No. 2018-2128

IN THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

ELI LILLY AND COMPANY,

Plaintiff-Appellee,

v.

DR. REDDY'S LABORATORIES, LTD., DR. REDDY'S LABORATORIES, INC.,

Defendants-Appellants.

On Appeal from the United States District Court for the Southern District of Indiana, Case No. 1:16-cv-00308 (Pratt, J.)

BRIEF FOR ACTAVIS LLC AS AMICUS CURIAE IN SUPPORT OF APPELLANTS

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CERTIFICATE OF INTEREST

Counsel for amicus curiae Actavis LLC certifies the following:

1. The full name of every party or amicus represented by me is:

   Actavis LLC

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

   See answer to number 1.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

   Actavis Holdco US, Inc.
   Teva Pharmaceuticals USA, Inc.
   Teva Pharmaceutical Industries Ltd.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in the court (and who have not or will not enter an appearance in this case) are:

   Not applicable.

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal is:

   Eli Lilly and Co. v. Hospira, Inc., Nos. 18-2126, 18-2127 (Fed. Cir.)
   Actavis LLC v. Eli Lilly and Co., No. 1:17-cv-982-TWP-MPB (S.D. Ind.)

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INTEREST OF AMICUS CURIAE

Actavis LLC ("Actavis") is pharmaceutical manufacturer with a direct interest in the outcome of this appeal. Like Appellants Dr. Reddy's Laboratories, Ltd. and Dr. Reddy's Laboratories, Inc. (collectively, "DRL"), Actavis has been sued by Appellee Eli Lilly & Co. ("Lilly), for alleged infringement of U.S. Patent No. 7,772,209 ("the '209 patent"). Lilly's suit is premised on Actavis's submission of a new drug application ("NDA") to the U.S. Food and Drug Administration ("FDA") in order to sell a chemotherapy drug that contains the antifolate pemetrexed *See Eli Lilly and Co. v. Actavis LLC*, Case No. 1:17-cv-982-TWP-MPB (S.D. Ind.).

The '209 patent claims a method of administration for "pemetrexed *disodium*"—a salt form of pemetrexed that Actavis's Pemetrexed Injection Concentrate product does *not* contain. Indeed, Actavis was required to submit a NDA to FDA under the section 505(b)(2) process, rather than under the pathway available for generic drugs, precisely because its pemetrexed product is chemically distinct from Lilly's pemetrexed disodium product, ALTIMA. The parties have stipulated to the dismissal of Lilly's literal infringement claim against Actavis's product. Lilly thus bases its indirect infringement case against Actavis entirely on the doctrine of equivalents, asserting that the '209 patent allows Lilly to block the use of competing cancer drugs that contain *different* salt forms of pemetrexed.

In the district court, Actavis and Lilly agreed to stay proceedings pending a decision in the parallel action between Lilly and DRL that is now before this Court. In the DRL action, the district court recognized that Lilly was required to overcome a presumption of prosecution history estoppel based on the undisputed evidence that Lilly had amended claim language in the '209 patent to avoid a prior-art objection—specifically, by retreating from claims that covered the administration of antifolates generally and instead claiming only the administration of "pemetrexed disodium." Appx34. But the district court nevertheless concluded that Lilly had rebutted the presumption of prosecution history estoppel on the theory that Lilly's rationale for amending its claims was "tangential to the accused equivalent—pemetrexed ditromethamine." Appx12-13. The court also rejected DRL's argument that Lilly's doctrine-of-equivalents claim was barred by the disclosure-dedication doctrine, even though the '209 patent disclosed the tromethamine salt of pemetrexed without claiming it. Appx13-14.

