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INVENTORS BEWARE: THE DANGER OF GETTING TOO MANY PATENTS

Daniel Kazhdan & Molly R. Silfen*

Until recently, conventional wisdom held that getting more patents was all upside (aside from the cost of prosecution and maintenance). Later patents—even if of questionable validity—could not hurt your existing portfolio, and, so long as you did not assert your weak patents, they would just sit quietly collecting dust. That conventional wisdom was pretty much true.

Conventional wisdom has not changed, but the reality has. Because of three recent developments, getting continuation patents can now affirmatively hurt your whole portfolio—even patents you already have. First, with the 2011 passage of the America Invents Act, the U.S. Patent and Trademark Office adopted a strong form of estoppel for post-issuance proceedings. That estoppel means that, once someone petitions the agency for post-issuance review of a patent, the patent owner may have no way of avoiding an estoppel-creating judgment on the validity of the patent—one that will potentially infect the owner's other patents. Second, courts have long allowed a patent owner to show that her patent would not have been obvious by pointing to various so-called objective indicia (such as the commercial success) of a patented product. For that evidence to be meaningful, though, there needs to be a nexus between the patent claims and the product. Recently, the Federal Circuit ruled that if the inventor has other patents that claim other, different features of the product, those other patents make it harder to show nexus. Thus, getting additional patents might, once again, weaken existing patents. Third, in 2014, the Federal Circuit changed the law of double patenting and ruled that later-issued patents could shorten the patent-term adjustment of earlier-issued patents. Therefore, a patent could lose a few years of term simply because the patent owner got a continuation patent.

Following these changes, patent owners should be more judicious when they consider applying for additional patents because their later applications can potentially damage their whole portfolio.

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I. INTRODUCTION

A common refrain is, “More is always better.”¹ As applied to patents, this means collect more patents.² After all, other than the cost of getting the patents (which, to be sure, is a real cost), more patents means more IP protection. Right? Indeed, some have argued that, “for patents, *the whole*” of a patent portfolio consisting of multiple patents “*is greater than the sum of its parts.*”³ In the past, that was pretty much true. Aside from a few exceptional cases, obtaining additional patents could not hurt your pre-existing portfolio.

As this article shows, that is not true anymore. After providing some background on patent prosecution in Section I, this article demonstrates that three recent legal changes have made it so that getting more patents can affirmatively hurt a portfolio—even hurting patents that were already issued. Section II analyzes the most significant change, which comes from how the U.S. Patent and Trademark Office has implemented the Leahy-Smith America Invents Act of 2011 (the “AIA”).⁴ Both before and after the AIA, parties could challenge issued patents in the Patent and Trademark Office. Before the AIA, there were *ex parte* and *inter partes* reexaminations.⁵ The AIA left *ex parte* reexaminations⁶ but replaced *inter partes* reexaminations with three more trial-like proceedings.⁷ In implementing the AIA, the Patent and Trademark Office promulgated regulations that make it more difficult for patent owners to avoid agency trials without an adverse judgment. Where patent owners could get out of *reexaminations* without an estoppel-creating decision by simply disclaiming all the challenged claims,⁸ AIA trials have no similar exit ramp. Like the pre-AIA reexaminations, if the agency ultimately gets to the merits, then that decision can create a binding estoppel.⁹ AIA

1. Mean Girls on Broadway, “*More Is Better*” | *Mean Girls on Broadway*, YOUTUBE (May 17, 2018), <https://www.youtube.com/watch?v=3BEj3HyJQGU>.

2. *But see* Christopher J. Rourke, *Key Strategic Considerations in Obtaining Domestic and International Patents* in *DEVELOPING A PATENT STRATEGY* (2013), Westlaw 2013 WL 571775, at *12 (explaining why failing to focus on the commercial value of individual patents in a portfolio can result in high maintenance costs with little financial gain).

3. Gideon Parchomovsky & R. Polk Wagner, *Patent Portfolios*, 154 U. PENN. L. REV. 1, 5 (2005) (emphasis added); *see also* Rourke, *supra* note 2, at *12.

4. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284-341 (2011) [hereinafter AIA].

5. 35 U.S.C. §§ 302-307 (2006) (*ex parte* reexamination); *id.* at §§ 311-318 (*inter partes* reexamination).

6. *See id.* at §§ 302-307.

7. *See id.* at §§ 311-319 (*inter partes* review), §§ 321-329 (post-grant review); AIA, 125 Stat. at 329-31 (covered business method review).

8. *See* MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 706.03(w) (U.S. PATENT & TRADEMARK OFFICE, 8th ed. rev. 8, July 2010).

9. *See id.*

trials are novel, though, because the implementing regulations leave the patent owner with no simple way out: if the patent owner disclaims her claims or abandons the proceedings, the Board may enter an adverse judgment with binding estoppel effects.¹⁰

Section III discusses the recent shift in the law of nexus. If a patent is challenged as obvious, the patent owner has long been able to point to secondary considerations, like the “commercial success” of a claimed product, as evidence that the claims would not have been obvious.¹¹ However, secondary considerations are probative of non-obviousness only if there is a “nexus” between the product and the claimed features: If, for example, a product is commercially successful due to something other than the claimed invention, commercial success is irrelevant.¹² Unfortunately, “there is rarely a *perfect correspondence*” between patent claims and a commercial product, so it can be difficult to tell whether secondary considerations like commercial success are due to the patented invention.¹³ A particularly difficult nexus question arises when multiple patents cover various aspects of a single product.¹⁴ In a recent case, the Federal Circuit held that the default is that having multiple patents that cover the same product cuts against nexus (in a rebuttable way) unless the different patents cover “essentially the same invention.”¹⁵

Section IV considers recent changes to the law of obviousness-type double patenting. Historically, a parent application could not lose its patent term based on a later-issued continuation application. Not anymore.¹⁶ Now, a later-filed, later-issued patent might shorten the term of its parent.¹⁷

Finally, Section V notes a few long-existing doctrines under which an inventor’s later patents have always created potential risks to earlier

10. See 37 C.F.R. § 42.73 (2020).

11. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966); see also *Consol. Safety Valve Co. v. Crosby Steam Gauge & Valve Co.*, 113 U.S. 157, 179 (1885) (making an invention “practically valuable” is evidence of non-obviousness).

12. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019); *In re Caveney*, 386 F.2d 917, 923 (C.C.P.A. 1967).

13. *Fox Factory*, 944 F.3d at 1374.

14. See DONALD S. CHISUM, *CHISUM ON PATENTS* § 5.05[2][f], at 5-1073-77 (2019) (citing cases).

15. *Fox Factory*, 944 F.3d at 1377, 1378; see also *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1289, 1299 (Fed. Cir. 2010) (finding no presumption of nexus where there was “uncontroverted evidence” demonstrating that the product succeeded because of features already present in prior art), *reh’g en banc granted, opinion vacated*, 374 F. App’x 35 (Fed. Cir. 2010), *reinstated in relevant part*, 649 F.3d 1276, 1296 (Fed. Cir. 2011).

16. See *Abbvie Inc. v. Kennedy Inst. of Rheumatology*, 764 F.3d 1366 (Fed. Cir. 2014); *Gilead Scis., Inc. v. Natco Pharma Ltd.*, 753 F.3d 1208 (Fed. Cir. 2014).

17. See Daniel Kazhdan, *Obviousness-Type Double Patenting: Why it Exists and When It Applies*, 53 AKRON L. REV. (forthcoming June 2019).

patents: inequitable conduct, prosecution laches, claim construction, and prosecution history estoppel. However, as the section describes, these can be avoided through careful prosecution.

The upshot is that inventors should be careful before they seek more and more patent protection. Those extra patents can sometimes affirmatively hurt the value of a patent portfolio.

II. HOW PATENTS ARE PROSECUTED

Patent prosecution is an intricate area of practice,¹⁸ but, for our purposes, only a high-level understanding of a few basic points is necessary.¹⁹ The process starts when an inventor files an application with the Patent and Trademark Office. There are two kinds of patent applications: provisional applications and nonprovisional applications. Only nonprovisional applications are relevant for this article.

An inventor who files a nonprovisional application must include both a “specification,” which describes and enables the invention, and claims, which particularly and distinctly claim the invention.²⁰ Every application receives an effective “filing date.”²¹ The effective filing date is important for several reasons, notably: (1) it defines the prior art that can be raised against the patent (prior art has to be prior to the effective filing date)²² and, since 1995, (2) the patent expires 20 years after that date.²³

An inventor can, if she so chooses, file for multiple patents on the same or similar inventions. There are two ways to do this.

A. *Unrelated applications*

Inventors can file multiple “unrelated” applications: the different applications might not even mention one another. This method of filing for patents can create problems for the inventor’s later-filed applications depending on certain intricacies of timing.²⁴

B. *Related applications*

The inventor can also file “related” applications, where the later applications reference and claim certain benefits from the earlier—

18. See generally MPEP.

19. Portions of this section are copied from Kazhdan, *supra* note 17.

20. 35 U.S.C. §§ 111(a)(2)(A), 112(b) (2012); MPEP § 601 (9th ed. rev. 08.2017, Jan. 2018).

21. 35 U.S.C. § 111(a)(4) (2012).

22. *Id.* at § 103; see MPEP § 2141.

23. 35 U.S.C. § 154(a)(2) (Supp. V 2017).

24. See 35 U.S.C. § 102(a)(1) (2012) (providing that an inventor cannot get a patent if, for example, the invention was first described in another patent).

sometimes called the “parent”—application.²⁵ There are three types of related applications: (1) continuation applications, (2) divisional applications, and (3) continuation-in-part applications.²⁶ In all three, the inventor must apply for the “child” application before the parent issues.²⁷ In continuation and divisional applications, the inventor files for multiple patents using largely the same specification,²⁸ and the inventor can claim the filing date of the parent. In a continuation-in-part application, an inventor can add new matter to the specification, but the claims of the continuation-in-part application get the benefit of the parent’s filing date only if the parent application contains a disclosure that supports those claims.²⁹

There are many reasons an inventor might choose to file multiple related applications on the same invention. The Patent and Trademark Office might insist on the inventor dividing her claims,³⁰ the inventor might worry that prosecuting all the claims right away would be too expensive, the inventor might believe that prosecuting the more-ambitious claims could hold up the issuance of the less-ambitious ones, the inventor could be trying to game the system, or the inventor might have some other reason.³¹

III. THE REGULATIONS THAT IMPLEMENT THE AMERICA INVENTS ACT HAVE MADE IT EASIER FOR A PETITIONER TO USE ONE WEAK PATENT AS A LEVER TO CHALLENGE OTHER PATENTS

With this background in hand, we can now consider the recent changes to patent law. The AIA made several significant changes to patent law. One was the establishment of AIA trials through which petitioners can aggressively challenge issued patents at the Patent and Trademark Office. Importantly, petitioners choose which patent to target, so they can start by attacking the weakest one. As this section shows, that ability can be an incredibly powerful tool for taking down a whole patent portfolio—not just the weak patents.

25. See 35 U.S.C. §§ 120–121, 154(a)(2).

26. MPEP § 201.02 (9th ed. rev. 08.2017, Jan. 2018).

27. 35 U.S.C. § 120.

28. *Id.* §§ 201.06, 201.07.

29. See MPEP § 201.08 (9th ed. rev. 08.2017, Jan. 2018).

30. 35 U.S.C. § 121.

