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Who Invented It? Streamlining Determination of Patent Inventorship

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Who Invented It? Streamlining Determination of Patent Inventorship

HENRY H. PERRITT, JR.*

Disputes over inventorship are common in industries where new technology is important. Patents are invalid unless correct inventors are named on the patent, even when all the inventors have assigned their rights to the enterprise applying for a patent. The complexity of modern technology is such that an invention qualifying for a patent rarely is the work of only one individual. Employees and former employees frequently claim that they have been left off patent applications wrongfully. Patent law provides a variety of ways to correct inventorship both while such applications are being prosecuted in the U. S. Patent and Trademark Office and after a patent is issued. Access to these means of correction is unnecessarily limited by unduly restrictive understandings of Article III standing requirements. Often an inventor is denied access to the courts because he has assigned his rights to his employer, even when he challenges the efficacy of the assignment. Several alternatives exist to streamline the ap-

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plication of the standing requirement, including a more robust understanding of the distinction between inventorship and patent ownership, an unambiguous recognition of reputational injury to an inventor as injury in fact, an appreciation of the future interests likely involved in an assignment, and an implementation of mechanisms within a firm that investigate and resolve inventorship disputes.

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INTRODUCTION

Bailey Dutton went to work for Robots on the Range LLC right after he graduated from Georgia Tech, where he earned a bachelor's degree in electrical engineering with a concentration in robotics. In his senior year, he participated in Georgia Tech's Invention Studio and won a prize for the best engineering design. One of the reasons he accepted the job at Robots on the Range LLC was the recruiter's promise that Bailey would be part of a special group that worked on new practical technologies that might be eligible for patents.

Bailey eagerly reported for work and was dismayed by being presented with an apparently endless sequence of paperwork he had to slog through. There were sign-up and disclosure forms for the employee benefit plan, an acknowledgment that he had read the employer safety protocols and had seen the OSHA notices, stern reminders that the employer must not discriminate based on race, sex, religion, or national origin in violation of Title VII, similar disclosures regarding age and disability discrimination, and a certification that he had been vaccinated against COVID.

Bailey did not read any of this stuff but, prompted by the HR representative who was flipping the pages somewhat impatiently, he simply signed his name where Post-it notes marked the places to sign. Among the papers was a nondisclosure agreement that concluded with an invention assignment. Bailey did not intend to disclose any of his employer's trade secrets, so he did not pay any more attention to this form than any of the others.

Relieved to be free of the bureaucracy, Bailey started work that same afternoon. He immediately liked his boss and his co-workers. Over the next few weeks, his initial impressions strengthened. They all seemed to be good engineers and were enthusiastic. They were working on a new product that the firm hoped would measure methane levels in the vicinity of cattle herds. For the measurements to be useful, they had to be taken no more than fifty yards away from a herd of more than three animals. Everyone on the team was stumped with how to get a robot to recognize a herd and to position itself within fifty yards. Bailey had an idea that fused imagery collected from cameras, sonar, and lidar with signals from infrared heat detectors. Everyone was quite excited with his discovery and took him out for a boisterous celebration after he was able to demonstrate its successful implementation in the lab.

Although Bailey was excited about getting a patent naming him as an inventor, he was not all that interested in the process of getting a patent or in patent law. He knew that Robots on the Range had a staff of lawyers and engineers who specialized in obtaining patents on what the company's engineers developed. He was happy to let them handle it.

Two years later, Bailey was out for a few beers with his SAE fraternity brother, Morgan Williams. Morgan had been a couple years ahead of Bailey at Georgia Tech and had gone to Emory Law School. Morgan now was practicing patent law at the prestigious firm Meunier, Carlin, and Curfman.

Bailey and Morgan had always teased one another mercilessly, and they did so on this occasion too. The intensity of the teasing, however, grew as the number of beers increased. "I thought that cowboy outfit was going to help you get some patents!" Morgan said.

"They are," Bailey said.

"Not yet, they aren't," Morgan said. "I just saw a published patent application for some kind of sniffing robot that is supposed to go out and check the gases that cattle burp and expel from the other end. I thought that is what you're working on."

"It was," Bailey said. "It was my main project and, if I don't mind bragging a little—"

“You never do.” Morgan said. “I expected to see your name on the published patent application as an inventor, but your name isn’t on it.”

“What!?” Bailey said. “What do you mean? Of course it is.”

“No, it isn’t,” Morgan said. “I may not know much yet, but I know how to read a published patent application or a patent.”

“That’s crazy!” Bailey said. “How do I make them add me?”

Morgan explained to Bailey that if he really was the inventor, he could get the Patent Office or a federal court to correct inventorship on any issued patent.

“Do I have to wait for it to be issued?” Bailey asked.

“No. The most straightforward procedure is to persuade your employer to change inventorship on the patent application.”

“I don’t trust them,” Bailey said. “In fact, I have already handed in my resignation and taken another job.”

Morgan explained that, once the patent issues, Bailey could file a civil action in federal court under Section 256 of the Patent Act seeking to correct inventorship. As the two young men discussed the matter further over the next few days, Morgan discovered by going through Bailey’s files, which Bailey was pretty good about keeping, the invention assignment agreement.

“This is not good,” Morgan said. “We can’t get into court on your correction-of-inventorship action without winning a lawsuit setting aside the invention assignment agreement first or, maybe, showing that you had a reputational interest in having your name on the patent that has economic implications.”

“I’m not sure I understand all that legalese,” Bailey said. “How would we do that?”

Morgan replied, “We would need to line up a number of witnesses—expert witnesses who would testify about how you lost job opportunities, promotions, or salary increases because your name is not on this particular patent.”

“I am young, and I’m in demand. I don’t know that I have lost too many opportunities yet,” Bailey said.

“Well, that is what we would have to prove.” Morgan laughed and cuffed Bailey on the shoulder. “I have always known that you were a lazy slug, and undesirable. And now we get to prove it.”

Bailey then asked, “How much will that cost?”

“From what I know about expert witness fees, closing in on \$1,000 an hour, we are probably talking a hundred thousand dollars before we are done—I don’t mean *done with the lawsuit*. I mean done as in even before we get to make your arguments and present your proof that you were the true inventor, or one of them.”

“Would we go to federal court or state court?”

“Probably both,” Morgan said. “You and Robots on the Range are citizens of Georgia, so that limits our access to federal court to try to set aside the assignment contract. We have to go to Georgia state court for that, and then go to federal court to correct inventorship.”

“Not only that, we also may get bounced back and forth between federal and state court because the Federal Circuit—the main patent court—says that disputes over patent assignment agreements present only questions of state law, but also says that some aspects of assignment agreements, like whether they are automatic or merely promises of future action, present federal questions justiciable only in federal court,” Morgan added.

“Good Lord!” Bailey repeated.

Though inventorship disputes are particularly common in the employer-employee context, as illustrated by the hypothetical involving Bailey Dutton, they also arise in other relationships, such as those between joint venturers and between suppliers and purchasers.¹ Therefore, the same need for efficient and predictable resolution of such disputes exists regardless of the context in which they arise.²

As Bailey’s story indicates, the existing procedure for correcting patent inventorship is a mess. The barriers to adjudication on the merits are unjustified. The Federal Circuit, while not reaching illogical results in recent cases, forces an unnecessary two-step dance.³

The Federal Circuit does so by interpreting Article III of the United States Constitution as imposing a standing requirement that

¹ See Steven E. Bartz & Jerry L. Fellows, *Joint Ventures, IP, and the Siren Song of Joint Ownership: IP-Related Pitfalls*, WESTLAW TODAY (Aug. 9, 2023), [https://today.westlaw.com/Document/Ie72cf24436bf11ee8921fbef1a541940/View/FullText.html?transition-Type=Default&contextData=\(sc.Default\)](https://today.westlaw.com/Document/Ie72cf24436bf11ee8921fbef1a541940/View/FullText.html?transition-Type=Default&contextData=(sc.Default)).

² See *id.*

³ See discussion *infra* Sections III.B, III.D.

burdens an inventor with proving that a patent is valuable economically, even as the United States Patent and Trademark Office (USPTO) churns out promotional material extolling the advantages of patents as drivers of business success.⁴ The foundational premise of the patent system since 1790 has been that patents are valuable.⁵ Why should an inventor have to prove that?

Controversies over inventorship are inevitable. Some claims are frivolous; some are meritorious. Sometimes all the parties can agree and, when they can, the Patent Office corrects inventorship.⁶ When they cannot agree, sorting the frivolous from the meritorious is the job of a district court hearing a Section 256 claim.⁷ Interposing complex and expensive litigation over assignment contracts imposes unnecessary costs.⁸

Resolution of inventorship contests can be streamlined by embracing four related but independent propositions: (1) by recognizing that inventions and ownership of rights associated with them are independent, and that inventors have legal rights in their inventions even when they contract away their rights to exploit them;⁹ (2) by recognizing that inventors have inherent reputational rights in their inventions which are not, and cannot be, contracted away in invention assignment agreements;¹⁰ (3) by recognizing that inventors who

⁴ See, e.g., Itinerary, U.S. Pat. & Trademark Off., Promoting Innovation in the Life Science Sector and Supporting Pro-Competitive Collaboration: The Role of Intellectual Property (Sept. 23–24, 2020), <https://www.uspto.gov/sites/default/files/documents/USPTO-DOJ-LifeScienceAgenda-092320.pdf>.

⁵ See Jessie Kratz, *Inventing in Congress: Patent Law Since 1790*, U.S. NAT'L ARCHIVES (Mar. 11, 2015), <https://prologue.blogs.archives.gov/2015/03/11/inventing-in-congress-patent-law-since-1790/>.

⁶ See Peter J. Borghetti, *Correcting Inventorship in the U.S. Utility Patents*, BLOOMBERG L. (Mar. 2019), [https://www.bloomberglaw.com/external/document/X4Q50NJ8000000/patents-professional-perspective-correcting-inventorship-in-u-s-\(citing-MPEP-§§-1412.04,-1481.02-\(9th-ed.-Rev.-7,-July-2022\)\)](https://www.bloomberglaw.com/external/document/X4Q50NJ8000000/patents-professional-perspective-correcting-inventorship-in-u-s-(citing-MPEP-§§-1412.04,-1481.02-(9th-ed.-Rev.-7,-July-2022))).

⁷ See Jordan Porter, *35 U.S.C. § 256 Actions in District Court for Correction of Inventorship of Patents*, JD PORTER L., <https://www.jdporterlaw.com/intellectual-property-law/990-2/> (last visited Sept. 28, 2024).

⁸ See Karen D. McDaniel & Alex M. Matthews, *What to Do When Hit With a Patent Infringement Lawsuit*, TAFT L. (July 9, 2024), <https://www.taft-law.com/news-events/law-bulletins/what-to-do-when-youve-been-hit-with-a-patent-infringement-lawsuit/>.

⁹ See discussion *infra* Section III.A.

¹⁰ See discussion *infra* Section III.B.

assign their invention rights have, in many cases, future interests in their inventions, which are legally recognized interests;¹¹ and (4) by making wider use of private dispute resolution systems for resolving inventorship disputes before they get to court.¹²

Part I of this article, immediately following this introduction, explains patent inventorship, the accuracy of inventorship as a prerequisite to patent validity, the procedures for correcting inventorship, and the evidence necessary to support a disputed claim of inventorship. Part II explains standing, which is derived from the Article III case-or-controversy requirement, reviews how the United States Court of Appeals for the Federal Circuit has applied standing requirements under Section 256 of the Patent Act, and compares that application with standing requirements in non-patent cases.

Part III explores principles for streamlining access to judicial correction of inventorship. It argues that assignment of interest in a patent does not give up inventorship and that reputational injury can amount to injury in fact. It shows how alternative dispute resolution procedures such as arbitration can forestall inventorship disputes before they get to court, and argues that the Federal Circuit should give effect to the future interests retained in many patents under assignment.

I. INVENTORSHIP

A. *Patent Prerequisites*

Patents are available only to inventors for inventions that involve patentable subject matter under Section 101 of the patent statute,¹³ that are novel under Section 102,¹⁴ that are not obvious under

¹¹ See discussion *infra* Section III.C.

¹² See discussion *infra* Section III.D.

¹³ 35 U.S.C. § 101.

¹⁴ 35 U.S.C. § 102.

Section 103,¹⁵ that are accompanied by disclosures adequately defining the invention and allowing anyone to make it under Section 112,¹⁶ and that accurately name the inventors under Section 256.¹⁷

Section 8 of Article 1 of the United States Constitution empowers the United States Congress “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”¹⁸ The very first Congress enacted a law allowing inventors to get patents: temporary, legally enforceable monopolies over their inventions.¹⁹ After various adjustments in the institutional apparatus for granting patents in the first half of the nineteenth century,²⁰ patent law settled on a process in which inventors wishing to

¹⁵ 35 U.S.C. § 103.

¹⁶ 35 U.S.C. § 112.

¹⁷ *Id.*; see also CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co., 916 F.3d 1350, 1358 (Fed. Cir. 2019) (quoting Stark v. Advanced Magnetics, Inc., 119 F.3d 1551, 1556 (Fed. Cir. 1997)) (“Misjoinder is the error of naming a person as an inventor who is not an inventor; nonjoinder is the error of omitting an inventor. . . . Through claims of misjoinder and nonjoinder together, § 256 ‘allows complete substitution of inventors.’”).

¹⁸ U.S. CONST. art. 1, § 8, cl. 8.

¹⁹ The currently enacted code says that: “[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.” 35 U.S.C. § 271(a). Comparatively, the statute enacted under the first Congress stated:

That if any person or persons shall devise, make, construct, use, employ, or vend within these United States, any art, manufacture, engine, machine or device, or any invention or improvement upon, or in any art, manufacture, engine, machine or device, the sole and exclusive right of which shall be so as aforesaid granted by patent . . . without the consent of the patentee or patentees, . . . every person so offending, shall forfeit and pay to the said patentee . . . damages as shall be assessed by a jury, and moreover shall forfeit to the person aggrieved, the thing or things so devised, made, constructed, used, employed or vended . . .

Patent Act of 1790, ch. 7, § 4, 1 Stat. 109, 111.

²⁰ Under the Patent Act of 1790, an inventor could petition a panel consisting of the Secretary of State, the Secretary of War, and the Attorney General for a patent, which would be granted if the three officers “shall deem the invention or discovery sufficiently useful and important” Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 109–10. The Patent Act of 1793 shifted responsibility to the Secretary

obtain patents on their inventions applied to a federal agency, the USPTO.²¹ There, federal employees known as *patent examiners*²² scrutinize the application to determine if the patent names the inventors, and whether the patent meets the requirements of the patent statute; in particular, examiners check requirements such as eligible subject matter, novelty, non-obviousness, and a clear and enabling description of the invention.²³

Under the 2012 America Invents Act, the critical date for determining priority is the date on which an inventor files an application for a patent,²⁴ not, as under the previous law, when he conceived of

of State alone, subject to certification by the Attorney General that the invention satisfied the requirement that the applicant has “invented any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter, not known or used before the application.” Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 318–21. That statute is generally regarded as having eliminated any government scrutiny of applications; it was a mere registration scheme. *See* Herbert J. Hovenkamp, *The Emergence of Classical American Patent Law*, 58 ARIZ. L. REV. 263, 268 (2016). The Patent Act of 1836 established an examination system under a Commissioner of Patents within the Department of State and required applicants to submit written descriptions and models. Patent Act of 1836, ch. 357, §§ 6–7, 5 Stat. 117, 119–20. The Patent Act of 1870 lightened technical details for patent applications, administrative appeals of rejections, and judicial consideration of infringement claims, and provided for the filing of caveats, which were the ancestor of the modern provisional application. The Patent Act of 1870, ch. 230, § 40, 16 Stat. 198–217. In 1849, the Patent Office was transferred from the Department of State to the Department of the Interior, and in 1925 from Interior to the Department of Commerce. *See* KENNETH W. DOBYNS, *THE PATENT OFFICE PONY: A HISTORY OF THE EARLY PATENT OFFICE 164–65* (2016) (detailing the evolution of patent law, with particular attention to institutional arrangements). The Patent Act of 1952 established a board of appeals comprising the examiners in chief, the commission, and the assistant commissioner and rationalized examination practice and criteria, including the addition of a new Section 103 to replace the amorphous “invention” requirement of the common law. *See id.*; Patent Act of 1952, Pub. L. 593, ch. 950, §§ 3, 5, 7, 66 Stat. 792, 792–93.

²¹ 35 U.S.C. §§ 1–2.

²² 35 U.S.C. § 3(b)(4).

²³ *Id.*

²⁴ Leahy-Smith America Invents Act, Pub. L. No. 112–29, sec. 3, § 100(i)(B), 125 Stat. 284, 285 (2011) (giving priority to inventor who files first).

the invention, assuming that he sought to reduce it to practice with reasonable diligence thereafter.²⁵

1. ELIGIBLE SUBJECT MATTER

The Patent Act begins by describing eligible subject matter:

§ 101. Inventions patentable

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.²⁶

Patents are available for: processes, machines, articles of manufacture, and new compositions of matter.²⁷ Even inventions falling into one of these four categories may not be eligible for patent protection if they involve abstract ideas, laws of nature, or natural phenomena,²⁸ unless the invention adds something significant beyond what is found in nature.²⁹ Further, inventions claiming a capacity to achieve the impossible are outside the scope of eligible subject matter under Section 101.³⁰

²⁵ “A person shall be entitled to a patent unless . . . another inventor . . . establishes, . . . that before such person’s invention thereof the invention was made by such other inventor . . .” 35 U.S.C. § 102(g) (2000) (popularly known as “pre-AIA 102”).

²⁶ 35 U.S.C. § 101.

²⁷ *Id.*

²⁸ See *Mayo Collaborative Servs. v. Prometheus Lab’ys., Inc.*, 566 U.S. 66, 70 (2012) (“The Court has long held that this provision [§ 101] contains an important implicit exception. ‘[L]aws of nature, natural phenomena, and abstract ideas’ are not patentable.”) (alteration in original).

²⁹ See *Alice Corp. Pty. Ltd. v. CLS Bank Int’l.*, 573 U.S. 208, 221 (2014) (“At *Mayo* step two, we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application. A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’”) (alterations in original) (citations omitted).

³⁰ See MPEP § 2107.01(II) (9th ed. Rev. 7, July 2022) (citing examples of incredible utility, outside scope of Section 101).

2. NOVELTY

Patents are only available for something new and not already found in the public domain.³¹ Section 102 explains, in detail, the required conditions for patentability:

§ 102. Conditions for patentability; novelty

(a) NOVELTY; PRIOR ART.—A person shall be entitled to a patent unless—

(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.³²

Language with meaning similar to that of Section 102 has been a part of the law since the first Patent Act of 1790.³³ Whether an invention is novel depends on what is already known.³⁴ The types of information that may disqualify an invention for patenting under Section 102 are known as *prior art*.³⁵

Section 102 has been interpreted to disqualify invention—to *anticipate* it—only when a single prior art reference contains all of the elements in the invention.³⁶ Anticipation requires that “each and every limitation of the relevant claim . . . [be] disclosed in a single prior art reference”³⁷ When that occurs, the prior art reference is said to anticipate the invention and, therefore, to disqualify it under Section 102.³⁸

³¹ 35 U.S.C. § 102(a)(1).

³² *Id.*

³³ See *Amgen Inc. v. Sanofi*, 598 U.S. 594, 604 (2023). “The Patent Act of 1790 promised up to a 14-year monopoly to any applicant who ‘invented or discovered any useful art, manufacture, . . . or device, or any improvement therein *not before known or used.*’” *Id.* (emphasis added) (quoting Patent Act of 1790, ch. 7, § 1, 1 Stat. 109, 109–12).

³⁴ 35 U.S.C. § 102(a)(1).

³⁵ The scope of the prior art block depends on the meaning of “described” in Section 102 and “obvious” in Section 103. See 35 U.S.C. §§ 102(a)(1), 103.

³⁶ MPEP § 2131 (9th ed. Rev. 7, July 2022).

³⁷ Timothy R. Holbrook, *Patent Anticipation and Obviousness as Possession*, 65 EMORY L.J. 987, 1007 (2016).

³⁸ *Id.* at 1047.