Following the district court's decision in the DRL action, Lilly and Actavis entered a stipulation applying that court's decision as to these two threshold issues to Lilly's infringement case against Actavis. The district court then granted Actavis's unopposed motion to certify an interlocutory appeal under 28 U.S.C. § 1292(b), recognizing that these disputed issues present "controlling question[s] of law as to which there is a reasonable difference of opinion." D.I. 83, *Eli Lilly*

and Co. v. Actavis LLC, Case No. 1:17-cv-982-TWP-MPB (S.D. Ind.) (Jul. 19, 2018).[1] Although this Court declined to grant the petition as a matter of discretion, its order was entered "without prejudice to Actavis seeking leave of this court to participate in the DRL appeal by, e.g., filing an amicus brief." D.I. 23, *Eli Lilly and Co. v. Actavis LLC*, No. 18-150 (Fed. Cir.) (Sept. 19, 2018).

Actavis now submits this amicus brief in support of DRL. Actavis has a direct interest in this appeal because a decision holding that Lilly may not rely on the doctrine of equivalents to pursue infringement claims as to the administration of products containing antifolates that are *not* "pemetrexed disodium" will resolve Lilly's infringement action against Actavis. Actavis fully agrees with DRL that the district court erred in its application of both prosecution history estoppel and the disclosure-dedication rule. In the interest of avoiding repetition, this brief will focus on a single issue: the district court's legal error in expanding the narrow exception to prosecution history estoppel available for equivalents that are "tangential" to the patentee's rationale for an amendment. The district court misapplied that doctrine by allowing Lilly to escape estoppel without providing *any* objective evidence from the prosecution record to show that its decision to

[1] The parties' stipulation did not result in a final judgment because Actavis disputes whether its NDA product infringes the '209 patent under the doctrine of equivalents, even assuming that Lilly is not estopped from invoking that doctrine.

narrow its claims to a specific salt form of pemetrexed—rather than claiming "pemetrexed" more generally—was unrelated to concerns about patentability.[2]

INTRODUCTION

By relying on the doctrine of equivalents to reclaim an equivalent that was indisputably surrendered during prosecution, Lilly tries to stretch the "tangential" exception to prosecution history estoppel well past its breaking point. This Court has made clear that this exception is "very narrow." *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 480 F.3d 1335, 1342 (Fed. Cir. 2007). For the exception to apply, the patentee has the burden to show—based on "objectiv[e]" evidence from the prosecution record—that "the rationale underlying [its] amendment bore no more than a tangential relation to the equivalent in question." *Id.* (quotation marks and brackets omitted). Lilly cannot make that showing here.

In order to overcome a prior-art objection, Lilly narrowed its claims to cover only a method of administration using "pemetrexed disodium," rather than a method using any antifolate. That amendment made clear to the public that Lilly was claiming a method that only applied to the use of that specific chemical compound—which is the pemetrexed salt used in Lilly's chemotherapy product,

[2] All parties have consented to the filing of this brief. No counsel for any party authored this brief in whole or in part, and no party, counsel, or person other than Actavis, its members, and its counsel contributed money to fund the preparation or submission of this brief. *See* Fed. R. App. P. 29(a)(4)(E).

ALTIMA. The alleged equivalent here—a chemically distinct pemetrexed salt—cannot plausibly be characterized as "tangential" to the rationale for Lilly's narrowing amendment.

In rejecting that conclusion, the district court relied on Lilly's assertion that its motivation for adopting the "pemetrexed disodium" limitation was to distinguish a prior-art reference that disclosed the application of its method of administration to a different antifolate—not to distinguish between salt forms of pemetrexed. But at most, that argument shows that Lilly may have surrendered more than necessary to secure approval for its patent, which is *not* a proper basis to overcome the presumption of estoppel. *See Integrated Tech. Corp. v. Rudolph Techs., Inc.*, 734 F.3d 1352, 1358 (Fed. Cir. 2013); *accord* DRL Br. 37-47. Lilly cannot point to any objective evidence in the prosecution history record that explains why it included the "disodium" limitation in its amendment—rather than, for example, simply claiming "pemetrexed." In fact, Lilly has acknowledged that "[n]othing in the prosecution record even mentions" this issue. Appx2613. Under well-established precedent, silence in the prosecution history record as to Lilly's rationale for the scope of its surrender means that estoppel applies. *See, e.g.*, *Biagro Western Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296 (Fed. Cir. 2005).

