Claim and Switch: Is Assignor Estoppel Still Material After *Minerva*?

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I. Introduction

As patent law gained more attention from the Supreme Court in recent years, the Court's case law caused significant changes often ending the use of bright line rules, causing some confusion around patent prosecution and litigation. The Supreme Court's

June 2021 decision in *Minerva Surgical, Inc. v. Hologic, Inc.*¹ is no exception to the ending of bright line rules. In *Minerva*, the Supreme Court narrowed the Court of Appeals for the Federal Circuit's interpretation of assignor estoppel in patent law.²

Assignor estoppel is a long-founded doctrine that prevents an assignor inventor from initially representing their claimed invention as valid and later challenging the validity of the same patent.³

In *Minerva*, the Court upheld assignor estoppel as a valid but narrow doctrine. The Court also held that assignor estoppel does not apply when the challenged claims are "materially broader" than the assigned claims because the assignor did not make any warranties about the challenged claims' validity. Thus, the Court held that an assignor could challenge the new claims when the assignor had not made any express statement about the validity of the claims. This holding makes the timing of the assignment important and possibly at odds with the current industry practice of including a blanket assignment clause in inventors' employment contracts. Further, this holding seems to restrict a significant amount of post-assignment claim amendments or applications.

First, this Note analyzes the Court's holding and reasoning in *Minerva*. Specifically, this Note reviews how the case relates to the history of both assignor estoppel and the now-defunct licensee estoppel. Second, this Note analyzes the issue of whether, after *Minerva*, the assignee retains any power to modify patent claims post-assignment without destroying the availability of assignor estoppel in future litigation. This Note argues that the Court's holding in *Minerva* may have gone too far—such that the result could be the over-limiting of patent incentives for assignors. Finally, this Note recommends how to interpret what qualifies as a "material" claim difference based on the Federal Circuit's opinion on remand and how these differences should be treated such that assignees' warranties are respected and balanced with assignors' rights.

II. BACKGROUND

This Part does two things. First, it introduces patent law, including patent assignment and patent continuation practice. Second, this Part explains the history of licensee estoppel and assignor estoppel in the United States. 8

A. Overview of Patent Law

A patent grants an inventor a property right in their invention for a limited term, generally 20 years from its filing date. The property right conferred by the patent is not an

- 1. See generally Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298 (2021).
- 2. Id. at 2302.
- 3. JORGE L. CONTRERAS, INTELLECTUAL PROPERTY LICENSING AND TRANSACTIONS 615 (2022); Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co., 266 U.S. 342, 349 (1924).
 - 4. Minerva Surgical, 141 S. Ct. at 2300.
 - 5. Id. at 2311.
 - 6. Id.
 - 7. See infra Parts A-B.
 - 8. See infra Parts C-D.
- 9. Patent Basics: General Information Concerning Patents, USPTO, https://www.uspto.gov/patents/basics/general-information-patents [https://perma.cc/NC4V-Z6RN].

affirmative right to the invention but is "the right to exclude others from making, using, offering for sale, or selling the invention in the United States or importing the invention into the United States." ¹⁰

The statutory basis for patent law comes from Congress's enumerated powers.¹¹ Specifically, Article I, Section 8, clause 8 of the United States Constitution states that "Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The primary goal of patent law is to incentivize technical innovation. Thus, a patent is conditioned, among other things, on the invention being new and useful. 14

The USPTO accordingly allows a patent when the claimed invention is useful, ¹⁵ new, ¹⁶ and nonobvious, ¹⁷ considering the current public knowledge. A patent application includes multiple parts: a title, a background, a summary, drawings, a brief description of the drawings, a detailed description of the drawings, and last but certainty not least, the claims. ¹⁸ Notably, a patent's written description must describe the invention in "such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same ." ¹⁹ This disclosure is the inventor's part of the *quid pro quo* for obtaining patent rights. ²⁰

Specifically for the patent claims, the law states that "[t]he [patent] specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention." Thus, the claims of the patent define the scope of a patent owner's rights. Accordingly, when a patent owner asserts their patent against an accused infringer, the patent owner believes that the accused infringer is practicing every feature of one or more of the asserted patent's claims.

It is important to note that there are different claim types.²³ For example, pharmaceutical patent claims may cover a drug formulation or a method for manufacturing a drug, and the written description requirement would differ for enabling the drug formulation and enabling the manufacturing method. Accordingly, the specifics of what a patent claims—e.g., a drug formulation, a method of manufacturing, a method of storing

- 10. Id.
- 11. JASON RANTANEN, INTRODUCTION TO INTELLECTUAL PROPERTY: CASES AND QUESTIONS 161 (2021).
- 12 U.S. CONST., art. I, § 8, cl. 8.
- 13. JONATHAN S. MASUR & LISA LARRIMORE OUELLETTE, PATENT LAW 10 (2d ed. 2022).
- 14. See 35 U.S.C. § 101 ("Whoever invents or discovers any new and useful process") (emphasis added).
 - 15. Id.
 - 16. Id.
- 17. See 35 U.S.C. § 103 ("A patent for claimed invention may not be obtained . . . if the difference between the claimed invention and the prior art are such that the claimed invention . . . would have been obvious. . . .").
 - 18. See MPEP ch. 600 (9th ed. Rev. 10, June 2019) (providing necessary materials for a patent application).
 - 19. 35 U.S.C. § 112(a).
 - 20. MASUR & OUELLETTE, supra note 13, at 12.
 - 21. 35 U.S.C. § 112(b).
 - 22. MASUR & OUELLETTE, supra note 13, at 11, 25.
 - 23. Id. at 29-31.

and transporting, or a method of treatment using a specific drug—are key to analyzing a patent's validity and the alleged infringement.

B. Patent Assignment

Patent rights, like other forms of property, "may be bought, sold, transferred and assigned." Although United States patent rights initially vest in the individual inventor, the rights are often assigned, for example, to an inventor's employer. As the market places more value on patents as a business asset, employers hire more employees to invent and contractually obligate those employees to assign the patent rights in their inventions to their employer. The United States Patent and Trademark Office (USPTO) defines a patent assignment as "a transfer by a party of all or part of its right, title and interest in a patent, patent application . . . for which an application to register has been filed." Thus, an inventor may agree in their employment contract to transfer all of their future patent rights to inventions they will develop within the scope of their employment to their employer. Notably, a patent assignment—explicitly or at least implicitly—includes the assignor's (e.g., the inventor's) warranty that the patent is valid.