3. NON-OBVIOUSNESS

Even if the novelty requirement of Section 102 is satisfied, an invention nevertheless may not be qualified for a patent if it is “obvious,”³⁹ in light of the prior art as Section 103 lays out:

§ 103. Conditions for patentability; non-obvious subject matter

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.⁴⁰

The Section 103 obviousness requirement was added by the 1952 Patent Act⁴¹ to replace the common law “invention” standard.⁴² In *Graham v. John Deere Co.*,⁴³ the Supreme Court held that Section 103 is meant to codify the standard of inventiveness articulated by *Hotchkiss v. Greenwood*, 52 U.S. 248, 267 (1851).⁴⁴ In *John*

³⁹ 35 U.S.C. § 103.

⁴⁰ *Id.* The phrase “person having ordinary skill in the art” frequently is expressed by the acronym: PHOSITA.

⁴¹ Patent Act of 1952, Pub. L. 593, ch. 950, § 103, 66 Stat. 792, 798 (revising and codifying Title 35 of the United States Code).

⁴² See Giles S. Rich, *Why and How Section 103 Came to Be*, 14 FED. CIR. BAR J. 181, 186–92 (2005) (recounting the history and the purpose for replacing the ambiguous “invention” standard). The invention requirement originated in *Hotchkiss v. Greenwood*, 52 U.S. 248 (1851), in which the Supreme Court required that an invention, to qualify for a patent, must be the work of an “inventor,” not merely that of a “skillful mechanic.” *Id.* at 267 (affirming judgment invalidating a patent).

⁴³ 383 U.S. 1 (1966).

⁴⁴ *Id.* at 13–19 (1966) (rejecting argument that Section 103 was meant to lower the barrier imposed by inventiveness).

Deere, the USPTO crystallized a “teaching-suggestion or motivation” (TSM) test for obviousness.⁴⁵ Obviousness depends on, but is not limited to: (1) all of the elements of a patent claim being found in a plurality of prior-art references; and (2) some teaching, suggestion, or motivation in the literature to combine them to come up with the new invention.⁴⁶

In *KSR International Co. v. Telefax Inc.*,⁴⁷ the Supreme Court reversed the Federal Circuit for taking a “rigid approach”⁴⁸ to TSM and articulated a more flexible, multi-factor test for obviousness under Section 103.⁴⁹ In *Virtek Vision International ULC v. Assembly Guidance Systems, Inc.*,⁵⁰ the Federal Circuit reiterated the essentiality of a “motivation to combine” as a precondition for an obviousness finding.⁵¹

Anticipation and obviousness are distinct, though related. Anticipation says, “Someone else already invented it.”⁵² Obviousness says, “No one invented it before, but your innovation is only a trivial contribution to the state of the art;” obviousness involves “matters of design well within the expected skill of the art and devoid of invention.”⁵³

4. DESCRIPTION AND ENABLEMENT

To be entitled to a patent, an applicant must also describe his invention, even if novel and non-obvious, so “as to *enable* any person skilled in the art” to practice it.⁵⁴ As Section 112 explains:

§ 112. Specification

⁴⁵ See MPEP § 2141 (9th ed. Rev. 7, July 2022).

⁴⁶ See *id.*

⁴⁷ 550 U.S. 398 (2007).

⁴⁸ *Id.* at 415. The Federal Circuit’s test for obviousness depended on finding “teaching, suggestion, or motivation (TSM)” that encouraged combining prior art references. *Id.* at 407 (characterizing Federal Circuit’s test). The court rejected obviousness based on a simple “obvious to try.” *Id.* at 414.

⁴⁹ See *id.* at 419–22.

⁵⁰ 97 F.4th 882 (Fed. Cir. 2024).

⁵¹ *Id.* at 888.

⁵² See MPEP § 3141 (9th ed. Rev. 7, July 2022).

⁵³ *Graham v. John Deere Co.*, 383 U.S. 1, 22–23 (1966) (quoting a patent examiner making an obviousness rejection).

⁵⁴ 35 U.S.C. § 112(a) (emphasis added).

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms *as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same*, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.⁵⁵

Further, “the threshold in all cases requires a transition from theory to practice, from basic science to its application, from research plan to demonstrated utility”⁵⁶ The written description requirement of Section 112, thus, requires disclosing more than a mere “‘wish’ or ‘plan.’”⁵⁷ Therefore, Section 112 imposes two requirements: adequate description and enablement,⁵⁸ which are distinct from one another.⁵⁹ One can fully describe an invention without enabling it by explaining how to make it.⁶⁰ Conversely, one can enable without fully describing.⁶¹

5. CORRECT DESIGNATION OF INVENTORS

The correct inventors must be named on a patent, or the patent is invalid.⁶² Similarly, the correct inventors must be named on a patent application, or the application must be rejected.⁶³

⁵⁵ *Id.* (emphasis added).

⁵⁶ *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1359 (Fed. Cir. 2010).

⁵⁷ *Id.* at 1350 (quoting *Fiers v. Revel*, 984 F.2d 1164, 1170–71 (Fed. Cir. 1993)).

⁵⁸ The best mode requirement is not material. *See* MPEP § 2165 (9th ed. Rev. 7, July 2022).

⁵⁹ *Id.* § 2161 (9th ed. Rev. 7, July 2022) (written-description, enablement, and best-mode are separate and distinct from each other).

⁶⁰ *See id.*

⁶¹ *Id.*

⁶² *Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 412 F.3d 1331, 1338 (Fed. Cir. 2005) (recognizing that a patent would be invalid for failure to name co-inventor but reversing summary judgment and remanding for trial of whether he co-invented).

⁶³ “If a determination is made that the inventive entity named in a U.S. application is not correct, . . . a rejection should be made on this basis.” MPEP § 2109

B. *Inventorship Concept*

Only inventors are entitled to U.S. patents.⁶⁴ This distinguishes U.S. law from the law of most of the rest of the world.⁶⁵ Inventors may assign their inventions to others, and assignees may apply for patents; but they must name the inventors, and the inventors names must go on the patent.⁶⁶ Applications not correctly claiming the inventors are rejected.⁶⁷

The inventorship concept was refined in U.S. patent law during its first 223 years, when priority was determined based on when the invention occurred.⁶⁸ Priority disputes turned on who was the first to invent, and the need to resolve those disputes necessitated rules for deciding when an invention was complete.⁶⁹ Was conception enough, or must there be reduction to practice? And what constitutes reduction to practice?

Those refinements still apply now that the America Invents Act (AIA) makes priority depend on when an inventor files a patent application.⁷⁰ The seminal cases discussing this topic involved interference proceedings, in which two inventors working independently

(9th ed. Rev. 7, July 2022). *See also* MPEP § 2157 (9th ed. Rev. 7, July 2022) (providing for correction of inventorship in a derivation proceeding under 35 U.S.C. § 135, by correction of inventorship under 37 CFR § 1.48, or by rejection under 35 U.S.C. § 101 and 35 U.S.C. § 135); *In re VerHoeft*, 888 F.3d 1362, 1367–68 (Fed. Cir. 2018) (affirming PTAB decision that omission of co-inventor made the invention unpatentable).

⁶⁴ “Whoever *invents* . . . may obtain a patent . . .” 35 U.S.C. § 101 (emphasis added). The Patents and Copyrights clause empowers Congress to secure “to . . . *inventors* the exclusive right to their . . . discoveries.” U.S. CONST. art. I § 8, cl.8 (emphasis added).

⁶⁵ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022).

⁶⁶ *See id.*

⁶⁷ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022) (citing 35 U.S.C. § 101).

⁶⁸ 35 U.S.C. § 102(g) (2000) (“A person shall be entitled to a patent unless, . . . another inventor . . . establishes, . . . that before such person’s invention thereof the invention was made by such other inventor . . .”).

⁶⁹ *See id.*

⁷⁰ *See* Leahy-Smith America Invents Act, Pub. L. No. 112–29, sec. 3, § 100(i)(B), 125 Stat. 284 (2011); *see also* LAMAR SMITH, AMERICA INVENTS ACT, H.R. REP. NO. 112–98, at 40 (2011) (describing first inventor to file system to replace older first-to-invent system).

argued over which of them should receive a patent.⁷¹ The AIA replaced interference proceedings with derivation proceedings under 35 U.S.C. § 135.⁷²

The two key events in the birth of an invention are *conception* and *reduction to practice*.⁷³ The distinction between conception and reduction to practice emerged early in patent cases. For instance, in *Perry v. Cornell*,⁷⁴ an inventor claimed that a competing inventor, even if he did conceive of an invention first, did not qualify as an inventor because “it was merely an intellectual invention, based on theory, and not an invention in the meaning of the law.”⁷⁵

The court rejected the argument, explaining that “[t]here is no law requiring the applicant to reduce his invention to actual use before he can obtain a patent. On the contrary, the use of the invention before obtaining a patent is one of the reasons for refusing it.”⁷⁶ The court went on to explain that although “[h]e may have conceived the idea years ago . . . [he] is not obliged to furnish drawings or model until he makes his application.”⁷⁷

The Commissioner of Patents, in his submission to the court, had explained that the test for invention is whether the inventor had conceived of an invention and described it in sufficient detail that a competing mechanic could build it and put it into use.⁷⁸ Therefore, the law did not burden the inventor with actually performing the activities of a mechanic.⁷⁹

But an inventor could not sit on his conception forever. In *Chandler v. Ladd*,⁸⁰ the court stated the priority rule this way: “[H]e who

⁷¹ See MPEP § 2301 (9th ed. Rev. 7, July 2022).

⁷² “As part of the transition to a simpler, more efficient first-inventor-to-file system, this section eliminates costly, complex interference proceedings, because priority will be based on the first application. A new administrative proceeding—called a ‘derivation’ proceeding—is created to ensure that the first person to file the application is actually a true inventor.” PATRICK J. LEAHY, THE PATENT REFORM ACT OF 2007, S. REP. NO. 110–259, at 8 (2008).

⁷³ 35 U.S.C. § 102(g) (2000).

⁷⁴ 19 F. Cas. 267 (C.C.D.D.C. 1847) (No. 11,001).

⁷⁵ *Id.* at 268.

⁷⁶ *Id.* at 271. Prior use would be prior art, defeating novelty. See discussion *supra* Section 0.

⁷⁷ *Perry*, 19 F. Cas. at 271.

⁷⁸ See *id.* at 268.

⁷⁹ See *id.*

⁸⁰ 5 F. Cas. 452 (C.C.D.D.C. 1857) (No. 2,593).

invents first shall have the prior right, if he is using reasonable diligence in adapting and perfecting the same, although the second inventor has in fact perfected the same and reduced the same to practice in a positive form.”⁸¹ The lack of reasonable diligence during the period between conception and reduction to practice led the court to conclude the inventor had abandoned the invention.⁸²

In *Woodcock v. Parker*,⁸³ Justice Story suggested that if, contrary to the record, the first inventor wholly abandoned his invention and never reduced it to practice “so as to produce useful effects,” he would not be entitled to priority over a subsequent inventor.⁸⁴ He instructed a jury that a first inventor, reducing his invention to practice and then obtaining a patent, is entitled to priority over a subsequent innocent inventor of the same invention.⁸⁵

Similar principles of conception and reduction to practice determine contests over joint inventorship, in which parties working together argue over who is entitled to be listed as an inventor.⁸⁶ In *Reutgen v. Knows*,⁸⁷ the court charged the jury as follows regarding joint inventorship:

I have hurried over these points, because it strikes the court, that there remain to be considered, much more important objections to the plaintiff’s right to recover. It is in proof, (if the witnesses are credited by the jury,) that the machine used by the defendant Graunt, was erected on Kanowrs’ land, at his expense. That before it was done. Kanowrs, upon hearing the plan, suggested the improvement of swedges, which was adopted, and has since received the plaintiff’s approbation. That the plaintiff frequently acknowledged the joint right of the defendant, to the invention, as partnership property; and that the patent was to be taken in their joint names. If the jury are

⁸¹ *Id.* at 458 (citing *Reed v. Cutter*, 20 F. Cas. 435, 438 (C.C.D. Mass. 1841) (No. 11,645)).

⁸² *Id.*

⁸³ 30 F. Cas. 491 (C.C.D. Mass. 1813) (No. 17,971).

⁸⁴ *Id.* at 492.

⁸⁵ *See id.*

⁸⁶ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022).

⁸⁷ 20 F. Cas. 555, 556–57 (C.C.D. Pa. 1804) (No. 11,710).

satisfied of these facts, and that the defendant did not relinquish his right to a joint interest in the patent right, then the plaintiff was guilty of a fraud, in obtaining it in his own name; he is in equity a trustee for the defendant; and though, possibly, at law, a verdict must be rendered for plaintiff, still, the jury may give merely nominal damages.⁸⁸

*Marshall v. Mee*⁸⁹ was an appeal from a decision by the Commissioner of Patents in an interference case.⁹⁰ Mee was the first to conceive and describe a knitting loom; Marshall was the first to embody the invention in a working machine.⁹¹ Mee used reasonable diligence to perfect this invention and to reduce it to practice, but he succeeded in doing so only after Marshall and before a patent was granted to either.⁹² The record contained no evidence that Marshall had copied Mee's invention, but rather that he was an innocent inventor of the same apparatus.⁹³

The court reviewed evidence in the form of witness testimony that Mee had conceived and described his invention in 1849 and 1850.⁹⁴ Mee did not abandon his invention; he used reasonable diligence by preparing a model and a patent application in 1851.⁹⁵ Resolving the issue was complicated by evidence that Marshall borrowed his ideas from Mee.⁹⁶ The court explained that:

No patent in fact has yet been granted to anybody; and if he is the first original inventor, and has now reduced his invention to practice, he must prevail over any subsequent original inventor reducing it to use before him, and a fortiori over Mr. Marshall, not

⁸⁸ *Id.* at 556–57.

⁸⁹ 16 F. Cas. 843 (C.C.D.D.C. 1853) (No. 9,129).

⁹⁰ *Id.*

⁹¹ *See id.* at 844.

⁹² *See id.*

⁹³ *See id.* at 845–46.

⁹⁴ *See id.* at 844–46.

⁹⁵ *See Marshall*, 16 F. Cas. at 844–45.

⁹⁶ *Id.* at 845.

an original inventor at all, but borrowing his ideas of the improvement from Mee.⁹⁷

1. CONCEPTION

Today, the threshold requirement for status as an inventor is: “One must contribute to the conception to be an inventor.”⁹⁸ Merely executing the direction of others is not enough; one must actually contribute—add intellectual value—oneself.⁹⁹ Simply reducing the conception of another to practice is not enough.¹⁰⁰ To be an inventor, however, one need not reduce the invention to practice.¹⁰¹ The Manual of Patent Examining Procedure (MPEP) says:

Conception is the ‘formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.’ An idea is sufficiently “definite and permanent” when “only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.”¹⁰²

2. REDUCTION TO PRACTICE

One obvious way to reduce an invention to practice is to build a working model.¹⁰³ The Patent Act of 1836, required applicants to “furnish a model of his invention, in all cases which admit of a representation by model.”¹⁰⁴ The Patent Act of 1870 eliminated a statutory model requirement, but still authorized the Commissioner of

⁹⁷ *Id.* at 846.

⁹⁸ MPEP § 2109 (9th ed. Rev. 7, July 2022) (quoting *In re Hardee*, 223 U.S.P.Q. 1122, 1123 (Comm’r Pat. 1984)).

⁹⁹ *See id.*

¹⁰⁰ *See id.*

¹⁰¹ *See id.*; *see also* MPEP § 2157 (9th ed. Rev. 7, July 2022) (providing for rejection if applicant fails to request correction of inventorship).

¹⁰² *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998) (citations omitted) (affirming finding of co-inventorship).

¹⁰³ *See, e.g.*, Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119.

¹⁰⁴ *Id.*

Patents to require one.¹⁰⁵ The Commissioner stopped requiring models in most cases after 1880¹⁰⁶ because many of the existing models had been destroyed in a Patent Office fire in 1877¹⁰⁷ and because the Office was running out of room to store all the models.¹⁰⁸

Now—and even when the model requirement was in effect—”an inventor has reduced his invention to practice when he has so described it on paper, with such drawings or model, as to enable any person skilled in the art to make and use the same.”¹⁰⁹ Further, “[i]nsofar as defining an inventor is concerned, reduction to practice, *per se*, is irrelevant.”¹¹⁰ Nor does one become a co-inventor by assisting the actual inventor after conception, as by reducing the inventor’s idea to practice.¹¹¹

3. CO-INVENTORSHIP

The statute defines co-inventorship as:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.¹¹²

¹⁰⁵ Patent Act of 1870, ch. 230, § 29, 16 Stat. 198, 201–02.

¹⁰⁶ See DOBYNS, *supra* note 20, at 258 (describing 1880 regulation dropping general requirement for models).

¹⁰⁷ *Id.* at 252 (recounting “The Second Patent Office Fire”).

¹⁰⁸ See *id.* at 244–49.

¹⁰⁹ Perry v. Cornell, 19 F. Cas. 267, 271 (C.C.D.D.C. 1847) (No. 11,001).

¹¹⁰ MPEP § 2109 (9th ed. Rev. 7, July 2022) (quoting *In re Hardee*, 223 U.S.P.Q. 1122, 1123 (Comm’r Pat. 1984)); see also *Fiers v. Revel*, 984 F.2d 1164, 1169 (Fed. Cir. 1993) (discussing an exception for simultaneous conception and reduction to practice).

¹¹¹ *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998).

¹¹² 35 U.S.C. § 116(a); see also MPEP § 2109(IV) (9th ed. Rev. 7, July 2022). The courts use the terms *joint inventor* and *co-inventor* interchangeably. The patent office uses *joint inventor*. MPEP § 2109.01.

Pannu v. Iolab Corp.,¹¹³ articulated the test of joint inventorship.¹¹⁴ The Federal Circuit reversed the district court and held that William Link was an actual inventor.¹¹⁵ It reiterated basic criteria for joint inventorship,¹¹⁶ and went on to find that Link had satisfied the requirements for joint inventorship because according to the court:

All that is required of a joint inventor is that he or she: (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.¹¹⁷

The Federal Circuit held that the evidence supported submitting to a jury the question of whether Link was a co-inventor.¹¹⁸ The court remanded for determination of that question and correction of the patent, or a finding of invalidation.¹¹⁹

Joint inventors are two or more persons who contribute to the conception of an invention.¹²⁰ Joint inventors must be named on the patent application even if they did not physically work together or at the same time, even if each did not make the same type or amount of contribution, or even if each did not contribute to the subject matter of every claim in the patent.¹²¹ Nor must a co-inventor contribute to the conception of all the limitations in a claim.¹²²

Different individuals cannot be co-inventors, however, if they work entirely independently of each other and do not even know of

¹¹³ 155 F.3d 1344 (Fed. Cir. 1998).

¹¹⁴ *See id.* at 1351.

¹¹⁵ *See id.*

¹¹⁶ *Id.* (citing 35 U.S.C. § 116 (1994)).

¹¹⁷ *Id.* (citations omitted).

¹¹⁸ *Id.*

¹¹⁹ *See Pannu*, 155 F.3d at 1353.

¹²⁰ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022).

¹²¹ *See id.*

¹²² *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1361–62 (Fed. Cir. 2004).

one another's efforts.¹²³ *Kimberly-Clark Corp. v. Procter & Gamble Distribution Co.*,¹²⁴ explained that "the statute neither states nor implies that two inventors can be 'joint inventors' if they have had no contact whatsoever and are completely unaware of each other's work. Indeed, whether inventors 'physically work together' would be irrelevant if Congress did not intend that they interact together in some fashion."¹²⁵ Additionally:

For persons to be joint inventors under Section 116, there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting. Here there was nothing of that nature. Individuals cannot be joint inventors if they are completely ignorant of what each other has done until years after their individual independent efforts. They cannot be totally independent of each other and be joint inventors.¹²⁶

CODA Development S.R.O. v. Goodyear Tire & Rubber Co.,¹²⁷ added that "with regard to joint inventorship, there must be 'some quantum of collaboration.'"¹²⁸ Quantum of collaboration has been understood as "some open line of communication during or in temporal proximity to their inventive efforts."¹²⁹

One cannot be a co-inventor unless one's contribution is novel and nonobvious.¹³⁰ A co-inventor must have "a firm and definite idea of the claimed combination as a whole" and must "make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full

¹²³ See MPEP § 2109.01 (9th ed. Rev. 7, July 2022) (citing *Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co.*, 973 F.2d 911, 916 (Fed Cir. 1992)).

