.

2. *Graham v. John Deere Co.*

Instead of granting review in one of Judge Hand’s cases, the Supreme Court later granted certiorari in 1965 in four cases involving three patents. Then, in 1966, the Court issued two opinions in these cases, one entitled *Graham v. John Deere* and the other *United States v. Adams*.³¹¹ The opinion in *Graham* in particular represented somewhat of a triumph for the patent bar and the drafters of the Patent Act of 1952.

The opinion begins by stating the Court’s ultimate conclusion: “[T]he 1952 Act was intended to codify judicial precedents embracing the principal long ago announced by this Court in *Hotchkiss v. Greenwood*, and . . . while the clear language of § 103 places emphasis on an inquiry into obviousness, the general level of innovation necessary to sustain patentability remains the same.”³¹² Moreover, the Court stated that “[i]t is the duty of the Commissioner of Patents and of the courts in the administration of the patent system to give effect

309. Rich, *supra* note 193, at 869–70; *see also* Frost, *supra* note 26, at 348–49 (quoting *Lyon v. Bausch & Lomb Optical Co.*, 224 F.2d 530, 537 (2d Cir. 1955)) (“Perhaps the most noteworthy early opinion was that of Judge Learned Hand in *Lyon v. Bausch and Lomb*. Judge Learned Hand in this decision pointed out that a more strict test of patentability appeared to exist in the recent Supreme Court decisions, concluded that Section 103 restored the state of the law to that of an earlier day when the Supreme Court was less strict, and would end up observing that ‘[c]ertainly a legislature whose will the courts have undertaken to proliferate, must be free to reinstate the courts’ initial interpretation, even though it may have been obscured by a series of late comments whose upshot is at best hazy.”).

310. *See* Rich, *supra* note 193, at 870.

311. *See generally* *Graham v. John Deere Co.*, 383 U.S. 1 (1966); *United States v. Adams*, 383 U.S. 39 (1966).

312. *Graham*, 383 U.S. at 3–4 (citation omitted). This statement contradicted Federico’s commentary. Federico, *supra* note 14, at 183 (“While it is not believed that Congress intended any radical change in the level of invention or patentable novelty, nevertheless, it is believed that some modification was intended in the direction of moderating the extreme degrees of strictness exhibited by a number of judicial opinions over the past dozen or more years; that is, that some change of attitude more favorable to patents was hoped for. This is indicated by the language used in section 103 as well as by the general tenor of remarks of the Committees in the reports and particular comments.”).

to the constitutional standard by appropriate application, in each case, of the statutory scheme of the Congress.”³¹³ In both respects, the patent bar had room to fear that lower courts would find that § 103 did not really eliminate the invention requirement.

The remainder of the opinion, however, provided more hope. The Court explained that “[t]he major distinction is that Congress has emphasized ‘nonobviousness’ as the operative test of the section, rather than the less definite ‘invention’ language of *Hotchkiss* that Congress thought had led to ‘a large variety’ of expressions in decisions and writings.”³¹⁴ The Court, furthermore, pointed out that “[i]n the title itself the Congress used the phrase ‘Conditions for patentability; non-obvious subject matter,’ thus focusing upon ‘nonobviousness’ rather than ‘invention.’”³¹⁵

The opinion also made clear that there was no “flash of creative genius” test.³¹⁶ The Court found it “apparent that Congress intended by the last sentence of § 103 to abolish the test it believed this Court announced the controversial phrase ‘flash of creative genius,’ used in *Cuno*.”³¹⁷ In a somewhat throwaway line in a footnote, the Court explained that, “[a]lthough some writers and lower courts found in the language connotations as to the frame of mind of inventors, none were so intended.”³¹⁸

The opinion then laid out a four-part test to determine obviousness:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.³¹⁹

Immediate reaction to the Supreme Court’s decisions reflected skepticism that patents would survive the nonobviousness test embraced in the decisions, yet hope that the Court and the Patent

313. *Graham*, 383 U.S. at 6.

314. *Id.* at 14.

315. *Id.* (emphasis omitted).

316. *Id.* at 15.

317. *Id.*

318. *Id.* at 15 n.7.

319. *Id.* at 17–18.

Office would both apply nonobviousness as a uniform standard.³²⁰ That said, in 1966 the Patent Office finally stopped referring to the “requirement of invention.”³²¹

Later, Judge Rich would state that “[a]ll things considered, § 103 fared well” in these cases.³²² In his view, “[t]he most important question answered in *Graham* was whether § 103 replaced ‘invention’ as a test for patentability, so that it is legally dead.”³²³ As he read the opinions, “[t]he answer is ‘Yes.’”³²⁴ He explained, “The circumstantial evidence of this is that . . . the Supreme Court applied no other test, deciding the validity of the patent in each case according to the obviousness inquiry specified in § 103.”³²⁵ In short, there was reason to think that the invention requirement was not, in fact, legally dead.

3. Anderson’s-Black Rock and Sakraida

As it turned out, the invention requirement was not really dead, and there was more work to do. In two cases decided by the Supreme Court in the next decade—*Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*³²⁶ and *Sakraida v. Ag Pro, Inc.*³²⁷—the Court injected

320. See Charles R. Haworth, *Patents—Patentability—Section 103 of the Patent Act of 1952 Construed*, 44 TEX. L. REV. 1405, 1409–10 (1966) (“The decisions in the principal cases bring little comfort to those who believe that the Supreme Court is steadily eroding the value of a patent system by striking down nearly every patent to come up for review. The Court’s opinion does, however, enable the lower courts to apply more uniform tests in litigation. . . . Perhaps, as the Court hoped, the direction of inquiry toward nonobviousness will also bring an end to the ‘notorious difference’ in the standards applied by the Court and the Patent Office.”).

321. Swain, *supra* note 140, at 19 (“Even the Patent Office found it hard to accept the fact that the ‘invention’ test for patentability had been replaced with a ‘non-obviousness’ standard. It was not until 1966 that the Patent Office stopped referring to ‘invention’ as the test for patentability.”).

322. Rich, *supra* note 88, at 37. Another later commentator declared that “in that moment it appeared that a century of patent law confusion had come to an end.” Robert T. Edell, *The Supreme Court and Section 103*, 5 APLA Q.J. 99, 99 (1977) (“On February 21, 1966, some fourteen years after the enactment of Title 35, United States Code, the Supreme Court of the United States entered its decisions in the now-famous ‘trilogy’ of patent cases, and in that moment it appeared that a century of patent law confusion had come to an end.”).

323. Rich, *supra* note 88, at 40.

324. *Id.*

325. *Id.*

326. See generally *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969).

327. See generally *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976).

uncertainty into the nonobviousness analysis in part by seeming to continue to apply the invention requirement.

In *Anderson's-Black Rock*, the Supreme Court's opinion referred to the "question of invention," stated that filling a long-felt want and enjoying commercial success "without invention" will not make patentability, and concluded that the use of old elements in combination "was not an invention by the obvious-nonobvious standard."³²⁸ The Court also stated that no "synergistic result is argued here."³²⁹

In *Sakraida*, the Court's opinion likewise stated that "[i]t has long been clear that the Constitution requires that there be some 'invention' to be entitled to patent protection" and quoted *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.* twice for the proposition that courts must be careful with combination patent claims to "find[] invention" because "without invention" there is not patentability.³³⁰ And the Court again referred to the issue of synergy.³³¹

In response, Judge Rich returned to his speaking and writing crusade. After *Anderson's-Black Rock*, he gave a speech and published a paper entitled *Laying the Ghost of the 'Invention' Requirement*.³³² After *Sakraida*, he gave a speech and published a paper entitled *Why and How Section 103 Came to Be*.³³³ In both of these efforts he continued his work to eliminate the confusion regarding the elimination of the invention requirement.³³⁴ He downplayed the significance of the Supreme Court's two recent cases.³³⁵ He pointed out that the Ninth Circuit had

answered the argument that [a] patent was invalid for failure to meet the [synergy] test by saying that that contention suggests an analytical approach directly contrary to § 103 which, carried to its logical conclusion, would

328. *Anderson's-Black Rock, Inc.*, 396 U.S. at 60–63.

329. *Id.* at 61.

330. *Sakraida*, 425 U.S. at 279–83.

331. *See id.* at 282.

332. *See generally* Rich, *supra* note 88.

333. *See generally* Rich, *supra* note 20.

334. Rich, *supra* note 88, at 27 ("I am discussing it again because I and many others see that confusion remains rampant in the courts and has arisen even in the Supreme Court, which fact is creating even more confusion in the lower courts.").