C. Patent Families and Continuation Applications

Future patent rights may cover a wide range of rights, such as rights to a single patent application or an entire patent family. A patent family includes multiple patents that claim priority directly or indirectly to the same original patent.³⁰ The figure below shows an example patent family.

^{24.} CONTRERAS, supra note 3, at 16.

^{25.} Id. at 27.

^{26.} *Id.*; see Kevin G. Rivetter & David Kline, *Discovering New Value in Intellectual Property*, HARV. BUS. REV., Jan.—Feb. 2000, at 56–61 (highlighting the increasing importance of intellectual property and its perception as a business asset).

^{27. 37} C.F.R. § 3.1 (2015).

^{28.} CONTRERAS, *supra* note 3, at 27; *see* Brief for Minerva Surgical, Inc. as Amici Curiae of Intellectual Property Professors in Support of Petitioner at 6, Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298 (2021) (No. 20-440) (discussing the harms of 'assignor estoppel', specifically its effects on employee mobility).

^{29.} Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298, 2309 (2021).

^{30.} CONTRERAS, supra note 3, at 131.

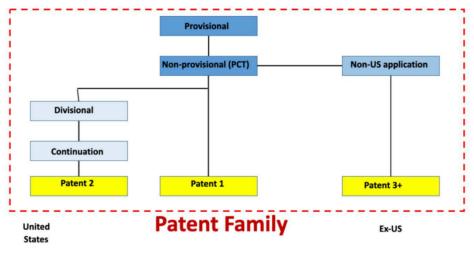


Figure 1: Visual Depiction of a Patent Family³¹

For example, a patent family may include a parent application that establishes the priority date for the family—the provisional application in the figure above—as well as one or more continuation applications.³² A continuation application is a nonprovisional patent application that must rely on the parent application's specification, but the continuation application includes new claims that are different from the parent application's claims as long as the parent application's original disclosure supports the new claims.³³

Patent applicants often use continuation applications to broaden or shift claim scope and to "keep a patent alive," such that claims can be amended long after the initial patent is granted.³⁴ The purpose of keeping a patent family alive is to preserve the chance to pursue claims of different aspects of the original invention disclosure that the applicant did not originally claim but may become valuable after the parent application is issued.³⁵ For example, a parent application may include two ways to connect a cell phone to a 5G wireless network. In the parent application, the first and second methods are claimed as separate, mutually exclusive options; and in a continuation application, a hybrid of the two methods may be claimed.³⁶

^{31.} Id.

^{32.} Id.

^{33.} JONATHAN S. MASUR & LISA LARRIMORE OUELLETTE, PATENT LAW 17 (1st ed. 2021); 37 C.F.R. § 1.78 (2023); MPEP § 201.07 (9th ed. Rev. 10, June 2019).

^{34.} Chen, *Using Continuation Applications Strategically*, COOLEYGO (2023), https://www.cooleygo.com/using-continuation-applications-strategically [https://perma.cc/CZ8X-PJQG].

^{35.} Id.

^{36.} The hybrid method may be claimed in the continuation application only if it is supported by the original parent application under 35 U.S.C. § 112.

Patent families refer to all patents and patent applications, including continuation patent applications, that stem from a common parent application.³⁷ Patent families require planning on the applicant's part because the applicant must file a continuation application "before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application "³⁸ The use of continuation applications has been increasing more rapidly than the filing of nonprovisional patent applications, and many in the patent field think continuation applications are necessary. ³⁹ One study shows "that due to such acceleration of claim obsolescence and scope reduction, patent continuations at the USPTO is essential for applicants who seek to appropriate equivalent returns from their inventions." ⁴⁰ Specifically, a continuation application allows an applicant to adjust their claim scope to accurately capture the broadest allowable subject matter with the insight provided by the prior prosecution of one or more earlier applications in the patent family.

D. Defenses to Infringement Allegations

A patent owner may sue a party for patent infringement if the accused party "without authority, makes, uses, offers to sell, or sells any patented invention, within the United States" In response to patent infringement allegations, accused infringers commonly challenge the validity of the asserted patent claims. ⁴² The validity of a patent claim may be challenged on several grounds. For example, an accused infringer may argue that the patent claim should not have been granted and is invalid due to a lack of novelty ⁴³ or the obviousness of the invention, ⁴⁴ both of which are requirements for a patent claim to be granted.

In some technical fields—for example, the software and diagnostic methods technical areas—it is possible for an accused infringer to argue that the patent claim should not have been granted and is invalid because the patent claims only cover non-eligible subject matter. Additional invalidity arguments may include lack of enablement and/or lack of written description support for the claimed subject matter. If the accused infringer can prove that the asserted patent claim(s) is invalid, then those claims can no longer be considered in the infringement action against the accused infringer. In fact, the invalid claims cannot be enforced against any party.

- 37. CONTRERAS, supra note 3, at 131.
- 38. 35 U.S.C. § 120.
- 39. Ron D. Katznelson, *Patent Continuations, Product Lifecycle Contraction and the Patent Scope Erosion.—A New Insight into Patenting Trends* 1 (S. Cal. L. Ass'ns Intell. Prop. Spring Seminar, Seminar Paper, June 8–10, 2007).
 - 40. Id.
 - 41. 35 U.S.C. § 271.
 - 42. MASUR & OUELLETTE, supra note 13, at 413-15.
 - 43. 35 U.S.C. § 102.
 - 44. 35 U.S.C. § 103.
- 45. 35 U.S.C. § 101; 35 U.S.C. § 282(a)—(b) ("The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.").
 - 46. 35 U.S.C. § 112.
 - 47. Blonder-Tongue Lab'ys. v. Univ. of Ill. Found., 402 U.S. 313, 350 (1971).