¹²⁴ 973 F.2d 911 (Fed Cir. 1992).

¹²⁵ *Id.* at 916.

¹²⁶ *Id.* at 917.

¹²⁷ 916 F.3d 1350 (Fed. Cir. 2019).

¹²⁸ *Id.* at 1359.

¹²⁹ *Eli Lilly*, 376 F.3d at 1359.

¹³⁰ See 35 U.S.C. § 102 (discussing the novelty requirement for granting a patent); see also 35 U.S.C. § 103 (discussing the nonobvious requirement for granting a patent).

invention.”¹³¹ One is a co-inventor when she contributes an essential feature of the conception of an invention.¹³²

A co-inventor need not reduce an invention to practice,¹³³ and reduction to practice without contribution to conception is insufficient to be a co-inventor.¹³⁴ The court in *Ethicon, Inc. v. U.S. Surgical Corp.*¹³⁵ explained that “[o]ne who simply provides the inventor with well-known principles or explains the state of the art without ever having ‘a firm and definite idea’ of the claimed combination as a whole does not qualify as a joint inventor.”¹³⁶ It is not enough to cheer from the sidelines, and it is not enough to be the mechanic who builds a machine according to a description written by the inventor.¹³⁷

Whether a second inventor is a co-inventor along with a first inventor, or instead is an independent inventor of an improvement on the invention of the first, depends on whether the conception of the first inventor has crystallized before the second inventor goes to work on it.¹³⁸ If the conception has not crystallized and the second inventor’s contribution merges into the work of the first, which results in conception for the combined work, they are co-inventors.¹³⁹

C. *Procedures for Correcting Inventorship*

Inventorship disputes are common. A Westlaw search on April 17, 2024, using the search term “correction of inventorship” produced links to 856 cases in the state and federal case databases.¹⁴⁰

¹³¹ *Nartron Corp. v. Schukra U.S.A. Inc.*, 558 F.3d 1352, 1356–57 (Fed. Cir. 2009) (reversing finding of co-inventorship because a co-inventor must do more than provide the inventor with well-known principles or explain state of the art and must make a significant contribution to conception).

¹³² *See In re VerHoef*, 888 F.3d 1362, 1366 (Fed. Cir. 2018) (affirming PTAB decision that omission of co-inventor made the invention unpatentable).

¹³³ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022).

¹³⁴ *See id.*

¹³⁵ 135 F.3d 1456 (Fed. Cir. 1998).

¹³⁶ *Id.* at 1460.

¹³⁷ *See* MPEP § 2109 (9th ed. Rev. 7, July 2022).

¹³⁸ *See* MPEP § 2109.01 (9th ed. Rev. 7, July 2022).

¹³⁹ *See id.*

¹⁴⁰ The same search term on the same date in the Patent Trial and Appeal Board database produced twenty-two links, and in its predecessor, the Board of Patent Appeals and Interferences, returned seven links. The incidence among the

Once inventorship is established in a patent application, it may be corrected during prosecution of the application by a simple request if joined by everyone affected.¹⁴¹ Once a patent is issued, inventorship may be corrected in a reissue¹⁴² or ex parte reexamination proceeding,¹⁴³ in a post grant review by a petition to the Patent Office under Section 256,¹⁴⁴ or in federal court under Section 256.¹⁴⁵

1. ESTABLISHMENT, PRIMA FACIE

A patent application is incomplete without designation of the inventors.¹⁴⁶ The inventors are designated in the first instance by listing them on an Application Data Sheet (ADS)¹⁴⁷ and by submitting an oath or declaration on behalf of each inventor.¹⁴⁸ A substitute statement on behalf of an inventor who is unavailable or unwilling to sign an oath or declaration suffices as well.¹⁴⁹

2. CORRECTION IN APPLICATIONS

Section 116(c) authorizes correction of inventorship in patent applications.¹⁵⁰ While an application is pending, inventorship can be corrected by the simple expedience of providing a revised list of inventors on a new ADS, and by filing oaths or declarations, or statements on behalf of any inventor who does not already have one on file.¹⁵¹ These change mechanisms are obviously under the complete

administrative appeals is less because correction of inventorship during patent prosecution is usually consensual.

¹⁴¹ See 35 U.S.C. § 256.

¹⁴² See MPEP § 1412.04 (9th ed. Rev. 7, July 2022).

¹⁴³ See 37 C.F.R. § 1.530(k)(1).

¹⁴⁴ 35 U.S.C. § 256.

¹⁴⁵ *Id.* § 256(b).

¹⁴⁶ See MPEP § 601.01(a) (9th ed. Rev. 7, July 2022) (discussing requirement for oath or declaration as part of complete application).

¹⁴⁷ See MPEP § 601.05 (9th ed. Rev. 7, July 2022).

¹⁴⁸ See 37 C.F.R. § 1.63; *see also* MPEP § 602.01(a) (9th ed. Rev. 7, July 2022).

¹⁴⁹ See 37 C.F.R. § 1.64(a).

¹⁵⁰ See 35 U.S.C. § 116(c).

¹⁵¹ See MPEP § 601.05(a) (9th ed. Rev. 7, July 2022) (describing inventor information required on Application Data Sheet).

control of the applicant. If an unnamed inventor cannot persuade the applicant to add him, he must resort to other procedures.¹⁵²

Requests for correction of inventorship in a pending application are authorized by Section 116¹⁵³ and implemented by Section 1.48 of the USPTO regulations.¹⁵⁴ Requests under Section 1.48 must be accompanied by a fee, a corrected ADS, and an oath or declaration for any added inventor.¹⁵⁵ The Patent Office publishes a standard form for correction of inventorship under Section 1.48, which is a series of checkboxes with no requirement for justification or showing of good cause for the change.¹⁵⁶ Inventorship also may be corrected by filing a continuing application.¹⁵⁷

Section 1.291 of the USPTO regulations permits “any member of the public” to protest a patent application.¹⁵⁸ Section 1901.02(c) of the MPEP expressly permits such a protest to include a claim that the applicant did not himself invent the matter for which a patent is applied.¹⁵⁹ One is not entitled to a patent unless he is the inventor.¹⁶⁰

The utility of a Section 1.291 protest is limited because it must be filed before an application is published or before a patent is granted, whichever is earlier.¹⁶¹ But if an inventor learns of an application being filed that names the wrong inventors, she has a relatively short window to file a protest that opens up the question of inventorship.¹⁶² Recall that the correct inventors must be named on a patent application or the application must be rejected.¹⁶³

¹⁵² See generally MPEP § 1412.04 (9th ed. Rev. 7, July 2022).

¹⁵³ See 35 U.S.C. § 116(c).

¹⁵⁴ See 37 C.F.R. § 1.48.

¹⁵⁵ See MPEP § 602.01(c) (9th ed. Rev. 7, July 2022).

¹⁵⁶ See *id.*

¹⁵⁷ See *id.*

¹⁵⁸ 37 C.F.R. § 1.291.

¹⁵⁹ See MPEP § 1901.02(c) (9th ed. Rev. 7, July 2022).

¹⁶⁰ See generally 37 C.F.R. § 1.41.

¹⁶¹ See 37 C.F.R. § 1.291(b).

¹⁶² See MPEP § 1901.04 (9th ed. Rev. 7, July 2022).

¹⁶³ See MPEP § 2109 (9th ed. Rev. 7, July 2022) (“If a determination is made that the inventive entity named in a U.S. application is not correct, . . . a rejection should be made on this basis.”); MPEP § 2157 (providing for correction of inventorship in a derivation proceeding under 35 U.S.C. § 135, by correction of inventorship under 37 C.F.R. § 1.48 or by rejection under 35 U.S.C. § 101 and 35 U.S.C. § 135).

Third-party submissions after an application is published under Section 122(e)¹⁶⁴ are not particularly useful in inventorship contests. Those submissions are limited to prior art, such as earlier patents, published patent applications, or other published material.¹⁶⁵ If, however, a former employee or employer were to apply for a patent on something that had already been patented by the other, the third-party submission might be useful.¹⁶⁶

3. CORRECTION IN ISSUED PATENTS

Section 256 authorizes the Patent Office to correct inventorship in issued patents and empowers United States district courts to correct inventorship.¹⁶⁷ Section 256(a) authorizes the Patent Office to correct inventorship in published patents.¹⁶⁸ Inventorship may be corrected in a reissue proceeding, and incorrect inventorship is grounds for beginning a reissue proceeding.¹⁶⁹

The Patent Office can also correct inventorship in derivation proceedings under Section 291.¹⁷⁰ The Patent Office explicitly says that these proceedings are available to correct inventorship.¹⁷¹ Under the pre-AIA and long-standing interference procedure, omitted inventors could challenge inventorship by filing their own patent applications having the same claims as the applications from which

¹⁶⁴ 35 U.S.C. § 122(e).

¹⁶⁵ *See id.* § 122(e)(1).

¹⁶⁶ *See generally* MPEP § 1134.01.

¹⁶⁷ 35 U.S.C. § 256(a)–(b).

¹⁶⁸ 35 U.S.C. § 256(a).

¹⁶⁹ *See* MPEP § 1402 (9th ed. Rev. 7, July 2022) (“The correction of misjoinder of inventors in reissues has been held to be a ground for reissue.”).

¹⁷⁰ 35 U.S.C. § 291.

¹⁷¹ *See* Changes to Implement Derivation Proceedings, 77 Fed. Reg. 56068, 56075, 56078 (Sep. 11, 2012) (to be codified at 37 C.F.R. pt. 42) (allowing motions to address inventorship issues and adding new subpart E to 37 C.F.R. §§ 42.400–42.412); *see also id.* at 56078 (“[I]f the Board finds the inventorship to be incorrect in an involved application or patent, the Board may correct the inventorship in such an application or patent depending on the facts of the particular case, such as whether there is an agreement of the parties as to the correct inventors of the claimed invention in dispute.”); *id.* (“Any request to correct the inventorship of an application or patent accompanying such a motion must also comply with the appropriate requirements in part 1 of the CFR (e.g., § 1.48).”).

they were omitted.¹⁷² But few inventors wanted to go to the expense of triggering and litigating interference.¹⁷³

The derivation procedure has not been used much since its establishment but remains available.¹⁷⁴ “A charge of derivation addresses originality—namely, who invented the subject matter at issue.”¹⁷⁵ The law developed in interference proceedings is applicable in derivation proceedings.¹⁷⁶ To establish derivation, a petitioner must show: (1) substantial identity of at least one claim in the two application or the application and a patent; (2) prior conception by the petitioner; and (3) disclosure to the respondent.¹⁷⁷ The disclosure must be enabling.¹⁷⁸

Inventorship on an issued patent may be corrected in *ex parte* reexamination or on a petition by all the parties, including the assignees,¹⁷⁹ but incorrect inventorship is not grounds for reexamination.¹⁸⁰

¹⁷² See Ian Y. Liu & Leslie A. McDonnell, *AIA Breathes Life into Inventorship Correction in PTO*, FINNEGAN (Nov. 1, 2013), <https://www.finnegan.com/en/insights/articles/aia-breathes-life-into-inventorship-correction-in-pto.html>.

¹⁷³ See *id.* (“AIA makes derivation proceedings a viable venue to correct inventorship. Compared to interferences, a derivation provides a clearer pathway for making corrections. Compared to litigations, it carries a lower evidentiary standard and is less costly and much speedier.”).

¹⁷⁴ See generally Barbara Clarke McCurdy et al., *Spotted: The Rare AIA Derivation Proceeding!*, FINNEGAN (Apr. 22, 2022), <https://www.finnegan.com/en/insights/blogs/at-the-ptab-blog/spotted-the-rare-aia-derivation-proceeding.html> (reporting only twenty-three derivation cases filed by April 2022 producing only two instituted cases).

¹⁷⁵ Tencent Tech. (ShenZhen) Co. v. Rathod, No. DER2022-00002, 2022 WL 2307029, at *4 (P.T.A.B. June 27, 2022).

¹⁷⁶ See generally *id.* at *3.

¹⁷⁷ See *id.* at *4.

¹⁷⁸ See generally *id.* at *5. On the record presented by the petitioner, the Board denied institution of a derivation proceeding because Tencent, the petitioner, submitted insufficient evidence of prior conception. *Id.* at *1.

¹⁷⁹ See MPEP § 2250.02 (9th ed. Rev. 7, July 2022); 37 C.F.R. § 1.324; 37 C.F.R. § 1.530(k)(1) (allowing for correction of inventorship in *ex parte* reexamination if the petition is sufficient under 37 C.F.R. § 1.324(b)(1) and is filed). Section 1.324 of the Code of Federal Regulations requires agreement by all persons to be added as inventors, all persons originally named as inventors, and all assignees. 37 C.F.R. § 1.324(b).

¹⁸⁰ See MPEP § 2217 (9th ed. Rev. 7, July 2022) (“Other matters, such as . . . inventorship . . . will not be considered when making the determination on the request and should not be presented in the request.”).

Section 256(a) authorizes adding an inventor omitted from a patent through “error,” but only if all the parties and assignees agree.¹⁸¹ Applications under Section 256(a) must be made on behalf of all the parties and assignees.¹⁸² Because of the requirement for unanimity, the Patent Office does not specify procedures for reconciling disagreements over inventorship in issued patents.¹⁸³ Section 116, authorizing correction of inventorship in a patent application, contains no such requirement of unanimity,¹⁸⁴ and neither does a complaint filed in federal court under Section 256(b).¹⁸⁵

Section 256(b), rather opaquely, refers to a “court before which such matter is called in question,” authorizes such a court to order a correction, and obligates the Patent Office to issue an appropriate certificate of correction.¹⁸⁶ Before Section 256 was added to the statute in 1952, the only remedy for nonjoinder or misjoinder was invalidation of the patent.¹⁸⁷

In *Dee v. Aukerman*,¹⁸⁸ the district court held that Section 256 gives district courts original jurisdiction to order correction of inventorship, without need of either an infringement action or exhaustion of administrative remedies.¹⁸⁹ In *E.I. Du Pont de Nemours and Co. v. Okuley*,¹⁹⁰ the court held that *Dee* allows action in district court under Section 256 to correct inventorship on an issued patent without recourse to Patent Office; but, for correction of inventorship

¹⁸¹ 35 U.S.C. § 256.

¹⁸² MPEP § 1481.02 (9th ed. Rev. 7, July 2022) (construing 35 U.S.C. § 256(a)). Section 1.324(b) of the Code of Federal Regulations says:

Any request to correct inventorship of a patent pursuant to paragraph (a) of this section must be accompanied by: (1) A statement from each person who is being added as an inventor and each person who is currently named as an inventor either agreeing to the change of inventorship or stating that he or she has no disagreement in regard to the requested change.

37 CFR § 1.324(b).

¹⁸³ See 35 U.S.C. §§ 116, 256(b).

¹⁸⁴ 35 U.S.C. § 116.

¹⁸⁵ 35 U.S.C. § 256(b).

¹⁸⁶ *Id.*

¹⁸⁷ *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1350 (Fed. Cir. 1998) (citing S. REP. No. 82-1979, at 7–8 (1952)).

¹⁸⁸ 625 F. Supp. 1427 (S.D. Ohio 1986).

¹⁸⁹ *Id.* at 1429–30.

¹⁹⁰ No. C2-97-1205, 2000 WL 1911430 (S.D. Ohio Dec. 21, 2000).

in a patent application, an omitted inventor must go to the Patent Office under Section 116.¹⁹¹

Some confusion existed surrounding whether an omitted inventor seeking relief directly in district court must satisfy the requirement of Section 256(a) that all parties agree to correction of inventorship.¹⁹² The Federal Circuit says the answer is no.¹⁹³ The court held that “[i]f the patentees and their assignees agree, correction can be had on application to the Commissioner. In the event consensus is not attained, however, the second paragraph of [S]ection 256 permits redress in federal court.”¹⁹⁴

In *HRD Corp. v. Bagherzadeh*,¹⁹⁵ the district court denied a motion to dismiss a declaratory judgment action brought by a corporation to remove an inventor, who failed to identify his contributions during an arbitration proceeding and who refused to consent to a joint effort before the USPTO to correct inventorship.¹⁹⁶ The court held that all-party consent was not necessary in a judicial proceeding:

Under the express language of the statute, the requirement that “all of the parties and assignees” file a joint application for a correction of a named inventor pertains to situations where “the Director . . . issues a certificate correcting [an] error.” The sentence that empowers the Director to make such a correction is found in the statute’s first paragraph and bears no mention of a party requesting a correction through a court order. The sentence empowering a court to order a correction of a named inventor is found in a separate paragraph and is conditioned only on the “notice and hearing of all parties concerned.”

The notion that the prerequisites for corrections issued by the Director are distinct from those issued by

¹⁹¹ *Id.* at *11 (citing 35 U.S.C. § 116).

¹⁹² *MCV, Inc. v. King-Seeley Thermos Co.*, 870 F.2d 1568, 1570 (Fed. Cir. 1989).

¹⁹³ *See id.*

¹⁹⁴ *Id.* (citations omitted).

¹⁹⁵ 822 F. Supp. 2d 667 (S.D. Tex. 2011).

¹⁹⁶ *Id.* at 667–68.

court order is reinforced by the language in the regulation, which arranges them disjunctively: “the Director. . . may, on application of all the parties and assignees, or on order of a court before which such matter is called in question” The regulation makes clear that a party seeking a correction through a court order is not required to first obtain the consent of all the parties and assignees. Accordingly, HRD was not required to obtain consensus from all of the parties and assignees before filing its complaint.¹⁹⁷

But the authority of a district court does not extend to pending applications as opposed to issued patents. In *Stevens v. Broad Reach Companies, LLC*,¹⁹⁸ the district court dismissed a declaratory judgment action to correct inventorship in a pending patent application that was premised on the inability of the plaintiff to get others to agree to correction in a Section 116 proceeding.¹⁹⁹ The court held that Section 116 provides the exclusive remedy for misjoinder or nonjoinder in a pending application, following the *DuPont* case.²⁰⁰

A plaintiff seeking to be included as an inventor must be careful with this approach. The traditional remedy for misjoinder or nonjoinder was invalidation of the patent.²⁰¹ So, a plaintiff seeking correction of inventorship in court may find the patent invalidated but nevertheless constituting prior art that prevents the plaintiff from obtaining a patent on her own.²⁰² Protection against this unhappy eventuality should be available by a clear request to the district court to correct inventorship as the remedy rather than declaring the patent to be invalid; but, the possibility exists that the choice between the two remedies would lie within the discretion of the court.

¹⁹⁷ *Id.* at 670 (alterations in original) (citations omitted).

¹⁹⁸ No. 05-647-CV-W-GAF, 2006 WL 1556313 (W.D. Mo. May 31, 2006).

¹⁹⁹ *Id.* at *8.

²⁰⁰ *Id.*; see also *E.I. Du Pont de Nemours & Co v. Okuley*, No. C2-97-1205, 2000 WL 1911430, at *11 (S.D. Ohio Dec. 21, 2000).

²⁰¹ *MCV, Inc. v. King-Seeley Thermos Co.*, 870 F.2d 1568, 1570 (Fed. Cir. 1989).

²⁰² See *id.* at 1570–71.

D. Evidence of Inventorship

*Blue Gentian v. Tristar Products, Inc.*²⁰³ provides a good example of the kinds of evidence and the nature of the proceedings involved in resolving inventorship disputes.²⁰⁴ *Blue Gentian* was a patent infringement case in which the court held a hearing to decide an inventorship dispute under Section 256.²⁰⁵ The court heard live testimony from nine witnesses and received briefs.²⁰⁶ Gary Ragner, a non-party to the infringement litigation, claimed that he was a co-inventor with Blue Gentian's principal, Michael Berardi, but that his name was left off six patents.²⁰⁷

Most of the evidence in this case related to a single three-to-four-hour long meeting.²⁰⁸ The meeting focused on a derivative of an expandable hose already developed by Ragner.²⁰⁹ Berardi was a songwriter and video producer, who taught himself about garden hoses while working in his father's hardware store.²¹⁰ He heard about Ragner's "Microhose," watched videos of it, and had an idea for a different type of expandable hose.²¹¹ He decided to explore a venture with Ragner instead of developing his own idea.²¹² Ragner was an experienced inventor with several patents to his name.²¹³ At the meeting, Berardi, Ragner, and several of their advisors, focused mainly on financial matters such as raising capital, the details of a business plan, and how to structure a relationship.²¹⁴ At one point, Berardi and Ragner discussed changing the design of the hose to use elastic material rather than springs, but not everyone remembered that part of the conversation.²¹⁵ They conducted a demonstration of

²⁰³ 632 F. Supp. 3d 627 (D.N.J. 2021).