335. *Id.* at 44 ("I do not believe the Supreme Court sees the inconsistencies between *Graham* and *Black Rock* that get patent lawyers so excited and I think that if it ever has to resolve the matter it will stick with *Graham* and say—for face-saving reasons—that *Black Rock* is really to the same effect.").

preclude the patenting of virtually every mechanical or electrical device since they are all combinations of old elements.³³⁶

He also sought to focus attention back on *Graham*.³³⁷

Furthermore, Judge Rich countered the expressed views of other judges, such as Judge Edwards of the Sixth Circuit, who in 1977 publicly disagreed with Judge Rich, saying “the requirement of invention for patentability is alive and well in the Supreme Court of the United States, and as a consequence, in all of the federal courts—and the Patent Office.”³³⁸ In response, Judge Rich gave a speech and wrote a paper entitled *Escaping the Tyranny of Words—Is Evolution in Legal Thinking Impossible?*³³⁹ In it, he tried a new approach to “illuminating the darkness out of which sprang” Judge Edwards’ statements,³⁴⁰ explaining that he did “not believe that the requirement for ‘invention’ is very much alive in the Supreme Court because, when

336. *Id.* at 44–45.

337. Rich, *supra* note 20, at 1:203 (“At the tender age of 14 [section 103] was adopted by a kindly Supreme Court. A few years later, upon discovering that it was a bastard, the Court decided it would at least have to change the name of the child, if it was to stay in the family, from unobviousness to synergism, thus covering up its natural origins with a pretense of legitimacy.”).

338. George Edwards, *That Clumsy Word “Nonobviousness”*, in NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY 3:204, 3:208 (John F. Witherspoon, ed., 1978) (“I supposed Judge Rich would, at least in theory, subscribe to all of what I have just said. But, nonetheless, as I read him, he appears to assert two propositions with which I cannot agree . . . I suggest then that the requirement of invention for patentability is alive and well in the Supreme Court of the United States, and as a consequence, in all of the federal courts—and the Patent Office.”).

339. Giles S. Rich, *Escaping the Tyranny of Words—Is Evolution in Legal Thinking Possible?*, in NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY 3:301, 3:303–04 (John F. Witherspoon, ed., 1978) (citations omitted) (“A principal reason Mr. Dunner asked me here today was a speech before a group of patent lawyers last November in Washington by a U.S. Court of Appeals judge entitled ‘That Clumsy Word “Nonobviousness”!’ We who heard it suffered instant shock from the realization which he brought home to us, that a high federal judge, who properly felt bound to follow the Supreme Court’s pronouncements, believed notwithstanding the 1952 Patent Act and *Graham v. John Deere*, that ‘[t]he requirement of invention for patentability is alive and well in the Supreme Court of the United States, and as a consequence in all of the federal courts—and the Patent Office,’ and that ‘[t]he elements of novelty, utility and non-obviousness . . . constitute the statutory definition of “invention,”’ and that [there is a synergism requirement.]”).

340. *Id.* at 3:304 (“Oh, the tyranny of words! And the most tyrannical of all are those related words ‘inventor,’ ‘invention,’ ‘invents,’ and ‘invented.’ I can’t help wondering what those terms mean to the good judge and why they have such a magical power over him that he deems ‘nonobviousness’ to be a ‘clumsy’ word by comparison. How does one go about illuminating the darkness out of which sprang the statements I have quoted? I have tried it before, apparently with something less than total success, so I will try a new approach.”).

one follows the carefully considered dictates of the Court, that old requirement will be seen to have been substituted in the statutory requirement for nonobviousness.”³⁴¹

Ultimately all of Judge Rich’s hard work paid off. While synergism was “threatening to become a fourth requirement of patentability”³⁴² and “created confusion in many circles, that is now a thing of the past In short, the fruit of Judge Rich’s labors has withstood the test of time.”³⁴³

G. Fortuity

In addition to all of the other factors, fortuity played a role in the success of the legislative reform efforts.

1. *Timing of Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*

The first fortuity was the coincidence of the issuance of the Supreme Court’s opinions in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.* and the meetings of the Drafting and Coordinating Committees.³⁴⁴ As discussed above, the day the opinions were published in the *New York Times* they were read to the Drafting Committee, and they ultimately persuaded the Coordinating Committee meeting the next day to replace the case law’s invention

341. *Id.* at 3:324.

342. Janice M. Mueller, *An Interview with Judge Giles S. Rich, U.S. Court of Appeals for the Federal Circuit*, 9 FED. CIR. B.J. 75, 76 (1999) (“Back in 1978, ‘synergism’ was threatening to become a fourth requirement of patentability in addition to the trio of novelty, utility, and nonobviousness, or at least an unnecessary complication of the nonobviousness requirement, due to the erroneous thinking of some judges.”).

343. See Witherspoon, *supra* note 288, at 160–61. Judge Rich continued to speak and write about § 103 the rest of his life. See, e.g., Giles S. Rich, *Foreword*, PRINCIPLES OF PATENT LAW (1998) (“Section 103 had no statutory predecessor and replaced a judge-made case law requirement for the presence of ‘invention.’ It was sort of mystery. The Supreme Court once said that invention could not be defined. The requirement realistically said nothing more than to be patentable an invention had to be the result of invention, a sort of ‘you know it when you see it’ proposition. Beware, therefore, of opinions prior to January 1, 1953, when the act took effect, and to be safe, for a decade thereafter, because the courts, the Patent Office, and many lawyers were slow to take in the effect of Section 103. Old habits of thought are broken slowly.”).

344. See Rich, *supra* note 88, at 32.

requirement with a statutory nonobviousness requirement.³⁴⁵ There are at least two other important fortuities.

2. Coincidence

A second example of fortuity was the coincidence that the same subcommittee of the House Committee on the Judiciary held responsibility for both the revision of law (which included the codification of statutes) and legislation related to patents.³⁴⁶ As explained by Philip Swain, “[w]hile codification could have involved (as it often does) simply collecting existing statutes and laws, and unifying them without significant alteration, in this case,” given the subcommittee’s responsibility for patent legislation, “codification offered the opportunity for the Patent Office to propose important changes to the corpus of patent law.”³⁴⁷

3. Charles Reed

The third instance of fortuity relates to the Supreme Court’s first opinion interpreting the nonobviousness requirement, *Graham v. John Deere Co.*, in 1966.³⁴⁸ The Court granted certiorari in the case on January 18, 1965,³⁴⁹ and in its companion cases, *Calmar, Inc. v. Cook Chemical Co.*, *Colgate-Palmolive Co. v. Cook Chemical Co.*, and *United States v. Adams*, on March 29, 1965.³⁵⁰ On April 19, within

345. See Rich, *supra* note 88, at 32.

346. Federico, *supra* note 27, at 88 (“In 1949 and for a few years thereafter, the same Subcommittee of the House Committee on the Judiciary (Subcommittee No. 4, number later changed to 3) was in charge of the subject of revision of the laws as well as patents.”); Rich, *supra* note 36, at 64 (“It was a fortuitous circumstance that the same subcommittee (then known as Subcommittee No. 4 and later changed to No. 3) had jurisdiction over both patents and the revision of the laws.”); Harris, *supra* note 13, at 658 (“By a fortunate circumstance, the Patent, Trade-mark and Copyright Subcommittee of the House Judiciary Committee was also charged with this revision function”); Zinn, *supra* note 175, at 2508 (“During that Congress it was suggested that the patent laws be revised and Title 35 reenacted with such revisions especially in view of the fact that the House Committee on the Judiciary—which had succeeded to the functions of the Committee on Revision of the Laws under the Legislative Reorganization Act of 1946—had jurisdiction of revision of statutes and of legislation relating to patents.”).