31. See Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. REV. 63, 65 (2004) (listing some “pernicious” reasons); see *id.* at 74–83 (expanding on these reasons); *id.* at 68 (giving less pernicious reasons).

A. Controlling the battleground

A petitioner that manages to invalidate one patent in a portfolio gets both *de facto* and *de jure* benefits when it later challenges other patents in the portfolio.

1. Atmospheric

“Specific patterns of timing and sequence matter.”³² Experienced litigators know this, and they are thoughtful in choosing the sequence in which they present their cases. Perhaps the best-known example is the way Thurgood Marshall and the NAACP (National Association for the Advancement of Colored People) carefully chose the order of cases in which to challenge *Plessy*’s “separate but equal” standard.³³ They started by attacking segregation in law schools, moved to graduate schools more generally, and, only after they had won those cases, went down the educational ladder to public schools.³⁴ As Oona Hathaway notes, this was a classic example of “path dependence”: they “present[ed] cases in an order that maximized their chances of obtaining the legal standard they sought.”³⁵

Applying this strategy to the patent context, patent owners should try to litigate their strongest patent first, while patent challengers should try and start with the weakest one. The party that defines the battleground has a major advantage because it is “strikingly prevalent” for courts to follow the result in an earlier patent decision even when they are not formally bound to do so.³⁶ Thus, if claims in one patent in a family are deemed valid in one tribunal, a later tribunal will likely find that to be a meaningful consideration in considering claims in a related patent. The converse is also true: if claims in one patent are found to be invalid, a later court is likely to find that claims in a related patent are, too.

32. Paul Pierson, *Increasing Returns, Path Dependence, and the Study of Politics*, 94 AM. POL. SCI. REV. 251, 251 (2000).

33. *Plessy v. Ferguson*, 163 U.S. 537 (1896).

34. See, e.g., Constance B. Motley, *The Historical Setting of Brown and its Impact on the Supreme Court’s Decision*, 61 FORDHAM L. REV. 9, 11-14 (1992) (citing cases); Wiley A. Branton, *The Effects of Brown v. Board of Education: A Retrospective View*, 23 HOW. L.J. 125, 129-31 (1980) (similar).

35. Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in A Common Law System*, 86 IOWA L. REV. 601, 650 (2001).

36. Anthony M. Garza, *Collateral Estoppel and Claim Construction Orders: Finality Problems and Vacatur Solutions*, 6 COLUM. SCI. & TECH. L. REV. 1, 4 (2005); see *id.* at 4 n.11 (citing cases); cf. *Triplett v. Lowell*, 297 U.S. 638, 642 (1936) (finding that, even where an earlier decision is not “res adjudicata,” it may, “by comity[,] be given great weight in a later litigation and thus persuade the court to render a like decree”), *overruled in part by Blonder-Tongue Labs., Inc. v. Univ. of Illinois Found.*, 402 U.S. 313 (1971).

The Supreme Court's decision in *Providence Rubber Co. v. Goodyear*³⁷ makes this point almost explicitly. The Goodyears made a lot of money enforcing their patent on rubber—in each case, they were successful.³⁸ When they sued Providence Rubber Co., Providence Rubber alleged that Goodyear was not the first inventor of rubber.³⁹ The Supreme Court began by noting that, despite the “numerous cases of litigation” that were “earnestly contested,” the Goodyear patent was sustained “in every instance.”⁴⁰ The Supreme Court found this “very persuasive” evidence that Goodyear was the first inventor—indeed, the presumption was “impregnable.”⁴¹ If the patent was invalid, the Supreme Court could not “doubt that it would have been overthrown in the numerous and severe assaults which have been made upon it.”⁴² The Supreme Court then reviewed the evidence just to be sure—and it remained convinced that Goodyear was the first inventor.⁴³

A more recent example is *Idenix*, where both the district court and the Federal Circuit ruled that Idenix's patent did not enable its claim to a specific geometry of a compound.⁴⁴ In their analyses, both courts found it noteworthy that a prior Federal Circuit decision, *Storer*, had invalidated a different Idenix patent for failing to enable the compound.⁴⁵ No one disputed that *Storer* was distinguishable from *Idenix*: As the district court recognized, it “involved a different patent, having different claims as well as a different specification . . . , the evidentiary record [in *Idenix* was] far more developed than [in *Storer*], and the legal standard applicable [in *Idenix*] . . . [wa]s far more favorable to Idenix than it was [in *Storer*].”⁴⁶ Yet both *Idenix* decisions mentioned *Storer* because both thought it significant that a prior tribunal had invalidated somewhat similar patent claims.⁴⁷

37. 76 U.S. 788, 793-94 (1869).

38. *Id.* at 793.

39. *Id.*

40. *Id.* at 793.

41. *Id.* at 793-94.

42. *Id.* at 794.

43. *Goodyear*, 76 U.S. at 794.

44. *Idenix Pharm. LLC v. Gilead Scis., Inc.*, No. CV 14-846, 2018 WL 922125 (D. Del. Feb. 16, 2018), *aff'd in relevant part*, 941 F.3d 1149 (Fed. Cir. 2019).

45. *Idenix*, 941 F.3d at 1155 n.1. (citing *Storer v. Clark*, 860 F.3d 1340 (Fed. Cir. 2017)).

46. *Idenix*, 2018 WL 922125, at *18 n.17; *see also Idenix*, 941 F.3d at 1155 n.1.

47. Of course, this is not a fixed rule, and courts will sometimes not even begin analogizing related patents because they involve “different patents, different specifications, or different claims.” *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1095 (Fed. Cir. 2019); *see Shelcore, Inc. v. Durham Indus., Inc.*, 745 F.2d 621, 627 (Fed.Cir.1984).

2. *Res judicata*

When certain conditions are met, path dependence is enshrined in the doctrine of *res judicata*—either claim preclusion or issue preclusion.⁴⁸ As the Supreme Court has explained, if there is a “final judgment,” then claim preclusion “forecloses ‘successive litigation of the very same claim, whether or not relitigation of the claim raises the same issues as the earlier suit.’”⁴⁹ Meanwhile, issue preclusion “bars ‘successive litigation of an issue of fact or law actually litigated and resolved in a valid court determination essential to the prior judgment,’ even if the issue recurs in the context of a different claim.”⁵⁰ Decisions by administrative agencies create *res judicata* just as much as decisions by district courts—unless a statute expressly provides otherwise.⁵¹

Although *res judicata* certainly applies to patent law, patents are something of an awkward fit. At the threshold, while a patent owner can assert the same patent against many different parties, each particular patent litigation generally involves only two parties—the patent owner and one defendant. For a long time, the Supreme Court held that a patent owner whose patent was found invalid against one defendant could still assert it against another.⁵² However, in 1971, the Supreme Court in *Blonder-Tongue* abrogated its prior precedent and ruled that a new defendant could raise estoppel as a defense against a patent that had been previously invalidated by another party.⁵³

Technically, the Supreme Court left the patent owner some room to navigate around estoppel. Before a court could find estoppel, “the patentee-plaintiff must be permitted to demonstrate, if he can, that he did not have ‘a fair opportunity procedurally, substantively and evidentially to pursue his claim the first time.’”⁵⁴ The Supreme Court suggested some half dozen factors that might cut against a finding of estoppel: “choice of forum”; “incentive to litigate”; “whether the first validity determination purported to employ the [proper legal] standards”; whether the decision in the first case indicates that “the courts wholly failed to grasp the technical subject matter and issues in suit”; and “whether without fault of his own the patentee was deprived of crucial evidence or

48. *Taylor v. Sturgell*, 553 U.S. 880, 892 (2008).

49. *Id.* (quoting *New Hampshire v. Maine*, 532 U.S. 742, 748 (2001)).

50. *Id.* (quoting *New Hampshire*, 532 U.S. at 748-49); *see also* *B & B Hardware, Inc. v. Hargis Indus.*, 575 U.S. 138, 148 (2015).

51. *See B & B*, 575 U.S. at 148; *Astoria Fed. Sav. & Loan Ass’n v. Solimino*, 501 U.S. 104, 107-08 (1991).

52. *Triplett*, 297 U.S. at 642.

53. *Blonder-Tongue*, 402 U.S. at 350.

54. *Id.* at 333 (quoting *Eisel v. Columbia Packing Co.*, 181 F. Supp. 298, 301 (Mass. 1960)).

witnesses in the first litigation.”⁵⁵ Notwithstanding this multi-factor analysis, courts are quick to apply estoppel once an earlier tribunal invalidates a patent. Nearly every court to rule on the issue has found that a first judgment of invalidity estops the patent owner in later cases.⁵⁶ And, over a dissent, the Federal Circuit has recently refused to even wait for briefing on the estoppel issue.⁵⁷ The few exceptions prove the rule: There was a case in 1975 where an Ohio court allowed a patent owner to relitigate the *enforceability* of a patent that the Seventh Circuit had previously deemed unenforceable.⁵⁸ Still, the court found the patent unenforceable based on the “authority” of the Seventh Circuit case.⁵⁹ There was also a Federal Circuit case that suggested, without deciding, that it might be “possible” for a patent owner who settled after losing a first case to avoid estoppel in a later case.⁶⁰ Those two cases are the closest courts have come to not applying estoppel.

The bigger problem with applying *res judicata* to patent cases is how to decide when two cases present the same “claim” or “issue.”⁶¹ This is far murkier. At least some decisions suggest that everything (the claims and the record) must be the same. Thus, the Federal Circuit like its predecessor, the Court of Customs and Patent Appeals, sometimes allowed an inventor whose patent was invalidated in court to prosecute identical claims in a continuation application simply by filing a new affidavit.⁶² The most famous advocate of this narrow approach to estoppel

55. *Id.*

56. *See, e.g.,* *Soverain Software LLC v. Victoria’s Secret*, 778 F.3d 1311, 1315 (Fed. Cir. 2015); *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 721 F.3d 1330, 1347 (Fed. Cir. 2013); *Restorative Care of Am. Inc. v. Dickinson*, 232 F.3d 909 (Fed. Cir. 2000) (Table); *Pharmacia & Upjohn Co. v. Mylan Pharm., Inc.*, 170 F.3d 1373, 1379-80 (Fed. Cir. 1999); *Mendenhall v. Barber-Greene Co.*, 26 F.3d 1573, 1577-78 (Fed. Cir. 1994); *Mississippi Chem. Corp. v. Swift Agr. Chemicals Corp.*, 717 F.2d 1374, 1376 (Fed. Cir. 1983); *Kaiser Indus. Corp. v. Jones & Laughlin Steel Corp.*, 515 F.2d 964, 987 (3d Cir. 1975), *amended*, 524 F.2d 1154 (3d Cir. 1975); *Blumcraft of Pittsburgh v. Kawneer Co.*, 482 F.2d 542, 549 (5th Cir. 1973).

57. *XY, LLC v. Trans Ova Genetics*, 890 F.3d 1282, 1294-95 (Fed. Cir. 2018) (over a dissent by Judge Newman).

58. *See Kearney & Trecker Corp. v. Cincinnati Milacron, Inc.*, 403 F. Supp. 1040, 1068 (S.D. Ohio 1975), *aff’d*, 562 F.2d 365 (6th Cir. 1977).

59. *Id.*

60. *See Aqua Marine Supply v. AIM Machining, Inc.*, 247 F.3d 1216, 1221 (Fed. Cir. 2001) (“In a future action, it is possible that Aqua Marine could avoid collateral estoppel by arguing that it did not have a full and fair opportunity to litigate the issue of invalidity.”); *cf. Hall v. U. S. Fiber & Plastics Corp.*, 476 F.2d 418, 420-21 (3d Cir. 1973) (refusing to opine on the question of estoppel).