Additionally, or alternatively, accused infringers may argue noninfringement of the asserted patent. ⁴⁸ In other words, the accused infringers may take the position that even if the asserted patent claim is valid, the asserted claim does not cover the accused device, system, or method. For that reason, the accused invention does not "read on" the asserted patent claims. Arguments of noninfringement hinge on claim construction in which the judge interprets what the asserted claim language means. ⁴⁹

E. Estopping Patent Validity Challenges

When an accused infringer—with current or previous rights to the asserted patent—attempts to challenge the validity of a patent claim, two forms of estoppel have been widely recognized in patent law: licensee estoppel and assignor estoppel.⁵⁰ These estoppel doctrines do not apply to the accused infringer's defense of noninfringement, only validity challenges.⁵¹

1. Licensee Estoppel

A patent licensee is a party that receives the right to practice the patent from the patent owner, the licensor.⁵² Licensee estoppel was a judge-made doctrine that prevented a challenge to a patent's validity by a licensee of the licensed patent; however, the Supreme Court abolished licensee estoppel in *Lear, Inc. v. Adkins.*⁵³ The policy rationale for licensee estoppel is "that a licensee should not be permitted to enjoy the benefits of a licensing agreement (i.e., protection from suit by the patentee) while simultaneously seeking to void the patent that forms the basis of the agreement."⁵⁴

a. Lear, Inc. v. Adkins, 395 U.S. 653 (1969)

In *Lear, Inc. v. Adkins*, Lear hired Adkins, an inventor, to improve gyroscope accuracy for aviation applications.⁵⁵ At the start of the working relationship, the parties entered into a one-page agreement that "[a]ll new ideas, discoveries, inventions etc. related [to] vertical gyros become the property of Mr. John S. Adkins," and Adkins agreed to license all of these ideas to Lear "on a mutually satisfactory royalty basis." Adkins quickly developed improvements to Lear's production process that improved gyroscope accuracy with a minimal increase in cost, and in February 1954, Adkins filed a patent application covering the process.⁵⁷ In September 1955, Adkins and Lear agreed to a licensing agreement that stated:

[I]f the U.S. Patent Office refuses to issue a patent on the substantial claims or if such a patent so issued is subsequently held invalid, then in any of such events

- 48. 35 U.S.C. § 282(b)(1); MASUR & OUELLETTE, supra note 13, at 381.
- 49. MASUR & OUELLETTE, supra note 13, at 303.
- 50. Id. at 488.
- 51. Scott Paper Co. v. Marcalus Mfg. Co., 326 U.S. 249, 257-58 (1945).
- 52. CONTRERAS, supra note 3, at 7.
- 53. Lear, Inc. v. Adkins, 395 U.S. 653, 655 (1969); CONTRERAS, supra note 3, at 618-19.
- 54. CONTRERAS, supra note 3, at 619.
- 55. Lear, Inc., 395 U.S. at 657.
- 56. *Id*.
- 57. Id.

Lear at its option shall have the right forthwith to terminate the specific license so affected or to terminate this entire Agreement. ⁵⁸

On January 5, 1960, Adkins' patent was granted after a lengthy prosecution that required the claims to be significantly narrowed from the originally filed claims.⁵⁹ During this prosecution, Lear became convinced that Adkins would not receive a patent and stopped paying royalties.⁶⁰ Right after the patent issued, Adkins sued Lear for breach of contract.⁶¹ Lear sought to respond by challenging the validity of Adkins' patent, but the trial court held that Lear was estopped as a licensee from challenging the patent's validity.⁶²

On appeal, the Supreme Court held that courts may no longer apply the doctrine of licensee estoppel because the doctrine was inconsistent with principles of contract law and the policy rationales of patent law. ⁶³ The Court reasoned that the doctrine's enforcement disfavored the "full and free use of ideas in the public domain" and "would give the licensor an additional economic incentive to devise every conceivable dilatory tactic in an effort to postpone the day of final judicial reckoning. ⁶⁴ Thus, the Court placed the importance of invalidating bad patents and free competition above the benefits of licensee estoppel. ⁶⁵

2. Assignor Estoppel

The second form of estoppel in patent validity challenges is assignor estoppel. Assignor estoppel is also a judge-made doctrine adopted in the United States in 1880. Assignor estoppel prevents a challenge to a patent's validity if the challenger previously sold the same patent for consideration. For example, an inventor may not challenge the validity of their own patents that were assigned to their employer.

The difference between a patent assignment and a patent license is complex, but generally, a patent assignment is a permanent transfer of ownership rights of the subject matter covered by the patent, ⁶⁸ whereas licensing a patent is a temporary and possibly non-exclusive transfer of limited patent rights to a licensee where—unlike assignment—the licensor retains some rights to the subject matter covered by the patent. ⁶⁹

The origin of assignor estoppel relates to the doctrine of estoppel by deed in real property, "which holds that a seller of property by deed cannot later assert defects in the

- 58. Id.
- 59. Id. at 658.
- 60. Lear, Inc., 395 U.S. at 659.
- 61. Id. at 660.
- 62. Id.
- 63. Id. at 673-74.
- 64. *Id*.

- 67. See sources cited supra note 66.
- 68. See 37 C.F.R. § 3.1 (2023) (defining assignment).
- 69. CONTRERAS, supra note 3, at 27–28.

^{65.} Brief for Minerva Surgical, Inc. as Amici Curiae of Intellectual Property Professors in Support of Petitioner at 8–11, Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298 (2021) (No. 20-440); Roger Allan Ford, *Patent Invalidity Versus Noninfringement*, 99 CORNELL L. REV. 71, 110 (2013) ("[A] successful invalidity defense is a public good.").

^{66.} CONTRERAS, *supra* note 3, at 691–92; Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co., 266 U.S. 342, 349 (1924).

deed to claim back any right in the property." In Westinghouse Electric & Manufacturing Co. v. Formica Insulation Co., the Supreme Court explained:

The analogy between estoppel in conveyances of land and estoppel in assignments of a patent right is clear. If one lawfully conveys to another a patented right to exclude the public from the making, using and vending of an invention, fair dealing should prevent him from derogating from the title he has assigned, just as it estops a grantor of a deed of land from impeaching the effect of his solemn act as against his grantee. The grantor purports to convey the right to exclude others, in the one instance, from a defined tract of land, and in the other, from a described and limited field of the useful arts. ⁷¹

The Federal Circuit, in *Arista Networks v. Cisco Systems*, held that assignor estoppel did not apply to validity challenges by an assignor made to the Patent Trial and Appeal Board (PTAB).⁷² Specifically, the court refused to extend assignor estoppel applicability to *inter partes* review (IPR) proceedings at the PTAB.⁷³ An IPR is a proceeding at the PTAB where a third party may challenge the validity of a patent claim for lack of novelty and/or lack of nonobviousness.⁷⁴ Thus, a patent assignee can challenge the validity of a patent claim for lack of novelty and/or lack of nonobviousness in front of the PTAB. Further, the PTAB's determination in an IPR proceeding that a patent claim is invalid can be used as a defense by the assignee in the infringement litigation.⁷⁵

a. Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298 (2021)

In 2021, the Supreme Court upheld assignor estoppel in *Minerva Surgical, Inc. v. Hologic, Inc.* ⁷⁶ In this case, Hologic sued Minerva for patent infringement, and like many patent infringement cases, Minerva responded by claiming that Hologic's asserted patent was invalid. ⁷⁷ Hologic invoked the doctrine of assignor estoppel, which prevents the assignor of a patent—that they held as valid—from later challenging the validity of that patent. ⁷⁸

The facts of *Minerva* are as follows. Csaba Truckai invented a device for treating abnormal uterine bleeding (the NovaSure System). ⁷⁹ Truckai then filed Patent Application No. 09/103,072 ('072 application) claiming this device, which included a moisture-permeable head for ablating the uterine lining. ⁸⁰ Truckai also "assigned his interest in the ['072] application—as well as in any future 'continuation applications'—to Novacept." ⁸¹

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70. CONTRERAS, supra note 3, at 692.
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^{71.} Westinghouse Elec. & Mfg. Co., 266 U.S. at 350.