Lilly's attempt to expand the "tangential" exception is particularly misguided because the facts of this case are completely disconnected from the

doctrine's underlying purpose. The Supreme Court has explained that the doctrine of equivalents is intended to account for the imprecision of language by allowing patentees to cover insubstantial alternatives to an invention that the patent's literal language failed to capture. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 734 (2002). The narrow exceptions to prosecution history estoppel—including the "tangential" exception at issue here—are all rooted in the same rationale: *i.e.*, that while a patentee is presumed to have abandoned claim scope surrendered during prosecution, it may "rebut th[at] presumption" by "show[ing] at the time of the amendment [that] one skilled in the art could not reasonably [have] be[en] expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Id.* at 725, 741.

Here, Lilly plainly could have claimed alternative salt forms of pemetrexed; in fact, in other patent applications associated with ALTIMA, Lilly did precisely that. *See* pp. 27-29, *infra*; DRL Br. 16, 44-45. Lilly argued below that the ready availability of such alternative claim language is irrelevant because it has not invoked the "foreseeability" exception to prosecution history estoppel. That position, however, divorces the "tangential" exception from its rationale, as *Festo* makes clear that *all three* exceptions are intended to identify circumstances in which a skilled artisan "could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." 535 U.S. at 741.

Lilly's decision to specify "disodium" as the salt form of pemetrexed claimed in the '209 patent had nothing to do with the shortfalls of language. It was a choice, and Lilly cannot now turn to the doctrine of equivalents for a mulligan.

ARGUMENT

Under the doctrine of prosecution history estoppel, when a patentee amends its application to overcome an examiner's objection, the patentee presumptively surrenders "all territory between the original claim limitation and the amended claim limitation." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1367 (Fed. Cir. 2003) (en banc). Here, it is undisputed that Lilly narrowed its claims covering the administration of an "antifolate" in order to overcome the examiner's objection that Lilly's purported invention was anticipated by the prior art. It is also undisputed that the equivalent at issue—pemetrexed ditromethamine—falls within the surrendered range. Thus, Lilly cannot rely on the doctrine of equivalents unless it can show that one of the limited exceptions to prosecution history estoppel applies.

Lilly has relied on a single potential exception, asserting that its surrender should be disregarded because the "rationale underlying [its] amendment" supposedly "bear[s] no more than a tangential relationship to the equivalent in

question." *Integrated Tech.*, 734 F.3d at 1356.[3] But Lilly cannot satisfy its heavy burden to show that the "tangential" exception to prosecution history estoppel applies here. The district court's contrary determination should be reversed.

I. Prosecution History Estoppel Places an Important Limit on the Doctrine of Equivalents.

Prosecution history estoppel places an important restriction on the doctrine of equivalents, which is itself an exception to the rule that a patentee must precisely "claim" the subject-matter of its invention. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 26-27 (1997). The purposes underlying the doctrine of equivalents and prosecution history estoppel thus provide crucial context to understanding the "tangential" exception to estoppel.

The doctrine of equivalents strikes a balance between two competing concerns. On the one hand, requiring clarity as to the scope of a claimed invention promotes competition and innovation: a patent is "a property right; and like any property right, its boundaries should be clear." *Festo*, 535 U.S. at 730-31. On the other hand, a strict literalist application of a patent's claims would allow competitors to "exploit[]" imprecisions in the "nature of language" by making "trivial changes" to the invention. *Id.* at 733. As refined through years of judicial application, the doctrine of equivalents accounts for the fact "[t]he language in the

[3] The Court has recognized two other potential exceptions to prosecution history estoppel. *See Integrated Tech.*, 734 F.3d at 1356. But Lilly has conspicuously declined to rely on any other exception in this case.

patent claims may not capture every nuance of the invention," *id.* at 731, while still ensuring that the "definitional and public-notice functions of the statutory claiming requirement" are protected by treating "[e]ach element contained in a patent claim" as material and enforcing "well-established limit[s]" on the doctrine's scope, *Warner-Jenkinson*, 520 U.S. at 29-30.