²⁰⁴ *See id.* at 631.

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 631–34.

²⁰⁷ *Id.* at 632.

²⁰⁸ *Id.*

²⁰⁹ *See Blue Gentian*, 632 F. Supp. 3d at 632.

²¹⁰ *Id.* at 633.

²¹¹ *Id.*

²¹² *Id.* at 634.

²¹³ *See id.*

²¹⁴ *Id.* at 635.

²¹⁵ *Blue Gentian*, 632 F. Supp. 3d at 635–36.

Ragner's design, and the testimony disagreed about how successful it was.²¹⁶

Berardi testified that he was disappointed by the demonstration and thereafter worked on his own idea without Ragner's involvement.²¹⁷ Berardi claimed that while he was exercising at the gym, the following idea sprang to his mind: to use elastic materials similar to exercise bands as the foundation of an expandable hose.²¹⁸ The court explained the evidentiary standard for correction of inventorship under Section 256 as follows:

In a § 256 proceeding to correct inventorship, "the inventors as named in an issued patent are presumed to be correct." In addition to this presumption, courts have also recognized the "temptation for even honest witnesses to reconstruct, in a manner favorable to their own position, what their state of mind may have been years earlier." In recognition of this temptation, the claimed inventor must "meet a heavy burden of proving his case by clear and convincing evidence."

To satisfy this standard, a claimed inventor must provide evidence corroborating his testimony concerning conception of the invention. Finally, "[t]he determination of whether a person is a joint inventor is fact specific and no bright-line standard will suffice in every case."²¹⁹

The court also rejected the idea that Berardi had completed conception before the meeting when it said:

Michael Berardi did not have a specific, settled idea, but rather a general goal of creating an expandable garden hose that could succeed as a DRTV product. Similarly, Michael Berardi did not yet have solution to a problem, or even a research plan to follow for the creation of the XHose. In fact, he testified that

²¹⁶ *Id.* at 636.

²¹⁷ *Id.* at 637.

²¹⁸ *Id.* at 633.

²¹⁹ *Id.* at 638–39 (citations omitted).

while making his first prototype, he “didn’t really know what [he] was doing” and had not settled on a “final thought process” for how to produce his hose.²²⁰

The court did find sufficient facts to establish collaboration, however, and explained that:

Michael Berardi saw relevant and excruciatingly detailed graphics and photographs at his meeting with Ragner Technologies. These disclosures encompassed Ragner’s novel, proprietary, and confidential information concerning Ragner Technologies’ MicroHose most, if not all, of which had been set forth in Ragner’s pending patent applications.

Though Michael Berardi did not photograph the prototype he was shown, he did hold and use it, even asking to keep it. Berardi clearly relied upon the prototype and Ragner’s oral suggestions about alternative methods for building an expandable hose in building his own. After Michael Berardi applied for his patent for the XHose in November 2011, Ragner recognized these inventions as being related to what he had shown Michael Berardi in the August 23 meeting. Moreover, Michael Berardi had neither attempted nor failed to make an expandable hose prior to meeting with Ragner Technologies and he admitted he was eager to meet with Ragner Technologies about its expandable hose.²²¹

The court found that Ragner made a significant contribution to the invention and that it did not matter that he decided not to pursue on his own the contributions he made.²²² The court added that “Ragner’s decision not to pursue this design further does not reflect a lack of a clear or definite idea. Rather, Ragner’s continued innovation reflects a rejection of a design that, in Ragner’s view, exhibited an

²²⁰ *Id.* at 640.

²²¹ *Blue Gentian*, 632 F. Supp. 3d at 641.

²²² *Id.* at 649.

unacceptable propensity to burst under high water pressure.”²²³ The court found only weak corroboration from the testimony of the participants in the meeting, but strong corroboration from the physical prototypes, documentary evidence, and earlier patents obtained by Ragner.²²⁴

In one case, the district court found sufficient contribution to conception by a claimed co-inventor where the claimed co-inventor offered his sketches showing the invention, his expertise in electronics, the named inventor’s need for someone with expertise in electronics, and his proposal that he and the co-inventor work together, followed by a collaboration.²²⁵ The sketches were also quite similar to the figures in the issued patent.²²⁶ The court of appeals, therefore, found no reversible error.²²⁷

In *Hip, Inc. v. Hormel Foods Corp.*,²²⁸ however, the Federal Circuit reversed a finding that David Howard, an individual omitted from a patent, should be added to the patent as a joint inventor.²²⁹ Hormel contracted with Howard, the purported co-inventor, to assist it in developing improved cooking processes for pork loin.²³⁰ Howard claimed that he contributed at least three concepts to the invention.²³¹ Hormel appealed on the basis that Howard’s contributions were anticipated or obvious under the prior art exception, and that the contributions were not significant.²³² The Federal Circuit agreed with Hormel, holding that:

[W]e find that Howard’s alleged contribution of pre-heating meat pieces using an infrared oven is “insignificant in quality,” to the claimed invention. How-

²²³ *Id.* at 644.

²²⁴ *See id.* at 646–49.

²²⁵ *Ethicon v. U.S. Surgical Corp.*, 135 F.3d 1456, 1464 (Fed. Cir. 1998).

²²⁶ *Id.*

²²⁷ *Id.* at 1464–65.

²²⁸ 66 F.4th 1346 (Fed. Cir. 2023).

²²⁹ *Id.* at 1347.

²³⁰ *Id.* at 1349.

²³¹ *Id.* at 1349–50 (citing *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1349 (Fed. Cir. 1998)) (highlighting how a plaintiff qualifies for joint inventorship under the three-part test articulated in *Pannu*).

²³² *Id.* at 1350–51.

ard’s alleged contribution, preheating with an infrared oven, is mentioned only once in the ‘498 patent specification as an alternative heating method to a microwave oven. Further, the alleged contribution is recited only once in a single claim of the ‘498 patent, in a Markush group reciting a microwave oven, an infrared oven, and hot air.²³³

Patent litigation is notoriously complex, but that complexity need not extend to resolution of inventorship disputes. *Blue Gentian* is an example of a relatively short hearing, a limited number of witnesses, and a manageable set of documents and exhibits that allowed for consideration of the opposing arguments.²³⁴

II. STANDING

Even when an inventor has been left off a patent, and even if she has good evidence of her sole or co-inventorship, she may not be able to get a judicial decision on the merits because her interest in the invention may not qualify as an “injury in fact” necessary for standing.

A. *Article III*

“To have Article III standing to sue in federal court, plaintiffs must demonstrate, among other things, that they suffered a concrete harm. No concrete harm, no standing.” The asserted harm must have a close relationship to harm traditionally recognized as providing a basis for a lawsuit, such as physical harm, monetary harm, or intangible harms such as reputational injury.

In *TransUnion LLC v. Ramirez*,²³⁵ all nine justices of the Supreme Court agreed on this much, but they disagreed on the threshold for harm.²³⁶ A class of 8,185 individuals sued TransUnion, a credit reporting agency, for failing to use reasonable measures to

²³³ *Id.* at 1351–52 (citations omitted).

²³⁴ *See Blue Gentian v. Tristar Prods., Inc.*, 632 F. Supp. 3d 627, 631 (D.N.J. 2021).

²³⁵ 594 U.S. 413, 417 (2021).

²³⁶ *Id.* at 415–16, 450, 460–61.

protect the accuracy of their credit files.²³⁷ The Court found that 1,853 class members demonstrated sufficient concrete reputational harm and, thus, had standing.²³⁸ The other 6,332 class members did not.²³⁹ The difference was that the smaller subclass showed that misleading credit reports were communicated to third party businesses, while the larger subclass had no such proof.²⁴⁰ On another claim for misformatting of mailings, only one individual had standing.²⁴¹

The core concept behind the standing requirement is that a plaintiff must have a personal stake in the case.²⁴² Therefore, “plaintiffs must be able to sufficiently answer the question: ‘What’s it to you?’”²⁴³ To answer that question satisfactorily, “a plaintiff must show: (i) that he suffered an injury in fact that is concrete, particularized, and actual or imminent; (ii) that the injury was likely caused by the defendant; and (iii) that the injury would likely be redressed by judicial relief.”²⁴⁴ A variety of intangible harms are recognized as sufficiently concrete, including “reputational harms, disclosure of private information, [] intrusion upon seclusion,” abridgment of free speech, and infringement of free exercise of religion.²⁴⁵

Plaintiffs do not automatically satisfy the injury in fact requirement merely by showing a statutory violation.²⁴⁶ In *TransUnion*, the Court contrasted two hypotheticals, both of which involved a violation of environmental law.²⁴⁷ One plaintiff was able to allege that the pollution damaged her property.²⁴⁸ The other plaintiff was unable to show any damage to its own property and stood merely on the statutory violation.²⁴⁹ The first plaintiff had Article III standing; the

²³⁷ *Id.* at 417.

²³⁸ *Id.* at 417.

²³⁹ *Id.*

²⁴⁰ *Id.*

²⁴¹ *TransUnion LLC*, 594 U.S. at 418.

²⁴² *Id.* at 423.

²⁴³ *Id.* (citation omitted).

²⁴⁴ *Id.* at 423.

²⁴⁵ *Id.* at 425.

²⁴⁶ *Id.* at 426.

²⁴⁷ *TransUnion LLC*, 594 U.S. at 427.

²⁴⁸ *Id.*

²⁴⁹ *Id.*

second plaintiff did not, even though they both were able to show violation of a statutory right.²⁵⁰

This outcome is required because as the Court said, “if the law of Article III did not require plaintiffs to demonstrate a ‘concrete harm,’ Congress could authorize virtually any citizen to bring a statutory damages suit against virtually any defendant who violated virtually any federal law.”²⁵¹ Additionally, dissemination of erroneous information by the *TransUnion* defendants satisfied the requirements for concrete reputational injury.²⁵² Conversely, merely maintaining erroneous information in *TransUnion*’s files without disseminating it did not.²⁵³ In defamation, for example, no liability exists until false information is published.²⁵⁴

Justice Thomas, joined by Justices Kagan, Sotomayor, and Breyer, dissented, although he agreed that the “key to the scope of the judicial power . . . is whether an individual asserts his or her own rights.”²⁵⁵ Justice Thomas noted that injury for standing purposes is often defined by statute: “No one could seriously dispute, for example, that a violation of property rights is actionable, but as a general matter, ‘property rights are created by the State.’”²⁵⁶ Thomas also added that “courts for centuries [have] held that injury in law to a private right was enough to create a case or controversy.”²⁵⁷

In *TransUnion*, Thomas thought that “each class member established a violation of his or her private rights,” by showing a violation of “three separate duties created by statute.”²⁵⁸ He explained that the injury in fact requirement, as distinct from an injury in law requirement, is relatively new in standing jurisprudence.²⁵⁹ It was invented to allow an additional pathway for citizen suits to enforce public

²⁵⁰ *Id.* at 427–28.

²⁵¹ *Id.* at 428.

²⁵² *Id.* at 433.

²⁵³ *TransUnion LLC*, 594 U.S. at 433.

²⁵⁴ *Id.* at 434.

²⁵⁵ *Id.* at 446 (Thomas, J., dissenting).

²⁵⁶ *Id.* at 448–49 (quoting *Palazzolo v. Rhode Island*, 533 U.S. 606, 626 (2001)).

²⁵⁷ *Id.* at 449.

²⁵⁸ *Id.*

²⁵⁹ *TransUnion LLC*, 594 U.S. at 450.

rights.²⁶⁰ No one questioned that violation of a private right was sufficient injury for standing purposes.²⁶¹

Justice Kagan, joined by Justices Breyer and Sotomayor, also dissented²⁶² and criticized the majority for holding, “for the first time . . . [that the] specific class of plaintiffs whom Congress allowed to bring a lawsuit cannot do so under Article III.”²⁶³

The Supreme Court’s observation in *TransUnion* that the mere maintenance of erroneous information does not constitute concrete harm for standing purposes unless it is published²⁶⁴ is significant to the subject of this Article. Patents are published, and the omission of an inventor’s name on a published patent indicates that he did not satisfy the criteria for inventorship,²⁶⁵ which is an implication likely to cause reputational harm to anyone active in technological innovation.

TransUnion does not mandate the way the Federal Circuit has imposed Article III standing requirements.²⁶⁶ Each of the opinions in *TransUnion* emphasized the underlying policy-justified requirement that standing be based on an individualized, particularized injury.²⁶⁷ That is surely satisfied by an inventor who is not listed as an inventor on a patent. Section 256 plaintiffs are not trying to assert inventorship claims on behalf of someone else, they are asserting their own inventorship.²⁶⁸ And to establish their own inventorship, plaintiffs must offer highly particularized evidence about their conduct and motivations.²⁶⁹

Second, the *TransUnion* majority, in denying standing based on the maintenance without disclosure of erroneous information in credit bureau files, analogized to the law of defamation and distinguished false information that is published, which causes injury in

²⁶⁰ See *id.* at 451.

²⁶¹ See *id.* at 451–52.

²⁶² *Id.* at 460 (Kagan, J, dissenting).

²⁶³ *Id.* at 461.

²⁶⁴ See *id.* at 434 (majority opinion).

²⁶⁵ See MPEP § 2109 (9th ed. Rev. 7, July 2022).

²⁶⁶ See *infra* Section IB (reviewing Federal Circuit’s application of standing law under § 256).

²⁶⁷ See, e.g., *TransUnion LLC*, 594 U.S. at 423.

²⁶⁸ See 35 U.S.C. § 256.

²⁶⁹ See, e.g., *Blue Gentian v. Tristar Prods., Inc.*, 632 F. Supp. 3d 627, 639 (D.N.J. 2021).

fact, from false information that is not published.²⁷⁰ This might justify a conclusion that nonjoinder of an inventor in a patent application that is never published and never matures into a patent may not support Article III standing; however, it does not mean that depriving one's place as an inventor on a published application or a patent is harmless.

Finally, the five-to-four split of the Court in *TransUnion* and the carefully reasoned distinctions about when reputational injury crystallizes²⁷¹ suggests that the Court might reach a different outcome in a case involving a different statute, such as Section 256 of the Patent Act.

For example, in *Thole v. U.S. Bank N.A.*,²⁷² the Court reiterated the requirements for Article III standing:

To establish standing under Article III of the Constitution, a plaintiff must demonstrate (1) that he or she suffered an injury in fact that is concrete, particularized, and actual or imminent, (2) that the injury was caused by the defendant, and (3) that the injury would likely be redressed by the requested judicial relief.²⁷³

The Court also reiterated that Article III standing is independent of establishing a statutory right when it explained that “Article III standing requires a concrete injury even in the context of a statutory violation.”²⁷⁴

Though the named plaintiffs in *Thole* were receiving all the benefits to which they were entitled, they filed a class action under the Employee Retirement Income Security Act of 1974 (ERISA).²⁷⁵ The plaintiffs claimed mismanagement of the defined benefit plan by poor investments a decade before, resulting in some \$750 million in losses.²⁷⁶ The Supreme Court held that the outcome of the lawsuit

²⁷⁰ See *TransUnion LLC*, 594 U.S. 434.

²⁷¹ *Id.*

²⁷² 590 U.S. 538 (2020).

²⁷³ *Id.* at 540 (citations omitted).

²⁷⁴ *Id.* at 538, 544 (quoting *Spokeo, Inc., v. Robins*, 578 U.S. 330, 341 (2016)).

²⁷⁵ See *id.* at 541.

²⁷⁶ See *id.*

would make no difference to the named plaintiffs.²⁷⁷ The named plaintiffs would receive their benefits regardless of what happened in the litigation.²⁷⁸ Thus, standing was lacking.²⁷⁹

Under this test for Article III standing articulated by the Supreme Court, Bailey Dutton from the Introduction's hypothetical²⁸⁰ can distinguish *Thole*; he can show the efficacy of relief from the court—putting his name on the patent.

Additionally, Article III standing is not a requirement for access to any administrative procedure before the Patent Office; Article III only limits the power of federal courts.²⁸¹

B. *As Applied to Section 256 Claims*

The United States Court of Appeals for the Federal Circuit has been rigorous in its insistence that Section 256 plaintiffs establish standing in addition to establishing entitlement for correction of inventorship under that section.²⁸² Under the Federal Circuit's jurisprudence, standing is thrown into question when an inventor has assigned his right—an outcome that is almost inevitable in the case of employee-inventors who must assign their inventions to their employers as a condition of continued employment.²⁸³ Depending on the terms of the assignment, an inventor may have difficulty establishing that failure to name him as an inventor has caused him economic injury.²⁸⁴

The Federal Circuit has been coy as to whether nonjoinder causes reputational injury sufficient to be injury in fact for Article III purposes.²⁸⁵ Also, the court's opinions leave some doubt as to the type of future interest, such as the possibility of reverter for failure

²⁷⁷ *See id.*

²⁷⁸ *Thole*, 590 U.S. at 541.

²⁷⁹ *Id.* at 541–42.

²⁸⁰ *See* discussion *supra* Introduction (discussing hypothetical involving Bailey Dutton and Robots on the Range, LLC).

²⁸¹ *See, e.g.,* *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 559–60 (1992) (explaining that Article III “limits the jurisdiction of federal courts to ‘Cases’ and ‘Controversies.’”).

²⁸² *See, e.g.,* *Chou v. Univ. of Chi.*, 254 F.3d 1347, 1357 (Fed. Cir. 2001).

²⁸³ *See, e.g., id.*; Henry H. Perritt, Jr., *Employee Patents*, 63 UNIV. LOUISVILLE L. REV. 75 (2024).

²⁸⁴ *See, e.g., id.* at 1359.

²⁸⁵ *See, e.g., id.*

to pay royalties or failure to name the assignor as an inventor, that would qualify as economic injury.²⁸⁶

*Chou v. University of Chicago*²⁸⁷ is the polestar for establishing standing to make a claim under Section 256.²⁸⁸ The Federal Circuit held that “an expectation of ownership of a patent is not a prerequisite for a putative inventor to possess standing to sue to correct inventorship under § 256.”²⁸⁹ The court suggested that reputational interest in being named as an inventor might be enough to establish standing,²⁹⁰ but then it hedged:

Chou argues that a reputational interest alone is enough to satisfy the requirements of Article III standing. That assertion is not implausible. After all, being considered an inventor of important subject matter is a mark of success in one’s field, comparable to being an author of an important scientific paper. Pecuniary consequences may well flow from being designated as an inventor. However, we need not decide that issue because Chou has alleged a concrete financial interest in the patent, albeit an interest less than ownership. Chou claims that the University is obligated to provide “[f]aculty, student and staff inventors . . . 25% of the gross royalties and up-front payments from licensing activities.” She also claims the right to receive rights to 25% of the stock of new companies based on their inventions. If Chou has indeed been deprived of an interest in proceeds from licensing the invention and in stock ownership by the conduct that she alleges, then she will have suffered an injury-in-fact, *i.e.*, the loss of those benefits.²⁹¹

²⁸⁶ See, e.g., *id.* at 1363–64.

²⁸⁷ 254 F.3d 1347 (Fed. Cir. 2001).

²⁸⁸ *Id.* at 1356–60.

²⁸⁹ *Id.* at 1358.

²⁹⁰ See *id.* at 1359.

²⁹¹ *Id.*

In *Larson v. Correct Craft, Inc.*,²⁹² the Federal Circuit distinguished *Chou*.²⁹³ The Federal Circuit explained that Larson's position differed from Chou's in that:

Larson has affirmatively transferred title to the patents to Correct Craft, and he stands to reap no benefit from a preexisting licensing or royalties arrangement. His only path to financial reward under § 256 involves him first succeeding on his state-law claims and obtaining rescission of the patent assignments. With his ownership of the wakeboard-tower patents being contingent in this manner, Larson has no financial interest in the patents sufficient for him to have standing to pursue a § 256 claim.²⁹⁴

The court also referred to *Jim Arnold Corp. v. Hydrotech Systems, Inc.*,²⁹⁵ an infringement case in which the Federal Circuit held that the plaintiff lacked standing because he did not have an ownership interest in the patents.²⁹⁶ When referencing this case, the court added that “[j]ust as Larson would lack standing to sue for infringement unless and until he regains title to the patents, so, too, he has no non-contingent interest in the patents on which to support his standing to correct inventorship under Section 256.”²⁹⁷ At least twice, the *Larson* court referred to the plaintiff's interest as “contingent.”²⁹⁸

In *Larson*, the court avoided the question left open in *Chou*—whether a purely reputational interest is sufficient to confer standing for a Section 256 claim—because Larson claimed no reputational injury, and so that could not be a basis on which to find standing.²⁹⁹ Though, *Shum v. Intel Corp.*³⁰⁰ distinguished *Larson* because of a

²⁹² 569 F.3d 1319 (Fed. Cir. 2009).