^{72.} Arista Networks v. Cisco Sys., 908 F.3d 792, 803-04 (Fed. Cir. 2018).

^{73.} Id.

^{74.} MASUR & OUELLETTE, supra note 13, at 475.

^{75. 35} U.S.C. §§ 311–19; MASUR & OUELLETTE, supra note 13, at 476, 489.

^{76.} Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298, 2300 (2021).

^{77.} Id.

^{78.} Id.

^{79.} Id.

^{80.} Id.; Hologic, Inc. v. Minerva Surgical, Inc., 44 F.4th 1358 (Fed. Cir. 2022).

^{81.} Minerva Surgical, 141 S. Ct. at 2303.

The USPTO issued U.S. Patent No. 6,813,520 ('520 patent) from the '072 application. ⁸² Then, in 2004, Novacept sold its patent portfolio, including the '520 patent, to another company. ⁸³ In a subsequent sale, Hologic "acquired all patent rights in the NovaSure System." Hologic currently sells the NovaSure System throughout the United States. ⁸⁵

In 2008, Truckai founded Minerva Surgical, Inc., where he continued to develop devices for treating abnormal uterine bleeding. ⁸⁶ In particular, Truckai came up with an allegedly improved device for treating abnormal uterine bleeding that had a moisture-impermeable head for ablating the uterine lining, which was different from the previously designed moisture-permeable head. ⁸⁷ Truckai filed a patent application covering this device, and the USPTO issued the related patent. ⁸⁸

In 2013, Hologic filed a continuation application that claimed benefit to the original NovaSure '072 application that Truckai assigned away. ⁸⁹ Claim 1 in this continuation application was broadly drafted to encompass both moisture permeable and impermeable ablation heads—likely based on Hologic's awareness of Truckai's latest development. ⁹⁰ The USPTO issued this application as U.S. Patent No. 9,095,348 ('348 patent) in 2015, and within a few months, this suit was initiated to assert claim 1 of the '348 patent covering both moisture permeable and impermeable ablation heads against Minerva. ⁹¹ Minerva responded, among other defenses, that the asserted claim 1 was invalid. ⁹²

In reviewing whether Minerva Inc. was barred under assignor estoppel from challenging the validity of '348 patent's claim 1 in the U.S. District Court for the District of Delaware, the Supreme Court held "[a]ssignor estoppel applies when an invalidity defense in an infringement suit conflicts with an explicit or implicit representation made in assigning patent rights. But absent that kind of inconsistency, an invalidity defense raises no concern of fair dealing—so assignor estoppel has no place." ⁹³

Consequently, the Court remanded the case to the Court of Appeals for the Federal Circuit to determine whether the asserted claim 1 was "materially broader" than those claims covered by Truckai's assignment such that Truckai's assignment "could not have warranted [the asserted claim's] validity."

The Court's holding was based on recognizing the limits of assignor estoppel based on fair dealings. Specifically, the boundaries of assignor estoppel come from the equitable purpose of the doctrine—"to prevent an assignor from warranting one thing and later alleging another." The Court noted that post-assignment changes to claim scope could

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82. Hologic, 44 F.4th at 1360.
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^{83.} Minerva Surgical, 141 S. Ct. at 2303.

^{84.} Id.

^{85.} *Id*.

^{86.} *Id*.

^{87.} Id.

^{88.} Minerva Surgical, 141 S. Ct. at 2303.

^{89.} *Id*.

^{90.} Id.

^{91.} Id.; see also Hologic, Inc. v. Minerva Surgical, Inc., 44 F.4th 1358, 1361 (Fed. Cir. 2022).

^{92.} Minerva Surgical, 141 S. Ct. at 2303.

^{93.} Id. at 2311.

^{94.} *Id*.

^{95.} Id.

eliminate the rationale for applying assignor estoppel because the inventor would only have made validity warrants about the original claim scope. ⁹⁶

b. On Remand: Hologic, Inc. v. Minerva Surgical, Inc., 44 F.4th 1358 (Fed. Cir. 2022)

On August 11, 2022, the Federal Circuit addressed, on remand, "whether claim 1 is 'materially broader' than the claims assigned to Hologic such that assignor estoppel [as narrowed by the Supreme Court] should not apply." The Federal Circuit held "that claim 1 is not 'materially broader' than the claims assigned to Hologic. Accordingly, Minerva is estopped from challenging the validity of claim 1 of the '348 patent."

The Federal Circuit opinion highlights one key fact that the Supreme Court did not analyze—claim 31 of the parent '072 application. Claim 31, although canceled after filing, was a part of the original '072 application filing. ⁹⁹ Notably, the applicant canceled claim 31 two years before the application was ever assigned. ¹⁰⁰ Crucially, unlike the other independent claims in the '072 application, claim 31 was not expressly limited to a moisture permeable ablation head because it did not specifically recite moisture permeable when claiming the ablation head. ¹⁰¹

Minerva argued "that Hologic cannot assert that Mr. Truckai represented claim 31 was valid at the time of the 2004 assignment." Hologic countered by arguing that claim 31 was warranted because the claim was canceled without prejudice in response to a restriction requirement. In other words, the subject matter of claim 31 was supported by the patent application's written description—shown by the Examiner previously allowing the claim—and could be reintroduced in another patent application.

After reviewing the entire prosecution history of claim 31, the Federal Circuit agreed "with Hologic that [claim 31's] cancelation in response to the Examiner's restriction requirement says nothing, implicitly or explicitly, about the patentability of claim 31."¹⁰⁵ Thus, the Federal Circuit considered the assignee's point of view and determined that "an assignee would have understood that the restriction requirement and subsequent cancelation in response to the restriction requirement meant that the patent applicant could later prosecute claim 31's subject matter."¹⁰⁶ In dicta, the Federal Circuit generally noted that "[a] claim canceled in response to a restriction requirement thus travels with the

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96. Id. at 2310.
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^{97.} Hologic, Inc. v. Minerva Surgical, Inc., 44 F.4th 1358, 1360 (Fed. Cir. 2022).