Prosecution history estoppel is one such "well-established limit." *Id.* at 30. At the most basic level, estoppel "prevents a patentee from recapturing under the doctrine of equivalents subject matter surrendered during prosecution to obtain the patent." *Cross Med. Prods.*, 480 F.3d at 1341. The doctrine thus most obviously bars a patentee from claiming equivalents that it needed to give up to overcome an examiner's objection to patentability—for example, an equivalent that appeared in the prior art. *See Festo*, 535 U.S. at 735-36.

But prosecution history estoppel extends beyond enforcing the patentee's necessary concessions, because the prosecution history provides an important public record of the invention's scope. Whereas "[t]he doctrine of equivalents is premised on language's inability to capture the essence of innovation," prosecution history "may rebut the inference that a thing described was indescribable." *Id.* Specifically, an amendment that restricts claim scope—and gives up the purported "equivalent"—"undercuts" the premise underlying any doctrine-of-equivalents assertion by showing "that the inventor turned his attention to the subject matter in

question, knew the words for both the broader and narrower claim, and affirmatively chose the latter." *Id.* The "public notice function of a patent and its prosecution history requires that a patentee be held" to that choice. *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003).

Of course, the fact that an inventor "turned [its] attention" to the scope of a particular claim does not make the inventor clairvoyant. *Festo*, 535 U.S. at 735. "The patentee, as the author of the claim language, may be expected to draft claims encompassing readily known equivalents," but there are cases in which a skilled artisan could not have anticipated an amendment's implications for a particular equivalent. *Id.* at 740. Thus, under *Festo*, courts must "presume that the patentee surrendered all subject matter between the broader and the narrower language," but the patentee can overcome that presumption by showing that "at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Id.* at 741.

As noted, pp. 7-8, *supra*, one way the patentee can make this showing—and the only way at issue here—is to establish "that the amendment giving rise to the estoppel was tangential to the equivalent in question." *Felix v. Am. Honda Motor Co.*, 562 F.3d 1167, 1181 (Fed. Cir. 2009). In that limited circumstance, there is no reason to believe the patentee "turned [its] attention" to the issue of claim scope

raised by the equivalent in question, *Festo*, 535 U.S. at 735, because the amendment was directed to a completely unrelated issue.

This Court has made clear that the tangential exception is "very narrow" and cannot be used to recapture claim scope that the patentee simply regrets giving up. *Integrated Tech.*, 734 F.3d at 1358 (quotation marks omitted). Importantly, the "tangential rationale" for the amendment must be "objectively apparent from the prosecution history" record itself and cannot be filled-in with after-the-fact explanations. *Id.* Moreover, if the record is silent as to why the patentee adopted a particular amendment—or why the patentee drafted the amendment to surrender as much claim scope as it did—then prosecution history estoppel *applies* because it means that the patentee "cannot meet [its] burden." *Felix*, 562 F.3d at 1184.

II. Lilly Cannot Show That Its Amendment Surrendering All Antifolates Other Than "Pemetrexed Disodium" Was Tangential to the Alternative Pemetrexed Salt at Issue Here.

Under the legal principles set forth above, Lilly cannot meet its burden to show that its rationale for amending the "antifolate" limitation was tangential to the alleged equivalent. Lilly responded to the examiner's objection regarding its application's attempt to claim a method covering the administration of any "antifolate" by narrowing the claim to cover the specific antifolate compound in its own commercial product ALTIMA, *i.e.*, "pemetrexed disodium." The alleged equivalent at issue here—an alternative salt form of pemetrexed—is not tangential

to Lilly's rationale for the amendment. Lilly's argument to the contrary ultimately reduces to the assertion that Lilly could have surrendered less ground than it did to overcome the examiner's objection and avoid the prior art. This Court's precedent makes clear that such an argument provides no basis for avoiding estoppel.

A. The Prosecution History Shows That Lilly Adopted the Specific Limitation at Issue To Avoid the Examiner's Prior-Art Objection.

The prosecution history record shows that Lilly adopted the limitation at issue in this appeal—pemetrexed disodium—for the purpose of overcoming the patent examiner's prior-art objection. As set forth by DRL (at 12), Lilly's original claim stated:

> 2. (Original) A method of reducing the toxicity associated with the administration of an *antifolate* to a mammal comprising administering to said mammal an effective amount of said *antifolate* in combination with a methylmalonic acid lowering agent.