²⁹³ *Id.* at 1326–28.

²⁹⁴ *Id.* at 1326–27.

²⁹⁵ 109 F.3d 1567 (Fed. Cir. 1997).

²⁹⁶ *See Larson*, 569 F.3d at 1327 (citing *Jim Arnold Corp. v. Hydrotech Sys., Inc.*, 109 F.3d 1567, 1572 (Fed. Cir. 1997)).

²⁹⁷ *See id.*

²⁹⁸ *See id.*; see also discussion *infra* Section III.C (discussing future interests).

²⁹⁹ *Larson*, 569 F.3d at 1324.

³⁰⁰ 629 F.3d 1360 (Fed. Cir. 2010).

difference in the assignment.³⁰¹ In *Shum*, the court described the difference as:

Shum is not like the plaintiff in *Larson*, who had already transferred title to the patents for which he sought correction of inventorship, and thus had no ownership interest in the patents-in-suit. Our conclusion that the plaintiff in *Larson* suffered no injury-in-fact sufficient to confer constitutional standing was based on that transfer of ownership rights. No such transfer or assignment has occurred here. Accordingly, Shum had, and continues to have, standing to pursue his correction of inventorship claims under 35 U.S.C. § 256.³⁰²

Likewise, in *Trireme Medical, LLC v. AngioScore, Inc.*,³⁰³ the Federal Circuit reversed dismissal of a Section 256 action for lack of standing.³⁰⁴ As in *Chou*, the court found no assignment.³⁰⁵ The portion of the assignment agreement at issue in this case was titled “Inventions Retained and Licensed.”³⁰⁶ The plain meaning of this section of the agreement, construed according to California law, failed to indicate that inventions not listed as prior inventions were assigned, rather than licensed.³⁰⁷ At most, the agreement granted the defendant a nonexclusive license in the event of incorporation of a prior invention into an AngioScore product during the term of the Consulting Agreement.³⁰⁸ Such license is not exclusive and would not prevent Dr. Lotan, a claimed inventor that was left off of the patent, from subsequently assigning his rights elsewhere.³⁰⁹ The Federal Circuit held that the district court erred by finding that Dr. Lotan assigned his rights.³¹⁰ The court ultimately remanded to the

³⁰¹ *Id.* at 1366.

³⁰² *Id.* at 1366 n.7.

³⁰³ 812 F.3d 1050 (Fed. Cir. 2016).

³⁰⁴ *Id.* at 1052.

³⁰⁵ *Id.* at 1050.

³⁰⁶ *Id.* at 1054.

³⁰⁷ *See id.*

³⁰⁸ *Id.* at 1055.

³⁰⁹ *Trireme Med. LLC*, 812 F.3d at 1055.

³¹⁰ *Id.*

district court for determination of whether Dr. Lotan crystallized inventions during his work for the defendant and thus brought them within the assignment.³¹¹

*James v. j2 Cloud Services, LLC*³¹² also reversed dismissal for lack of standing to sue for correction of inventorship under Section 256.³¹³ The district court concluded that Mr. James lacked standing to claim his sole inventorship because he had assigned away all his rights in the patent.³¹⁴ The court stated a basic proposition for Section 256 standing—one apparently at odds with other Federal Circuit cases discussed in this section:

Mr. James alleges that he is the sole inventor of the inventions claimed in the . . . patent, that sole inventorship entails sole ownership, and that 35 U.S.C. § 256 gives him a cause of action to establish sole inventorship and therefore sole ownership. Subject to an important qualification, if Mr. James were to prevail on those allegations in this case, he would stand to gain concretely, whether through securing an entitlement to seek damages for past acts of infringement or otherwise. Such a gain would be directly related to the merits of the claim and would redress the asserted injury of being deprived of allegedly rightful ownership. In the absence of other facts, that is enough to give Mr. James Article III standing.³¹⁵

At the preliminary stage of the litigation, the district court was unwarranted in concluding that the software development agreement (SDA) precludes Mr. James from retaining ownership rights in patents on his inventions—either as itself an assignment or as a contract to assign.³¹⁶

“Although state law governs the interpretation of contracts generally,” whether a contract “creates an

³¹¹ *Id.* at 1056.

³¹² 887 F.3d 1368 (Fed. Cir. 2018).

³¹³ *Id.* at 1373.

³¹⁴ *Id.*

³¹⁵ *Id.* at 1372.

³¹⁶ *Id.* at 1373.

automatic assignment or merely an obligation to assign” is a matter of federal law. On the automatic-assignment side of the line is a “contract [that] expressly conveys rights in future inventions. On the other side of the line is a “mere promise to assign rights in the future. . . .”

. . . The SDA is amenable to the construction that it does not assign, or promise to assign, patent rights that would otherwise accrue to Mr. James as an inventor. . . .

. . . .

. . . We conclude that the SDA can, and therefore at the present stage of this case must, be construed in Mr. James’s favor. So construed, the SDA does not deprive Mr. James of constitutional standing.³¹⁷

The court’s conclusion is unremarkable, turning as it does, on a conclusion that the plaintiff had not assigned away all of his rights.³¹⁸ But the quoted language about denial of inventorship itself, without more, satisfying the Article III requirement for standing is significant.

The problem with these decisions is not that the Federal Circuit is getting the law wrong. All of them are technically correct. The problem is that the court is unnecessarily burdening omitted inventors with having to prove economic injury from not being listed as inventors of their inventions.³¹⁹ Marshaling such proof is time consuming and expensive, and the outcome is always uncertain.³²⁰ Part III shows how these burdens can be lifted while still requiring Article III standing for Section 256(b) lawsuits.³²¹

³¹⁷ *Id.* at 1373–75 (citations omitted).

³¹⁸ *See j2 Cloud Servs.*, 887 F.3d at 1373.

³¹⁹ *See* William Honaker, *Getting a Patent: The Devastating Consequences of Not Naming All Inventors*, IP WATCHDOG (Oct. 21, 2020, 7:15 AM), <https://ip-watchdog.com/2020/10/21/getting-patent-devastating-consequences-not-naming-inventors/id=126534/>.

³²⁰ *See* Jordana Goodman, *Who Benefits?: How the AIA Hurt Deceptively Non-Joined Inventors*, 50 HOFSTRA L. REV. 725, 750 (2022).

³²¹ *See* discussion *infra* Part III.

C. *Other Cases in Which Plaintiffs Allegedly Contracted Away Their Rights*

Article III standing case law in other contexts does not deprive a plaintiff of injury in fact necessary for standing merely because he has contracted away the interest that he now claims. *Springer v. Cleveland Clinic Employee Health Plan Total Care*³²² is particularly instructive. There, the plaintiffs claimed denial of health benefits allegedly owed to them under an ERISA plan.³²³ The court of appeals held that the plaintiffs had injury in fact for standing purposes even if they had assigned their benefits to health care providers.³²⁴

In *CHKRS, LLC v. City of Dublin*,³²⁵ the court of appeals reversed the district court and found standing to file a Takings Clause action against a municipality for replacing a driveway with a defective one.³²⁶ The district court found no injury in fact and, thus, no standing because the plaintiffs lacked a property interest.³²⁷ The court of appeals disagreed and stated that:

As long as a plaintiff has asserted a colorable legal claim (and has met standing's other elements), the plaintiff has satisfied Article III and the court may resolve the claim on its merits. And here, CHKRS has established its standing by alleging a colorable interest in the property for its takings claim.³²⁸

Although lessees usually have rights in eminent domain proceedings, the district court held that the plaintiffs had contracted away their rights in their lease-buy contract by providing that any eminent domain proceeds would go to the lessor until, and unless, the plaintiffs bought the property.³²⁹

The proper test, the court of appeals said, however, is whether a plaintiff has alleged a colorable or arguable claim that the defendant

³²² 900 F.3d 284 (6th Cir. 2018).

³²³ *Id.* at 292.

³²⁴ *Id.* at 287 (compiling cases from Fifth, Ninth, and Eleventh circuits reaching same conclusion).

³²⁵ 984 F.3d 483 (6th Cir. 2021).

³²⁶ *Id.* at 492.

³²⁷ *Id.* at 489.

³²⁸ *Id.* at 486.

³²⁹ *Id.* at 489.

has invaded a legally protected interest.³³⁰ Only if the claimed interest is “wholly insubstantial and frivolous,” does a claim’s failure on the merits turn into a standing defect.³³¹ The court of appeals analogized to breach of contract claims, where the possibility that the contract has not been breached does not defeat standing to sue for breach of contract.³³² Therefore, parties seeking to set aside contracts do not lack standing merely because the contract they are challenging leaves them without rights.³³³ It takes no great intellectual gymnastics to map this reasoning onto the patent assignment context.

III. PRINCIPLES FOR STREAMLINING

The Federal Circuit’s view can be summed up as follows: an inventor lacks standing to seek correction of inventorship unless he can show a financial interest in a patent.³³⁴ It has so far refused to decide whether a reputational interest will suffice as an alternative to a financial interest, while leaving open the possibility.³³⁵ An inventor lacks the necessary financial interest to have standing if he has assigned away his entire interest.³³⁶ If the inventor challenges the force of the assignment, that challenge presents a controversy exclusively within the subject matter jurisdiction of state courts and outside the subject matter jurisdiction of federal courts under Section 1338.³³⁷ An inventor must first go to state court to get his assignment wholly or partially set aside and then come back to federal court, where he can then present his case for correction of inventorship under Section 256.³³⁸ To be sure, he does not always have to go to state court to get the assignment matter adjudicated if he has access to federal court under some source of subject matter jurisdiction

³³⁰ *Id.*

³³¹ *CHKRS, LLC*, 984 F.3d at 489.

³³² *Id.*

³³³ *Kuhns v. Scottrade, Inc.*, 868 F.3d 711, 716 (8th Cir. 2017) (holding that a party to a breached contract has a judicially cognizable interest for establishing standing).

³³⁴ *Larson v. Correct Craft, Inc.*, 569 F.3d 1319, 1321 (Fed. Cir. 2009).

³³⁵ *Id.* at 1327.

³³⁶ *James v. j2 Cloud Servs.*, 887 F.3d 1368, 1373 (Fed. Cir. 2018).

³³⁷ 28 U.S.C. § 1338.

³³⁸ 35 U.S.C. § 256.

other than Section 1338.³³⁹ This could be diversity of citizenship under Section 1332³⁴⁰ or federal question jurisdiction under Section 1331³⁴¹ because he asserts a Defend Trade Secrets Act claim.³⁴² The district court may then have supplemental jurisdiction over the state law assignment claims depending on the transactional unity among the claims.³⁴³ But even in federal court, it is a two-step process.

The force of the Federal Circuit's position depends on its conclusion that assignment extinguishes inventorship status. It does not. Inventorship remains even after ownership in the invention is conveyed to someone else.³⁴⁴

A. *Assignment Does Not Give Up Inventorship*

Ownership and inventorship are different interests; curtailing one's interest in inventorship is injury in fact and confers standing.³⁴⁵ Patent laws long have recognized that ownership of a patent or a patent application is distinct from inventorship.³⁴⁶ Inventorship is established and fixed at the time of the invention and does not change even when inventors, as they commonly do, assign interests in their inventions to others, especially to employers who fund the invention's development, commercialization, and patenting process.³⁴⁷ The format of U.S. patents itself shows this distinction: inventors are named, and assignees are named separately.³⁴⁸ Documentation associated with assignment is separate from documentation associated with establishing inventorship under Patent Office

³³⁹ 28 U.S.C. § 1338.

³⁴⁰ 28 U.S.C. § 1332.

³⁴¹ 28 U.S.C. § 1331.

³⁴² See Defend Trade Secrets Act of 2016, Pub. L. No. 114-153, sec. 2, § (b)(1), 113 Stat. 376, 376. (current version at 18 U.S.C. § 1836).

³⁴³ 28 U.S.C. § 1367 (granting supplemental jurisdiction over state claims so closely related to a claim within the original jurisdiction of the federal court that they constitute the same case or controversy, commonly known as the common nucleus of operative fact test).

³⁴⁴ See *Vapor Point LLC v. Moorhead*, 832 F.3d 1343, 1350 (Fed. Cir. 2016).

³⁴⁵ See *Larson v. Correct Craft, Inc.*, 569 F.3d 1319, 1326 (Fed. Cir. 2009).

³⁴⁶ *Vapor Point LLC*, 832 F.3d at 1350.

³⁴⁷ See *Chou v. Univ. of Chi.*, 254 F.3d 1347, 1353-54 (Fed. Cir. 2001).

³⁴⁸ MPEP §§ 301, 602.01 (9th ed. Rev. 7, July 2022).

rules.³⁴⁹ Even if an inventor assigns all his ownership rights in his inventions and patents that may issue on them, the law still requires that he be named as an inventor on the patent if he is one.³⁵⁰

The Federal Circuit itself recognizes that ownership and inventorship are distinct.³⁵¹ Indeed if the two questions were not separate, the logic of denying standing under Section 256 until state law questions of assignment are resolved would not make any logical sense at all. A finding of no injury in fact would be correct if Bailey Dutton had abandoned his invention.³⁵² But that is not what he did.

B. *Recognize Reputational Interest in Inventorship*

Even if the Federal Circuit or the Supreme Court is unwilling to accept the proposition that a legally cognizable interest in inventorship remains after assignment and thereby eliminate the two-step dance, the Federal Circuit or the Supreme Court can sidestep the problem by recognizing that all inventors presumptively have reputational interests in their inventions and that they have Article III standing to protect those interests. This is possible because inventors have more than economic interests in their patents. They have reputational interests that are important to them. The fact that U.S. law insists that only individual human beings can be inventors recognizes the possibility of intangible psychological interests, unlikely to exist if inanimate entities could be inventors.³⁵³

The Federal Circuit recognized that “concrete and particularized reputational injury can give rise to Article III standing” in *Shukh v. Seagate Technology, LLC*.³⁵⁴ The plaintiff, Dr. Alexander Shukh was a quarrelsome but talented scientist, who had a reputation for constantly complaining that co-workers were stealing his ideas and that his employer was not giving him credit for them.³⁵⁵ After he

³⁴⁹ MPEP §§ 601.05, 602.01 (9th ed. Rev. 7, July 2022) (concerning establishment of inventorship in ADS and oaths and declarations).

³⁵⁰ MPEP § 602.01(a) (9th ed. Rev. 7, July 2022).

³⁵¹ *Vapor Point LLC*, 832 F.3d at 1349–50 (affirming decision on inventorship and refusing to decide assignment obligation).

³⁵² See discussion *supra* Introduction (discussing hypothetical involving Bailey Dutton and Robots on the Range LLC).

³⁵³ See Inventorship Guidance for AI-Assisted Inventions, 89 Fed. Reg. 10043, 10044 (Feb. 13, 2024).

³⁵⁴ 803 F.3d 659, 662 (Fed. Cir. 2015).

³⁵⁵ *Id.* at 661.

was laid off, he sued for correction of inventorship under Section 256 and asserted twelve other claims, including rescission of his employment agreement, breach of contract, fraud, breach of fiduciary duty, unjust enrichment, federal and state retaliation, and national origin discrimination claims.³⁵⁶ He also sought a declaratory judgment that certain provisions of his employment agreement were unenforceable.³⁵⁷

Reversing the district court, the United States Court of Appeals for the Federal Circuit held that Dr. Shukh showed that being omitted as an inventor on a patent would transform reputational injury into economic injury sufficient for Article III standing.³⁵⁸ It found that a trier of fact could conclude that the plaintiff's employment prospects were harmed by omitting him from patents and that the prospects would improve if his inventorship were corrected.³⁵⁹

The court of appeals also found triable issues of fact as to whether reputational injury resulted after reviewing conflicting evidence.³⁶⁰ More particularly, it found sufficient evidence for trial regarding whether the plaintiff's negative reputation was caused by leaving his name off patents and patent applications,³⁶¹ and whether victory on his Section 256 claim would rehabilitate his reputation.³⁶²

The *Shukh* case does not support the idea that a Section 256 plaintiff can establish standing merely by alleging reputational injury, however.³⁶³ Evidence of reputation with and without being named as an inventor on the patent or patents in question is necessary and probably requires expert testimony.³⁶⁴ As the court in *Kamdem-Ouaffo v. PepsiCo Inc.*³⁶⁵ explained:

Dr. Kamdem–Ouaffo's sole claim of injury, in his Second Amended Complaint, stemming from his alleged loss of inventorship, was a bare assertion that

³⁵⁶ *Id.* at 662.

³⁵⁷ *Id.*

³⁵⁸ *Id.* at 663.

³⁵⁹ *Id.* at 666–67.

³⁶⁰ *Shukh*, 803 F.3d at 664–65.

³⁶¹ *Id.* at 665.

³⁶² *Id.* at 666.

³⁶³ *See id.* at 663.

³⁶⁴ *See id.* at 664.

³⁶⁵ 657 F. App'x 949 (Fed. Cir. 2016).

“Plaintiff sustains and/or *might sustain* damages in terms of the loss of the ownership, inventorship, recognition, and the honor for his . . . Intellectual Property.” An allegation that one “sustains and/or might sustain” injury, including reputational injury, is not “concrete and particularized,” but rather “conjectural or hypothetical.” “Where, as here, a case is at the pleading stage, the plaintiff must ‘clearly . . . allege facts demonstrating’ each element [of standing].” Dr. Kamdem–Ouaffo did not clearly allege facts demonstrating actual harm to his reputation and that his alleged reputational harm had an economic component such as loss of employment.³⁶⁶

A recent district court case applying *Shukh* is instructive on how a Section 256 plaintiff can establish standing in the face of an assignment of his rights. In *Sywula v. Teleport Mobility, Inc.*,³⁶⁷ Krzysztof Sywula struggled to establish standing.³⁶⁸ His first lawsuit was dismissed because he had no ownership or financial interest in the patents on which he sought to be named as an inventor and, thus, he could establish no financial or economic injury sufficient to satisfy *Fina Oil* and *Chou*.³⁶⁹ Sywula also unsuccessfully claimed reputational injury:

[He] alleged his “omission from th[e] [Teleport] [patents] has caused [him] concrete *reputational* harm.” Sywula identified three items of purported reputational injury; the first two relate to his professional reputation and the last to his personal reputation. First, Sywula alleged Defendants’ withholding of inventorship credit “depriv[ed] [him] of the public recognition and vocational leverage that comes from being named as an inventor on a patent in one’s

³⁶⁶ *Id.* at 954 (citations omitted) (affirming dismissal of Section 256 action accompanied by claims of unenforceable contract, unjust enrichment, and constructive trust).

³⁶⁷ 652 F. Supp. 3d 1195 (S.D. Cal. 2023).

³⁶⁸ *Id.* at 1202–03.

³⁶⁹ *Id.* at 1203.

field.” Second, he averred Defendants made diminishing statements about his contributions to the Teleport ride-sharing technology, which also “are harmful to Sywula’s credibility as a reputable software engineer.” And third, Sywula claimed “reputational harm . . . based on . . . the intense acrimony” arising from the various disputes between the parties, including publicly available police reports and a civil harassment restraining order DaCosta filed against him in Santa Clara County.³⁷⁰

But “[t]he Court found Sywula’s attempt to invoke *Shukh* unavailing” in his first amended complaint.³⁷¹ Specifically, the court previously found that “Sywula’s allegations of personal reputational injury were neither fairly traceable to Defendants’ omission of inventorship credit nor redressable by a favorable ruling” on his Section 256 claim.³⁷² Additionally, the court said that “Sywula failed to allege” concrete injuries to his professional reputation.³⁷³ And even if his reputational injury allegations were satisfactory, “reputational injury alone is not sufficient; rather, it must be tied to economic consequences.”³⁷⁴ The court went on to conclude that Sywula was precluded from bringing a Section 256 claim because of his “failure to identify ‘economic harm or other concrete consequences’ arising from is [sic] purportedly diminished reputation as a software developer”³⁷⁵

Sywula then filed a second amended complaint, alleging that the failure to name him as an inventor harmed his employment prospects, which gave him an economic component to his claimed reputational injury.³⁷⁶ The plaintiff submitted five declarations in support of the factual argument.³⁷⁷ The submitted declarations were from hiring managers or engineering supervisors in the industry and

³⁷⁰ *Id.* at 1204–1205 (alterations in original) (citations omitted).