^{98.} Id.

^{99.} Id.

^{100.} Id.

^{101.} Id. at 1360.

^{102.} Hologic, 44 F.4th at 1363.

^{103.} When an Applicant elects a species after a restriction requirement, the non-elected claims are canceled. Unless there is a generic claim allowed, the canceled claims of the non-elected species cannot be reintroduced in the same application. In fact, the subject matter of the non-elected species must be pursued in a divisional patent application. Pfizer, Inc. v. Teva Pharms. USA, Inc., 518 F.3d 1353, 1362 (Fed. Cir. 2008); 35 U.S.C. § 121; MPEP § 201.06 (9th ed. Rev. 10.2019, June 2020).

^{104.} Hologic, 44 F.4th at 1364.

^{105.} Id.

^{106.} *Id.* at 1365.

application."¹⁰⁷ More specifically, the Federal Circuit reasoned that claim 31 traveled with the application and was warranted as valid at assignment because "Mr. Truckai signed an oath when presenting the '072 application, in which he stated his implicit good-faith belief that the claims in the application [(including claim 31 at the time)] are patentable and would result in a valid patent."¹⁰⁸ Further, the Federal Circuit opined that this oath was then reaffirmed twice.

Accordingly, the Federal Circuit turned to the issue of "whether claim 1 of the '348 [asserted] patent is 'materially broader' than claim 31 of the '072 [parent] application." Based on the parties agreeing to what materially broader meant in this case, the Federal Circuit construed claim 31 to determine if it was limited to a moisture-permeable device. The Federal Circuit construed claim 31 such that it was not restricted to a moisture-permeable device because of the principle of claim differentiation and the written description of the '072 [parent] application. Therefore, the Federal Circuit held that Minerva was estopped, under the doctrine of assignor estoppel, from challenging the validity of claim 1 of the '348 patent because "claim 1 of the '348 patent is not materially broader than claim 31 of the '072 application."

III. ANALYSIS

This analysis discusses the Supreme Court's holding and reasoning in *Minerva* and how it relates to the history of both assignor estoppel and the now-defunct licensee estoppel. Then, this Part analyzes the issue of whether the assignee retains the power to modify patent claims post-assignment. This Part then argues that the Court's holding in *Minerva* may have gone too far, such that the result could be the over-limiting of patent incentives for assignors. Finally, this Part addresses how to interpret what qualifies as a "material" claim difference based on the Federal Circuit's opinion on remand and how these differences should be treated such that assignees' warranties are respected and balanced with assignors' rights.

A. Comparing Assignor Estoppel and Licensee Estoppel

Although assignor estoppel and licensee estoppel are often discussed together because of their similarities, the Supreme Court clarified the distinction in these doctrines by rejecting Minerva's argument that the elimination of licensee estoppel in *Lear* similarly ended assignor estoppel. As discussed above, licensee estoppel was a judge-made doctrine that prevented a licensee from challenging a patent's validity of the licensed patent; however, licensee estoppel was abolished by the Supreme Court in *Lear*, *Inc. v. Adkins*. The policy rationale for licensee estoppel was that a licensee, the one receiving

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107. Id.
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^{108.} Id.

^{109.} Hologic, 44 F.4th at 1364.

^{110.} Id. at 1363.

^{111.} Id.

^{112.} Id. at 1364-66.

^{113.} Id. at 1369.

^{114.} Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298, 2308 (2021).

^{115.} Lear, Inc. v. Adkins, 395 U.S. 653, 670–71 (1969); CONTRERAS, supra note 3, at 618–19.

the right to the patent, should not be able to sue the licensor, the patent owner, while the licensor is unable to sue the licensee. Assignor estoppel is also a judge-made doctrine that prevents an assignor, a previous patent owner who previously sold the same patent for consideration, from challenging the same patent's validity. 117

The Supreme Court was correct to distinguish assignor estoppel from licensee estoppel because the policy rationales for each doctrine are unrelated. Unlike the imbalance in litigation rights between two different parties that undermines licensee estoppel, assignor estoppel is premised on the inequitable actions of a single party, the patent assignor. Thus, assignor estoppel and licensee estoppel are similar in that they both prevent specific parties from challenging a patent's validity. The key difference between assignor estoppel and licensee estoppel is that assignor estoppel polices the original controlling party of the challenged patent, whereas licensee estoppel policed the non-controlling party of the challenged patent.

Minerva's argument—that assignor estoppel was also struck down along with licensee estoppel in *Lear*—was misguided based on the different doctrines' distinct policy rationales. The Supreme Court further explained the distinction between assignor estoppel and licensee estoppel, stating that a "licensee is a buyer of patent rights, not a seller." The importance of this statement is that a seller—for example, a licensor or an assignor—is the party who makes warranties about a patent's validity. Thus, Minerva's argument that assignor estoppel fell with licensee estoppel would only make sense if licensee estoppel was *really* licensor estoppel. Because a licensor retains some ownership rights in a patent, there is no rational reason that a licensor would attempt to invalidate their own rights. But an assignor transfers all ownership rights in a patent, which means the assignor has no interest in the patent's validity after the sale. This lack of future interest that results from the patent assignment gives rise to the need for assignor estoppel.

With assignor estoppel distinguished from licensee estoppel, the remainder of this Note focuses on assignor estoppel. Specifically, the remainder of this Note focuses on the difference in the treatment of assignor estoppel by the Federal Circuit and the Supreme Court.