Appx7860 (emphases added). The patent examiner rejected this claim as anticipated by the prior-art reference Arsenyan, because Arsenyan "teaches a method of pretreating mammals . . . with . . . a vitamin B12 derivative . . . then administering methotrexate (an antifolate)." Appx7860-7861, Appx7868. Lilly responded by narrowing the "antifolate" limitation to "pemetrexed disodium":

> 2. (Currently Amended) A method of reducing the toxicity associated with the administration of ~~an antifolate~~ pemetrexed disodium to a ~~mammal~~ human comprising administering to said ~~mammal~~ human an effective amount of ~~said antifolate~~ pemetrexed disodium in combination with a methylmalonic acid lowering agent, selected from vitamin B12 or a pharmaceutical derivative thereof.

Appx7877-7879. Lilly explained to the Patent Office that it had narrowed "antifolate" to "pemetrexed disodium" in order to overcome the examiner's anticipation rejection:

> There is no disclosure in Arsenyan et al. of the invention as presently claimed. In particular, Arsenyan et al. does not disclose *pemetrexed disodium* and does not disclose the use of vitamin B12 or a pharmaceutical derivative to reduce the toxicity associated with the administration of *pemetrexed disodium*[.]

Appx7880 (emphases added).

The equivalent at issue here is not "tangential" or "peripheral" to this rationale; to the contrary, it is "directly relevant" to the limitation that was amended and Lilly's rationale for the amendment. *Festo*, 344 F.3d at 1369. Lilly was told by the examiner that it could not secure a patent claiming a method of administration associated with "antifolate[s]" as a class. In response, Lilly jettisoned the broad term "antifolate" and included the narrow limitation "pemetrexed disodium." Lilly's attempt to reclaim claim scope that it surrendered in prosecution by asserting that a competing chemotherapy drug product that lacks the compound claimed in its patent—and instead includes a chemically distinct from of pemetrexed—is barred by prosecution history estoppel.

B. Lilly Cannot Rebut the Presumption of Prosecution History Estoppel By Asserting That It Was Unnecessary To Identify a Particular Salt Form of Pemetrexed To Overcome the Prior Art.

1. In concluding that Lilly had overcome the presumption of prosecution history estoppel, the district court held that the "tangential" exception applied because Lilly's rationale for adopting the "pemetrexed disodium" limitation was to distinguish the prior-art Arsenyan reference, which the court noted was "about a different antifolate, methotrexate." Appx12; *see also* Appx36-37. Lilly has likewise contended that its amendment is tangential to the alleged equivalent here because its amendment's purpose was to overcome Arsenyan by "exclud[ing] non-pemetrexed antifolates, specifically methotrexate." Appx2616. Thus, the basic argument endorsed by the district court is that Lilly's unexplained designation of the salt "disodium" in its amended claim language should be disregarded, because Lilly did not *need* to specify a particular salt form of pemetrexed to overcome the examiner's objection based on Arsenyan. But this theory is directly contrary to controlling precedent in two critical respects.

First, "there is no principle of patent law" that limits "the scope of a surrender of subject matter during prosecution . . . to what is absolutely necessary to avoid a prior art reference that was the basis for an examiner's rejection." *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356, 1361 (Fed. Cir. 2005); *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1383 (Fed. Cir. 2005) (rejecting the

argument that an equivalent was tangential to the patentee's amendment rationale because the equivalent was not "within the prior art"). "To the contrary," this Court has recognized that "it frequently happens that patentees surrender more through amendment than may have been absolutely necessary to avoid particular prior art." *Norian Corp.*, 432 F.3d at 1361. In such cases, the Court has "held the patentees to the scope of what they ultimately claim," rather than "allow[ing] them to assert that claims should be interpreted as if they had surrendered only what they had to." *Id.* at 1361-62. Thus, the possibility that Lilly could have avoided Arsenyan without implicating the alleged equivalent is irrelevant: "It may be that [Lilly] did not need to surrender" forms of pemetrexed other than pemetrexed disodium in order to overcome Arsenyan, but "[t]he dispositive fact is that [Lilly] chose to do so." *Integrated Tech.*, 734 F.3d at 1358.