347. Swain, *supra* note 140, at 18.

348. See generally *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

349. See *Graham v. John Deere Co.*, 85 S. Ct. 652 (1965) (granting certiorari).

350. See *Calmar, Inc. v. Cook Chem. Co. & Colgate-Palmolive Co. v. Cook Chem. Co.*, 85 S. Ct. 1082 (1965) (granting certiorari and consolidating cases); *United States v. Adams*, 85 S. Ct. 1090 (1965) (granting certiorari).

three weeks of the last grant of certiorari, Supreme Court Justice Tom Clark offered a clerkship to Charles Reed, a law student at South Texas College of Law.³⁵¹ Reed held undergraduate and graduate degrees in chemical engineering and fluid mechanics and obtained experience prior to law school as a research chemical engineer.³⁵² Moreover, while in law school and indeed at the same time he obtained his offer to clerk for Justice Clark, Reed “studied patent law . . . in a course taught by Tom Arnold of Houston, Texas.”³⁵³ “According to Mr. Arnold, a thorough understanding of the ‘Kettering Address’ was required to obtain a passing grade in his course.”³⁵⁴

At this point it is important to know more about the *Kettering Address*. In 1963, the Patent, Trademark, and Copyright Research Institute of the George Washington University awarded Judge Rich the Charles F. Kettering Award,³⁵⁵ and in 1964 Judge Rich gave what is now known as the *Kettering Address* as his acceptance speech.³⁵⁶ Importantly, the *Journal of the Patent Office Society* published the speech as an article in December 1964.³⁵⁷ Philip Swain has called this speech and article “[p]erhaps the most important speech and article” ever given and written by Rich.³⁵⁸ Swain made this sweeping statement because, as explained by John Witherspoon, “a comparison of the *Graham* opinion [authored by Justice Clark] with the ‘Kettering Address’ leaves little doubt that Judge Rich’s thinking had a profound influence on the Court.”³⁵⁹

351. See Letter from Charles D. Reed to Elden S. Magaw (Apr. 19, 1965) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

352. See Charles A. Reed, *Kile Park Reed & Houtteman PLLC*, <https://www.kilepark.com/charles-reed> [<https://perma.cc/MU6X-H7XN>].

353. See Witherspoon, *supra* note 288, at 160.

354. *Id.* For a detailed description of how Arnold, upon learning that Reed would serve as a law clerk for Justice Clark, assigned and stressed the importance of memorizing the *Kettering Address* to Reed in the last patent law class of the semester, see Tom Arnold, *My Friend, Giles Rich*, 9 FED. CIRCUIT B.J. 39, 45–48 (1999). Reed later expressed surprise to learn that his “role was more like that of the robot R2D2 from the movie Star Wars. I was preconditioned and programmed, sent forward to the Supreme Court to get the word across. The ‘word,’ of course, was what was truly intended by the drafters of Section 103.” Charles D. Reed, *Some Reflections on Graham v. John Deere Co.*, in NONOBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY 2:301, 2:301 (John F. Witherspoon ed., 1978).

355. See Swain, *supra* note 140, at 22, 29.

356. See John F. Witherspoon, *A Tribute to Judge Giles S. Rich*, 2 (2017) <https://cpip.gmu.edu/wp-content/uploads/sites/31/2017/04/Witherspoon-A-Tribute-to-Judge-Giles-S-Rich.pdf> [<https://perma.cc/ZM2C-T4HT>].

357. See generally Rich, *supra* note 193.

358. Swain, *supra* note 140, at 22.

359. Witherspoon, *supra* note 288, at 160.

While Witherspoon may have had little doubt in that regard, the Supreme Court's opinion in *Graham v. John Deere Co.* does not cite the *Kettering Address* or, for that matter, any other text written by Rich.³⁶⁰ Nevertheless, I have been able to confirm Rich's influence on the four-part test articulated in *Graham*. I visited the law library at the University of Texas and found two handwritten pages of notes on yellow legal paper in Justice Clark's files entitled "Judge Giles Rich CCPA Kettering Address."³⁶¹ Indeed, beyond summarizing many of Judge Rich's views articulated in the *Kettering Address*, it is particularly noteworthy that the notes paraphrase in full Judge Rich's four-part test from footnote 36 of the *Kettering Address* printed in the December 1964 issue of the *Journal of the Patent Office Society*.³⁶² The text of the *Graham* opinion articulates a strikingly similar four-part test.³⁶³

Justice Clark's papers also include a list of references, the first fifteen of which are clearly drawn from the *Kettering Address* given

360. *See id.*

361. Notes on Judge Giles Rich CCPA *Kettering Address* (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

362. *See id.* ("Suggested approach—§ 103 itself (1) What are diff. between the 'invention' and 'prior art'? (2) What is disclosed by prior art presumed to have been available to the inventor[?] (3) What was the level of ordinary skill in the art at the time the invention was made? (4) Other fact issues related to *circumstances* indicative of the presence or absence of obviousness, traditionally taken into account in determining 'invention,' such as long-felt need, immediate copying, sudden displacement of existing practices or devices, difficulty of achievement, failure of others, etc. Once these *facts* have been assembled, there remains the ultimate staty' reqmnt of nonobviousness, the 3rd reqmnt for pat'bility which becomes a matter of statutory *application* and *as such* must be a question of law.").

363. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966) (citation omitted) ("While the ultimate question of patent validity is one of law, the § 103 condition, which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy."). An early draft of the opinion comes even closer to Rich's four steps; handwritten edits indicate to reverse the order of the first two steps. *See Early Draft Reversing Steps 1 and 2 of 4 Part Test* (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

the order and citations.³⁶⁴ This list includes two other articles written by Rich.³⁶⁵ An early draft of the opinion included in Justice Clark's files cites two of these references identified in the list, one by Rich (but not the *Kettering Address*) and one by Federico.³⁶⁶ These citations were removed from the opinion, however, in response to two memos from Justice Hugo Black, the last criticizing Justice Clark for relying upon statements of the drafters of the Patent Act of 1952.³⁶⁷

Given these findings, there is no doubt that Rich's *Kettering Address*, as well as some of his other articles, did indeed influence the Supreme Court's resolution of *Graham v. John Deere Co.*, helping the Court to form the four-part test expressed in the opinion. Arnold, Reed's professor, would later report based on statements by Justice Clark that the *Graham* and *Adams* "opinions, at least essentially, were not by Justice Clark, but by Charles Reed, who put as much of Giles Rich into them as a law clerk could, as I had indirectly sort of taught him he should."³⁶⁸ Certainly without the publication of the *Kettering Address* in December 1964, Reed taking Arnold's patent law course in the spring of 1965, Arnold's assignment of the *Kettering Address*, or Reed's clerkship—indeed any one of this series of events or another series of events described by Arnold³⁶⁹—there is no telling if the Court

364. See List of References (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

365. See *id.* (identifying, *inter alia*, "Principles of Patentability, Rich 28 Geo. Wash. L. Rev. 393, 42 JPOS 75"; "Rich, Congressional Intent—Or, Who Wrote the Pat Act of 1952, 11 Pat. Procurement and Exploitation, BNA 1963, pp. 61-78").

366. See Citations in Early Draft (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin) (citing Rich, *supra* note 36, at 61-78; "Frederico [sic], Commentary on the New Patent Act, in 35 U.S.C.A. 1, at 19-23").

367. See Memorandum from Justice Hugo Black to Justice Clark (Jan. 11, 1966) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin) ("In view of the language and history of the patent laws, I cannot treat the term 'invention' as a 'Gossamer' or 'illustive' [sic] concept which Congress could ignore or repudiate at will. It has been given substance, solidity and precision for more than 150 years in the Constitution, statutes, court opinions, and administrative actions. I cannot believe that the 1952 Congress intended to scuttle this well-established test and substitute a far less exacting one than the Constitution requires. And, incidentally, I think it would be very unwise to attribute such a revolutionary prospect to Congress on the basis of what patent lawyers or commentators, or even Congressmen said about the 1952 Act after it had already been passed.").

368. See Arnold, *supra* note 354, at 48.

369. See *id.* ("Out of such coincidences as a Justice Department liaison, becoming a trial lawyer and a law professor, being in trial in Dallas, when a Supreme Court justice visited, a trial judge's invitation to meet the justice, the professor having a unique student then in his class, who had memorized what Giles Rich has written,

would have understood the basis for the legislative intervention that occurred in 1952, the long-felt need for improvement, the problems emanating from the Court with respect to the invention requirement, the depth of the confusion related to it, and the sense of urgency that all motivated those who drafted the Patent Act of 1952.³⁷⁰

There is, however, reason to think that the Supreme Court's opinion in *Graham v. John Deere Co.* might have been substantially different without Rich's influence. The final opinion issued by the Supreme Court includes points and language reminiscent of Rich's discussion of various issues examined, not only in the *Kettering Address* but also in one of Rich's other articles cited in the early draft, *Principles of Patentability*. For example, beyond articulating a similar four-part test, the Court's opinion, like the *Kettering Address*, identifies nonobviousness as the third requirement of patentability.³⁷¹ The Court's opinion, moreover, like *Principles of Patentability*, understands the Constitution to identify the purpose behind the patent system as being "[t]o promote the progress of . . . useful Arts," without including the term "science."³⁷²

. . . out of such a series of coincidences was the patent system saved from what Giles and I had perceived as almost certain oblivion for some indeterminate but long time.").