B. The Federal Circuit's Historically Broad Interpretation of Assignor Estoppel

The Federal Circuit has generally held that assignor estoppel broadly prevents any challenge to a patent's validity by an assignor. ¹²² The Federal Circuit seems comfortable allowing assignor estoppel to remain a broad doctrine because of the other defenses available to a patent assignee. For example, the assignee may argue noninfringement,

- 116. CONTRERAS, *supra* note 3, at 618–19.
- 117. Id.; Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co., 266 U.S. 342, 349 (1924).
- 118. CONTRERAS, supra note 3, at 618–19.
- 119. Minerva Surgical, 141 S. Ct. at 2308.
- 120. See id. at 2309 (noting that when a person sells their patent rights, they warrant to the buyer that the patent is valid).
 - 121. 37 C.F.R. § 3.1 (2023) (stating that an assignment consists of transferring all rights in a patent).
- 122. See, e.g., MAG Aerospace Indus., Inc. v. B/E Aerospace, Inc., 816 F.3d 1374, 1380 (Fed. Cir. 2016) (affirming finding of privity between inventor and company that had developed patented invention prior to hiring inventor); Mentor Graphics Corp. v. Quickturn Design Sys., Inc., 150 F.3d 1374, 1379 (Fed. Cir. 1998) (expanding privity); Hologic, Inc. v. Minerva Surgical, Inc., 957 F.3d 1256, 1264–65 (Fed. Cir. 2020).

which provides the accused infringer a fair chance to prove their innocence. Additionally, the assignee may challenge aspects of the asserted patent's validity in an IPR proceeding at the PTAB. A patent must withstand every challenge to remain valid because it only takes one party to succeed in invalidating a patent for those claims to be forever invalid. 124

Thus, it is important to remember the limited context of assignor estoppel—an accused infringer that challenges, in a U.S. District Court, the validity of the same patent they previously sold. Specifically, the assignor is only estopped from invalidating the patent, but the assignor is not estopped from arguing non-infringement. ¹²⁵

Although some fear that the Federal Circuit's broad interpretation of assignor estoppel may have gone too far beyond its original purpose, ¹²⁶ assignor estoppel still has a valid equitable rationale and may become increasingly more important in patent litigation. The rationale may become more important as inventors increasingly move between different companies ¹²⁷ and companies increasingly use patents ¹²⁸ to protect their inventions.

C. Minerva Surgical, Inc. v. Hologic, Inc. Narrowed Assignor Estoppel Precedent

In *Minerva*, the Supreme Court held that "[a]ssignor estoppel applies when an invalidity defense in an infringement suit conflicts with an explicit or implicit representation made in assigning patent rights." ¹²⁹ The Supreme Court further explained that "absent that kind of inconsistency, an invalidity defense raises no concern of fair dealing—so assignor estoppel has no place." ¹³⁰ Accordingly, assignor estoppel is still a valid doctrine, but the Federal Circuit has narrowed the doctrine's scope through its broad application of assignor estoppel to any patent validity challenge by an assignor.

The Supreme Court focuses on the post-assignment change to the claims. Notably, the patent-in-suit here is a continuation of the original application that the assignor actually assigned. In other words, the patent-in-suit here relies on the specification of the original assigned application, but the claims are different from the claims of the original assigned application. The Supreme Court specifically states that "[a]ssuming that the new claims

^{123.} Arista Networks v. Cisco Sys., 908 F.3d 792, 803-04 (Fed. Cir. 2018).

^{124.} Mark Lemley, The Fractioning of Patent Law 510 (Stan. Pub. L., Working Paper No. 1895681, 2012).

^{125.} See MASUR & OUELLETTE, supra note 13, at 488 (discussing assignor estoppel).

^{126.} See Brief for Minerva Surgical, Inc. as Amici Curiae of Intellectual Property Professors in Support of Petitioner at 1, Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298 (2021) (No. 20–440), 2021 WL 878675, at *1 ("The Federal Circuit . . . has steadily expanded the [assignor estoppel] doctrine's application beyond this Court's precedent and any justification for it.").

^{127.} Atta Tarki, How Tech's Trillion-Dollar War for Talent Will Forever Redefine Business Strategy, FORBES (Feb. 22, 2021), https://www.forbes.com/sites/forbesbusinesscouncil/2021/02/22/how-techs-trillion-dollar-war-for-talent-will-forever-redefine-business-strategy/?sh=51c70df22498 [https://perma.cc/R2C6-S8GM]; see Orly Lobel, The New Cognitive Property: Human Capital Law and the Reach of Intellectual Property, 93 TEX. L. REV. 789, 817–20 (2015) ("[A]ssignor estoppel penalizes a former employee and thus creates a powerful disincentive for competitors to hire an employee who has experience in the field."); see also Lara J. Hodgson, Assignor Estoppel: Fairness at What Price?, 20 SANTA CLARA HIGH TECH. L.J. 797, 827–30 (2004) (discussing the negative consequences of judicially created warranties for assignor estoppel).

^{128.} See generally Rivetter & Kline, supra note 26.

^{129.} Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298, 2311 (2021).

^{130.} Id.

[post-assignment] are *materially broader* than the old ones [pre-assignment], the assignor did not warrant to the new claims' validity." ¹³¹

Although *Minerva* relates to a continuation application, the Supreme Court's reasoning in *Minerva* has important implications for any assigned patent application where claims can still be amended, and continuation applications can still be filed post assignment. Accordingly, the *Minerva* holding may seem to have limited applicability; however, most—if not all—sophisticated companies have their employee inventors assign their rights in a patent to the company at or before the patent application stage ¹³²—not after the patent issues.

Additionally, when a company sells its patent, the company often sells the entire patent family, which may include both issued patents and patent applications. ¹³³ Because this is common practice in the patent field, the *Minerva* holding could impact a large number of patent assignments.

1. What Makes a Claim Materially Broader Than a Previous Claim?

The standard for assessing if assignor estoppel applies is whether the post-assignment claims are materially broader than the assigned claims. This standard is straightforward in the context of the facts in *Minerva* because, on remand, the parties agreed that if originally filed claim 31 of the parent application '072 was limited to a moisture permeable ablation head, then asserted claim 1 was materially broader than claim 31; whereas, if originally filed claim 31 of the parent application '072 was not limited to a moisture permeable ablation head, then asserted claim 1 was not materially broader than claim 31. Based on the prior allowability of claim 31 and the parties' agreement, the Federal Circuit sidestepped the most difficult part of the new assignor estoppel doctrine when it did not generally address what makes a claim materially broader than a previous claim.

As the Supreme Court indicated, if the assignee had drafted the new claims to broaden the claim scope by removing the "moisture permeable" limitation, which was clearly done to cover the moisture impermeable head developed by the assignor, then the newly drafted claims would be materially broader than the previous claim. The materially broader analysis will be very fact specific, and a lot of grey area remains after *Minerva*.

If interpreted broadly, the materially broader standard could effectively eliminate assignor estoppel for most post-assignment claims in continuation patent applications because continuation application claims are typically broader, at least in some respects, than the previously issued patent claims of the parent application that was originally assigned. The continuation application claims are drafted this way to expand the scope of protection of the already patented claims—otherwise, the continuation application would not provide value relative to the already patented claims.

^{131.} Id. at 2310 (emphasis added).