Second, even under Lilly's theory of the case, there is nothing in the prosecution history that explains why Lilly chose to claim only "pemetrexed disodium" rather than "pemetrexed" more generally. Indeed, as Lilly informed the district court, "[n]othing in the prosecution record even mentions different salt forms of pemetrexed." Appx2613. But contrary to Lilly's suggestion below, that silence *undermines* its attempt to rebut the estoppel presumption. Lilly cannot show that the rationale for including "disodium" in the amended claim—rather than using broader terms such as "pemetrexed" or "pemetrexed or a

pharmaceutically acceptable salt thereof"—is tangential to the alleged equivalent here, when there is "[n]othing in the prosecution record" that explains its choice. *Id.*; *see, e.g.*, *Felix*, 562 F.3d at 1184 (holding that the "tangential" exception did not apply because the patentee had "identified no explanation in the prosecution history for the addition of" a particular limitation); *accord* DRL Br. 46.

2. The Supreme Court's decision in *Warner-Jenkinson* perfectly illustrates these two related principles, *i.e.*, that (1) a patentee's surrender is not limited to what was needed to overcome a patentability rejection, and (2) if the prosecution history record does not disclose the patentee's rationale for an amendment, then estoppel applies.

The patent at issue in *Warner-Jenkinson* described a process for purifying dyes by filtering the dye through a porous membrane at certain pressures and pH levels. 520 U.S. at 21-22. The asserted claims included the requirement that the purification occur at a "pH from approximately 6.0 to 9.0"—a requirement that was added during prosecution to distinguish a prior-art reference ("Booth") that disclosed a process at a pH above 9.0. *Id.* at 22. As the Supreme Court recognized, the patentee's need to overcome Booth only explained why it had adopted the *upper* endpoint of the pH range; the record did "not reveal the reason for including the lower pH limit of 6.0." *Id.* at 32-33. That question was critical, because the patentee had invoked the doctrine of equivalents to assert an

infringement claim against a process using a 5.0 pH level. *Id.* at 23. The Supreme Court thus remanded the case for further record development. *Id.* at 34.[4] Significantly, in doing so, the Court made clear that if the patentee could not "establish the reason" for adopting the "6.0 pH" limitation, then prosecution history estoppel would apply. *Id.* at 33, 41.

The district court's reasoning in this case cannot be squared with *Warner-Jenkinson*. Here, as in *Warner-Jenkinson*, the patentee (Lilly) amended its claims to distinguish a prior-art reference. And here, as in *Warner-Jenkinson*, the amendment included a change that may not have been needed to overcome that reference: in *Warner-Jenkinson*, the adoption of the lower bound on the pH range of 6.0-9.0, and in this case, the designation of a specific salt ("disodium") along with the general disclosure of "pemetrexed." But the district court absolved Lilly of any obligation to explain its rationale for claiming a particular salt, and instead concluded that the issue was tangential merely because Lilly did not need to identify a salt-type to distinguish Arsenyan. Appx12-13; Appx36-37. *Warner-*

[4] A remand was needed to allow record development related to the Supreme Court's newly adopted presumption in favor of estoppel. *See Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 114 F.3d 1161, 1163 (Fed. Cir. 1997) (recognizing that patentees should have a chance to develop the prosecution history record for patents issued *before Warner Jenkinson*, given the change in law). There is no basis for remand here, because Lilly had a full opportunity to develop the record and this Court's decisions make clear that the patentee must rely on objective evidence from the prosecution record, which it may not supplement after-the-fact. *See* pp. 20-24, *infra*.

Jenkinson makes clear that such reasoning is flawed. By way of amendment, the disodium salt "became a material element of the claim." 520 U.S. at 32. And because Lilly has no explanation for why it "includ[ed] th[at] limiting element," prosecution history estoppel "bar[s] the application of the doctrine of equivalents to that element." *Id* at 33.