370. While Reed may have called Justice Clark's attention to the *Kettering Address* and worked to ensure the Court's opinion in *Graham* included a version of the four-part test it advocated, an amicus brief filed by the Dean Page Keeton and Professor E. Ernest Goldstein from the University of Texas, curiously titled "Brief Amicus Curiae in Support of 35 USC 103," attached the *Kettering Address* as an exhibit. Brief Amicus Curiae in Support of 35 USC 103, *Graham v. John Deere Co.*, 383 U.S. 1 (1966) ("[W]e attach hereto as Appendix A, and respectfully urge detailed study and consideration of, 'The Vague Concept of Invention as Replaced by Sec. 103 of the 1952 Patent Act,' delivered by Judge Rich in June 1964 on the occasion of his accepting the Kettering Award from the Patent Trademark and Copyright Foundation of the George Washington University.").

371. Compare *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) ("The Act sets out the conditions of patentability in three sections. An analysis of the structure of these three sections indicates that patentability is dependent upon three explicit conditions: novelty and utility as articulated and defined in § 101 and § 102, and nonobviousness, the new statutory formulation, as set out in § 103."), with Rich, *supra* note 193, at 866 ("I would like to inject a new term into the language so we can discuss the matter rationally. I would like to call it the THIRD REQUIREMENT of patentability Section 101 says inventions must be *new* and *useful*, requirement one and two; section 102 defines novelty; and section 103 lays down the *third requirement*.").

372. Compare *Graham*, 383 U.S. at 5 ("At the outset it must be remembered that the federal patent power stems from a specific constitutional provision which authorizes the Congress 'To promote the Progress of . . . useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries.'"), with Rich, *supra* note 245, at 395 ("It is reasonably predictable that the last statement will

The Supreme Court's opinion no doubt could have been more specific on the point that the nonobviousness inquiry *replaced* the old invention inquiry given its problems, a point made by Rich in the *Kettering Address*.³⁷³ An early draft of the Court's opinion, however, was more specific on that point.³⁷⁴ The draft, for example, criticized the old invention requirement in more explicit terms, stating that "[w]e would be less than candid if we did not also admit, however, that *Hotchkiss* brought into American patent law an unfortunate nomenclature which has, perhaps, added confusion to it."³⁷⁵ Moreover, a draft stated that "[t]his Court has striven to apply the *Hotchkiss* rule albeit an analysis of its patent decisions reveals some ambiguities."³⁷⁶ Elsewhere the draft referred to "the troublesome and elusive dependence upon the concept of 'invention.'"³⁷⁷ Another draft referred to the invention requirement as a "gossamer" concept.³⁷⁸ Elsewhere in an early draft Justice Clark referred to "evidence that the Act was not entirely a codification," referring to the views of "several of the principal drafters of the Act" and citing both Federico's Commentary and Rich's *Congressional Intent—or, Who Wrote the Patent Act of 1952*.³⁷⁹ One draft stated that "[s]ection 103 avoids the elusive concept of 'invention.'"³⁸⁰ Another draft stated that "the criteria set out avoid the troublesome and illusive dependence upon the concept of

be questioned on the ground that the constitutional purpose behind the patent system is, 'To promote the progress of Science and useful Arts,' but that would be a misconstruction To say that the purpose of the patent system is to promote the progress of science and useful arts involves an erroneous reading of what is actually written in the Constitution.").

373. See Rich, *supra* note 193, at 869 (stating that "the 1952 Patent Act was intended . . . to *replace* the 'standard of invention,' which never was a standard, with a requirement of unobviousness to a particular kind of person at a particular time").

374. See Candid Statement Regarding *Hotchkiss* (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

375. *Id.*

376. Statement Regarding Ambiguities after *Hotchkiss* (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

377. Statement Regarding Troublesome and Elusive Dependence upon the Concept of Invention (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

378. Memorandum from Justice Clark to Justice Black (Jan. 6) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

379. References to Evidence Not Entirely Codification (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

380. Statement about Avoiding Elusive Concept of Invention (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

‘invention.’”³⁸¹ Finally, an early draft circulated to the other Justices indicated that the inquiry had “shifted” from invention to nonobviousness.³⁸² In each of these ways, the earlier drafts suggested the elimination of the invention requirement.

But Justice Clark removed all of this language during the editing process. He did so primarily, as far as I can tell, in response to criticism from Justice Black, who circulated two memos to Justice Clark. In the first memo, Justice Black indicated he was “troubled by the general slant” of the opinion because he thought it would “abandon[] the idea of invention or ‘discovery’ in adopting as a complete substitute the idea of the concept of obviousness.”³⁸³ He indicated he did “not believe that the 1952 Act was intended to make such a revolutionary change in the idea of patentability as many might read your opinion to suggest.”³⁸⁴ Moreover, he “seriously doubt[ed] the constitutional power of Congress to repudiate the idea of ‘invention’ in connection with patents.”³⁸⁵

Justice Clark responded to Justice Black’s first memo by pointing out that, while he had added the phrase “couched as it was in so gossamer a concept as invention,” he would be glad to strike it and also would have no objection to leaving out the phrase about the “elusive” invention requirement.³⁸⁶ Justice Black, however, responded with his second memo indicating, essentially, that without additional changes he would be unable to join the opinion.³⁸⁷ As with his first memo, he expressed his disagreement with the interpretation of the Patent Act of 1952 as “shift[ing] patentability and validity inquiries from invention to non-obviousness.”³⁸⁸ He did “not believe that Congress did this, intended to do it, or could have done it consistently with its limited power granted by Section 8 of the Constitution.”³⁸⁹ He

381. Statement about Criteria Avoiding Troublesome and Illusive Dependence upon the Concept of Invention (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

382. See Memorandum from Justice Black to Justice Clark (Jan. 6) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin); Memorandum from Justice Black to Justice Clark (Jan. 11) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

383. Memorandum from Justice Black to Justice Clark (Jan. 6), *supra* note 382.

384. *Id.*

385. *Id.*

386. Memorandum from Justice Clark to Justice Black, *supra* note 378.

387. See Memorandum from Justice Black to Justice Clark (Jan. 11), *supra* note 382.

388. *Id.*

389. *Id.*

could not believe that “Congress intended to scuttle this well-established test and substitute a far less exacting one than the Constitution requires.”³⁹⁰ “And incidentally,” he added with reference to Justice Clark’s citations to Federico, Rich, and Representative Crumpacker, he thought “it would be very unwise to attribute such a revolutionary prospect to Congress on the basis of what patent lawyers or commentators, or even Congressmen said about the 1952 Act after it had already been passed.”³⁹¹ Justice Black also made it clear that his interpretation of the 1952 Patent Act was that “the ‘non-obviousness’ test of Section 103 was intended to be an additional or supplemental test and not a substitute for the old novelty, utility and invention test.”³⁹²

Later, Justice Clark circulated a revised opinion only to Justice Black, stating that he was “not circulating until after you see this latest draft and give me your reaction. Hope this is okay now.”³⁹³ Notably, however, at least Justice Harlan harbored the exact opposite view of the issue as compared to Justice Black. Justice Harlan also sent a memo to Justice Clark, his memo stating that Justice Clark

use[d] language which might indicate that the standard of patentability is a constitutional one, whereas I feel pretty sure that you would agree that patentability in a particular case must be judged against the standards of the statute, there being no claim made in any of these cases about the statute’s constitutionality.³⁹⁴

In the end, the opinion did not take a clear position as between the diverging views of Justices Black and Harlan.³⁹⁵ The closest the opinion comes to addressing the question is the following statement:

Within the scope established by the Constitution, Congress may set out conditions and tests for patentability. It is the duty of the Commissioner of Patents and of the courts in the administration of the patent system to give effect to the constitutional standard by appropriate application, in each case, of the statutory scheme of the Congress.³⁹⁶

In this way, the Supreme Court took the middle road, preserving its ability in future cases to decide that the Constitution demanded more

390. *Id.*

391. *Id.*

392. *Id.*

393. Recirculation Only to Black (Jan. 20) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

394. Memorandum from Justice Harlan to Justice Clark (Feb. 11) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin).

395. *See* *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966).