^{132.} MASUR & OUELLETTE, supra note 13, at 293.

^{133.} CONTRERAS, supra note 3, at 110–11.

^{134.} Minerva Surgical, 141 S. Ct. at 2310.

^{135.} Hologic, Inc. v. Minerva Surgical, Inc., 44 F.4th 1358, 1364 (Fed. Cir. 2022).

After *Minerva*, it is unclear what changes to a claim would be considered immaterial. Typically, claims are only amended for patentability reasons. ¹³⁶ Thus, one could argue that almost every claim amendment is material. The Supreme Court, however, does provide that the claim amendment must be broader than the assigned claims. ¹³⁷ This admittedly does narrow the type of claim amendments this holding will apply to for the specifically assigned application because most claim amendments made during patent prosecution are narrowing, not broadening, amendments to overcome prior art or clarify claim scope.

In contrast, continuation applications are specifically filed with different claims than the patent to which they claim priority; ¹³⁸ otherwise, they would be useless (and unpatentable under statutory double patenting) ¹³⁹ if they attempted to cover the same claim scope as their parent application. Thus, every continuation application has material claim changes from the parent application.

If there is only an assignment of the parent application, then every continuation application that claims priority to the parent application is post-assignment. As a result, every continuation application would have a material change in claim scope that occurred post assignment, and assignor estoppel would not apply. Does the *Minerva* holding mean that assignor estoppel does not apply to any continuation application? On remand, the Federal Circuit answered no based on the specific facts of the case. Going forward, courts will evaluate the materially broad standard on a claim limitation by limitation basis.

2. Is Materially Broader Than a Previous Claim Analyzed Based on the Totality of the Circumstances?

The Supreme Court did not completely resolve the *Minerva* case and instead remanded the case to the Court of Appeals for the Federal Circuit to determine if the continuation application claims were materially broader than the assigned claims. ¹⁴⁰ Although commercial products are not normally given weight during claim construction in patent infringement suits, ¹⁴¹ the Supreme Court was influenced by the fact that the assignee purposefully broadened the claims in the continuation application to cover the assignor's recent invention. The Supreme Court may have been concerned with more than just the specific assignment and subsequent claims, and, instead of limiting the assignor estoppel analysis to those factors, the Court may have considered the totality of the circumstances in this case; the decision was also based on the policy rationale for assignor estoppel.

Specifically, in *Minerva*, the facts highlighted by the Supreme Court indicated that the assignor was aware that the assignee's newly developed technology would compete with the patented invention, and the assignor made the broadening claim amendment after learning of the newly developed technology. ¹⁴² The Supreme Court also may have been apprehensive about the restriction on innovation that may result from the previous broad application of assignor estoppel by the Federal Circuit.

^{136.} There are some minor exceptions; for example, one could make claim amendments to fix typographical errors or antecedent basis mistakes.

^{137.} Minerva Surgical, 141 S. Ct. at 2310.

^{138.} Chen, supra note 34.

^{139. 35} U.S.C. § 101.

^{140.} Minerva Surgical, 141 S. Ct. at 2311.

^{141.} MASUR & OUELLETTE, supra note 13, at 216.

^{142.} Minerva Surgical, 141 S. Ct. at 2303.

For example, there could be a concern that an inventor who previously assigned away patent rights to an invention in a specific technical field may be significantly limited in their ability to practice in the same field in the future. This could be truly detrimental to inventors who are often experts in their technical fields and may not be able to easily translate their knowledge to another technical area. Further, this would be contrary to patent law's primary goal—to incentivize innovation. ¹⁴³

On remand, the Federal Circuit partially resolved this question where their analysis was based on the totality of the prosecution history¹⁴⁴ and assignment timeline. Although this analysis was focused on intrinsic evidence in the patent family and assignment agreements, the Federal Circuit did not foreclose the use of extrinsic evidence.

D. Future Impacts

As a result of the *Minerva* ruling, inventors' employment contracts may be reworked. For example, employers may require inventors to make a warranty of patent validity when a patent is issued. Alternatively, will inventors have to assign away any right to future litigation against their own inventions? Additionally, will continuation practice slow based on the *Minerva* holding?

Due to the limited chance that a patent infringement suit can meet all of the factors to implicate assignor estoppel, like *Minerva*, this will have a minimal impact on patent drafting practice post assignment. Still, inventing powerhouse companies would be wise to update their employment contracts with their inventors.

IV. RECOMMENDATIONS

The currently changing doctrine of assignor estoppel compromises the assignees' and assignors' ability to predict when assignor estoppel applies. Additionally, the changing doctrine now complicates how assignees can make post-assignment claim amendments, specifically in continuation practice.

If an assignee materially broadens the claim scope of the asserted patent post assignment, then assignor estoppel is unavailable as a defense to a validity challenge by an accused assignor infringer. ¹⁴⁵ Based on the limited applicability of assignor estoppel after *Minerva*, the court should extend a narrow rule of assignor estoppel to IPR proceedings where the accused infringer can only challenge the validity of materially broader claims than the claims assigned. If assignors are allowed to continue using IPRs to challenge the key aspects of validity of their previously assigned patents, ¹⁴⁶ then this IPR loophole has essentially destroyed the equitable basis of assignor estoppel.

This Note discusses additional recommendations for assignor inventors and future assignees below.

^{143.} MASUR & OUELLETTE, supra note 33.

^{144.} In fact, the Federal Circuit's analysis was very similar to its analysis of prosecution history estoppel, which the Federal Circuit is familiar with.

^{145.} Minerva Surgical, 141 S. Ct. at 2303.

^{146.} Arista Networks v. Cisco Sys., 908 F.3d 792, 803-04 (Fed. Cir. 2018).

A. Assignor Inventors

Inventors should be aware that they—and their future employer—may be unable to challenge the validity of the inventor's patent unless there are materially broadening claim amendments made post assignment. Inventor assignment is typically made and recorded at the USPTO around the time a patent application is filed. Thus, it is crucial for an inventor—at the time of filing of a patent application with specific claims (not an omnibus claim)—to review the claims and understand their scope of protection because courts will assume that the inventor's assignment at least implicitly represents that these originally filed claims are believed to be valid.

The court will hold that any claims broader than the originally filed claim scope (or assigned claim scope, if broader than the original claims) will be outside of the inventor's representations and thus available for the inventor to challenge their validity. ¹⁴⁷ Ultimately, the more involved an inventor is in drafting a patent application for their inventions, the greater understanding the inventor will have for what rights will be limited if the patent issues.