3. Decisions from this Court establish the same point. For example, the Court's decision in *Biagro Western Sales, Inc.*, closely mirrors the reasoning of *Warner-Jenkinson*. There, the patentee amended claims for a concentrated phosphorus fertilizer to add the requirement that the "phosphorous-containing acid or salt . . . is present in [the fertilizer in] an amount of about 30 to about 40 weight percent." 423 F.3d at 1299. The patentee argued that *only* the lower limit of the new range limitation (30 percent) was needed to distinguish prior art, and that the rationale for the amendment was therefore tangential to the accused equivalent, which had a phosphorus concentration of more than 40%. *Id.* at 1306. This Court rejected that argument, explaining that because (1) the patentee had added both ends of the range in response to a patentability rejection, and (2) "the prosecution history show[ed] no reason for adding an upper limit to the concentration range," the patentee could not show that the reason for the amendment was tangential. *Id.*

Similarly, in *Felix*, this Court rejected a patentee's attempt to invoke the tangential exception where the rationale it proffered "d[id] not explain the entire

amendment." 562 F.3d at 1184. There, the patentee had adopted amendments adding two limitations to a patent that described the design for the trunk of a pick-up truck: a "channel" limitation and a "gasket" limitation. *Id.* at 1173-74. The Court determined that the patentee could not rely on the doctrine of equivalents to prove infringement with respect to a truck that did not meet the gasket limitation. *Id.* at 1184-85. In so holding, the Court rejected the patentee's argument that the equivalent was tangential because its amendment was made to address the fact that "the prior art lacked a channel," and "not because of the presence or position of a gasket." *Id.* at 1184 (quotation marks omitted). The Court reasoned that the patentee's rationale did not explain why the patentee had included the gasket limitation, and that the patentee therefore could not "meet his burden to show that the rationale for adding the gasket limitation was tangential to the presence and position of a gasket." *Id*.

Finally, in *Integrated Technology Corp.*, this Court rejected an attempt by a patentee to invoke the "tangential" exception, which closely mirrors Lilly's argument here. The patent at issue in that case disclosed a digital viewing system to assess whether probes (used to test semiconductor chips) had become misaligned. 734 F.3d at 1355. During prosecution, the patentee amended its claims to require physical contact between the probe tip and the viewing window of the system. *Id.* But despite that amendment, the patentee asserted that it could

use the doctrine of equivalents to assert infringement claims against products that did not meet the physical-contact limitation; the patentee reasoned that the rationale for its amendment had been to "distinguish[] the prior art solely on the basis of obtaining two images of the probe tip at different points." *Id.* at 1357. This Court rejected that argument, explaining that even if the patentee did not *need* "to surrender a lack of physical contact" to overcome the prior art, "[t]he dispositive fact was that [it] chose to do so." *Id.* at 1358.

The same reasoning applies here. It is possible that Lilly could have overcome the examiner's prior-art objection without limiting its invention to pemetrexed disodium. But Lilly nonetheless "chose to do so." *Id.* It is now bound by that choice.

C. The District Court's Attempt To Fill in Evidentiary Gaps in the Prosecution Record Was Improper.

Instead of recognizing that Lilly could not overcome the presumption of estoppel given the complete absence of objective evidence in the prosecution history record explaining Lilly's choice to include "disodium" in its claim amendment, the district court let Lilly back-fill the record with irrelevant expert testimony and speculation. That was error.

1. Under this Court's precedent, a patentee "seeking to establish the reason for an amendment must base [its] arguments solely upon the public record of the patent's prosecution." *Festo*, 344 F.3d at 1369 (quotation marks omitted).