61. *See In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994) (“Difficulty sometimes arises, however, in delineating the issue on which litigation is, or is not, foreclosed.”).

62. *See In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985) (finding that an applicant’s new affidavit creates a “new record [that] presents a new issue”); *In re Russell*, 439 F.2d 1228, 1230 (C.C.P.A. 1971); *In re Craig*, 411 F.2d 1333, 1334 (C.C.P.A. 1969) (overruling prior precedent to the contrary).

was Justice Clark. Sitting by designation on the Seventh Circuit (after he retired from the Supreme Court),⁶³ Justice Clark ruled that a patent owner was estopped from asserting only “explicitly” invalidated claims, but the patent owner could still assert similar claims.⁶⁴ Most courts, however, are far more willing to find estoppel,⁶⁵ and the Federal Circuit—like the Court of Customs and Patent Appeals—regularly applies *res judicata* even when there are new claims or new evidence.⁶⁶ At present, the Federal Circuit seems to be willing to apply *res judicata* whenever the asserted patent “describe[s] substantially the same invention” as the invalidated patent.⁶⁷

Whatever clarity there may have been was upended by the Supreme Court’s recent decision in *Gunn v. Minton*,⁶⁸ which seems to send *res judicata* back a half century. In *Gunn*, the Court addressed the question of whether a patent-law malpractice claim must be brought in federal court.⁶⁹ As the *Gunn* Court noted, legal malpractice is a state-law cause of action, so malpractice cases normally go to state court.⁷⁰ However, by statute, state courts have no “jurisdiction [over any claim for relief] arising under any Act of Congress relating to patents,”⁷¹ which might suggest that patent-malpractice cases should be decided in federal court. In *Gunn*, the Supreme Court ruled that patent-malpractice cases do not have to be litigated in federal courts because they do not present a “significant” question that affects the “federal system as a whole.”⁷² One potential issue was that the state court’s decision might be *res judicata* on federal courts for related patents, but the Supreme Court was unconcerned.⁷³ It questioned whether state-court decisions could create

63. See generally MIMI CLARK GRONLUND, SUPREME COURT JUSTICE TOM C. CLARK: A LIFE OF SERVICE (2010).

64. *Bourns, Inc. v. Allen-Bradley Co.*, 480 F.2d 123, 124, 126 (7th Cir. 1973).

65. *Bourns, Inc. v. United States*, 537 F.2d 486, 492 (Ct. Cl. 1976); *Westwood Chem., Inc. v. Molded Fiber Glass Body Co.*, 498 F.2d 1115, 1117-18 (6th Cir. 1974) (citing *Technograph Printed Circuits, Ltd. v. Methode Elecs., Inc.*, 484 F.2d 905, 908-09 (7th Cir. 1973)).

66. See MPEP § 706.03(w) (citing *In re Freeman*, 30 F.3d 1459 (Fed. Cir. 1994); *Edger-ton v. Kingland*, 168 F.2d 121 (D.C. Cir. 1947); *In re Szwarc*, 319 F.2d 277 (C.C.P.A. 1963); *In re Katz*, 467 F.2d 939 (C.C.P.A. 1970)).

67. *Ohio Willow Wood Co. v. Alps South, LLC*, 735 F.3d 1333, 1342 (Fed. Cir. 2013); see also *MaxLinear, Inc. v. CF CRESPE LLC*, 880 F.3d 1373, 1377-78 (Fed. Cir. 2018) (re-quiring the Board on remand to consider “whether the remaining claims present materially different issues that alter the question of patentability”); *Univ. of Minn. v. LSI Corp.*, 926 F.3d 1327, 1345 (Fed. Cir. 2019) (additional views of the panel).

68. 568 U.S. 251 (2013).

69. *Id.* at 253.

70. *Id.* at 258.

71. 28 U.S.C. § 1338.

72. See *Gunn*, 568 U.S. at 263-65.

73. *Id.* at 262-63.

estoppel in a patent case at all.⁷⁴ Regardless, it held that any estoppel “would be limited to the parties and patents that had been before the state court.”⁷⁵

Everything about this is surprising. Although not our issue, the Supreme Court’s skepticism about estoppel from state court to federal court seems to overlook the Full Faith and Credit Act, which requires federal courts to give state court decisions the same preclusive effects as the state’s courts would.⁷⁶ If the state-court decision would create estoppel in state court, then it should create estoppel in federal court, too. The Supreme Court’s suggestion that estoppel is limited to the “patents” involved in the first litigation, albeit in accord with Justice Clark, is inconsistent with most courts. And the Court’s statement that any preclusion would be limited to the specific “parties” litigating the malpractice suit is irreconcilable with *Blonder-Tongue*.⁷⁷

* * * * *

Ultimately, the application of *res judicata* to patent cases remains remarkably complicated. Correspondingly, the Manual for Patent Examining Procedure recommends that examiners include other rejections along with any *res judicata* rejection.⁷⁸ But, whether because of atmospherics or because of *res judicata*, once one patent claim falls, there is a risk of “[a] domino approach in which each successively narrower claim is compared with the one before it,” and a whole portfolio can come apart.⁷⁹ Thus, the effects of path dependence can significantly reduce the value of a patent portfolio.

B. Before the America Invents Act, a patent owner could largely keep tribunals from ruling on non-asserted patents

With a few exceptions, before the AIA a patent owner could make sure no tribunal issued an estoppel-creating judgment on her weakest

74. *See id.* at 263.

75. *Id.*

76. 28 U.S.C. § 1738; *see also* *Allen v. McCurry*, 449 U.S. 90, 96 (1980) (“Congress has specifically required all federal courts to give preclusive effect to state-court judgments whenever the courts of the State from which the judgments emerged would do so.”).

77. Perhaps to avoid this problem, Professor Gugliuzza reads the Court’s statement as just a careless way of getting at the point that a state court’s rulings about a specific case are not likely to have broad implications over the state of patent law. *See* Paul Gugliuzza, *Rising Confusion About “Arising Under” Jurisdiction in Patent Cases*, 69 EMERY L.J. 459, 477 (2019). As Gugliuzza recognizes, though, many Federal Circuit judges read *Gunn* differently than he proposes. *See id.* at 478-85 (citing cases).

78. *See* MPEP § 706.03(w).

79. *See Bourns*, 537 F.2d at 493 (criticizing this as “inappropriate”); *In re Lundberg*, 280 F.2d 865, 867 (C.C.P.A. 1960) (ruling that this is proper); *see generally* CHISUM, *supra* note 14, § 11.03[5][d] (noting that courts are split on the issue).

patents. There were three primary ways that a non-asserted patent could be dragged into litigation: (i) interferences, (ii) reexaminations, and (iii) declaratory judgments. However, all three were of limited effect.

1. Interferences created significant estoppel but were rare

Before the AIA, the United States granted patents to the first person to *invent* something.⁸⁰ As a result, if two people applied for patents on essentially the same invention, the Patent and Trademark Office needed to decide who came up with the invention first. These disputes were resolved in a proceeding called an “interference,” and interferences have been around since 1793.⁸¹ Initially, interferences went to an arbitration panel,⁸² but later, Congress created a special board within the Patent and Trademark Office—today called the Patent Trial and Appeal Board⁸³—that was tasked with resolving interferences.⁸⁴ Although interferences were fundamentally about who invented first, once the Office declared an interference, the Board could decide any question of “patentability.”⁸⁵

Board interference decisions came with significant estoppel effects. At least by regulation (and maybe even by *res judicata*), Board judgments disposed of “all” issues that were or “could have properly been” raised and decided in the interference.⁸⁶ Moreover, once the Patent and Trademark Office declared an interference (assuming it did not later reconsider that decision), there was no avoiding a final judgment. If the parties litigated the interference to a final Board decision on the merits, the decision would, naturally, create estoppel.⁸⁷ But a party could not avoid estoppel by withdrawing from the interference: a request to withdraw was treated as a “[r]equest for adverse judgment”⁸⁸ that precluded

80. Thus the pre-AIA Patent Act had a complicated interference process to determine “priority of the invention[,]” which has since been abolished. *See* 35 U.S.C. § 135(a) (2006); *Storer v. Clark*, 860 F.3d 1340, 1342 (Fed. Cir. 2017) (The AIA “abolished the first-to-invent interference rule in favor of a first-to-file rule.”).

81. *See* 1 Stat. 318, 322-23 (Feb. 21, 1793).

82. *See id.*

83. 35 U.S.C. § 6(a) (2012).

84. *See* 5 Stat. 117, 123 (July 4, 1836); 35 U.S.C. § 135(a) (2006).

85. 35 U.S.C. § 135(a) (2006).

86. 37 C.F.R. § 41.127(a) (2009). This included claims that could have been brought into the interference even if they were not. *See Ex parte Kimura*, 55 U.S.P.Q.2d 1537 (B.P.A.I. 2000).

87. *See* 37 C.F.R. § 41.127(a) (2009); *see Ex parte Deckler*, 21 U.S.P.Q.2d 1872 (B.P.A.I. 1991); *Ex parte Tytgat*, 225 U.S.P.Q. 907 (Bd. App. 1985); Charles L. Gholz, *A Critique of Recent Opinions of the Federal Circuit in Patent Interferences*, 75 J. PAT. & TRADEMARK OFF. SOC’Y 448, 475-76 (1993).

88. 37 C.F.R. § 41.127(b) (2009). Many parties tried to get out of interferences without a judgment, but they all failed. *See, e.g., Omura v. Shafer*, 417 F. App’x 960 (Fed. Cir. 2011); *Guinn v. Kopf*, 96 F.3d 1419 (Fed. Cir. 1996); *Eli Lilly & Co. v. Cameron*, 61 U.S.P.Q.2d 1863 (B.P.A.I. 2001).

the losing party from asserting or prosecuting claims that were patentably indistinct from—meaning, claims that would have been obvious based on—the adjudged claims.⁸⁹

Although, doctrinally, interference estoppel was severe, it had a relatively small effect simply because interferences themselves were rare. In the last few years before the AIA was enacted, there were only about 50 to 60 interferences a year—amounting to approximately 0.01% of all applications.⁹⁰

2. Reexaminations were common, but parties could avoid estoppel

Until 1980, only federal courts could decide whether an issued patent was valid. In 1980, Congress created a radical new scheme by which the Patent and Trademark Office could reexamine an issued patent,⁹¹ and this *ex parte* reexamination exists to this day.⁹² The process is relatively straightforward: a requester files a few papers in the beginning of the proceeding challenging an issued patent, and then the reexamination continues like a normal patent examination—*ex parte*.⁹³ Thus, *ex parte* reexamination proceedings “are very similar to regular examination procedures in patent applications” with the requester having no continuing role.⁹⁴ During *ex parte* reexamination, the patent owner can amend her claims—sometimes cancelling some claims while adding other claims that are “substantially identical”⁹⁵—and, if the patent owner is dissatisfied with the examiner’s decision, she can appeal to the Board.⁹⁶ Ultimately, if the Patent and Trademark Office determines that the claims were unpatentable, the Office cancels the claims—and that cancellation “extinguishes” any underlying district court suits asserting those claims.⁹⁷

In 1999, Congress added a new scheme for review: *inter partes* reexamination (not to be confused with the *inter partes* review created

89. See *In re Deckler*, 977 F.2d 1449, 1452 (Fed. Cir. 1992) (citing cases).

90. See *Legacy Format Statistics Archive*, U.S. PATENT & TRADEMARK OFFICE, <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/statistics/ptabbpai-statistics-archive-page> (last visited Dec. 17, 2019); see William Ahmann & Tenaya Rodewald, *Patent Reform: The Impact on Start-ups*, 24(1) INTELL. PROP. & TECH. L.J. 3, 4 (2012); Michael R. Hull, *Patent Harmonization: Moving to A First-to-File Patent System*, 46 LES NOUVELLES 58 (2011).