396. *Id.*

rigor than the patent statute.³⁹⁷ Without Rich's articles, however, the Court may have taken the stronger position advocated by Justice Black, making clear that the old invention requirement remained alive and well.³⁹⁸

Subsequent events indicated the high level of respect Justice Clark held for Rich, Justice Clark's knowledge of the *Kettering Address*, and Justice Clark's own views on whether Justice Black or Justice Harlan was correct. Indeed, shortly after he retired from the Supreme Court, Justice Clark sat by designation on the Court of Customs and Patent Appeals with Rich in December, 1967,³⁹⁹ and the same year, Justice Clark gave a speech at the New Jersey Patent Law Association borrowing the phrase "mish-mash" from Judge Rich's *Kettering Address*.⁴⁰⁰ Lost in this exchange of memoranda at the Supreme Court was any clear indication what Justice Clark himself believed on the disputed issue of whether the invention requirement had been replaced by the nonobviousness requirement. But his speech to the New Jersey Patent Law Association made clear his own views on this issue.⁴⁰¹

In the speech, Justice Clark explained that the invention requirement was the cause of problems in patent law in the late 1940s.⁴⁰² He highlighted that in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corporation*, decided in 1950, "two distinguished Justices whose joint service on the court then spanned almost a quarter of a century, declared that it was 'the standard of

397. *See id.*

398. *See id.* at 3.

399. *See* Documents Related to Court of Customs and Patent Appeals Cases (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin). Indeed, Justice Clark authored the opinion of the court applying *Graham*, concluding that "appellant's claims comply with the conditions for patentability set forth in section 103 and revers[ing] the decision of the board." Application of Wiggins, 397 F.2d 356, 357 (C.C.P.A. 1968).

400. *Compare* Mr. Justice Clark, Patents and the Supreme Court, Address to New Jersey Patent Law Association 3 (Apr. 4, 1967) (on file with Tom C. Clark Papers, Tarlton Law Library, University of Texas at Austin) ("The title that your President-elect has assigned to me tonight begs all description. It is: 'Patents and the Supreme Court.' Judge Rich would call it 'a mish mash!'"), *with* Rich, *supra* note 193, at 867-68 (stating that "[w]hat we have today is a mish-mash," that "members of the bar have a lot to answer for in creating and perpetuating the mish-mash," and "in the legislature the mish-mash has been described in detail").

401. *See* Clark, *supra* note 400, at 3.

402. *Id.* at 6 ("In my view the injection into the law of the doctrine known as 'the requirement for invention' was the culprit.").

invention’ that controlled.”⁴⁰³ Justice Clark was referring to the concurring opinion authored by Justice Douglas and joined by Justice Black, who entered service on the Supreme Court in 1939 and 1937 respectively (and thus whose service in 1950 totaled about 24 years, just under a quarter of a century). In their concurring opinion in the case they said that “[t]he Court now recognizes what has long been apparent in our cases: that it is the ‘standard of invention’ that controls.”⁴⁰⁴ Justice Clark, however, in his speech stated that “neither the Constitution nor the Congress mentioned such a standard”⁴⁰⁵ and, borrowing a point from the *Kettering Address*, joked that, “[a]s Judge Rich has pointed out, only a Supreme Court could find ‘a standard of invention’ in the two words ‘inventors’ and ‘discoveries’ found in Clause 8” of the Constitution.⁴⁰⁶ Even more specifically, he said that the opinion in *Graham* “casts to one side as confusing the label ‘standard of invention’ and substitutes the test of patentability as laid down over 100 years ago in *Hotchkiss* and as well by the action of the Congress, including its 1952 Act.”⁴⁰⁷ In other words, Justice Clark disagreed with Justice Black and instead agreed with Justice Harlan and Rich that the invention requirement had been eliminated by Congress.

With knowledge of Justice Clark’s own view on the issue, a close study of his opinion for the Supreme Court in *Graham* reveals the careful choices he made to avoid sustaining use of the invention requirement.⁴⁰⁸ As Reed later reflected on the opinion,

[t]he Court quite clearly stayed away from the use of “invention,” except when referring to *Hotchkiss*, and there was equally careful to speak of “patentable invention” and to characterize “inventions” as a “[word] of legal art.” And finally in this connection, the opinion points out that Section 103

403. *Id.* at 8–9.

404. *See* Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp., 340 U.S. 147, 156 (1950) (Douglas, J., concurring).

405. Clark, *supra* note 400, at 9.

406. *Compare id.* at 10 with Rich, *supra* note 193, at 861 (“[Courts] also proclaimed in all seriousness—and are doing so this very moment—that this ‘standard’ was to be found in the Constitution, where there are only two words on which it could possibly be predicated, the word ‘inventors’ and the word ‘discoveries.’ You really have to be on the Supreme Court to find a ‘standard’ there because the only way it can work is this: if you think the lower court was wrong in sustaining the patent, you proclaim that it applied too low a standard and reverse its decision, saying ‘That was not an invention.’”).

407. Clark, *supra* note 400, at 18 (emphasis added).

408. *See* Reed, *supra* note 354, at 2:306.

“will permit a more practical test of patentability,” suggesting that something new indeed was added by Congress.⁴⁰⁹

In short, perhaps as a result of fortuity, Rich’s speeches and articles influenced the Supreme Court in *Graham* to craft an opinion that ultimately over time resulted in one of the primary purposes of those who drafted the Patent Act of 1952, the replacement of the invention requirement with the non-obviousness requirement.

* * *

The factors I have identified—*a clear need for legislative intervention, the involvement of the patent bar, good drafting, legislative stewardship, an article and speaking campaign, judicial recognition, and fortuity*—contributed to the success of the Patent Act of 1952. These factors led to the elimination of the invention requirement, “reversed the direction of the Supreme Court’s antipathy towards patents and the patent system at the time,”⁴¹⁰ and “fundamentally transformed the patent system.”⁴¹¹ In the words of President George H.W. Bush on the 40th anniversary of the Patent Act of 1952, the Act set the stage for remarkable scientific progress based on the flourishing of the inventive spirit.⁴¹²

II. PATENT REFORM—NOW

With that review of the Patent Act of 1952, I turn now toward an analysis of the present patent system. As it turns out, there is an uncanny parallel between the state of patent law today and the state of patent law prior to 1952—and there is nearly as much of a need of legislative reform now as then. In this Part, therefore, I assess the present state of the patent system, and, in particular, the Supreme Court’s recent creation of the inventive concept requirement and efforts to eliminate it.⁴¹³ I highlight the problems with the law today,

409. Reed, *supra* note 354, at 2:306 (footnotes omitted).

410. *Special Session*, *supra* note 156, at 141.

411. Swain, *supra* note 140, at 19.

412. *Id.* (“In 1992, in a letter dated December 3, and marking the occasion of the 40th anniversary of the 1952 Patent Act, President George Bush wrote: ‘The last four decades have witnessed remarkable scientific progress in this country, thanks in part to your strong commitment to fostering and promoting the American creative genius. Our national security and unparalleled standard of living are the direct result of this inventive spirit, which has continued to flourish under the act that you fathered 40 years ago.’”).

413. See *infra* Section II.A (discussing the need for legislative intervention).

the people and groups of people involved today in reform efforts, and the circumstances and strategies they might use to their advantage to create change.⁴¹⁴ Moreover, drawing from the factors that led to the success of legislative reform efforts in 1952, I organize my analysis around how those same factors may contribute to the success of current legislative reform efforts—or hinder it.⁴¹⁵

A. Clear Need for Legislative Intervention

As in 1952, today there is a clear need for legislative reform. In 1952 the problem was the invention requirement.⁴¹⁶ Today the problem is the inventive concept requirement.⁴¹⁷ While the two requirements share a similar name, they grew out of different patent law doctrines. The invention requirement grew out of the doctrine of patentable novelty.⁴¹⁸ The inventive concept requirement, by contrast, grew out of the doctrine of patent eligibility.⁴¹⁹ The doctrine of patentable novelty asked how different from the prior art a claimed invention needed to be to become patentable,⁴²⁰ while the doctrine of patent eligibility traditionally asked whether the claimed invention fell within one of the statutory subject matter categories or instead merely constituted an abstract idea, physical phenomenon, or natural law.⁴²¹

414. See *infra* Section II.B (discussing the involvement of the patent bar in pioneering new solutions and reforms in patent law today).

415. See *infra* Section II.C (discussing the potential successes and difficulties of reform efforts).

416. See generally Swain, *supra* note 140 (noting that the principle test of whether something was an “invention” was vague and unpredictable).

417. See, e.g., *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72 (2012) (introducing the inventive concept requirement).

418. See Federico, *supra* note 180, at 120 (explaining that evidence the invention “may be a derivation of the statutory requirement for novelty is shown by the frequent use of the expression ‘patentable novelty’ or ‘patentable difference over the prior art’”).

419. See *Mayo Collaborative Servs.*, 566 U.S. at 70–72 (creating the inventive concept requirement in the context of patent eligibility law).

420. See Federico, *supra* note 180, at 120 (“What we really mean is that this thing now attempted to be patented is in fact new—it is different from the prior art—but that the differences are not considered sufficiently great to warrant the grant of a patent.”); Federico, *supra* note 14, at 182 (“[T]he requirement originally was an extension of the statutory requirement for novelty.”).