³⁷¹ *Id.* at 1205.

³⁷² *Sywula*, 652 F. Supp. 3d at 1205.

³⁷³ *Id.*

³⁷⁴ *Id.* (quoting *Kamdem-Ouaffo v. PepsiCo Inc.*, 657 F. App’x 949, 954 (Fed. Cir. 2016)).

³⁷⁵ *Id.*

³⁷⁶ *Id.* at 1203.

³⁷⁷ *Id.* at 1205.

contained statements “attest[ing] [to] Sywula’s lack of inventorship credit,” which in turn, “significantly diminished his candidacy for Principal Engineer at Intel.”³⁷⁸

The district court reviewed the *Shukh* opinion in detail,³⁷⁹ yet could find no case in which a putative inventor successfully invoked *Shukh*.³⁸⁰ The court characterized the *Shukh* standard as follows:

[T]he reputational injury *Shukh* recognizes as conferring Article III standing is not the loss of “the dignity of and accompanying self-satisfaction of official inventorship recognition” arising out of wrongful omission of inventorship status. These benefits of inventorship recognition simply are too nebulous. Instead, *Shukh* cabins cognizable reputational injuries to those that materialize in the loss of benefits flowing from inventorship that have an economic flavor: employment opportunities, vocational leverage, and other pecuniary consequences that stem from the public recognition that patent-inventorship credit provides. The loss of these sorts of benefits is pecuniary in nature and, thus, is concrete.³⁸¹

The court found sufficient allegations to establish standing under this interpretation of *Shukh* through Sywula’s allegations that loss of inventorship credit diminished or foreclosed his prospects of career-advancement at Intel and in other software developer positions.³⁸² This diminution had pecuniary consequences, and, thus, Sywula plausibly alleged an economic component of his reputational injury.³⁸³ As to redressability, the third element of Article III standing, “a trier of fact could infer that [a defendant’s] employment prospects would improve if the inventorship of the disputed patents was corrected.”³⁸⁴

³⁷⁸ *Sywula*, 652 F. Supp. 3d at 1207.

³⁷⁹ *Id.* at 1214–17.

³⁸⁰ *Id.* at 1217–18 (reviewing post-*Shukh* cases denying standing).

³⁸¹ *Id.* at 1218–19 (citations omitted).

³⁸² *Id.* at 1220.

³⁸³ *Id.*

³⁸⁴ *Sywula*, 652 F. Supp. 3d at 1223 (quoting *Shukh v. Seagate Technology, LLC*, 803 F.3d 659, 667 (Fed. Cir. 2015)).

Given this reality of a meaningful judicial remedy, the Federal Circuit should join the many district courts that have concluded that reputational interest in a patent is sufficient to constitute injury in fact for vertical freestanding purposes.³⁸⁵ This would avoid the expensive and frustrating Article III standing analysis that bounces inventors seeking correction of inventorship in good faith back to state court.³⁸⁶

C. *Recognizing Future Interests*

The Federal Circuit Section 256 standing cases say that an inventor has standing if the terms of his assignment agreement leave him with something.³⁸⁷ That proposition includes a future interest, such as a possibility of reverter,³⁸⁸ a power of termination,³⁸⁹ or an executory interest³⁹⁰ if certain conditions in the assignment agreement are not satisfied.³⁹¹ Indeed, if he has a possibility of reverter, and the conditions for triggering it have occurred, he has a present interest; thus, ownership of the invention has reverted to him without the need for any judicial action.³⁹² An omitted inventor would argue that payment of royalties or naming him as an inventor on the patent is a condition precedent to his obligation to perform—to assign patent rights—and that failure of payment or failure to include him as an inventor relieves him of the obligation to assign.³⁹³ Under the condition precedent characterization, the assignor retains of a fee

³⁸⁵ See, e.g., *id.* at 1232.

³⁸⁶ See, e.g., *id.*

³⁸⁷ See, e.g., *James v. j2 Cloud Servs.*, 887 F.3d 1368, 1371–72 (Fed. Cir. 2018).

³⁸⁸ RESTATEMENT (FIRST) OF PROP. § 154 (AM. L. INST. 1936) (describing reversion and possibility of reverter).

³⁸⁹ *Id.* § 155 (describing power of termination).

³⁹⁰ *Id.* § 158 (describing executory interest).

³⁹¹ See, e.g., *Cedyco Corp. v. PetroQuest Energy, LLC*, 497 F.3d 485, 490 (5th Cir. 2007).

³⁹² See *id.*

³⁹³ See *id.* (reversing district court and holding that failure to satisfy condition precedent relieved defendant of obligation to assign oil leases); *Intelsat USA Sales LLC v. Juch-Tech, Inc.*, 52 F. Supp. 3d 52, 57–58 (D.D.C. 2014) (stating the general principle that satisfaction of condition precedent is prerequisite for performance obligation and explaining that the failure to satisfy condition precedent avoided acceleration damages).

simple defeasible interest in the form of a fee simple subject to an springing executory limitation.³⁹⁴

A complementary argument is that an automatic assignment is vacated upon occurrence of a condition subsequent, like failure to make payments or to name the assignor as an inventor.³⁹⁵ In this characterization, the assignee has a fee simple determinable,³⁹⁶ and the assignor has a possibility of reverter.³⁹⁷

Statutorily, patents are personal property.³⁹⁸ The system of estates developed for real property did not necessarily extend to personal property, although some early cases suggest that it might, at least in some contexts.³⁹⁹ The Tentative Draft of the Fourth Restatement of Property, however, says that the system of estates applies to personal property.⁴⁰⁰

The Federal Circuit does treat patent rights in some circumstances by analogy to real property law.⁴⁰¹ Treating an executory contract to assign patent rights as transferring only an equitable interest is equivalent to treating the interest retained by the assignor as a fee simple subject to a springing executory limitation.⁴⁰²

³⁹⁴ See RESTATEMENT (FIRST) OF PROP. § 46 cmt. 1–n (AM. L. INST. 1936) (describing form of fee simple subject to executory limitation).

³⁹⁵ See *Succession of McCord v. Comm’r*, 461 F.3d 614, 629 (5th Cir. 2006) (discussing general contract law principles regarding conditions subsequent).

³⁹⁶ See RESTATEMENT (FIRST) OF PROP. § 16 (AM. L. INST. 1936).

³⁹⁷ See *id.* § 1154.

³⁹⁸ 35 U.S.C. § 261 (2012).

³⁹⁹ See, e.g., *Halbert v. Halbert*, 21 Mo. 277, 279–280 (1855) (allowing testamentary disposition of personal property to impose executive limitations); *Glover v. Condell*, 45 N.E. 173, 179–180 (Ill. 1896) (applying real property rules to future interests in property).

⁴⁰⁰ RESTATEMENT (FOURTH) OF PROP. vol. 4, div. I, ch. 4, intro. note (AM. L. INST., Tentative Draft No. 3, 2022).

⁴⁰¹ See *Speedplay, Inc., v. Bebop, Inc.*, 211 F.3d 1245, 1253 (Fed. Cir. 2000) (distinguishing between automatic assignment and promise of future assignment and explaining that a promise of future assignment does not divest an assignor of standing); *Filmtec Corp. v. Allied-Signal Inc.*, 939 F.3d 1568, 1573 (Fed. Cir. 1991) (distinguishing between contract to assign, which passes only equitable title, and automatic assignment, which passes legal title).

⁴⁰² RESTATEMENT (FIRST) OF PROP. § 46 cmt. 1–n (AM. L. INST. 1936) (describing a form of fee simple subject to executory limitation).

D. *Alternative Dispute Resolution*

The Federal Circuit's two-step dance also can be avoided by intellectual property management policies that have the power to resolve inventorship controversies before they get to court or to the Patent Office.⁴⁰³

While alternative dispute resolution (ADR) procedures can be adopted after a dispute over inventorship arises, enterprises supporting inventive activity are more likely to include procedures for resolving inventorship disputes as a part of comprehensive non-disclosure, invention reporting, and invention assignment agreements.⁴⁰⁴ Well-managed firms involved in innovation have nondisclosure agreements to protect their trade secrets; prudent ones have policies that require their employees to disclose inventions made by the employees and to assign to the employer the ones made during employment.⁴⁰⁵ The utility of such agreements is not limited to the employer-employee relationship; the same terms are desirable with respect to joint venture partners and individuals or enterprises with whom a firm has or contemplates a commercial relationship.⁴⁰⁶

The *Shukh* case provides an example of an integrated agreement:

When he was hired, Dr. Shukh executed Seagate's standard At-Will Employment, Confidential Information, and Invention Assignment Agreement ("Employment Agreement"), in which Dr. Shukh agreed to "hereby assign to Seagate all his right, title, and interest in and to any inventions" made while at

⁴⁰³ See generally Henry H. Perritt, Jr., *Preclusive Effect of Administrative Decisions in Wrongful Dismissal Suits*, 5 J. NAT'L ASS'N ADMIN. L. Judges 33 (1985); Henry H. Perritt, Jr., *Administrative Alternative Dispute Resolution: The Development of Negotiated Rulemaking and Other Processes*, 14 PEPP. L. REV. 863 (1987); Henry H. Perritt, Jr., *Dispute Resolution in Electronic Network Communities*, 38 VILL. L. REV. 349 (1993); Henry H. Perritt, Jr., *Dispute Resolution in Cyberspace: Demand for New Forms of ADR*, 15 OHIO STATE J. ON DISP. RESOL. 675 (2000).

⁴⁰⁴ See, e.g., *DDB Tech., L.L.C., v. MLB Advanced Media, L.P.*, 517 F.3d 1284, 1284 (Fed. Cir. 2008) (providing an example of an invention disclosure agreement).

⁴⁰⁵ See, e.g., *id.*

⁴⁰⁶ See Bartz & Fellows, *supra* note 1.

Seagate. Seagate policy prohibited Seagate employees from filing patent applications themselves for their inventions. Instead, they were required to submit Employee Invention Disclosure Forms to Seagate’s Intellectual Property (“IP”) Department. Inventors were responsible for identifying co-inventors of their inventions on these forms. The IP Department would then forward the form to the internal Patent Review Board, which would determine whether, for example, to pursue a patent application for the invention or to protect it as a trade secret.⁴⁰⁷

1. INVENTORSHIP CLAIMS ARE ARBITRABLE

Section 294 of the Patent Act makes arbitration agreements involving patents or any right under a patent, including disputes over patent validity or infringement, irrevocable and enforceable and extends the same treatment to post-dispute arbitration agreements.⁴⁰⁸

In *Invista North America S.À.R.L. v. Rhodia Polyamide Intermediates S.A.S.*,⁴⁰⁹ the district court held that inventorship claims are arbitrable.⁴¹⁰ The court noted that Congress did not expressly exclude Section 256 claims from arbitration and that “[c]ourts cannot recognize ‘subject-matter exceptions [to arbitrate] where Congress has not expressly directed the courts to do so.’”⁴¹¹ Thus, the court held the federal presumption in favor of arbitration prevailed.⁴¹² The court also found that arbitration could provide appropriate relief and explained that:

⁴⁰⁷ *Shukh v. Seagate Technology, LLC*, 803 F.3d 659, 661 (Fed. Cir. 2015) (internal citation omitted) (characterizing contractual arrangements); see also Michael D. Van Loy et al., PATENT 101: Key Considerations and Activities for Establishing a Patent Program (Part 1 of 3), MINTZ (July 7, 2021), <https://www.mintz.com/insights-center/viewpoints/2231/2021-07-07-patent-101-key-considerations-and-activities> (suggesting establishment of patent review board to review detailed standard invention disclosure forms and mete out recognition to inventive employees).

⁴⁰⁸ 35 U.S.C. § 294.

⁴⁰⁹ 503 F. Supp. 2d 195 (D.D.C. 2007).

⁴¹⁰ *Id.* at 204–05.

⁴¹¹ *Id.* at 204 (alteration in original) (quoting *Mitsubishi Motors Corp. v. Soler Chrysler–Plymouth, Inc.*, 473 U.S. 614, 639 n.21 (1985)).

⁴¹² *Id.* at 204–05.

[I]f an arbitral tribunal finds that the named inventors of a patent should be corrected, the tribunal can order the parties to petition the Director to change inventorship. Furthermore, should the parties fail to petition the Director, a court can convert the tribunal's award into a judgment and order the Director to change the inventorship of the patent.⁴¹³

In *Endoscopic Technologies, Inc. v. Kochamba*,⁴¹⁴ the court denied a motion to vacate or modify an arbitration award deciding an inventorship question.⁴¹⁵ Arbitration was provided for in a licensing agreement.⁴¹⁶

2. ELEMENTS OF INTERNAL DISPUTE RESOLUTION ARRANGEMENTS

In the materials that follow, MIT and Ohio State's policies and procedures present a possible model for intellectual property management, although they reflect the importance to the universities of government funding and the universities' commitment to open access.⁴¹⁷ Private sector entities are likely to have different interests.⁴¹⁸

⁴¹³ *Id.* at 205.

⁴¹⁴ No. CV 07-7955 AHM (SSx), 2008 WL 2156763, at *8 (C.D. Cal. May 20, 2008).

⁴¹⁵ *Id.* at *8.

⁴¹⁶ *Id.* at *2; *see also* Sywula v. Teleport Mobility, Inc., No. 21-cv-01450-BAS-SBC, 2023 WL 4630620, at *3, *12 (S.D. Cal. July 18, 2023) (granting motion to compel arbitration and staying a 35 U.S.C. § 256 action to correct inventorship); Concat LP v. Unilever, PLC, 350 F. Supp. 2d 796, 808–09 (N.D. Cal. 2004) (reviewing cases and holding that inventorship is arbitrable at least in international cases).

⁴¹⁷ *See generally* MIT, POLICES & PROCEDURES § 13.1 (2023) [hereinafter MIT POLICIES], <https://policies.mit.edu/policies-procedures/130-information-policies/131-intellectual-property>; OHIO STATE UNIV. OFF. OF INNOVATION & ECON. DEV., INTELLECTUAL PROPERTY UNIVERSITY POLICY (2018) [hereinafter OHIO STATE POLICIES], <https://policies.osu.edu/assets/policies/IP-Policy.pdf>.

⁴¹⁸ Van Loy et al., *supra* note 407.

i. *Confidentiality*

Inventions are trade secrets before they become patents.⁴¹⁹ If trade secrets are generally known, the knowledge not only defeats trade secret status,⁴²⁰ but it also constitutes prior art that would defeat patent novelty unless the trade secret in the invention is disclosed during the one-year grace period.⁴²¹ The trade secrets are extinguished when a patent application is published or a patent is issued, but until then, the inventor is protected by trade secret law because patent protection does not begin until a patent is issued.⁴²² Therefore, measures to protect the trade secret during patent prosecution are necessary.⁴²³ The most typical measure is a nondisclosure agreement that most employees are obligated to sign as a condition of employment.⁴²⁴ Prudent businesses also require nondisclosure agreements as a precondition for discussing business relations that might involve disclosure of trade secrets.⁴²⁵

Sample language for nondisclosure agreements is widely available.⁴²⁶ The following is a good example:

1. Definition of Confidential Information.

“Confidential Information” includes all written, electronic, or oral information that the Disclosing Party provides to the Receiving Party, including but not limited to business operations, strategies, plans, formulas, processes, research results, and data, or trade

⁴¹⁹ See HENRY H. PERRITT, JR., *TRADE SECRETS FOR THE PRACTITIONER* § 4:9.3 (3d ed. 2024).

⁴²⁰ See *id.* § 4:10 (explaining that secrecy is a continuing prerequisite for a trade secret).

⁴²¹ 35 U.S.C. § 102(b) (disclosures made within one year of application for patent are not prior art defeating novelty).

⁴²² See PERRITT, *supra* note 403, §§ 4:5, 4:9.2 n.51.

⁴²³ See *id.* § 4:9.5.

⁴²⁴ See *id.* § 4:13.3.

⁴²⁵ See Jack Lynch, *Employee Invention Agreements, Noncompete Clauses, and the Inevitable Disclosure Doctrine*, 23 IPL NEWSL. 39, 43 (2005).

⁴²⁶ See, e.g., Richard Stim & Amanda Hayes, *Sample Confidentiality Agreement (NDA)*, NOLO (July 8, 2024), <https://www.nolo.com/legal-encyclopedia/sample-confidentiality-agreement-nda-33343.html>.

secrets relating to the Disclosing Party's business activities.

2. Obligations of Receiving Party.

The Receiving Party agrees to:

- a. Maintain the confidentiality of the Confidential Information with at least the same degree of care that it uses to protect its own confidential information, but not less than a reasonable degree of care;
- b. Use the Confidential Information solely to perform job duties as an employee of the Disclosing Party evaluate or pursue a business relationship with the Disclosing Party;
- c. Restrict disclosure of the Confidential Information solely to those employees or agents who need to know such information to perform their job duties as employees of the Disclosing Party, who need to know such information to perform their obligations as contractors to the Disclosing Party, or who are required to be involved in the evaluation or business relationship and who are bound by confidentiality obligations at least as restrictive as those set forth herein;
- d. Not copy or reverse engineer any materials provided as part of the Confidential Information;
- e. Notify the Disclosing Party immediately upon discovery of any unauthorized use or disclosure of Confidential Information.

3. Exceptions to Confidential Information.

The obligations set forth herein shall not apply to information that:

- a. was in the possession of the Receiving Party without restriction in relation to disclosure before the date of receipt from the Disclosing Party;
- b. is or becomes publicly known through no act or omission of the Receiving Party;
- c. is received from a third party without breach of any obligation of confidentiality;
- d. is independently developed by the Receiving Party involving no access to the Confidential Information; or
- e. is required to be disclosed by law, upon which the Receiving Party shall provide the Disclosing Party with prompt written notice to allow the Disclosing Party to seek a protective order or other appropriate remedy.

4. Term.

This Agreement shall commence on the date first above written and shall continue in effect until the Confidential Information no longer qualifies as confidential or until terminated by either party with thirty (30) days written notice to the other party.

The obligations of confidentiality extend beyond the expiration of this Agreement and beyond the termination of any employment relationship so as to prohibit the Receiving Party from any disclosure or use of Confidential Information, specifically including trade secrets.

5. Return of Materials.

All documents and other tangible objects containing or representing Confidential Information and all copies thereof which are in the possession of the Receiving Party shall be and remain the property of the Disclosing Party and shall be promptly returned to the

Disclosing Party upon the Disclosing Party's written request.

ii. *Invention Disclosure*

Any intellectual property management system has, as a starting point, disclosure for those bound by the system's obligations.⁴²⁷ Employees and potential business partners must disclose innovations they have developed while under the sponsorship of the employer or other sponsoring entity.⁴²⁸ This disclosure allows the sponsoring entity to review the innovations and to decide if it wants to apply for a patent on the innovations.⁴²⁹

In addition, a good disclosure policy requires disclosure of innovations developed before beginning the relationship with the sponsoring entity, or outside of the scope of employment or other relationship.⁴³⁰ These kinds of disclosures permit both parties to know what inventions are likely to be outside the scope of any assignment agreement and to take steps to resolve any disputes at the beginning of the relationship.⁴³¹

This is the invention disclosure agreement involved in *DDB Technologies, L.L.C. v. MLB Advanced Media, L.P.*⁴³²

Employee shall promptly furnish to Company a complete record of any and all technological ideas, inventions and improvements, whether patentable or not, which he, solely or jointly, may conceive, make or first disclose during the period of his employment with [Schlumberger].⁴³³

MIT says, “[i]f you have developed something that may solve a significant problem and/or may have significant value, you should

⁴²⁷ Van Loy et al., *supra* note 407, at 1–2.

⁴²⁸ Lynch, *supra* note 425, at 40–41.

⁴²⁹ Van Loy et al., *supra* note 407, at 2.