91. See 35 U.S.C. §§ 301, 302 (1982).

92. See 35 U.S.C. §§ 301, 302 (2012).

93. See 35 U.S.C. § 305 (2017).

94. MPEP § 2209.

95. See *Target Training Int’l, Ltd. v. Extended Disc N. Am., Inc.*, 645 F. App’x 1018, 1023 (Fed. Cir. 2016).

96. See 35 U.S.C. §§ 134 (2017); see also 35 U.S.C. §§ 305, 306.

97. *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 721 F.3d 1330, 1336-37 (Fed. Cir. 2013).

by the AIA).⁹⁸ Anyone could file a request for *inter partes* reexamination.⁹⁹ *Inter partes* reexaminations were more adversarial than *ex parte* reexaminations, as the requester remained involved throughout and could comment on every patent-owner response.¹⁰⁰ Like *ex parte* reexamination, the patent would first go to an examiner for review, but, in *inter partes* reexamination, either party could appeal to the Board from an adverse decision.¹⁰¹ In 2011, Congress phased out *inter partes* reexaminations and replaced them with AIA trials.¹⁰² *Ex parte* reexaminations remain.

Importantly, neither *ex parte* nor *inter partes* reexaminations have the severe estoppel provisions of interferences,¹⁰³ so the decision to undertake a reexamination proceeding does not inexorably lead to an estoppel-creating judgment.¹⁰⁴ If a patent owner expects an adverse reexamination decision on one of her weaker patents—say the requester or examiner puts forth strong arguments for rejection—the patent owner can choose not to appeal or disclaim the involved claims, which would allow her to avoid an estoppel-creating Board decision. The Patent and Trademark Office will then issue a reexamination certificate of unpatentability or claim cancellation,¹⁰⁵ but—even in that very reexamination—the patent owner can obtain claims that are “substantially identical.”¹⁰⁶ Thus, while the reexamination may cancel some claims—and extinguish causes of action that rely on those specific claims—the reexamination does not itself create estoppel for other claims.

3. *Declaratory Judgments create estoppel, but they can be avoided*

A party can force non-asserted patents into district court litigation by seeking a declaratory judgment.¹⁰⁷ Declaratory judgments have *res judicata* effects.

98. See 35 U.S.C. § 311 (2000).

99. See *id.*

100. See *id.* § 314(a).

101. See *id.* §§ 134, 315.

102. See AIA, 125 Stat. at 285; see *infra* notes 106-08 and accompanying text (discussing the three new kinds of trials allowing the PTO to reconsider issued patents).

103. The interference estoppel provision of 37 C.F.R. § 41.127 (2009) is in subpart D, and the regulations provide that, “An *inter partes* reexamination proceeding is not a contested case subject to subpart D.” 37 C.F.R. § 41.60 (2009).

104. See MPEP § 706.03(w).

105. See MPEP §§ 2288 (*ex parte* reexamination), 2688 (*inter partes* reexamination).

106. See *Target Training*, 645 F. App’x at 1023 (explaining that if the newly added claims were found to be “‘substantially identical,’ then dismissal of the original cause of action would be inappropriate, as the original claims effectively would have survived reexamination”).

107. See 28 U.S.C. § 2201.

The Achilles heel of declaratory judgment actions, though, is the statutory (and constitutional¹⁰⁸) requirement for an underlying “case of actual controversy.”¹⁰⁹ This requirement allows patent owners to avoid declaratory judgment actions even more easily than reexaminations. The “case of actual controversy” ceases to exist if the patent owner gives the declaratory-judgment plaintiff a covenant not to sue;¹¹⁰ if the patent owner “unequivocally disclaim[s] any intent to sue” the declaratory-judgment plaintiff;¹¹¹ or if the patent owner dedicates the challenged claims to the public.¹¹² In such cases, the case is closed with no decision on the validity of the claims.

To be sure, if the patent owner grants one party a covenant not to sue for specific claims, she cannot assert *those* claims against *that* party, and if she dedicates the claims to the public, she cannot assert *those* claims against anyone. However, if the patent owner has other patents that are stronger, then losing the weaker claims may well be a price worth paying to control the patent-litigation battleground, thus avoiding the potential domino effect that can come from estoppel.

C. The AIA makes it much harder to avoid a final, estoppel-creating decision

The AIA “represents the most substantial change to American patent law since the Patent Act of 1952” and maybe even since 1836.¹¹³ Among other things, the AIA introduced three new kinds of trials that allow the Patent and Trademark Office to reconsider issued patents: *inter partes* review (“IPR”),¹¹⁴ post-grant review (“PGR”),¹¹⁵ and covered-business-method review (“CBM”).¹¹⁶ Like *inter partes* reexamination, IPRs and PGRs are largely available to any party, and IPRs are available

108. See *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 239-40 (1937).

109. 28 U.S.C. § 2201.

110. See *generally* *Already, LLC v. Nike, Inc.*, 568 U.S. 85 (2013); see also *Arris Grp., Inc. v. British Telecomm. PLC*, 639 F.3d 1368, 1380 (Fed. Cir. 2011).

111. *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 718 F.3d 1350, 1358, 1360-61 (Fed. Cir. 2013).

112. *Nat’l Semiconductor Corp. v. Linear Tech. Corp.*, 703 F. Supp. 845, 850 (N.D. Cal. 1988).

113. N. Scott Pierce, *The Effect of the Leahy-Smith America Invents Act on Collaborative Research*, 94 J. PAT. & TRADEMARK OFF. SOC’Y 133, 133-34 (2012).

114. 35 U.S.C. §§ 311-319.

115. *Id.* §§ 321-329.

116. AIA, § 18, 125 Stat. at 329-31. CBMs are sunseting and will not be available after September 15, 2020. See AIA, § 18(a)(3), 125 Stat. at 330.

for any patent.¹¹⁷ (CBMs are more limited in scope.¹¹⁸) Like reexamination requesters, AIA petitioners do not have to show standing.¹¹⁹ However, an AIA trial is “more favorable to the challenger than the prior reexamination process was.”¹²⁰ As a result, there are far more petitions for IPR than there were for reexamination, so more patents are being invalidated in AIA trials than had been in reexamination.¹²¹ (Although AIA trials have become somewhat more favorable to patent owners in the last few years, they continue to be more popular—and to invalidate more patents—than reexaminations.¹²²)

One little-noticed difference between AIA trials and reexaminations concerns estoppel. The statute itself makes AIA estoppel somewhat broader than *inter partes* reexamination estoppel—both in terms of timing and in terms of the estopped tribunals.¹²³ But the implementing regulations go significantly further because they give AIA trials the

117. Certainly, there are some limitations. Some petitioners are time-barred from seeking IPR, no petitioner can petition for an IPR or PGR if they previously brought a district court action challenging the patent, and only recently issued patents are susceptible to PGR. *See* 35 U.S.C. §§ 315, 321(c).

118. *See* AIA, § 18(a)(1)(B), (E), 125 Stat. at 330.

119. *See* *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2143–44 (2016).

120. *See* Robert Harkins, *How the Leahy-Smith America Invents Act (AIA) is Changing Patent Protection and Litigation*, INTEL. PROP. LAW, 2013 WL 571334, at *6 (Jan. 2013); Gregory Dolin & Irina D. Manta, *Taking Patents*, 73 WASH. & LEE L. REV. 719, 758–61 (2016).

121. In the 37 years in which *ex parte* reexamination have existed (since July 1, 1981), patent owners lost some or all of their claims in 9,012 reexaminations for an average of just under 250 per year. *Ex parte Reexamination Historical Statistics*, U.S. PATENT & TRADEMARK OFFICE 1-2 (Sept. 30, 2018), https://www.uspto.gov/sites/default/files/documents/ex_parte_historical_stats_roll_up.pdf. In the nearly 13 years in which *inter partes* reexamination could be requested (from November 29, 1999, to September 16, 2012), patent owners lost some or all of their claims in 1,369 reexaminations for an average of slightly over 100 per year. *Inter Partes Reexamination Historical Statistics*, U.S. PATENT & TRADEMARK OFFICE 1 (Sept. 30, 2017), https://www.uspto.gov/sites/default/files/documents/inter_parte_historical_stats_roll_up.pdf. Meanwhile, in the nearly 7 years in which AIA trials have existed (since September 16, 2012), patent owners lost some or all their claims in 2,768 trials for an average of a little under 400 per year. *Trial Statistics: IPR, PGR, CBM*, U.S. PATENT & TRADEMARK OFFICE 10-11 (Dec. 2019), https://www.uspto.gov/sites/default/files/documents/Trial_Statistics_20191231.pdf. To be fair, those same documents show that the raw *percentage* of decisions finding claims invalid are lower for AIA trials than reexaminations.

122. *See* Daniel F. Klodowski et al., *IPR and CBM Statistics for Final Written Decisions Issued in December 2019*, AIA BLOG (Jan. 31, 2019), <https://www.finnegan.com/en/insights/blogs/america-invents-act/ipr-and-cbm-statistics-for-final-written-decisions-issued-in-december-2019.html>; Daniel F. Klodowski et al., *Special Report – PTAB IPR Stats Over Time for Q2 2019*, AIA BLOG (Aug. 13, 2019), <https://www.finnegan.com/en/insights/blogs/america-invents-act/special-report-ptab-ipr-stats-over-time-for-q2-2019.html>.

123. *See* Matthew A. Smith, *A Critical Analysis of the Inter Partes review statute*, GRAY ON CLAIMS 2-6 (Sept. 8, 2011), http://www.grayonclaims.com/storage/Critical_Analysis_of_Inter_Partес_Review.pdf.

severe interference-estoppel provisions.¹²⁴ Once a party petitions for *inter partes* review, the patent owner may not be able to avoid an estoppel-creating judgment because disclaimer and abandonment are treated as requests for adverse judgment.¹²⁵

As a result, even the claims of the patent owner that are not involved in AIA proceedings become more subject to attack. Of course, unadjudicated claims can be challenged as obvious over the prior art directly (just as they could be if there were no AIA trial). But, once a patent owner has lost an AIA trial on some claims, the unadjudicated claims can also be attacked through *res judicata*: “If the differences between the unadjudicated patent claims and adjudicated patent claims do not materially alter the question of invalidity, collateral estoppel applies.”¹²⁶ This type of estoppel certainly applies—and has been applied—to other AIA trials. In one case, the Federal Circuit found certain claims to be invalid because they were patentably indistinct from claims in another patent that had been invalidated in another IPR.¹²⁷ In another, the court remanded to the Patent and Trademark Office to consider patentable distinctness over invalidated claims.¹²⁸

Two district courts have also considered applying estoppel to district court litigation based on patents that had not actually been litigated through.¹²⁹ In both cases, the Patent and Trademark Office instituted an IPR, the patent owner requested adverse judgment, and the patent owner then asserted other claims from those patents in district court.¹³⁰ The district courts accepted that the patent owner could, theoretically, be estopped,¹³¹ although both courts found patentable distinctness between the claims that were before the Patent and Trademark Office and the

124. Compare 37 C.F.R. § 41.127 (2009) (interference estoppel), with 37 C.F.R. § 42.73 (2020) (AIA estoppel); see *supra* note 103 (showing that interference-type estoppel did not apply to reexamination).