421. See 35 U.S.C. § 101 (2012) (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”); *Diamond v. Chakrabarty*, 447 U.S. 303, 308–09 (1980) (“[W]e begin, of course, with the language of the statute This is not to

The Supreme Court, however, recently created a two-part test for determining eligibility.⁴²² First, the Court explained, “we determine whether the claims at issue are directed to one of [the] patent-ineligible concepts,” in other words an abstract idea, physical phenomenon, or natural law.⁴²³ “If so, we then . . . search for an ‘inventive concept.’”⁴²⁴ In turn, it has explained that the second part of the test—the inventive concept requirement—asks whether a patent claim includes a concept “sufficient to ‘transform’ [an] abstract idea into a patent-eligible application.”⁴²⁵ The Court has said that a claim reciting an abstract idea, for example, must include additional features to ensure that the claim is more than a drafting effort designed to capture rights to the abstract idea.⁴²⁶ To comply with the requirement, the Court says, one must do more than simply state the abstract idea and add the words “apply it.”⁴²⁷ Simply appending conventional steps specified at a high level of generality, it says, is not enough.⁴²⁸ According to the Court, neither does specifying a conventional computer implementation⁴²⁹ or limiting the claim to a particular technological environment.⁴³⁰ An example of what does satisfy the requirement, says the Court, is using a mathematical equation in a process designed to solve a technological problem.⁴³¹

One of the many problems with this inventive concept requirement is that lower courts and the Patent and Trademark Office (USPTO) have been unable to provide any certainty with respect to the question of whether a particular claimed invention meets it, with resulting confusion imposed on investors, patent attorneys, patent examiners, and judges.⁴³² Like the invention requirement, the

suggest that § 101 has no limits or that it embraces every discovery. The laws of nature, physical phenomena, and abstract ideas have been held not patentable.”).

422. See *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 218, 221 (2014).

423. *Id.* at 217.

424. *Id.*

425. *Id.* at 221.

426. See *id.*

427. *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72 (2012)).

428. See *id.*

429. See *id.* at 222.

430. See *id.*

431. See *id.* at 223.

432. See, e.g., Lefstin, Menell & Taylor, *supra* note 4, at 561 (“The uncertainty and confusion resulting from the Court’s recent jurisprudence [adopting the ‘inventive concept’ requirement] create significant problems for many companies and investors contemplating research and development projects, as well as for patent prosecutors, patent examiners, and patent jurists.”).

inventive concept requirement presents a mystical mystery, an enigma, a situation of knowing it when you see it, which certainly is no way to run an incentive scheme that is supposed to support investment in invention and innovation.⁴³³ In this respect, beyond sharing essentially the same term—“invention” and “inventive”—the requirements share the same problem. Moreover, both requirements emanated from the Supreme Court and therefore seemingly require Congressional intervention to produce real change.⁴³⁴ And finally, the problems with the inventive concept requirement—and there are many others besides confusion—have been identified by national groups who have cried out for reform,⁴³⁵ even if not a national commission established by the President.

Moreover, as with Justice Jackson’s opinion calling out the Supreme Court for invalidating almost every patent using the invention requirement, judges have spoken loudly about the inventive concept requirement.⁴³⁶ They have identified problems with it, suggested solutions, and very recently even indicated they favor legislative reform. Judge Richard Linn, for example, highlighted problems with the inventive concept requirement in *Ariosa v. Sequenom*, a case decided by the Federal Circuit in 2015.⁴³⁷ That case involved a patent on a potentially life-saving invention allowing for noninvasive detection of birth defects.⁴³⁸ Despite the novelty of the discovery involved and the patent claiming its practical use to detect birth defects, the court invalidated the patent based on the lack of an inventive concept distinguishing the invention from a conventional use of a physical phenomenon or natural law.⁴³⁹ Calling attention to the inventive concept requirement, Judge Linn explained that its breadth “was unnecessary to the decision reached in *Mayo*” and, moreover, lamented that the “case represent[ed] the consequence—perhaps unintended—of [the] broad language [of the inventive concept requirement] in excluding a meritorious invention from the

433. See David O. Taylor, *Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards*, 46 CONN. L. REV. 415, 473–74 (2013) (describing the need for certainty in property-rights regimes including the patent system).

434. See David O. Taylor, *Amending Patent Eligibility*, 50 U.C. DAVIS L. REV. 2149, 2157–64 (2017) (describing how the Supreme Court is unlikely to modify the inventive concept requirement given the doctrine of stare decisis).

435. See THOMAS, *supra* note 5, at 15–16 (summarizing these proposals).

436. See *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1380–81 (Fed. Cir. 2015) (Linn, J., concurring).

437. See *id.*

438. See *id.* at 1373 (majority opinion).

439. See *id.* at 1376–77.

patent protection it deserves and should have been entitled to retain.”⁴⁴⁰ He went on to say that he saw “no reason, in policy or statute, why [Sequenom’s] breakthrough invention should be deemed patent ineligible.”⁴⁴¹

While the en banc court denied rehearing in *Ariosa*, several judges noted they were disturbed by the result.⁴⁴² Judges Alan Lourie and Kimberley Moore, for example, explained that “it is unsound to have a rule that takes inventions of this nature out of the realm of patent-eligibility on grounds that they only claim a natural phenomenon plus conventional steps, or that they claim abstract concepts.”⁴⁴³ Judge Timothy Dyk too wrote an opinion highlighting his view of the problem with the inventive concept requirement; as he saw it, “there is a problem with *Mayo* insofar as it concludes that inventive concept cannot come from discovering something new in nature—e.g., identification of a previously unknown natural relationship or property.”⁴⁴⁴ Judge Dyk went so far as to propose a solution to the problem, “limiting the scope of patents based on new discoveries to narrow claims covering applications actually reduced to practice,” in other words actually built.⁴⁴⁵

Even more recently, Judges Lourie and Pauline Newman have gone even further, expressing their belief in two identical opinions issued on the same day in two cases that “the law needs clarification, . . . perhaps by Congress, to work its way out of what so many in the innovation field consider are § 101 problems.”⁴⁴⁶ They explained that “[i]ndividual cases, whether heard by this court or the Supreme Court, are imperfect vehicles for enunciating broad principles because they are limited to the facts presented.”⁴⁴⁷ “Section 101 issues,” they

440. *Id.* at 1380 (Linn, J., concurring).

441. *Id.* at 1381.

442. *See id.* at 1287 (Lourie, J., concurring in the denial of the petition for rehearing en banc).

443. *Id.*

444. *Id.* at 1289 (Dyk, J., concurring in the denial of the petition for rehearing en banc).

445. *Id.* at 1292.

446. *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1374–76 (Fed. Cir. 2018) (Lourie, J., concurring in the denial of the petition for rehearing en banc); *see also* *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1359–62 (Fed. Cir. 2018) (Lourie, J., concurring in the denial of the petition for rehearing en banc).

447. *Berkheimer*, 890 F.3d at 1374 (Lourie, J., concurring in the denial of the petition for rehearing en banc).

continued, “certainly require attention beyond the power of this court.”⁴⁴⁸

In their opinions, Judges Lourie and Newman analyze the inventive concept requirement in the context of the prohibition on patenting abstract ideas, on the one hand, and physical phenomena and natural laws, on the other.⁴⁴⁹ With respect to the prohibition on patenting abstract ideas, they effectively propose eliminating the search for an inventive concept for two reasons: (1) it is unnecessary given the first step in the patent eligibility analysis; and (2) separate legal doctrines, the novelty and non-obviousness requirements, already account for the underlying concern:

[W]hy should there be a step two in an abstract idea analysis at all? If a method is entirely abstract, is it no less abstract because it contains an inventive step? And, if a claim recites ‘something more,’ an ‘inventive’ physical or technological step, it is not an abstract idea, and can be examined under established patentability provisions such as §§ 102 and 103.⁴⁵⁰

With respect to the prohibition on patenting physical phenomena and natural laws, they also again effectively propose eliminating the search for an inventive concept: “[C]laims to using such processes should not be barred at the threshold of a patentability analysis by being considered natural laws, as a method that utilizes a natural law is not itself a natural law.”⁴⁵¹ In other words, it does not matter if a claim includes an inventive concept as long as it claims a use (any use) of a physical phenomenon or natural law.⁴⁵² In this latter respect, it is important to note that while Judge Lourie and Judge Newman do not cite any support for their position, the long history of the patent utility doctrine indicates that the relevant question related to the usefulness of a discovery or invention is whether it has any practical use, not whether it has an inventive use, whatever that really means.⁴⁵³

As compared to the situation in 1952, however, there are two important differences that may present problems for legislative reform, at least in the short term. First, it is difficult to say at this point whether the problem is a long-felt one. The Supreme Court created the inventive concept requirement relatively recently, in its 2012 decision

448. *Id.*

449. *See id.* at 1375–76.