Additionally, inventors that find themselves in a new job working for a former competitor should take care that their new inventions are truly inventive compared to their previously assigned patent claims. Notably, this introduces—although not entirely new—increased transaction costs for inventors every time they consider publishing a new product, submitting an invention disclosure, or filing a patent, because the inventor must review their prior assigned patents and patent applications. Ideally, if the inventor ultimately files a patent application for their new idea, the examination of that application will address the relevant scope of their prior patents and reduce the transaction cost for the inventor.

B. Future Assignees

For predictability, assignees of patent applications should draft continuation claims and value the patent applications as if the doctrine of assignor estoppel does not exist. To reiterate, the standard for assessing if assignor estoppel applies is if the post-assignment claims are materially broader than the assigned claims. 148

Here, the working assumption is that assignees desire the broadest scope of protection by the assigned patent application. Assignees must balance this desire for broad protection with the desire to preserve the right to use assignor estoppel as a defense. If working in a highly technical area—such as the software or pharmaceutical industries—where validity challenges are likely, the desire for broad protection will be more important because the assignee will have to prepare for validity challenges from those that cannot be estopped by assignor estoppel, and there would be no or little additional cost to face an additional validity challenge from the assignor.

1. Continuation Practice

Based on the underlying policy of fair dealing, continuation patent applications are more likely than assigned parent patent applications to fall outside of assignor estoppel

^{147.} Minerva Surgical, 141 S. Ct. at 2311.

^{148.} Id. at 2310.

because continuation applications are intentionally filed with materially different claims than the patent to which they claim priority; otherwise, continuation patent applications would be useless (and unpatentable under statutory double patenting¹⁴⁹) if they attempted to cover the same claim scope as their parent application. ¹⁵⁰ If there is only the inventor's assignment of the parent application, then every continuation application would have a material change in claim scope that occurred post assignment, and assignor estoppel would not apply to an inventor's subsequent validity challenge.

Thus, it is likely unavoidable that a continuation will not be covered by the inventor's representations if there is not an assignment at the continuation phase. But the following two suggestions may help assignees preserve assignor estoppel as a defense to invalidity challenges by the inventor.

First, the assignee could contract at the time of assignment to require the inventor to help with the continuation application and provide an assignment at the time of filing the continuation application. Therefore, the filed claims of the continuation application would no longer be considered post-assignment activity, and the claims would be specifically warranted as valid by the assignor inventor. There may still be chances for the assignee to amend the claims post-assignment for clarity if the claim amendments are considered immaterial.

Second, like inventors, the assignee should review the scope of the inventor-assigned original claims and determine how broadly the continuation claims may be while still falling within the protection of assignor estoppel. In other words, assignees should only draft continuation claims as broadly as the originally filed parent claims. For example, Hologic may have done this (intentionally or not) based on the originally filed claim 31.

Assuming an inventor assignment followed the industry norm and took place at the time of filing the originally filed parent application, then there would be a representation that the original claims with a generic applicator head were valid, and it would be inequitable to allow the inventor to say otherwise because "[a]ssignor estoppel applies when an invalidity defense in an infringement suit conflicts with an explicit or implicit representation made in assigning patent rights." As a result, this may have a small impact on claim drafting practices of parent patent applications by discouraging broad initial claims so that an inventor (or other assignor) has greater flexibility in the future.

In most cases, assignor estoppel considerations will not impact continuation drafting because the desire for broad claim scope and the need to prepare for multiple validity challenges will outweigh the benefit of preserving assignor estoppel.

2. Patent Acquisition Evaluation

As patents are increasingly treated and transacted as an asset, companies may update their evaluation of a patent portfolio purchase based on the limited applicability of assignor estoppel. Specifically, the applicability of assignor estoppel may increase the value of issued patents with no post-assignment claim amendments and may decrease the value of patent applications with narrowly drafted claims.

^{149. 35} U.S.C. § 101.

^{150.} See Chen, supra note 34 (discussing the purpose and uses of continuation patent applications).

^{151.} Minerva Surgical, 141 S. Ct. at 2311.

When acquiring a patent portfolio in a patent-savvy technical field, the assignee should prepare for multiple validity challenges. As discussed above, it only takes one challenger to succeed in invalidating a patent for those claims to be forever invalid. Thus, a patent claim must withstand every challenge to remain valid. 153

In these challenge-heavy patent fields (namely the pharmaceutical and software industries), there is only a trivial amount of risk associated with a challenger being an assignor because there will likely be other challengers. Further, the assignor is only estopped from challenging the validity of the patent during litigation in court, but the assignor is not estopped from arguing non-infringement during litigation ¹⁵⁴ or challenging the asserted patent's validity in an IPR at the PTAB. ¹⁵⁵

Therefore, the doctrine of assignor estoppel should not be given much weight in the valuation of a patent portfolio in a patent-savvy field because other litigation considerations that include any competitor's interest in the patented technology will be more important and likely encompass the same risk of a validity challenge by the assignor. Conversely, assignor estoppel may be more relevant in the valuation of a patent portfolio in a less patent-savvy field.

V. CONCLUSION

Based on the underlying policy rationale of fair dealing, the Supreme Court correctly held that assignor estoppel should have limited applicability and bar a patent validity challenge only when the post-assignment claims are materially broader than the assigned claims. ¹⁵⁶ Assignor estoppel may continue to be important in some patent litigation based on the Federal Circuit's decision on remand and the increasing movement of inventors between different companies, and the increasing use of patents, especially large patent families with continuation applications.

But, due to the small chance of a patent infringement suit meeting all the factors to implicate assignor estoppel based on current assignment practices, the holding in *Minerva* will have a minimal impact on post-assignment patent drafting practice—other than the possible increased review of originally filed claims.

Minerva has given some power back to inventors because they now retain a right to challenge their previously assigned patent when there was no representation about the validity of the asserted claims. This right is crucial to the mobility of inventors in the job market. This mobility often results in increased innovation, which is the primary goal of patent law.

Additionally, there will be little to no cost imposed on assignees in patent-savvy fields because *Minerva* will have minimal impact on the already present high risk of patent litigation. Thus, the Supreme Court in *Minerva* properly balanced the rights of the assignor inventor with the limited possible harm to the assignee.

^{152.} MASUR & OUELLETTE, supra note 33, at 43.

^{153.} Id.

^{154.} Id. at 488.

^{155.} Arista Networks v. Cisco Sys., 908 F.3d 792, 803-04 (Fed. Cir. 2018).

^{156.} Minerva Surgical, 141 S. Ct. at 2310.