125. 37 C.F.R. § 42.73(b) (2020).

126. *MaxLinear, Inc. v. CF CRESPE LLC*, 880 F.3d 1373, 1377 (Fed. Cir. 2018).

127. See *Papst Licensing GMBH & Co. KG v. Samsung Elecs. Am., Inc.*, 924 F.3d 1243, 1252-53 (Fed. Cir. 2019).

128. See *MaxLinear*, 880 F.3d at 1377.

129. See generally *Music Choice v. Stingray Digital Grp.*, No. 2:16-cv-00586 (JRG)(RSP), 2019 WL 6114688 (E.D. Tex. Oct. 18, 2019), *adopted* 2019 WL 6052412 (E.D. Tex. Nov. 15, 2019); *Choon’s Design, LLC v. Zenacon, LLC*, No. 2:13-CV-13568, 2015 WL 539441 (E.D. Mich. Feb. 9, 2015).

130. See *Music Choice*, 2019 WL 6114688, at *1; *Choon’s Design*, 2015 WL 539441, at *3-4.

131. The district courts are right that *res judicata* should apply just as much to proceedings in the Patent and Trademark Office as to district courts. In *B & B Hardware*, the Supreme Court ruled that trademark decisions by the Patent and Trademark Office create *res judicata*, and that seems legally indistinguishable from AIA trials. See *B & B Hardware*, 575 U.S. at 148-49, 160.

claims at issue in the district court.¹³² Although the patent owner ultimately survived the *res judicata* motions, these situations illustrate the risks that a patent owner faces when some patents in their portfolio are challenged in the Patent and Trademark Office. The estoppel pitfall existed only because of the path dependence that the patent owner had sought weaker claims, and those weaker claims were challenged. If the patent owner had received only the stronger claims, they would not have had estoppel problems.

However, a couple of years ago, in *Arthrex, Inc. v. Smith & Nephew, Inc.*, the Federal Circuit cast doubt on the Patent and Trademark Office's AIA-estoppel regulations.¹³³ The case began when Smith & Nephew petitioned for IPR of Arthrex's patents.¹³⁴ Before the Board could decide whether to institute IPR, Arthrex disclaimed all its involved claims while caveating that it was "not requesting an adverse judgment."¹³⁵ This caveat notwithstanding, Smith & Nephew argued that the disclaimer legally served as a request for adverse judgment that would trigger estoppel.¹³⁶ The Board agreed. It ruled that it had discretion to treat Arthrex's statutory disclaimer as a request for adverse judgment and that it was appropriate to do so in that case.¹³⁷

Arthrex appealed the Board's *interpretation* of the regulations to the Federal Circuit, but it did not argue that the regulations were not *authorized* by statute.¹³⁸ The majority, through Judge Dyk, found that the Board had properly interpreted the regulations.¹³⁹ However, the court expressly "reserve[d] . . . for another day" the question of whether the Patent and Trademark Office had authority to adopt the regulations.¹⁴⁰ Judge O'Malley wrote a concurrence to express her "doubts about whether the Director had the authority under 35 U.S.C. § 316 (or any other statutory provision) to issue that regulation or whether, if so, the regulation was properly promulgated."¹⁴¹ She was unsure whether it

132. *Music Choice*, 2019 WL 6114688, at *2; *Choon's Design*, 2015 WL 539441, at *9, 12, 14, 16, 18.

133. *Arthrex, Inc. v. Smith & Nephew, Inc.*, 880 F.3d 1345 (Fed. Cir. 2018).

134. Petition for IPR, *Smith & Nephew, Inc. v. Arthrex, Inc.*, No. IPR2016-00917 (P.T.A.B. Apr. 19, 2016) (Paper 2), at 1.

135. Patent Owner's Preliminary Response at 1, *Smith & Nephew, Inc.*, No. IPR2016-00917 (P.T.A.B. July 22, 2016) (Paper 8).

136. Petitioner's Reply Brief at 1-2, *Smith & Nephew, Inc.*, No. IPR2016-00917 (P.T.A.B. Aug. 11, 2016) (Paper 10).

137. Judgment at 8, *Smith & Nephew, Inc.*, No. IPR2016-00917 (P.T.A.B. Sept. 21, 2016) (Paper 12).

138. *Arthrex*, 880 F.3d at 1349 & n.2.

139. *See id.* at 1349-51.

140. *Id.* at 1349; *see id.* at 1350 ("[B]ecause there has been no challenge to the Board's authority to adopt the rule, we sustain the Board's reading of the regulation.").

141. *Id.* at 1351 (O'Malley, J., concurring); *see id.* at 1351-52.

would be appropriate for the Board to issue a final judgment even in an instituted IPR after a disclaimer, but the Board's decision to do so "prior to institution" was "particularly" troubling.¹⁴² Judge Newman, meanwhile, dissented.¹⁴³ She agreed that the Board lacked statutory authority to issue an estoppel-creating judgment in the case, but she further believed that the regulations did not allow this either.¹⁴⁴

The Federal Circuit's doubts in *Arthrex* notwithstanding, the Board continues to apply the regulations as written. Shortly after *Arthrex*, one Board panel questioned whether adverse judgment is "even . . . allowed" based on a pre-institution disclaimer.¹⁴⁵ That panel, however, found that there were other reasons to deny adverse judgment, so it avoided the issue.¹⁴⁶ A more recent panel entered adverse judgment based on a pre-institution disclaimer—citing the Federal Circuit interpretation of the regulations in *Arthrex*.¹⁴⁷ In so doing, the Board pointed to the interference context as evidence of the scope of the estoppel.¹⁴⁸

In summary, a defendant can target a patent owner's weakest patents through AIA trials, and—if the petitioner receives a favorable judgment, either because the Board rules against the patent owner on the merits or because the patent owner's attempts to avoid the proceeding are treated as a request for adverse judgment—the challenger can use that judgment to infect the patent owner's other patents.

IV. THE FEDERAL CIRCUIT'S RECENT DECISION IN *FOX FACTORY* MAKES IT HARDER FOR PATENT OWNERS TO RELY ON SECONDARY CONSIDERATIONS IF THEY HAVE MULTIPLE PATENTS ON AN INVENTION

A bedrock of patent law is that an inventor is entitled to a patent only for a non-obvious invention.¹⁴⁹ While this fundamental principle is easy to state, it is hard to apply. Courts cannot go back to the time when the invention was developed and ask some hypothetical person of ordinary skill in the art what that person would have done. Instead, lay judges must decide, after the fact, what would have been obvious years before. This potentially invites improper "hindsight" bias¹⁵⁰ because

142. *Id.* at 1351, 1352.

143. *Id.* at 1352-56 (Newman, J., dissenting).

144. *See Arthrex, Inc.*, 880 F.3d at 1352-56.

145. *Commvault Sys., Inc. v. Realtime Data, LLC*, No. CBM2017-00061, 2018 WL 1358433, at *1 (P.T.A.B. Mar. 14, 2018).

146. *See id.* (blaming the petitioner for delaying the request for adverse judgment).

147. *See Google LLC v. Seven Networks, LLC*, No. IPR2018-01118, 2019 WL 171672, at *2 (P.T.A.B. Jan. 11, 2019).

148. *See id.* at *1.

149. 35 U.S.C. § 103.

150. *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (quoting *Monroe Auto Equip. Co. v. Heckethorn Mfg. & Supply Co.*, 332 F.2d 406, 412 (6th Cir. 1964)).

“[m]any things may seem obvious after they have been made.”¹⁵¹ “[T]o guard against slipping into use of hindsight,” courts look to what are commonly known as “secondary considerations” or “objective indicia.”¹⁵² These factors include the “commercial success enjoyed by devices practicing the patented invention, industry praise for the patented invention, copying by others, and the existence of a long-felt but unsatisfied need for the invention.”¹⁵³ However, such secondary considerations are not always meaningful evidence of non-obviousness because they may be due to “factors unrelated to patent validity.”¹⁵⁴

For secondary considerations to be probative, they must have a “nexus” to the patented invention.¹⁵⁵ The burden is generally on the patent owner to produce evidence that shows that nexus exists,¹⁵⁶ but nexus is presumed if “the thing (product or method) that is commercially successful is the invention disclosed and claimed in the patent.”¹⁵⁷

The law is more complicated in situations where a patent owner holds multiple patents on the same or related inventions. A classic example of this type of complication arises with “blocking patents.” A blocking patent is a patent that prevents others from trying to improve on an existing invention.¹⁵⁸ For example, if a drug company holds a patent on the active ingredient in a drug, competitors have little incentive to experiment with methods for delivering the drug since the blocking patent will block them from monetizing any improvement in the delivery.¹⁵⁹ Thus, any commercial success in a follow-on but blocked invention may be due less to the invention claimed in a later patent and more

151. *Monroe*, 332 F.2d at 412.

152. *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1052 (Fed. Cir. 2016) (en banc) (quoting *Graham*, 383 U.S. at 36).

153. *Id.*

154. Richard B. Robbins, *Subtests of “Nonobviousness”: A Nontechnical Approach to Patent Validity*, 112 U. PA. L. REV. 1169, 1176-77 (1964) (cited in *Graham*, 383 U.S. at 18); see also *Consol. Safety Valve Co. v. Crosby Steam Gauge & Valve Co.*, 113 U.S. 157, 179 (1885).

155. *E.g.*, *Apple*, 839 F.3d at 1054; *In re Caveney*, 386 F.2d 917, 923 (C.C.P.A. 1967); see also CHISUM, *supra* note 14, § 5.05[2][f][i] at 5-1066-67 n.64 (citing numerous cases).

156. *See, e.g.*, *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988); *Solder Removal Co. v. ITC*, 582 F.2d 628, 637 (C.C.P.A. 1978).

157. *Demaco*, 851 F.2d at 1392.

158. *See Acorda Therapeutics, Inc. v. Roxane Labs., Inc.*, 903 F.3d 1310, 1337 (Fed. Cir. 2018) (“A patent has been called a ‘blocking patent’ where practice of a later invention would infringe the earlier patent. The existing of such a blocking patent may deter non-owners and non-licensees from investing the resources needed to make, develop, and market such a later, ‘blocked’ invention, because of the risk of infringement liability and associated monetary or injunctive remedies.”).