⁴³⁰ Lynch, *supra* note 425, at 43.

⁴³¹ *Id.*

⁴³² 517 F.3d 1284 (Fed. Cir. 2008).

⁴³³ *Id.* at 1287.

submit a disclosure as soon as possible.”⁴³⁴ The MIT guidelines require “[a] detailed description of the invention or development,” which will be kept confidential, and “the date of conception and date of public disclosure.”⁴³⁵ The Ohio State policy, in comparison, provides as follows:

Creators must promptly disclose in writing all **university IP** they created with commercial value and other **university IP** required to be disclosed pursuant to an obligation to a third party (such as obligations in connection with **sponsored research** arrangements), using a disclosure form.

1. The disclosure must:

- a. provide a full and complete description of the **university IP**;
- b. describe the funding sources used in development of such **university IP**; and
- c. identify all persons participating in the creation and development of the **university IP**.

2. Upon request from TCO, the **creator(s)** will furnish any additional reasonable information, including the know-how related to the invention or discovery, and will execute documents in connection with the **university IP**, such as assignments and declarations.

3. **Faculty**, staff, and students may ask the TCO to verify that pursuant to this policy a specific **intellectual property** is not **university IP** or that it is available for a certain specific use.⁴³⁶

⁴³⁴ MIT Tech. Licensing Office, *Submit Disclosure*, MIT, <https://tlo.mit.edu/researchers-mit-community/protect/submit-disclosure> (last visited Aug. 16, 2024).

⁴³⁵ *Id.*

⁴³⁶ OHIO STATE POLICIES, *supra* note 417, § VII(C).

The Ohio State policy also explains what happens after disclosure:

D. Upon receipt by TCO of a disclosure form as described in subsection VII.C, the case will be assigned to a TCO representative. The assigned representative will facilitate evaluation of the **intellectual property** with respect to patentability, commercial potential, and obligations to sponsors or other third parties. This process will include:

1. a discussion with the **creator(s)** led by the TCO representative;
2. a search of prior art, if necessary. The TCO representative may reasonably request that the **creator(s)** participate in such search; and
3. determination of whether **intellectual property** protection, and in particular patent protection, should be pursued, taking into consideration, among other things, commercial potential. Although patent protection is sometimes sought for various noncommercial reasons, such as professional status, TCO will not seek protection for **university IP**, including patent protection, that is not deemed to have commercial potential (even if the **university IP** is intellectually meritorious), unless such protection (i) is requested by the sponsor of **sponsored research** and such sponsor pays for such protection or (ii) is authorized by the executive vice president for ERIK or the provost, at their sole discretion. The evaluation of the commercial potential will be based upon, among other things, patentability, scope of potential patent coverage, size of market, competition, and potential market share. The provost and/or the executive vice president for ERIK may

establish guidelines regarding the role of the university's units in the process of commercializing and/or protecting the university IP.

E. TCO will regularly update the **creator(s)** on the status of the **university IP** disclosed by such **creator(s)**.

1. TCO will provide the first status update within three months of receiving the disclosure form and a second status update within six months of the date of receipt of a disclosure form. Such status updates will include, but not be limited to, any filing decisions regarding **intellectual property** protection or transfer of the **university IP**.

2. TCO will provide a detailed summary of substantive decisions regarding protection, commercialization, and/or transfer of **intellectual property** promptly after those decisions are made.⁴³⁷

iii. *Assignment*

The terms of patent assignment agreements are as varied as the imagination and creativity of the lawyers who draft them.⁴³⁸ The terms may be “automatic” and assign present and future rights immediately, or they may be present promises to assign rights in the future.⁴³⁹ The terms may also contain conditions on certain performance by the assignee, such as paying royalties or fixed monetary awards, or putting the assignor's name on a patent application.⁴⁴⁰

This is the assignment language involved in *DDB Technologies, L.L.C. v. MLB Advanced Media, L.P.*:⁴⁴¹

⁴³⁷ *Id.* § VII.

⁴³⁸ See discussion *infra* Section III.D.2 (providing example sample language from various sources).

⁴³⁹ MIT POLICIES, *supra* note 417, § 13.1.5.

⁴⁴⁰ See, e.g., Richard Stim, *Sample Patent Assignment Agreements*, NOLO, <https://www.nolo.com/legal-encyclopedia/sample-patent-assignments.html> (last visited Sept. 12, 2024).

⁴⁴¹ 517 F.3d 1284 (Fed. Cir. 2008).

4. Employee agrees to and does hereby grant and assign to Company or its nominee his entire right, title and interest in and to ideas, inventions and improvements coming within the scope of Paragraph 3:

a) *which relate in any way to the business or activities of [Schlumberger], or*

b) *which are suggested by or result from any task or work of Employee for [Schlumberger], or*

c) *which relate in any way to the business or activities of Affiliates of [Schlumberger],*

together with any and all domestic and foreign patent rights in such ideas, inventions and improvements. Employee agrees to execute specific assignments and do anything else properly requested by [Schlumberger], at any time during or after employment with [Schlumberger], to secure such rights.⁴⁴²

This is MIT's assignment language:

[E]ach Required IPIA Signatory acknowledges that they hereby irrevocably assign all right, title, and interest in and to the IP described in Section 13.1.2 above (including but not limited to patent applications and patents which may issue from such IP), effective as of their first date of the use of MIT Funds, MIT employment, participating in performing an MIT collaboration, research or other sponsored agreement, or taking advantage of any MIT Opportunity, whichever occurs first, regardless of whether they execute or executed an IPIA.⁴⁴³

The following example demonstrates how an assignment agreement can negate standing for a claim of inventorship under Section 256:

⁴⁴² *Id.* at 1287.

⁴⁴³ MIT POLICIES, *supra* note 417, § 13.1.4 (defining IPIA as MIT's Inventions and Proprietary Information Agreement).

I will promptly and fully disclose to the Company any and all inventions, discoveries, trade secrets and improvements . . . which I develop, make, conceive or reduce to practice during my engagement with the Company, either solely or jointly with others (collectively, the “Developments”) All Developments shall be the sole property of the Company, and I hereby assign to the Company, without further compensation, all my right, title and interest in and to the Developments and any and all related patents . . . in the United States and elsewhere.⁴⁴⁴

Both MIT and Ohio State provide for transfer of invention rights back to the inventor in some cases. Here is the Ohio State provision:

F. In some cases university IP will be assigned to its creator(s).

1. Under the following circumstances, creator(s) will be allowed to require (subject to any required third party approvals, e.g., approval of a federal funding agency) assignment, free of charge, of university IP to them, and TCO will promptly effect such assignment:

a. The creator(s) provide TCO with evidence of a concrete potential commercialization partner for the university IP, such as a potential licensee thereof, and TCO does not complete, in good faith, its review and determination of the university’s interest in such opportunity within six months.

b. The university IP may reasonably be protected by a patent, and TCO does not complete, in good faith, its review and determination of the university’s interest in such university IP within six

⁴⁴⁴ Novopyxis, Inc. v. Applegate, No. 21-cv-10883-AK, 2022 WL 1491167, at *3 (D. Mass. May 11, 2022).

months of TCO becoming aware of a public disclosure of such university IP. Public disclosure under this section includes any disclosure that will make the university IP ineligible for patent protection in the United States, unless patent application is filed within one year of such disclosure.

c. TCO does not complete, in good faith, its review and determination of the university's interest in such university IP within twelve months of receipt of a disclosure form.

2. The assignment of university IP under subsection VII.F.1 will be subject to the following:

a. The TCO may reasonably delay, and in extreme cases deny, a request pursuant to subsection VII.F.1 if the creator's disclosure pursuant to subsection VII.C lacks material details in bad faith or if the creator failed to cooperate in good faith with TCO's reasonable requests;

b. All creators who are assigned the university IP pursuant to subsection VII.F.1 will grant the university a perpetual, worldwide, nonexclusive, royalty-free license limited to non-commercial use of such intellectual property; and

c. The assignment of university IP to the creator pursuant to subsection VII.F.1 will not affect any other obligations of the creator, including the obligation of disclosure and cooperation, set forth in subsection VII.C, with respect to any other university IP.

3. TCO is encouraged to cause assignment to creators any university IP which, in TCO's discretion, is not currently commercialized by the university or on its behalf and is not expected to be commercialized by

the university or on its behalf in the foreseeable future, unless such assignment would have an adverse impact on the ability to commercialize other university IP or such assignment cannot be legally made for any reason (e.g., a required third party approval was not secured). The university and OSIF may place terms on such assignment including requiring, at TCO's discretion, payment in consideration for such assignment.

4. In the case of multiple creators, the university or OSIF will assign the intellectual property to all creators according to this subsection VII.F as joint owners, unless all creators agree in writing to a different arrangement. Except for assignment to the creator(s) according to this subsection VII.F (or an assignment from the university to OSIF), the university and OSIF will not assign university IP for no consideration.

5. TCO will update the creator's unit of any assignment of university IP to the creator pursuant to this section VII.F.⁴⁴⁵

iv. *Resolution of Disputes*

Disagreements over the interpretation and application of any contract are inevitable.⁴⁴⁶ A good intellectual property management system recognizes this and includes procedures for dispute resolution.⁴⁴⁷ As this section makes clear, those procedures can include

⁴⁴⁵ MIT POLICIES, *supra* note 417, § 13.1.7; OHIO STATE POLICIES, *supra* note 422, § VII.

⁴⁴⁶ John J. Okuley, *Resolution of Inventorship Disputes: Avoiding Litigation Through Early Evaluation*, 18 OHIO STATE J. DIS. RES. 915, 916 (2003).

⁴⁴⁷ *Id.*

arbitration as a final step, but they need not.⁴⁴⁸ Pertinent to the subject of this Article, the dispute resolution procedures should explicitly apply to disputes over inventorship.⁴⁴⁹

v. *Crystallizing Claims*

For a dispute resolution system to be coherent, it must know what the dispute is about.⁴⁵⁰ This means that it should include a requirement that a claimant, such as one claiming inventorship, must express his claim in writing with particularity.⁴⁵¹ Here is an example of what the hypothetical Bailey Dutton⁴⁵² might submit to dispute his nonjoinder in a patent application filed by Robots on the Range LLC:

In June of 2023, I, Bailey Dutton, was assigned to the company's terrestrial robots lab as a member of a team working on designs for new product that would measure methane levels in the vicinity of cattle herds. For the measurements to be useful, they had to be taken no more than fifty yards away from a herd of more than three animals. Everyone on the team was stumped with how to get a robot to recognize a herd and to position itself within fifty yards.

I had an idea that fused imagery collected from cameras, sonar, and lidar with signals from infrared heat detectors. I sketched on a sheet of paper the various sensors and how they would be connected, and wrote a flow chart for a module in the form of a digital computer that would integrate their signals and compare them with templates for cattle herds developed in the company's machine learning lab.

⁴⁴⁸ See discussion in Section III.D.2 (discussing various alternative dispute resolution models and cataloguing several factors that should be included in a successful alternative dispute resolution system).

⁴⁴⁹ Okuley, *supra* note 446, at 917.

⁴⁵⁰ *Id.* at 955.

⁴⁵¹ *Id.* at 948.

⁴⁵² See discussion *supra* Introduction (discussing hypothetical involving Bailey Dutton and Robots on the Range LLC).

I obtained specifications for relevant sensor modules and bought copies of the best products. I wired them together with a Raspberry Pi computer and an Arduino computer using a breadboard. I demonstrated that prototype with video images of cattle herds and simulated odors of cattle flatulence. Everyone was quite excited with the successful demonstration of the prototype, and several people remarked, “I wish I that thought of that!” My supervisor, Anita Spector, told me and my co-workers that my design would definitely be incorporated in a patent application then being drafted.

On October 7, 2023, Ms. Spector wrote me an email asking me to provide a drawing and description of my work for the patent application.

I responded with a drawing and detailed description on October 14, 2023.

Based on my drawings and descriptions, among other things, the company filed a nonprovisional application for a United States Patent on November 18, 2023.

The patent application does not list me as an inventor, although I certainly am one, having contributed to the conception of the subject of the patent application.

I have copies of my sketches, drawings, flow charts, computer code and emails between me and the work group. I also have the prototype.

vi. *Investigation*

A rational dispute resolution system makes decisions based on facts, so it must know what the facts are.⁴⁵³ Informal investigatory

⁴⁵³ Okuley, *supra* note 446, at 938.

procedures, which are limited to interviews of knowledgeable individuals in review of proper documents, are necessary.⁴⁵⁴

John Okuley made suggestions about pre-litigation mechanisms to resolve disputes over inventorship.⁴⁵⁵ Okuley focuses on review by patent lawyers rather than formal internal processes,⁴⁵⁶ but the steps and content of the review that he suggests are useful in designing inventorship review and resolution procedures.⁴⁵⁷

Okuley suggests investigating everyone who has been listed as authors or acknowledged in public presentations or publications to determine if they have made an “inventive” contribution.⁴⁵⁸ Okuley explains that:

Three types of evaluative processes should be routinely employed: interview of a putative inventor by the patent application drafter, investigative interviews of a number of potential inventors, and a full investigative hearing by an independent evaluator. If this interview is conducted carefully, it will probably be obvious whether the putative inventor worked alone, or collaborated with other researchers. If there was any collaboration with others, the nature of the collaboration should then be investigated. . . .

. . . Potential inventors should be identified, and these individuals should be given a short explanation of standards for inventorship, and requested to submit written statements of their individual contributions. For those researchers who made a significant contribution, interviews should be conducted where the attorney can reiterate the importance of full disclosure and the bases for inventorship determinations.⁴⁵⁹

⁴⁵⁴ *Id.* at 917.

⁴⁵⁵ *Id.* at 938.

⁴⁵⁶ *Id.* at 938.

⁴⁵⁷ *Id.* at 917.

⁴⁵⁸ *Id.* at 945.

⁴⁵⁹ Okuley, *supra* note 446, at 948.

Bradley Krul has offered a helpful sequential checklist around which internal inventorship review systems can be structured.⁴⁶⁰ The four-step checklist is as follows:

1. The first step in determining joint inventorship requires an attorney to determine whether an alleged joint inventor collaborated with the other joint inventors. . . .⁴⁶¹
2. The second step in determining joint inventorship requires an attorney to determine: (1) whether the alleged joint inventor made a contribution to the conception of the claimed invention, and (2) whether that contribution is significant when measured against the complete invention. . . .⁴⁶²
3. The third step in determining joint inventorship requires an attorney to determine whether an alleged joint inventor's contribution is corroborated. . . .⁴⁶³
4. The final step in determining joint inventorship requires an attorney to determine whether an alleged joint inventor's contribution appears in a claim of a patent.⁴⁶⁴

Step four is for a patent lawyer to determine.⁴⁶⁵ Steps one through three depend on factual evidence such as oral testimony in

⁴⁶⁰ Bradley M. Krul, *The 'Four C's of Joint Inventorship: A Practical Framework for Determining Joint Inventorship*, 21 J. INTEL. PROP. L. 73, 95 (2013) (offering a checklist of questions without institutional framework suggestions).

⁴⁶¹ *Id.* at 96.

⁴⁶² *Id.* at 97.

⁴⁶³ *Id.* at 101.

⁴⁶⁴ *Id.* at 102.

⁴⁶⁵ *Id.* at 102.

interviews or hearings, written records such as inventor notebooks,⁴⁶⁶ and invention disclosure forms.⁴⁶⁷

Witnesses should have the necessary background to understand the subject matter in the notebook and have personal knowledge of the joint inventor's contribution.⁴⁶⁸ Moreover, drawings and sketches can serve as corroborating evidence,⁴⁶⁹ and such physical exhibits do not need to be corroborated independently; "Rather, only an alleged joint inventor's testimony requires corroboration."⁴⁷⁰

vii. *Some Kind of Hearing*

Private IP management policies and their dispute resolution mechanisms are not subject to constitutional due process requirements because they do not involve state action.⁴⁷¹ Nevertheless, analytical frameworks can be borrowed from the constitutional arena to serve as a kind of shopping list of procedural elements that should be considered.⁴⁷² A particularly useful example of this kind of framework is Judge Henry Friendly's elements of procedural due process that he articulated in his 1975 law review article as follows:

1. An unbiased tribunal,⁴⁷³
2. Notice of the proposed action and the grounds asserted for it,⁴⁷⁴
3. An opportunity to present reasons why the proposed action should not be taken,⁴⁷⁵

⁴⁶⁶ Long custom and practice and caselaw offers guidelines for good inventor notebooks. They should be permanently bound books. Krul, *supra* note 460, at 93. Entries should be recorded in a consistent manner and should not be erased or removed. *Id.* A line should be drawn through an unwanted entry so that it is still legible. Entries should be signed and dated by at least two witnesses. *Id.*

⁴⁶⁷ *Id.* at 97–101.

⁴⁶⁸ *Id.* at 93.

⁴⁶⁹ *Id.* at 94.

⁴⁷⁰ *Id.*

⁴⁷¹ See Henry J. Friendly, "Some Kind of Hearing," 123 U. PA. L. REV. 1267, 1269–70 n.10 (1975).

⁴⁷² *Id.* at 1278.

⁴⁷³ *Id.* at 1279.

⁴⁷⁴ *Id.* at 1280.

⁴⁷⁵ *Id.*

4. A right to call witnesses;⁴⁷⁶
5. A right to know the evidence against one;⁴⁷⁷
6. A right to have a decision based only on the evidence presented;⁴⁷⁸
7. A right to counsel;⁴⁷⁹
8. The making of a record;⁴⁸⁰
9. A statement of reasons;⁴⁸¹
10. Public attendance;⁴⁸² and
11. Judicial review.⁴⁸³

Judge Friendly's discussion of the individual elements makes several things clear about his thinking. First, a procedure may give due process without all of the elements; the list represents an ordered recipe in which the higher the number of the element, the greater the formality and expense.⁴⁸⁴ Second, some elements are more burdensome than others, such as examinations and cross-examinations of witnesses and creation of a record.⁴⁸⁵ Third, a procedure with all of the elements listed above resembles a trial under the Federal Rules of Civil Procedure, where the complaint provides element two, the answer provides element three, and discovery provides element five.⁴⁸⁶

Many employers or other organizations sponsoring inventive work will be unwilling to establish internal inventorship dispute resolution procedures that have all of the elements of Judge Friendly's

⁴⁷⁶ *Id.* at 1282.

⁴⁷⁷ Friendly, *supra* note 471, at 1282.

⁴⁷⁸ *Id.*

⁴⁷⁹ *Id.* at 1287.

⁴⁸⁰ *Id.* at 1291.

⁴⁸¹ *Id.*

⁴⁸² *Id.* at 1293.

⁴⁸³ Friendly, *supra* note 471, at 1294–95.

⁴⁸⁴ *Id.* at 1278–79.

⁴⁸⁵ *Id.* at 1303.

⁴⁸⁶ *Id.* at 1280–82.

list or that include arbitration under the rules of the American Arbitration Association (AAA).⁴⁸⁷ But Judge Friendly's list, nevertheless, is worth considering so that rational decisions can be made about the design features of any system for resolving inventorship disputes.⁴⁸⁸

The first element, an unbiased decision-maker, may be difficult to embrace because a sponsoring entity and assignee are unlikely to yield to each other over decisions about ownership of their assets to a neutral third-party.⁴⁸⁹ On the other hand, systems can be structured so that deciding disputes about inventorship can be assigned to personnel removed from the particular work environment that produced the dispute.⁴⁹⁰ Requiring a putative inventor whose name has been left off a patent application to submit his claim to the people who left him off, such as his co-inventors, is not likely to produce an objectively correct result.⁴⁹¹ For that reason, it is common to assign dispute resolution responsibilities to an officer or a committee that is removed from the claimant's immediate work environment.⁴⁹²

Elements two and three are unlikely to be problematic.⁴⁹³ Any system intended to produce accurate results should afford an opportunity to frame claims of inventorship in writing and with specificity, and any reasonable system will provide an opportunity for those opposing the claim to respond.⁴⁹⁴

Likewise, some aspects of elements four, five, and six are essential to any reasonable system, and each element can be made available in different proportions and with different intensity.⁴⁹⁵ Indeed,

⁴⁸⁷ *Commercial Arbitration Rules and Mediation Procedures Including Procedures for Large, Complex Commercial Disputes*, AM. ARB. ASS'N. (Sept. 1, 2022) [hereinafter *Commercial Arbitration Rules and Mediation Procedures*], https://www.adr.org/sites/default/files/CommercialRules_Web_1.pdf.