450. *Id.*

451. *Id.* at 1376.

452. *See id.* Judges Lourie and Newman also take the position that “finding, isolating, and purifying such products are genuine acts of inventiveness” and so should meet the inventive concept requirement even if it is retained. *Id.*

453. *See, e.g.,* Lefstin, Menell & Taylor, *supra* note 4, at 558.

in *Mayo v. Prometheus*.⁴⁵⁴ Second, while in my view the need for reform is urgent, particularly given the reduced incentive to invest in innovation in life-sciences technologies,⁴⁵⁵ several large, well-funded, entrenched companies with significant lobbying ability do not view the problem as urgent, at least in the software industry, and may actively oppose legislative reform, at least to the extent it might impact that industry.⁴⁵⁶

B. Involvement of Patent Bar

The patent bar has called for reform and elimination of the inventive concept requirement but only recently started to organize itself. Scholarly research, for example, has been done. As just a few examples, Professor Jeff Lefstin has conducted insightful research to identify the root of the Supreme Court's misinterpretation of the governing law in *Mayo*,⁴⁵⁷ and I have conducted extensive research regarding the requirement's problems and potential solutions.⁴⁵⁸ In addition to this groundwork, leadership has been shown by three organizations: the American Intellectual Property Law Association (AIPLA), the Intellectual Property Owners Association (IPO), and the American Bar Association Section on Intellectual Property Law (ABA-IPL). Two patent attorneys, patent litigator Jerry Selinger and

454. See *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 68–71 (2012). In this case, the Supreme Court cited two previous cases, neither of which had been relied upon as requiring a search for an inventive concept in the context of patent eligibility law. See *id.* at 72–73 (stating that the Court's cases “insist that a process that focuses upon the use of a natural law also contain other elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself”) (citing *Bilski v. Kappos*, 561 U.S. 593, 619 (2010) (which does not reference any such requirement); *Parker v. Flook*, 437 U.S. 584, 594 (1978) (stating, without support, that “the discovery of such a phenomenon cannot support a patent unless there is some other inventive concept in its application”)).

455. See generally David O. Taylor, *Patent Eligibility and Investment*, CARDOZO L. REV. (forthcoming 2019) (reporting on a survey of investors to determine the impact of the Supreme Court's changes to patent eligibility law on investment decision-making).

456. See, e.g., Lefstin, Menell & Taylor, *supra* note 4, at 599 (noting “substantial reluctance on the part of some software industry representatives about pursuing legislative reform that could increase patent assertion activity and raise defense risks and costs in the software field”).

457. See Jeffrey A. Lefstin, *Inventive Application: A History*, 67 FLA. L. REV. 565, 624 (2015).

458. See, e.g., David O. Taylor, *Confusing Patent Eligibility*, 84 TENN. L. REV. 157, 186, 227 (2016); Taylor, *supra* note 434, at 2198; Taylor, *supra* note 455.

patent prosecutor Marc Hubbard, led AIPLA's task force addressing possible patent eligibility legislation.⁴⁵⁹ IBM in-house counsel Marian Underweiser and patent prosecutor Robert Sachs served as leaders of IPO's similar group.⁴⁶⁰ The leaders of ABA-IPL's corresponding working group have not been named publicly. Notably, each of these organizations published reports in 2017 criticizing the inventive concept requirement and calling for its elimination, each report identifying a specific legislative proposal.⁴⁶¹ These proposals have gotten the ball rolling. In parallel with the efforts of these organizations, the USPTO held hearings in late 2016 to consider the views of the patent bar regarding the status of patent eligibility law and issued a report summarizing those views.⁴⁶² The USPTO concluded that a majority of those presenting their views recommended legislative change, noting that the "call for legislation was particularly strong from the life sciences industry but also had many supporters from computer-related industries."⁴⁶³ Moreover, the current Director of the USPTO, Andrei Iancu, has indicated that he supports efforts to reduce uncertainty regarding patent eligibility.⁴⁶⁴

459. See AM. INTELL. PROP. L. ASS'N, Bulletin, Message from the President (July 2015). For full disclosure, I have served as both a member and the Reporter of the AIPLA's Task Force.

460. See IPO DAILY NEWS, *IPO Releases Section 101 Legislation Task Force Report* (Feb. 8, 2017), https://www.ipo.org/index.php/daily_news/8-february-2017/ [<https://perma.cc/BR3H-9KKK>].

461. See AM. INTELL. PROP. L. ASS'N, *AIPLA Legislative Proposal and Report on Patent Eligible Subject Matter* (May 12, 2017); Letter from AM. BAR ASS'N SECTION OF INTELL. PROP. L. to the Honorable Michelle K. Lee, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (Mar. 28, 2017); INTELL. PROP. OWNERS ASS'N, *Proposed Amendments to Patent Eligible Subject Matter Under 35 U.S.C. § 101* (Feb. 7, 2017).

462. See generally U.S. PATENT & TRADEMARK OFFICE, *PATENT ELIGIBLE SUBJECT MATTER: REPORT ON VIEWS AND RECOMMENDATIONS FROM THE PUBLIC* (2017).

463. *Id.* at 48.

464. See *Oversight of the U.S. Patent and Trademark Office Before the S. Comm. on the Judiciary* (2018) (statement of Andrei Iancu, Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office) (describing patent eligibility as "an area I believe we must address and I will continue to engage stakeholders and the public about ways to reduce the uncertainty around this critical area of patent law"); see also *Oversight of the U.S. Patent and Trademark Office Before the H. Comm. on the Judiciary* (2018) (statement of Andrei Iancu, Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office) (making similar statements to the Committee on the Judiciary at the U.S. House of Representatives).

In addition to those efforts, three law professors, Professors Lefstin, Peter Menell, and myself, organized a workshop of experts and interested parties in March 2017 to seek common ground with respect to how to proceed to create change.⁴⁶⁵ Participants in the workshop included law professors, in-house counsel, patent prosecutors, patent litigators, USPTO representatives, and legislative aides.⁴⁶⁶ In our final report, we identified problems with the inventive concept requirement and reached several conclusions.⁴⁶⁷ For example, we reported “[t]he workshop revealed broad agreement that the Supreme Court’s patent eligibility jurisprudence has diverged from the Patent Act’s text and legislative history as well as long-standing jurisprudential standards.”⁴⁶⁸ Furthermore, “the workshop revealed a consensus that it is unlikely that the Supreme Court will reconsider the patent-eligibility issue in the foreseeable future.”⁴⁶⁹ And we revealed consensus that “legislative reform will be necessary to effect significant change in patent-eligibility standards.”⁴⁷⁰

The difference to date is that the patent bar has not consolidated around any one proposal.⁴⁷¹ Each of the relevant groups is acting separately, unlike prior to 1952 when the Coordinating Council spoke as a unified voice for the patent bar. The fact that no legislation has been introduced to date likely reflects this lack of convergence.⁴⁷² For legislative reform to occur, the patent bar is going to have to work in concert. It is unclear, however, whether that is even possible absent compromise given strong opponents of reform in the software industry, as already mentioned.⁴⁷³

C. Good Drafting, Legislative Stewardship, Campaigning, Judicial Recognition, and Fortuity

Consolidation around one proposal may nevertheless be possible. No doubt the members of the task forces of the AIPLA, IPO, and ABA-IPL have invested the time and effort to seek the best solution to the problems with the inventive concept requirement. It

465. See Lefstin, Menell & Taylor, *supra* note 4, at 557–58.

466. See *id.* at 602–03.

467. See *id.* at 597–99.

468. *Id.* at 599.

469. *Id.*

470. *Id.*

471. *Id.* at 592.