159. *See, e.g.*, *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 740 (Fed. Cir. 2013); *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 966 (Fed. Cir. 2014); *Merck & Co. v. Teva Pharm. USA, Inc. (Merck I)*, 395 F.3d 1364, 1377 (Fed. Cir. 2005).

to the existence of the blocking patent.¹⁶⁰ Different panels of the Federal Circuit seem to ascribe different weight to commercial success for a product that has a blocking patent. Some describe it as of “minimal probative value,”¹⁶¹ but others say blocking patents “do not necessarily detract from evidence of commercial success of a product or process.”¹⁶²

The problem of blocking patents is just one example of the more general difficulty of assessing nexus for products covered by multiple patents. Until recently, the Federal Circuit did not give clear guidance on this question,¹⁶³ but in *Fox Factory Inc. v. SRAM, LLC*¹⁶⁴ the Federal Circuit addressed the issue directly and held that having multiple patents cuts against nexus. The case started with Fox Factory petitioning for IPR of one of SRAM’s patents on bicycle chainrings.¹⁶⁵ The Board found that all of the claimed limitations were disclosed in two prior-art references, and it also found that a skilled artisan would have been motivated to combine the references.¹⁶⁶ Nevertheless, the Board upheld the patent claims based on various secondary considerations.¹⁶⁷

Fox Factory appealed, and the Federal Circuit remanded because it concluded that there may not have been sufficient nexus.¹⁶⁸ The court explained that the claims were not “coextensive” with the commercial chainrings.¹⁶⁹ In support, the Federal Circuit noted that SRAM had a continuation patent covering chainrings, and the chainrings that SRAM sold undisputedly embodied an independent claim of that other patent.¹⁷⁰ Because of that, the court held that no reasonable trier of fact could conclude that SRAM’s on-sale “chainrings *are* the invention claimed by the independent claims” at issue.¹⁷¹ SRAM argued that it would be an “absurd situation that multiple continuations on a patent would prohibit a presumption of nexus,” but the Federal Circuit ruled that the relationship

160. *Acorda Therapeutics, Inc.*, 903 F.3d at 1337 (citing cases).

161. *Galderma*, 737 F.3d at 740-41 (quoting *Merck I*, 395 F.3d at 1376).

162. *Merck Sharp & Dohme Corp. v. Hospira, Inc. (Merck II)*, 874 F.3d 724, 731 (Fed. Cir. 2017); see *Acorda*, 903 F.3d at 1336-39 (discussing the various cases).

163. See generally CHISUM, *supra* note 14, at § 5.05[2][f] at 5-1073-77 (analyzing relevant cases). In *Apple Inc. v. ITC*, 725 F.3d 1356, 1365 (Fed. Cir. 2013), for example, the Federal Circuit noted that Samsung and the ITC argued that Apple could not show nexus because “multiple patents cover the iPhone’s touchscreen,” but the court did not explain why that argument was unpersuasive.

164. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1380 (Fed. Cir. 2019).

165. *Fox Factory, Inc. v. SRAM, LLC*, No. IPR2017-00472, 2018 WL 1889561, at *1 (P.T.A.B. Apr. 18, 2018), *vacated and remanded by Fox Factory*, 944 F.3d 1366.

166. *Id.* at *5-7.

167. See *id.* at *13-20.

168. *Fox Factory*, 944 F.3d at 1380.

169. *Id.* at 1374-78.

170. *Id.*

171. *Id.* at 1375.

between the patents was irrelevant.¹⁷² Rather, the existence of “two patents” cuts against the presumption of nexus unless “both patents generally cover the same invention.”¹⁷³

Fox Factory demonstrates a significant hazard of seeking multiple patents on similar inventions. Obtaining multiple patents can make it harder for the patent owner to show the required nexus between any secondary considerations of non-obviousness and the claimed invention.

V. THE FEDERAL CIRCUIT’S RECENT CASE LAW ON OBVIOUSNESS-TYPE DOUBLE PATENTING HAS MADE IT SO THAT OBTAINING ADDITIONAL PATENTS CAN CAUSE A PATENT OWNER TO LOSE PATENT TERM

In his article *Obviousness-Type Double Patenting: Why it Exists and When It Applies*, Daniel Kazhdan (one of the authors of this article) shows that the Federal Circuit’s recent change to the law on obviousness-type double patenting creates an additional pitfall for patent owners who receive multiple patents on an invention. Now, a patent owner risks losing patent-term adjustment by getting more patents.¹⁷⁴ In this section, we summarize Kazhdan’s conclusions.

A. Patent term before and after the URAA

For more than two hundred years, a patent expired a particular number of years after it was *issued*: Patents issued between 1790 and 1835 were valid for 14 years from issuance; patents issued between 1836 and 1860 were valid for 21 years from issuance; and patents issued between 1861 and 1994 were valid for 17 years from issuance.¹⁷⁵ In 1994, Congress passed the Uruguay Round Agreements Act (“URAA”).¹⁷⁶ Under the URAA, patents filed in 1995 or later expire 20 years from the patent’s effective *filing* date.¹⁷⁷

This change in expiration dates created a potential problem. Under the old scheme (where a patent’s term was set based on the date the patent issued), the patent owner would get the same number of years of exclusivity no matter how long the Patent and Trademark Office took examining the patent. By contrast, under the URAA scheme (where the patent’s term is independent of the issue date), if the Patent and Trademark Office takes twenty years to examine a patent, the issued patent

172. *Id.* at 1377-78 (quoting SRAM’s brief; citations omitted).

173. *Id.* at 1377.

174. See generally Kazhdan, *supra* note 17.

175. Neel U. Sukhatme, *Regulatory Monopoly and Differential Pricing in the Market for Patents*, 71 WASH. & LEE L. REV. 1855, 1895 n.146 (2014).

176. Pub. L. No. 103-465.

177. 35 U.S.C. § 154(a)(2) (Supp. V 2017).

might not have any valid term. Recognizing this potential problem, Congress required that patent term be adjusted to make up for examination delays attributable to the Patent and Trademark Office.¹⁷⁸ Thus, the patent owner would not lose patent term simply because a patent languished in examination. Patent-term adjustment is limited to the specific patent whose examination was delayed, and related patents continue to get their normal term.

An example may be helpful. Imagine an inventor applies for a patent on January 1, 2000, but the Patent and Trademark Office simply does not look at her application until 2019. The Office only gets to issuing the application as the '000 patent on December 30, 2019. The term of the '000 patent would get significant patent-term adjustment to account for the Patent and Trademark Office delay. Now, imagine that late in 2019 the inventor files a continuation application that claimed the same effective filing date as the '000 patent and that second application promptly issues as the '001 patent on December 31, 2019. The '001 patent would not receive any patent-term adjustment, and it would expire the very next day—20 years from its effective filing date. As a result, these two related patents would expire on significantly different dates despite claiming the same effective filing date.¹⁷⁹

B. Obviousness-type double patenting and terminal disclaimers

Sometimes, having different expiration dates for similar patents is problematic, and courts have developed the “obviousness-type double patenting” doctrine as a means of limiting this type of situation. By way of background, the doctrine of obviousness-type double patenting prohibits a patent owner from receiving two patents that claim patentably indistinct inventions—generally defined as inventions that would be obvious over one another.¹⁸⁰ A patent owner can get around an obviousness-type double patenting rejection by filing a “terminal disclaimer.” In a terminal disclaimer, a patent owner disclaims the term of the challenged patent that would otherwise extend beyond the term of the reference patent—the patent that is being used as a challenge.¹⁸¹

Again, an example may help. The cleanest examples are pre-URAA,¹⁸² and we consider one of those. Imagine an inventor applies for

178. *Id.* at § 154(b).

179. This was not a URAA-created phenomenon. Indeed, before the URAA, related patents would always have different expiration dates if they did not issue on the same day—as discussed at the conclusion of the next subsection. *See infra* Sec. IV(c).

180. *See* MPEP § 804(II)(B).

181. *See* MPEP § 1490(VI).

182. *In re Fallaux*, 564 F.3d 1313, 1318 (Fed. Cir. 2009) (explaining that obviousness-type double patenting is of “limited force” after the URAA).

a first patent on January 1, 1960, and then, on January 1, 1965, she files a second application for a patentably indistinct invention. The Patent and Trademark Office issues the first application as the '002 patent on January 1, 1961, and the second as the '003 patent on January 1, 1966. Without obviousness-type double patenting, both patents would expire 17 years from filing: the '002 patent would expire on January 1, 1978, and the '003 patent would expire on January 1, 1983. The problem would be that the applicant would get (and the public would lose) five years of patent term based on the applicant's filing for a second patent that added little or nothing to the public's knowledge. As a result, courts would require the applicant to file a terminal disclaimer that disclaimed the term of the '003 patent that extended beyond the January 1, 1978 expiration date of the '002 patent. In this way, both patents would expire on January 1, 1978.

C. Obviousness-type double patenting after the URAA

Courts are still working out how obviousness-type double patenting works post-URAA. In most cases, obviousness-type double patenting is of "limited force" because two patents that claim similar inventions are often related, which means that they will have the same effective filing date, and, generally, the same expiration date.¹⁸³ But not always. The two patents might be unrelated (thus giving them different effective filing dates), one of the related patents might not claim the earliest possible effective filing date, or one of the patents could have patent-term adjustment so that it is set to expire later than the related patent. Thus, obviousness-type double patenting lives on.¹⁸⁴

What's more, the doctrine of obviousness-type double patenting may be expanding. Before the URAA, when a patent owner held two patents on obvious variations of the same invention, the earlier-issued patent could not be challenged for obviousness-type double patenting based on the later-issued one—regardless of *filing* dates.¹⁸⁵ However, post-URAA, a later-filed, later-issued patent might shorten the term of an earlier-filed, earlier-issued patent. This issue has yet to be finally resolved by the courts, but, if true, it can be dangerous to file for continuation patents once an inventor has patent-term adjustment on a parent because the child might shorten the term of the parent—what Kazhdan

183. *Id.* Terminal disclaimers also require common assignment, *see* 37 C.F.R. § 1,321(c)(3), but that is beyond the purview of this article.

184. *Id.* at 1318-19.

185. *Miller v. Eagle Mfg. Co.*, 151 U.S. 186, 197 (1894).

calls “patent patricide.”¹⁸⁶ This depends on how one synthesizes four relatively recent Federal Circuit cases.

*1. Gilead Sciences, Inc. v. Natco Pharma Ltd.*¹⁸⁷

Gilead held two unrelated patents on its Tamiflu® drug product for treating influenza.¹⁸⁸ It applied for one patent on February 26, 1996, and the Patent and Trademark Office issued that as the ‘375 patent on September 14, 1999.¹⁸⁹ Gilead applied for the second patent on December 27, 1996, and that patent issued as the ‘483 patent on June 9, 1998.¹⁹⁰ Thus, the ‘483 patent was an earlier-issued but later-expiring patent.

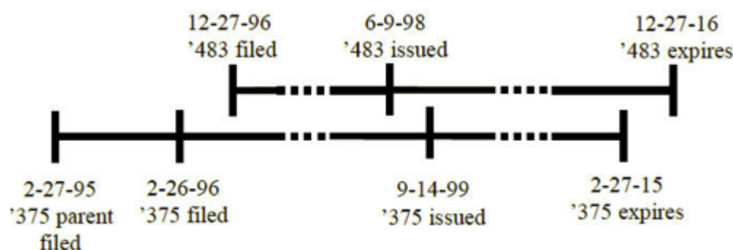


Figure 1: Gilead’s prosecution of its patents

Gilead sued Natco for infringing the later-expiring ‘483 patent.¹⁹¹ Natco responded that the ‘483 patent was invalid for obviousness-type double patenting over the ‘375 patent.¹⁹² In a split decision, the Federal Circuit agreed.¹⁹³ The majority, through Judge Chen, ruled that obviousness-type double patenting was different after the URAA, and a later-issued but earlier-expiring patent could now serve as an obviousness-type double patenting reference.¹⁹⁴ *Gilead* presented an unusual fact scenario in that Gilead seems to have “crafted” two unrelated applications to extend its patent term, but that gamesmanship does not seem to be the basis of the court’s holding.¹⁹⁵ Rather, the *Gilead* decision focuses

186. See Kazhdan, *supra* note 17.

187. 753 F.3d 1208 (Fed. Cir. 2014).