⁴⁸⁸ Friendly, *supra* note 471, at 1278.

⁴⁸⁹ *Id.* at 1279–80.

⁴⁹⁰ *Id.*

⁴⁹¹ *See id.* at 1279.

⁴⁹² *See id.*; discussion in Section III.D.2 (discussing several examples and proposals that assign dispute resolution responsibilities to a third party removed from the immediate work environment).

⁴⁹³ Friendly, *supra* note 471, at 1280–81.

⁴⁹⁴ *Id.*

⁴⁹⁵ *Id.* at 1282.

Judge Friendly himself discusses these elements together.⁴⁹⁶ Whether formal examination and cross-examination are part of the system presents a harder question.⁴⁹⁷ A more likely procedure will involve interviews of claimants, other participants involved in making the invention, and persons with knowledge who can corroborate what those directly involved say.⁴⁹⁸ This process will likely look like an informal deposition.⁴⁹⁹

Making a record, having explicit findings of fact, and disclosure of reasons for a decision are likely *sine qua non* for preclusive effect or evidentiary weight.⁵⁰⁰ And, given modern technologies of video and audio recording, making a record is not nearly as burdensome as it once was.⁵⁰¹ Allowing outside lawyers to be involved is likely to make any process much more adversarial and formal, so the additional costs of affording this element must be weighed against the likelihood of greater preclusive effect or evidentiary weight if claimants have their own counsel.⁵⁰²

Public attendance is almost certainly not going to be a feature because of the need to protect trade secrets.⁵⁰³ On the other hand, appellate review—not necessarily judicial review—within the organization may be appropriate, such as when a provisional decision by a committee is referred to a senior officer for review and adoption, or revision.⁵⁰⁴

viii. *Decisionmaker*

Most designers of dispute handling procedures want them to produce some kind of final decision.⁵⁰⁵ And that is the first item on Judge Friendly's list: an unbiased decision-maker.⁵⁰⁶ An Article III

⁴⁹⁶ *Id.*

⁴⁹⁷ *Id.*

⁴⁹⁸ *See id.* at 1285–86.

⁴⁹⁹ Friendly, *supra* note 471, at 1287.

⁵⁰⁰ *Id.* at 1291.

⁵⁰¹ *Id.* at 1292.

⁵⁰² *See id.* at 1293–94.

⁵⁰³ *See id.* at 1293.

⁵⁰⁴ *See id.*

⁵⁰⁵ *See generally* Friendly, *supra* note 471, at 1293.

⁵⁰⁶ *Id.* at 1279.

judge is the archetype of an unbiased decision-maker, and an arbitrator selected under the rules of the AAA come close.⁵⁰⁷ But many other arrangements that are conceivable and widely implemented preserve some measure of control of the final decision to the sponsoring entity, while also allowing for a decision to be made independent of the primary disputants.⁵⁰⁸

For example, in Okuley's system, the sponsoring entity's officer makes an inventorship determination soon after an invention's disclosure, and the employee inventors then have an opportunity to appeal that determination.⁵⁰⁹ When any significant factors weighing in favor of a full investigation of inventorship are present, such as an appeal of an initial decision, the system may provide for an independent evaluator to conduct an investigative hearing.⁵¹⁰ The investigative hearing should be designed to provide an early evaluation of all probable inventors so that, when inventorship declarations are executed as part of a patent application, there would be no need for later correction.⁵¹¹ Okuley's alternative system can be described as follows:

The independent evaluator should be chosen to avoid entanglements of continuing relationships between researchers and the evaluator. The evaluator should also have the necessary skill and experience in determining inventorship. . . . Having an evaluative procedure and a policy for employing it in place prior to a dispute will encourage implementation of procedure when a dispute does arise. With a procedure in place and designated evaluators identified, the independent evaluation of inventorship could be completed in a timely manner.⁵¹²

. . . .

⁵⁰⁷ *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 487.

⁵⁰⁸ Okuley, *supra* note 446, at 944.

⁵⁰⁹ *Id.* at 949.

⁵¹⁰ *Id.*

⁵¹¹ *Id.* at 947-48.

⁵¹² *Id.* at 950.

. . . The evaluator could conduct an informal hearing, where potential inventors and other interested parties would be interviewed in person and asked to provide documentation of their research contribution. By striving for an informal setting, candor and full disclosure by participants should be encouraged.⁵¹³

The ability to question inventors directly and to examine original documentation would allow an evaluator to explore individual contributions fully.⁵¹⁴ An informal hearing would afford inventors a greater opportunity to explain their role as opposed to a simple written explanation.⁵¹⁵ An investigative hearing need not take longer than one day when there are relatively few potential inventors, Okuley says.⁵¹⁶ Okuley explains that “[m]ost of the information needed for the hearing would need to be gathered in any circumstance in order to file the patent application.”⁵¹⁷ The primary expense would be the involvement of an additional patent attorney to act as an evaluator of inventorship.⁵¹⁸ For the researchers and attorneys, the additional burdens of time and legal fees will be minimal compared to the total cost of prosecuting an application.⁵¹⁹

Okuley’s evaluator decides who will be listed as inventors on the patent application and memorializes the basis for her decision, so that if the validity of the issued patent is ever challenged, the basis for the inventorship determination will be clear.⁵²⁰ MIT’s language for resolving inventorship disputes is general:

Specifically, disputes concerning accurate inventor, author, and contributor identification of MIT-owned IP that remain unresolved by the TLO will be escalated to the IPPC, for resolution in consultation with the Office of the General Counsel.⁵²¹

⁵¹³ *Id.* at 952.

⁵¹⁴ Okuley, *supra* note 446, at 952.

⁵¹⁵ *Id.*

⁵¹⁶ *Id.* at 953.

⁵¹⁷ *Id.*

⁵¹⁸ *Id.*

⁵¹⁹ *Id.*

⁵²⁰ Okuley, *supra* note 446, at 953.

⁵²¹ MIT POLICIES, *supra* note 417, § 13.1.9.

Further, the Ohio State policy provides recourse “if informal processes and consultation do not provide resolution”⁵²² where:

I. Policy Interpretation and Dispute Resolution

A. University constituents (such as **creators, creators’** units, employees, and TCO) should make every attempt to resolve disputes informally among themselves and, if needed, with the assistance of the Office of Academic Affairs, the university Ombudsman, and/or the Office of Legal Affairs.

....

1. Any person or entity directly affected by decisions or actions of any other person or entity in connection with this policy, may appeal such decisions or actions to the IPPC if such person or entity (the claimant) believes such decisions or actions are inconsistent with this policy.

2. The claimant will submit the complaint in writing to the chair of the IPPC, who will determine whether the claimant has made a reasonable effort to resolve the dispute informally and whether the substance of the dispute appears to be within the scope of the IPPC’s review authority under this policy.

3. Proceedings will be informal, but all parties will have adequate notice and an opportunity to be heard. The IPPC may establish additional procedures for resolving such disputes and may designate a sub-committee of its members for such procedures.

4. After considering all relevant information and within 30 days of receipt of the complaint, the IPPC will prepare and send to the executive vice president for ERIK and the provost a report of its

⁵²² OHIO STATE POLICIES, *supra* note 417, § VIII(B).

findings on the issues raised by the complaint and any corrective actions it recommends, within the scope of this policy.

5. Within 30 days of receipt of the IPPC report, the executive vice president for ERIK and/or the provost will review the IPPC report and make a final decision on behalf of the university and provide this decision to all the parties involved and IPPC.

6. IPPC will publish its reports (after removing certain information, as needed, to address reasonable privacy or secrecy concerns) and the decisions of the executive vice president for ERIK and/or the provost. The publication will be reasonably accessible to the university community. Those reports and decisions will guide future actions and decisions by the TCO and IPPC.⁵²³

Employer self-interest in avoiding uncertainty and transaction costs of litigating inventorship justifies establishing arbitration mechanisms as part of their invention assignment agreements.⁵²⁴ Most comprehensive intellectual property policies do not provide for arbitration of inventor disputes, however.⁵²⁵ Nevertheless, the inclusion of such a provision is something that should be considered by drafters.

Legitimate reasons may exist for why a firm does not want to yield decision making authority over inventorship to an arbitrator, but it is not clear why that would be so in most situations. The employer of skilled and creative professionals should be interested in keeping them motivated and feeling that they are treated fairly.⁵²⁶

⁵²³ *Id.* § VIII.

⁵²⁴ See Karl P. Kilb, *Arbitration of Patent Disputes: An Important Option in the Age of Information Technology*, 4 FORDHAM INTELL. PROP., MEDIA & ENT. L.J. 599, 612–14 (1993) (discussing the relatively lower cost of arbitration compared to litigation and the ability to stipulate to a choice of law in an arbitration agreement).

⁵²⁵ See, e.g., MIT POLICIES, *supra* note 417, § 13.1.9.

⁵²⁶ See Okuley, *supra* note 446, at 921.

Affording employees a considerable measure of due process when they think they are wrongly being deprived of recognition as inventors furthers that kind of personnel policy.⁵²⁷ Someone who opposes arbitration as the preferred method of resolving inventorship disputes when the firm considers the content of its policy should be burdened with explaining how the firm will suffer if an inventorship dispute is decided by arbitration.

If arbitration is available only for questions of inventorship, and not with respect to the enforceability of an assignment, the risk to the sponsor may be more tolerable.⁵²⁸ If ownership of the patent is assigned to the sponsoring entity, it does not matter whose name is on the patent as a co-inventor.⁵²⁹ It may matter a lot to the inventors, but not to the assignee.⁵³⁰

If the designer of an IP policy decides that arbitration should be the final step, contractual language effective in providing for arbitration is widely available.⁵³¹ The AAA provides arbitration clauses for different types of relationships and offers a checklist of features that can be modified.⁵³² The sample language has evolved with hundreds of years of experience and references resulting in judicially enforceable awards under the Federal Arbitration Act⁵³³ and the Uniform Arbitration Act.⁵³⁴ The AAA publishes patent arbitration rules, but they are limited to that context alone.⁵³⁵ Here is language that would be effective outside of that limited context:

The parties to this agreement agree to submit any controversy over inventorship covered by this agreement to arbitration under the rules of the American

⁵²⁷ *See id.*

⁵²⁸ *See id.* at 936.

⁵²⁹ *Id.* at 921.

⁵³⁰ *See id.*

⁵³¹ *See Clauses*, AM. ARB. ASS'N, <https://www.adr.org/Clauses> (last visited Sept. 10, 2024).

⁵³² *See id.*

⁵³³ 9 U.S.C. § 4 (2012).

⁵³⁴ UNIF. ARB. ACT § 22 (NAT'L CONF. COMM'RS ON UNIF. STATE L. 2000).

⁵³⁵ *See* AM. ARB. ASS'N, RESOLUTION OF PATENT DISPUTES SUPPLEMENTARY RULES 7–9 (2006) [hereinafter RESOLUTION OF PATENT DISPUTES SUPPLEMENTARY RULES], <https://www.adr.org/sites/default/files/Resolution%20of%20Patent%20Disputes%20Supplementary%20Rules.pdf>.

Arbitration Association. The arbitration decision shall be final and binding and the parties agree that enforcement and review of any such decision shall be only as provided in the Federal Arbitration Act. They also agree that the jurisdiction of the arbitrator to decide questions of inventorship includes any claims for interpretation or invalidation of this agreement assigning rights and inventions.⁵³⁶

3. PRECLUSIVE EFFECT

If the internal dispute resolution system culminates in arbitration, the rules for giving an arbitration award near preclusive effect in subsequent litigation are clear.⁵³⁷ If the system does not culminate in arbitration, or if a particular dispute is not referred to arbitration, the force of a determination by the private dispute resolution system is less forceful, but still substantial.⁵³⁸ The internal dispute resolution should be admissible as evidence, and it is reasonable to expect that its effect should be governed by the usual criteria for issue preclusion.⁵³⁹ The more ingredients from Judge Friendly's list, the greater the likely effect of the decision.⁵⁴⁰

In *Haworth, Inc. v. Steelcase, Inc.*,⁵⁴¹ the Federal Circuit minimized concerns about the above scenario in the context of a patent infringement case, where the parties used alternative dispute resolution procedures.⁵⁴² The alternative dispute resolution proceeding at issue involved confidential negotiations before a special master, followed, if necessary, by a mini trial before the master, which would have preclusive effect.⁵⁴³ The court pointed to differences between

⁵³⁶ See, e.g., *id.* at 4 (recommending a variation of this language for use as a standard arbitration clause in patent contracts).

⁵³⁷ See UNIF. ARB. ACT §§ 22–23 (NAT'L CONF. COMM'RS ON UNIF. STATE L. 2000).

⁵³⁸ See *Alexander v. Gardner-Denver Co.*, 415 U.S. 36, 60 (1974) (“The arbitral decision may be admitted as evidence and accorded such weight as the court deems appropriate.”).

⁵³⁹ See *id.*

⁵⁴⁰ See Friendly, *supra* note 471, at 1278–79.

⁵⁴¹ 12 F.3d 1090 (Fed. Cir. 1993).

⁵⁴² *Id.* at 1091–92.

⁵⁴³ *Id.*

the procedure used and the typical patent case in federal court.⁵⁴⁴ The parties waived any rights to appeal.⁵⁴⁵ The emphasis on compromise meant that issues were interrelated to an extent that made issue-by-issue collateral estoppel inappropriate.⁵⁴⁶

In *Greenblatt v. Drexel Burnham Lambert, Inc.*,⁵⁴⁷ the United States Court of Appeals for the Eleventh Circuit enumerated the characteristics of an alternative dispute resolution proceeding (there, arbitration) that would result in preclusive effect.⁵⁴⁸ The enumerated characteristics the court found relevant were:

- The allegations were the same;
- Both parties were represented by counsel;
- Both made opening and closing arguments;
- The parties were permitted every opportunity to examine and cross examine witness and to present other evidence,
- A complete record of the proceeding was made.⁵⁴⁹

Thus, preclusive effect may be afforded via procedures with less than everything Judge Friendly discusses, but the fewer the elements present in the alternative dispute resolution proceeding, the less likely the alternative dispute resolution will be preclusive.⁵⁵⁰

Section 84 of the Second Restatement of Judgments gives an arbitration award the same preclusive effect as a judgment of a court, unless the procedure producing the award “lacked the elements of

⁵⁴⁴ See *id.* at 1095.

⁵⁴⁵ *Id.* at 1092.

⁵⁴⁶ See *id.* at 1095.

⁵⁴⁷ 763 F.2d 1352 (11th Cir. 1985).

⁵⁴⁸ *Id.* at 1361.

⁵⁴⁹ *Id.* (applying *McDonald v. City of Branch*, 466 U.S. 284 (1984) and *Dean Witter Reynolds, Inc. v. Byrd*, 470 U.S. 213 (1985)).

⁵⁵⁰ See Friendly, *supra* note 471, at 1279 (suggesting that the list is not exclusive and that going further with one element may afford good reason for eliminating another).

adjudicatory procedure prescribed in Section 83(2).”⁵⁵¹ Those elements are:

- (a) Adequate notice to persons who are to be bound by the adjudication, as stated in § 2;
- (b) The right on behalf of a party to present evidence and legal argument in support of the party’s contentions and fair opportunity to rebut evidence and argument by opposing parties;
- (c) A formulation of issues of law and fact in terms of the application of rules with respect to specified parties concerning a specific transaction, situation, or status, or a specific series thereof;
- (d) A rule of finality, specifying a point in the proceeding when presentations are terminated and a final decision is rendered; and
- (e) Such other procedural elements as may be necessary to constitute the proceeding a sufficient means of conclusively determining the matter in question, having regard for the magnitude and complexity of the matter in question, the urgency with which the matter must be resolved, and the opportunity of the parties to obtain evidence and formulate legal contentions.⁵⁵²

Even when decisions resulting from ADR systems do not meet the criteria for preclusive effect, they are nevertheless admissible and may be entitled to considerable weight. At a time when Title VII claims were not subject to binding arbitration, the Supreme Court held in *Alexander v. Gardner-Denver Co.*⁵⁵³ that when an arbitral determination gives full consideration to Title VII rights, a court may give the arbitration award “great weight.”⁵⁵⁴

⁵⁵¹ RESTATEMENT (SECOND) OF JUDGMENTS § 84(3)(b) (AM. L. INST. 1982).

⁵⁵² *Id.* § 83(2).

⁵⁵³ 415 U.S. 36 (1974).

⁵⁵⁴ *Id.* at 60 n.21.

EVALUATING THE PROPOSAL

One can imagine two different justifications for the Federal Circuit's interpretation of Article III standing in Section 256 cases. The first is that the Federal Circuit has no choice; it is simply implementing what the Supreme Court has mandated.⁵⁵⁵ As Section A explains, that justification is not meritorious.⁵⁵⁶ The Supreme Court's reasoning in *TransUnion* and other Article III standing cases provides plenty of room for the injury associated with leaving an inventor off of a patent to constitute injury in fact for Article III standing purposes.⁵⁵⁷

The second justification is rooted in policy and efficiency. Applying draconian standing requirements weeds out most Section 256 claims and saves the Patent Office and federal courts the time and trouble of adjudicating claims on the merits.⁵⁵⁸ But, as Section B argues, not much in the way of judicial resources is saved by shifting the burden of litigating the circumstances of invention and assignment to adjudication over standing because many of the same facts are at issue.⁵⁵⁹ Those seeking efficiency in the patent system should compare the likely cost of litigating standing with the cost of litigating inventorship.⁵⁶⁰ In many cases, it will not be cheaper to litigate standing.⁵⁶¹

A third justification is that the patent system does not want to get immersed in complex question of state contract law relating to contract formation, breach, and rescission.⁵⁶² But district courts hearing Section 256 claims are still likely to have diversity jurisdiction or supplemental jurisdiction⁵⁶³ over state law claims related to

⁵⁵⁵ See *Chou v. Univ. of Chi.*, 254 F.3d 1347, 1357 (Fed. Cir. 2001).

⁵⁵⁶ See discussion *supra* Section II.A.

⁵⁵⁷ See, e.g., *TransUnion LLC v. Ramirez*, 594 U.S. 413, 417 (2021).

⁵⁵⁸ See, e.g., *Chou*, 254 F.3d at 1359 (reasoning that reputational harm alone may satisfy Article III standing requirements but declining to decide the issue).

⁵⁵⁹ See discussion *supra* Section II.B.

⁵⁶⁰ See *Kilb*, *supra* note 524, at 612–13.

⁵⁶¹ See *id.*

⁵⁶² See discussion *supra* Sections II.B, II.C.

⁵⁶³ The likelihood of supplemental jurisdiction is much increased by the existence of a federal right of action for trade secret infringement. See 18 U.S.C. § 1836(b)(1). Most patent claims have related trade secret claims. See discussion *supra* Section III.D.2.

patent assignment, so it is not clear that relegating such claims to state court really keeps them out of federal court.⁵⁶⁴

It is reasonable to suppose that as the organizational context for innovation and invention becomes increasingly bureaucratized, the incidence of nonjoinder will also increase. Invention assignment agreements are rarely actually negotiated; instead, they are imposed by bureaucracies on individual inventors who rarely read them.⁵⁶⁵ Denying these inventors their day in court to complain when they are left off patents is quite likely to result in objective error and subjective injustice.⁵⁶⁶

Employers and other sponsoring entities who fear increased litigation over inventorship can protect themselves by adopting private alternative dispute resolution mechanisms that adjudicate inventorship before lawsuits are filed.⁵⁶⁷ When such systems are well designed, they preclude re-litigation of the facts they have determined.⁵⁶⁸

⁵⁶⁴ See Kilb, *supra* note 524, at 612–13.

⁵⁶⁵ See discussion *supra* Introduction (discussing hypothetical involving Bailey Dutton and Robots on the Range LLC).

⁵⁶⁶ See *Chou v. Univ. of Chi.*, 254 F.3d 1347, 1359 (Fed. Cir. 2001).

⁵⁶⁷ See RESOLUTION OF PATENT DISPUTES SUPPLEMENTARY RULES, *supra* note 535, at 4.

⁵⁶⁸ See *Alexander v. Gardner-Denver Co.*, 415 U.S. 36, 60 n.21 (1974).