472. See *id.* at 599–600 (calling for a consensus among the interested constituencies).

473. See *supra* notes 455–456 and accompanying text.

remains to be seen whether a drafting committee can be formed and whether it can exercise the good judgment to select a successful proposal, and then fine tune it so that it is clear, concise, and, ultimately, effective. To do so, any such committee will need to demonstrate flexibility and willingness to improve. Moreover, it may behoove the group to adopt a prior judicial standard that provides an objective standard, as Rich did in 1950.⁴⁷⁴

While the absence of one legislative proposal backed by the patent bar means it is clearly too early to discuss legislative stewardship in detail, several points are worth noting. On the one hand, there is at least one reason to think it might be more difficult to revise patent law now. Unlike in 1952, there will not be a codification of the patent laws. That was likely a one-time event. Yet modern reformists will still need to seek to eliminate controversial aspects of the legislation.⁴⁷⁵ To do so, they may need to combine any bill to eliminate the inventive concept requirement with other legislation providing for political compromise.⁴⁷⁶ On the other hand, there is reason to think it might be less difficult now. It is noteworthy that, like in 1952, the USPTO appears to support a legislative solution.⁴⁷⁷ But perhaps even more importantly, unlike in 1952, the Antitrust Division of the Department of Justice does not seem likely to stand in the way of reform strengthening patent rights.⁴⁷⁸ Makan Delrahim, the current Assistant Attorney General—and the first head of the Antitrust

474. See Taylor, *supra* note 434, at 2212–13.

475. See Lefstin, Menell & Taylor, *supra* note 4, at 593–94.

476. See generally *id.* (providing an example of potential compromise points).

477. See Gene Quinn, *Iancu: “It Is Unclear What Is Patentable and What Is Not, and That Can Depress Innovation”*, IPWATCHDOG (May 22, 2018), www.ipwatchdog.com/2018/05/22/iancu-unclear-patentable-depress-innovation/id=97559/ [<https://perma.cc/45HE-Y2QF>] (“The issue is very significant. It is significant to the Office, to our applicants, and it is significant to the entire industry. In some industries it is unclear what is patentable and what is not, and that can depress innovation in those particular areas Section 101, the code itself, has not been amended since 1952 In fact, the language is by and large written by Thomas Jefferson in the early 1790s, with very little amendment ever since then. Obviously, we have developed some new technologies since then. So, if this Committee, or Congress in general, is interested in tackling Section 101, we would be very happy to work with the Committee on those issues. In the meantime, the PTO is going to do what we must do, which is help the examination process.”).

478. See Makan Delrahim, Assistant Attorney Gen., Remarks at the USC Gould School of Law’s Center for Transnational Law and Business Conference (Nov. 10, 2017) (transcript available at <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-usc-gould-school-laws-center> [<https://perma.cc/2G3J-93JV>]).

Division to be a registered patent lawyer—recently has made several speeches supporting strong patent rights as necessary to growing the innovation economy.⁴⁷⁹

It is also too early to discuss any speech or writing campaign to ensure that any legislation is properly interpreted and applied. These activities would need to be the subject of future work should legislation come together. And while discussion of judicial recognition of a nonexistent statute is similarly premature, it is important to note that any legislative reform would likely prove much easier to implement after enactment as compared to the aftermath of the Patent Act of 1952. Unlike then, when a Sixth Circuit judge made statements about his understanding of the Patent Act of 1952 that caused “instant shock” to a group of patent lawyers,⁴⁸⁰ today all appeals in patent cases go through the Federal Circuit rather than any of the regional circuits. As a result, the judges there have developed significant knowledge and expertise regarding the patent system and all of the various patent law doctrines. Success at the Supreme Court, of course, might still be difficult. But one need only consider the relative ease with which the Supreme Court recognized in *Graham* the elimination of the “flash of creative genius” test.⁴⁸¹ Even if the Supreme Court in the future recognizes an express elimination of the inventive concept requirement, however, what is not certain is whether the Supreme Court will *accept* its elimination and apply a new

479. See *id.*; Makan Delrahim, Assistant Attorney Gen., Keynote Address at University of Pennsylvania Law School (Apr. 10, 2018), <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-leadership-conference> [<https://perma.cc/7ULN-FLJE>]; Makan Delrahim, Assistant Attorney Gen., Keynote Address at the Leadership Conference on IP, Antitrust, and Innovation Policy (Mar. 16, 2018), <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-university> [<https://perma.cc/T5GD-SNQF>].

480. Rich, *supra* note 339, at 3:303–04 (citations omitted) (“A principal reason Mr. Dunner asked me here today was a speech before a group of patent lawyers last November in Washington by a U.S. Court of Appeals judge entitled ‘That Clumsy Word “Nonobviousness”!’ We who heard it suffered instant shock from the realization which he brought home to us, that a high federal judge, who properly felt bound to follow the Supreme Court’s pronouncements, believed notwithstanding the 1952 Patent Act and *Graham v. John Deere* that ‘[t]he requirement of invention for patentability is alive and well in the Supreme Court of the United States, and as a consequence in all of the federal courts—and the Patent Office[.]’ and that ‘[t]he elements of novelty, utility and non-obviousness . . . constitute the statutory definition of invention,’ and that [there is a synergism requirement.]”).

481. *Graham v. John Deere Co.*, 383 U.S. 1, 15 (1966) (“It also seems apparent that Congress intended by the last sentence of § 103 to abolish the test it believed this Court announced the controversial phrase ‘flash of creative genius,’ used in *Cuno*.”).

statutory requirement in its place,⁴⁸² let alone whether its interpretation of any new statutory requirement will provide the inventive community with a clear test for patent eligibility. Success may depend (again) on fortuity, which of course is inherently unpredictable.

* * *

Understanding all of the factors that made possible enactment of the Patent Act of 1952 does not suggest all need to be present to overturn the Supreme Court's requirement of an inventive concept. And the movement for reform still has many years to produce results. Nevertheless, the above analysis leads to three important suggestions to modern day reformists.⁴⁸³ First, there is a clear need for legislative intervention, which will become a long-felt need the longer intervention is delayed, and so some measure of patience is in order.⁴⁸⁴ Second, the patent bar needs to consolidate forces, present one proposal, and speak with a unified voice.⁴⁸⁵ Third, to agree upon one proposal, reformists need to demonstrate flexibility and, if possible, adopt a prior judicial standard that provides an objective standard.⁴⁸⁶

In this last regard, it is significant that Director Iancu recently laid out a case for replacing the inventive concept requirement (or, as applied, the "inventive application" test) with the Supreme Court's historical practical application test.⁴⁸⁷ As I have described elsewhere, this practical application test not only reflects longstanding Supreme Court precedent⁴⁸⁸ but also would comport with the principles of broad eligibility, clarity, constraint on judicial intervention, and flexibility.⁴⁸⁹ To replace the inventive application test with a practical application

482. Elsewhere I have explained why amending Section 101 would likely meet constitutional muster. *See supra* notes 446–456 and accompanying text; Taylor, *supra* note 434, at 2164–71.

483. *See supra* Part II.

484. *See supra* Section II.A.

485. *See supra* Section II.B.

486. *See supra* Section II.C.

487. *See* Andrei Iancu, Director of the U.S. Patent and Trademark Office, Remarks at the IPBC Global Conference (June 11, 2018), <https://www.uspto.gov/about-us/news-updates/remarks-director-andrei-iancu-ipbc-global-conference> [<https://perma.cc/JM3H-ZQKL>] ("I think Supreme Court jurisprudence taken together effectively allows claims that include prohibited matter as long as that matter is integrated into a practical application . . . [W]hy not simplify and bring the analysis back to its original filter: Is the patent merely on a defined building block of scientific or technological work? Or is it instead on a practical application of it?").

488. *See* Taylor, *supra* note 434, at 2172–73 n.114.

489. *See id.* at 2206.

test, “Congress, for example, might explain in the statute that the claimed subject matter must be a practical application of a natural law, physical phenomenon, or abstract idea.”⁴⁹⁰ Indeed, given the success in 1952 adopting a prior judicial standard, this might be modern reformist’s path to victory.

CONCLUSION

Modern critics of the patent system should understand that current problems with patent law doctrines reflect a much larger and longer ebb and flow in efforts to shape and control patent law by various institutional and non-institutional actors. In particular, the Supreme Court’s desire to inject an inventive concept requirement into patent law is not new. It has happened before, in the form of the invention requirement, both prior to 1952 and then again after *Graham v. John Deere* in *Anderson’s-Black Rock v. Pavement Salvage Co.* and *Sakraida v. Ag Pro*.⁴⁹¹ In the words of Homer Schneider, “[i]sn’t that a remarkably consistent pendulum? And only as a pendulum are the Supreme Court shifts consistent. But the record isn’t all that surprising—history has a way of repeating itself.”⁴⁹²

490. *Id.*

491. See *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 279–81 (1976); *Graham v. John Deere Co.*, 383 U.S. 1, 14 (1966).

492. Homer J. Schneider, *Nonobviousness, the Supreme Court, and the Prospects for Stability*, in *NON-OBVIOUSNESS—THE ULTIMATE CONDITION OF PATENTABILITY* 2:501, 2:509 (John F. Witherspoon, ed., 1978).