188. See Petition for a Writ of Certiorari at 8-10, *Gilead Scis. v. Natco Pharma Ltd.*, No. 14- (Nov. 26, 2014), available at <https://www.pbwt.com/content/uploads/2016/09/Gilead-Petition-for-Writ-of-Certiorari.pdf>.

189. *Gilead*, 753 F.3d at 1210.

190. *Id.*

191. *Id.* at 1211.

192. *Id.*

193. See *id.* at 1217 (“an earlier-expiring patent can qualify as an obviousness-type double patenting reference for a later-expiring patent under the circumstances”); see also *id.* (Radar J. dissenting) (disagreeing with the majority’s expansion of “the judicially-created doctrine of obviousness-type double patenting”).

194. See *id.* at 1214-17.

195. *Id.* at 1210.

almost exclusively on the “expiration” dates of the patents—independent of how that came to be.¹⁹⁶ If that is right, then a patent owner’s continuation patents could always be a potential obviousness-type double patenting reference against their parents—even if the continuation was filed later and issued later—and standard continuation patents could cause patent owners to lose patent-term adjustment.¹⁹⁷

2. *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Trust*¹⁹⁸

Soon after *Gilead*, the Federal Circuit again analyzed obviousness-type double patenting in the post-URAA context. The Kennedy Institute held two related patents on a treatment for rheumatoid arthritis.¹⁹⁹ The Institute applied for the first patent, the ‘766 patent, in 1996, and it claimed an effective filing date of 1992.²⁰⁰ Thus, the ‘766 patent was set to expire 20 years from 1992, i.e., in 2012.²⁰¹ In 2005, the Institute did something unusual: it filed a continuation application, which issued as the ‘442 patent, claiming a *later effective filing date than its parent*.²⁰² Additionally, the ‘442 patent had 750 days of patent-term adjustment and so was set to expire in 2018.²⁰³

196. *See id.* at 1214-17.

197. *Cf. Gilead*, 753 F.3d at 1218 (Radar J. dissenting) (“With this change, successive continuations generally do not result in any additional patent term. Rather, the filing date of the earliest member of a patent family limits the rest of the related patents. Thus a primary motivation behind the doctrine—preventing the effective extension of patent term—is largely no longer applicable.” (internal citations omitted)).

198. 764 F.3d 1366 (Fed. Cir. 2014).

199. *Id.* at 1368.

200. *Id.* at 1369.

201. *Id.*

202. *See id.* at 1370 (explaining that “[t]he ‘442 patent application was filed on September 12, 2005, and claimed priority to the date of the ‘766 patent was filed: August 1, 1996”).

203. Brief for Plaintiffs-Appellees, *AbbVie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Trust*, No. 2013-1545, 2014 WL 808969, at *15 (Feb. 18, 2014).

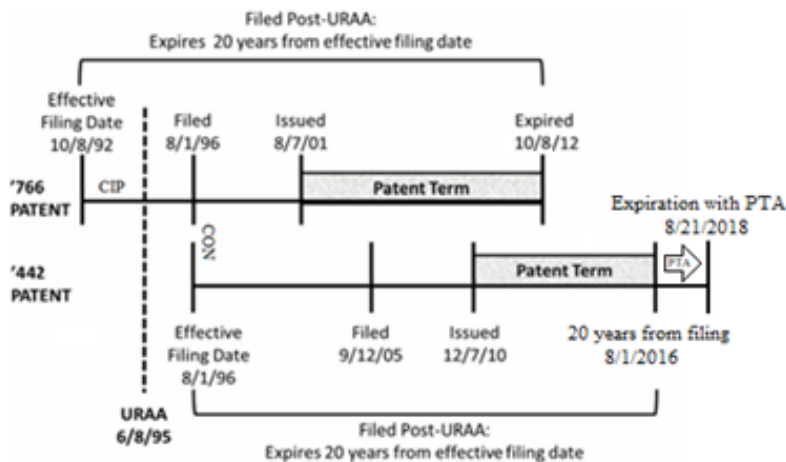


Figure 2: The Institute's prosecution of its patents

AbbVie took a license to the earlier-issued '766 patent, but, when the '442 patent issued, AbbVie refused to pay for a second license and sought a declaratory judgment that the '442 patent was invalid for obviousness-type double patenting.²⁰⁴ The Federal Circuit agreed with AbbVie that the later patent was invalid for obviousness-type double patenting.²⁰⁵ (Here, because the '442 patent issued later than the '766 patent, the obviousness-type double patenting problem would have existed even before the URAA.) Again, the Federal Circuit focused on the problem of a "later expiring patent."²⁰⁶ Although *AbbVie* involved a somewhat unusual fact pattern where the related applications claimed different effective filing dates, the Court suggested in *dicta* that there would be an obviousness-type double patenting problem even in the more typical situation in which two patents have different expiration dates "due to examination delays" that lead to "patent term adjustments."²⁰⁷ That seems to be referring to standard parent/child continuation practice where the parent has patent-term adjustment and the child does not.²⁰⁸ Like *Gilead*, the Federal Circuit's opinion in *AbbVie* suggests that a parent's patent-term adjustment can be lost based on obviousness-type double patenting over a standard continuation.

However, in two later cases, the Federal Circuit seemed to back-track.

204. *AbbVie*, 764 F.3d at 1370.

205. *Id.* at 1381 ("In sum, we conclude that the '442 patent is invalid for obviousness-type double patenting in light of the '766 patent.").

206. *See id.* at 1373-74, 80-81.

207. *See id.* at 1373.

208. *See* Stephanie Plamondon Bair, *Adjustments, Extensions, Disclaimers, and Continuations: When Do Patent Term Adjustments Make Sense?*, 41 CAP. U. L. REV. 445, 467-68 (2013).

3. *Novartis Pharmaceuticals Corp. v. Breckenridge Pharmaceutical Inc.*²⁰⁹

Novartis owned two patents covering the drug Zortress®: the earlier-filed, earlier-issued, pre-URAA '772 patent and the related, later-filed, later-issued, post-URAA '990 patent.²¹⁰ Because of the URAA's change to patent terms, the earlier-filed, earlier-issued '772 patent was set to expire later.²¹¹

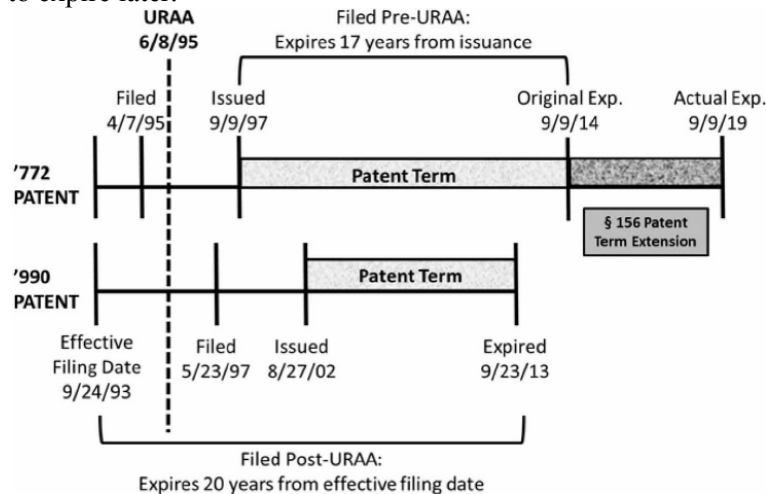


Figure 3: Novartis's prosecution of its Zortress® patents

The Federal Circuit, through Judge Chen, ruled that the later-filed, later-issued '990 patent could not serve as an obviousness-type double patenting reference against the '772 patent.²¹² The panel distinguished *AbbVie* and Judge Chen's own prior *Gilead* decision on two grounds. *First*, Novartis's patents involved the "particular situation" of one pre- and one post-URAA patent.²¹³ *Second*, Novartis did not engage in the "gamesmanship" of *Gilead* and *AbbVie*—where the patent owners claimed different effective filing dates for similar inventions.²¹⁴

The choice of the justification for distinguishing *Breckenridge* from both *Gilead* and *AbbVie* has significant ramifications for a standard continuation patent. The first rationale assumes that a patent *can* be challenged based on a later-filed, later-issued, earlier-expiring patent. It just carves out a small exception for the now (25 years after the URAA) rare situation where there is a mix of pre- and post-URAA patents. By

209. 909 F.3d 1355 (Fed. Cir. 2018).

210. *See id.* at 1358-59.

211. *Id.* at 1359.

212. *Id.* at 1359, 1367.

213. *Id.* at 1366.

214. *Id.* at 1364.

contrast, the second rationale turns *Gilead* and *AbbVie* into exceptions to a broader rule: the default under *Breckenridge* is that later-issued patents *cannot* serve as an obviousness-type double patenting reference, with an exception for cases of gamesmanship.²¹⁵

4. *Novartis AG v. Ezra Ventures LLC*.²¹⁶

Ezra involves the concept of patent term extension.²¹⁷ For our purposes, suffice it to note that *Ezra* is like *Breckenridge* in that it, too, distinguishes *Gilead* and *AbbVie* as cases of “gamesmanship.”²¹⁸

As Kazhdan notes, there is tension in the case law.²¹⁹ *Gilead* and *AbbVie* suggest that filing continuation patents can now affirmatively hurt previously granted patent-term adjustment, while *Breckenridge* and *Ezra* seem to back away from this.²²⁰ As a result, patent owners now potentially risk losing patent-term adjustment on parent patents if they obtain continuation patents.

VI. OTHER WAYS IN WHICH RECEIVING ADDITIONAL PATENTS CAN HURT A PORTFOLIO

Although this article focuses on recent changes in the law, there are ways in which obtaining more patents has always had the potential to hurt a patent owner’s portfolio.

A. *Inequitable conduct in prosecuting one patent can infect another patent*

Patent applicants have an “uncompromising duty” to disclose to the Patent and Trademark Office any “facts concerning possible fraud or inequity” in a patent.²²¹ This duty requires that applicants act with the “highest degree of candor and good faith.”²²² From 1790 to 1836, the Patent Act even included a provision that allowed a defendant to move to have a patent repealed if the defendant could show that the patent was obtained “surreptitiously . . . or upon false suggestion.”²²³

215. Kazhdan, *supra* note 17.

216. 909 F.3d 1367 (Fed. Cir. 2018).

217. *Id.* at 1369.

218. *Id.* at 1374.

219. *See* Kazhdan, *supra* note 17.

220. *See id.* (analyzing how the rationales provided by the various decisions suggest different approaches to obviousness-type double patenting).

221. *Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806, 818 (1945).

222. *Kingsland v. Dorsey*, 338 U.S. 318, 319 (1949).

223. Patent Act of 1790, Ch. 7, 1 Stat. 109, 111 § 5 (Apr. 10, 1790); *see also* Patent Act of 1793, Ch. 11, 1 Stat. 318, 322 § 6 (Feb. 21, 1793); S. William Cochran, *Historical Review of Fraud in Patent Procurement: The Standards and Procedures for Doing Business before the Patent and Trademark Office*, 52 J. PAT. OFF. SOC’Y 71, 73 (1970).

However, Congress removed that provision in 1836, and, for a time, the Supreme Court believed inequitable conduct was no longer a valid defense to a suit for patent infringement.²²⁴ However, in a series of cases from the 1930s and 1940s, the Supreme Court changed course and allowed defendants to raise an equitable defense of unclean hands.²²⁵

A finding of inequitable conduct has “far-reaching consequences”²²⁶: a patent applicant’s unclean hands in obtaining one patent can render other patents unenforceable.²²⁷ Courts have therefore tried to cabin the doctrine.²²⁸ Defendants need to plead inequitable conduct with particularity,²²⁹ inequitable conduct requires that the patent applicant act with the “specific intent” to deceive the Patent and Trademark Office,²³⁰ and, generally, the inequitable conduct has to be a but-for cause for the patent’s issuance (unless there is “affirmative egregious misconduct”).²³¹ The result is that inequitable-conduct defenses are almost never successful.²³²

As relevant here, if a patent applicant commits inequitable conduct while prosecuting a continuation patent, there is a theoretical possibility that she will retroactively hurt her other patents. However, the Federal Circuit has suggested that an applicant’s actions in prosecuting a continuation patent should not infect an already issued patent (at least not

224. *Providence Rubber Co. v. Goodyear*, 76 U.S. 788, 797 (1869).

225. *See, e.g., Precision Instrument*, 324 U.S. at 814-15; *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238, 250-51 (1944); *Keystone Driller Co. v. Gen. Excavator Co.*, 290 U.S. 240, 247 (1933); *see also Cochran*, *supra* note 223, at 74.

226. *Therasense v. Becton, Dickinson, and Co.*, 649 F.3d 1276, 1289 (Fed. Cir. 2011).

227. *See Consol. Aluminum Corp. v. Fosco Int’l Ltd.*, 910 F.2d 804, 809-10 (Fed. Cir. 1990) (analyzing *Keystone*, 290 U.S. at 245-46; *Precision*, 324 U.S. at 816, 819); *see also Therasense*, 649 F.3d at 1287 (“Inequitable conduct . . . diverged from the doctrine of unclean hands by adopting a different and more potent remedy—unenforceability of the entire patent rather than mere dismissal of the instant suit.”).

228. *See, e.g., Therasense*, 649 F.3d at 1290 (“This court now tightens the standards for finding both intent and materiality in order to redirect [the inequitable conduct] doctrine that has been overused to the detriment of the public.”).

229. *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1326 (Fed. Cir. 2009) (citing *Ferguson Beauregard/Logic Controls v. Mega Sys., LLC*, 350 F.3d 1327, 1344 (Fed. Cir. 2003)).

230. *Therasense*, 649 F.3d at 1290.

231. *Id.* at 1292.

232. *See Jason Rantanen, Recalibrating Our Empirical Understanding of Inequitable Conduct*, 3 IP THEORY 98, 110-11 (2013) (explaining that, prior to *Therasense*, determinations of inequitable conduct “were uncommon,” but since *Therasense* they have become “even more infrequent”); *see also Robert D. Swanson, The Exergen and Therasense Effects*, 66 STAN. L. REV. 695, 724 (2014) (finding that, since *Exergen* and *Therasense*, “the prevalence of inequitable conduct claims has decreased from 17% to 8% of patent cases” and attributing this drop to “a decrease [from 23% to 9%] in accused infringers’ success in proving inequitable conduct when an ultimate determination is made”).

normally),²³³ and one district court has concluded that, as a matter of law, “an otherwise validly issued patent cannot be made unenforceable because of inequitable conduct occurring years later in connection with the issuance of other patents.”²³⁴

B. Prosecution laches can infect a whole patent family

Somewhat related to inequitable conduct is the equitable doctrine of prosecution laches.²³⁵ The Supreme Court has described the doctrine as follows:

Any practice by the inventor and applicant for a patent through which he deliberately and without excuse postpones beyond the date of the actual invention, the beginning of the term of his monopoly, and thus puts off the free public enjoyment of the useful invention, is an evasion of the statute and defeats its benevolent aim.²³⁶

The purpose of the doctrine is to discourage applicants from delaying the issuance of patents until the public adopts the claimed technology.²³⁷ Like inequitable conduct, prosecution laches looks to “all of a series of related patents”—and not just the patent at issue²³⁸—and, if prosecution laches is found to invalidate a patent, related patents can be rendered invalid too.²³⁹ Thus, this is another way in which continuation applications can potentially hurt their already issued parents.

That said, prosecution laches is invoked only rarely.²⁴⁰ And now that patent term is measured from the date the applicant *files* an application rather than the date the patent *issues*, an applicant’s incentive to

233. See, e.g., SSIH Equip. S.A. v. ITC, 718 F.2d 365, 378-79 (Fed. Cir. 1983) (finding that the enforceability of the patent was unaffected where the fraud was not committed on the Commission itself).

234. Duhn Oil Tool, Inc. v. Cooper Cameron Corp., 609 F. Supp. 2d 1090, 1101 (E.D. Cal. 2009); see generally Patrick N. Burkhart, *The Sins of the Father Visited upon the Sons of Another: Infectious Unenforceability and Consolidated Aluminum Corp. v. Fosco International Ltd.*, 42 DEPAUL L. REV. 631 (1992).

235. See Robert A. Migliorini, *Lessons for Avoiding Inequitable Conduct and Prosecution Laches in Patent Prosecution and Litigation*, 46 IDEA 221, 234-35 (2006).

236. Woodbridge v. United States, 263 U.S. 50, 56 (1923); see also Webster Elec. Co. v. Splitdorf Elec. Co., 264 U.S. 463, 465-66 (1924).

237. Lemley & Moore, *supra* note 31, at 79-80 (discussing the process of “submarine patenting”).

238. See Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found., 422 F.3d 1378, 1386 (Fed. Cir. 2005).

239. *Id.* at 1385-86 (explaining the need to holistically evaluate conduct, because delay viewed “singly” may not merit relief, but “examination of the totality of the circumstances, including the prosecution history of all of a series of related patents and overall delay” might).

240. Lemley & Moore, *supra* note 31, at 93 (As of the 2004 publication date, “only one district court has held that the prosecution laches defense ought to apply, and in that case, the delays in prosecution were as long as thirty-nine years.”).

delay during prosecution is dramatically lower.²⁴¹ Thus, the number of cases invalidating patents for prosecution laches, which was historically already small, is likely to get even smaller.

C. Statements made in one patent can affect claim construction and create prosecution history estoppel for other patents within the family

When a tribunal is determining whether a patent claim is valid or infringed, it sometimes must construe the meaning of a term that is used in the claim.²⁴² Many sources inform the meaning of each term, including other words in the claims, the specification, and the prosecution history of the patent or application at issue.²⁴³ The hope is to construe the term in a way that is consistent with every claim, the specification, and the prosecution history.²⁴⁴

Even aside from a claim term’s technical “meaning,” an applicant’s statements during prosecution can estop her from making certain arguments. Specifically, there is an equitable doctrine of equivalents that allows a patent owner to sue a defendant for infringing a patent even if he does not literally practice every element recited in the claims so long as the differences from the claim are only “insubstantial.”²⁴⁵ Determining the scope of equivalents can be complicated, but the applicant’s statements during the prosecution of an application are an important factor. Under the doctrine of prosecution history estoppel, a patent owner cannot “regain[] through litigation[] coverage of subject matter relinquished during prosecution of the application for the patent.”²⁴⁶ So, if an applicant overcame a prior-art reference by narrowing an element in a claim and the claim then issued, the patent owner generally cannot assert that a product that literally infringes the broader claims but does not literally infringe the amended claims is legally equivalent.

In analyzing claim construction and prosecution history estoppel, courts look to more than just the patent at issue. Statements the applicant makes in a related specification or prosecution history—be it a child,

241. See 35 U.S.C. §§ 154(a)(2), 154(b), 156 (1999); S. Rep. No. 105-42, at 52 (1997) (discussing damage caused by submariners because of earlier lack of deadlines).

242. See generally Steven C. Carlson, Peter S. Menell, & Matthew D. Powers, *Patent Claim Construction: A Modern Synthesis and Structured Framework*, 25 *BERKELEY TECH. L.J.* 713 (2010).

243. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

244. *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579 (Fed. Cir. 1995); *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1326 (Fed. Cir. 2002).

245. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 24 (1997) (quoting *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950)).

246. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 734 (2002) (quoting *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1577-78 (Fed. Cir. 1997)).

parent, or sibling (i.e., an application that shares a common parent)—are all potentially relevant.²⁴⁷ Indeed, even abandoned applications can limit the scope of their non-abandoned relatives.²⁴⁸ In effect, anything the applicant has said during the prosecution of the related applications is fair game in interpreting a claim term. Thus, applicants who file multiple related patent applications run the risk of saying something that will later undercut the scope of their already issued claims.

This means that applicants who receive a solid and far-reaching patent should be careful in prosecuting related applications so that they do not accidentally limit the construction of their already issued claims or the scope of the equivalents for those claims. With care, though, the patent owner can avoid this problem.

VII. CONCLUSION

The upshot of this article is simple. The danger to the public of having too many patents is well recognized.²⁴⁹ What has gone unnoticed is that getting too many patents can hurt the patent owner herself. Although having multiple patents should, generally, give a patent owner broader coverage, there have always been dangers to seeking additional patents, and recent law has introduced significantly more risks. It has long been the case that inequitable conduct or undue delay (leading to laches) in prosecuting a later patent could infect an earlier-filed patent that would, otherwise, be fine. It has also long been the case that statements an inventor later makes in applying for another patent can limit the inventor's claim coverage under the doctrine of equivalents.

Recent changes to the law have dramatically increased the risk. A weak patent can make an easy target for an AIA trial—it is hard for a patent owner to get out of those—and that trial can then infect stronger,

247. *Biovail Corp. Intern. v. Andrx Pharm., Inc.*, 239 F.3d 1297, 1301 (Fed. Cir. 2001) (“Claim language . . . must be read consistently with the totality of the patent’s applicable prosecution history.”); *Cordis Corp. v. Boston Sci. Corp.*, 658 F.3d 1347, 1356 n.5 (Fed. Cir. 2011); *Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 902-04 (Fed. Cir. 2018) (looking to sibling patents to determine meaning of a term); *Weber Elec. Co. v. E.H. Freeman Elec. Co.*, 256 U.S. 668, 676-79 (1921) (Supreme Court’s looking to statements a patent owner made in a later patent to find a disclaimer of subject matter in an earlier one); *but cf.* *Georgia-Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1333 (Fed. Cir. 1999) (rejecting infringer’s argument that a statement made in the prosecution history of a later patent application surrendering claim coverage in that case, which was made after the patent in suit issued, applied to limit the scope of the term in the patent at issue where the specification and prosecution history of the patent at issue were unambiguous as to the meaning of the term), *opinion amended on reh’g*, 204 F.3d 1359 (Fed. Cir. 2000).

248. *E.g.*, *Hakim v. Cannon Avent Grp., PLC*, 479 F.3d 1313, 1317-18 (Fed. Cir. 2007).

249. *See generally* Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting*, in *INNOVATION POLICY & ECONOMY* (Adam Jaffe et al. eds., 2001), available at <http://faculty.haas.berkeley.edu/shapiro/thicket.pdf>.

already issued patents. Additionally, recent case law has made it so that a later-filed patent can weaken a patentee's ability to show that her earlier-issued claims are valid through secondary considerations. Finally, the Federal Circuit's case law on post-URAA obviousness-type double patenting might mean that a later-issued patent can cut short an earlier-issued patent's patent-term adjustment. In sum, *caveat inventor*.