As the Court has explained, a contrary rule "would undermine the public notice function of the patent record." *Id.* at 1370 (quotation marks omitted). Given this rule, expert testimony plays a very limited role in a patentee's attempt to rebut the estoppel presumption: an expert may testify about how a skilled artisan would have understood evidence in the prosecution history record, but expert testimony is not a vehicle to "introduc[e] additional evidence." *Id.*

The district court failed to honor these restrictions. The court did not turn to expert testimony to clarify ambiguity in how a skilled artisan would have understood the prosecution record about Lilly's rationale for adding "disodium" to its limitation. Nor could expert testimony have fulfilled that function, given Lilly's acknowledgment that "[n]othing in the prosecution record even mentions different salt forms of pemetrexed." Appx2613. Instead, the district court blurred analysis of the tangential exception with the factual doctrine of equivalents analysis by turning to expert testimony concerning chemical distinctions "between pemetrexed disodium and pemetrexed ditromethamine." Appx40. The court concluded that the medical relevance of selecting a particular pemetrexed salt presented a "clear battle of experts," *id.*, which the court ultimately resolved in Lilly's favor after a bench trial, Appx12-13.

The district court's reasoning, however, contains a basic category error. The expert testimony referenced by the court relates to the factual question whether

DRL's product infringes under the doctrine of equivalents—*i.e.*, whether pemetrexed ditromethamine and pemetrexed disodium are equivalents because the chemical differences between the salts are "insubstantial." *Brilliant Instruments, Inc. v. Guide Tech, LLC*, 707 F.3d 1342, 1346 (Fed. Cir. 2013). That testimony has *nothing* to do with the antecedent legal question whether prosecution history estoppel bars Lilly from relying on the doctrine of equivalents in the first place.

The district court's analysis thus was divorced from the prosecution history record and also improperly conflated the "tangential" exception with the factual question of equivalence. Contrary to the district court's reasoning, the unexplained surrender of an equivalent is not inherently "tangential" to the amendment merely because the difference between the claim and the accused product is (supposedly) minor. If that were the rule, then the tangential exception and the doctrine of equivalents would collapse into each other: an unexplained variation that qualifies as an equivalent would be tangential to the amendment's rationale by definition. Nothing in this Court's precedent supports combining the "tangential" and "equivalence" inquiries in this way, and the Court should now unambiguously reject it.

2. Aside from referencing inapposite expert testimony, the district court also relied on speculation to explain away Lilly's decision to claim only "pemetrexed disodium." For example, the court noted that the trade name for

Lilly's product (ALTIMA) was "sometimes used interchangeably with pemetrexed disodium during Lilly's patent prosecution," which the court surmised could explain why Lilly had referenced "pemetrexed disodium" when amending its claims. Appx37. The presumption of estoppel cannot be overcome with such conjecture; the patentee's rationale must be "objectively apparent" from the record. *Integrated Tech.*, 734 F.3d at 1359.

Indeed, if speculation were permitted, one could just as easily imagine reasons Lilly may have included the disodium limitation to avoid patentability objections. *See, e.g.*, Hospira Br. 63-64, in Nos. 18-2126, -2127. For example, Lilly might have been concerned that claiming "pemetrexed" alone could invite a written-description objection under 35 U.S.C. § 112, to the extent Lilly believed the patent's specification did not disclose that its method of administration could be used with antifolates other than pemetrexed disodium.[5] Or Lilly might have wanted to match the scope of its claims to its experimental data, which only covered the use of pemetrexed disodium, in order to support a patentability argument based on the "unexpected results" from its regimen. Appx48(2:32-54).

[5] In explaining its amendment, Lilly stated that "support for [its] change can be found in the specification on page 6, lines 6 and 16." Appx1789. Line 6 of the specification referred to "antifolate," and line 16 referred to "pemetrexed disodium." Appx197.

In any event, the district court's hypothesis would not support Lilly's position, even if it had record support. If Lilly's amendment was designed to claim only the specific formulation for ALTIMA—thus excluding all other compounds, including other pemetrexed salts—then the amendment plainly is not tangential to the alleged equivalent here. *See* Hospira Br. 63-64.

D. The Decisions Relied Upon by the District Court and by Lilly Are Easily Distinguished.

As noted, p. 11, *supra*, this Court has cautioned that the "tangential" exception to prosecution history estoppel is "very narrow." *Integrated Tech.*, 734 F.3d at 1358; *see also Cross Med. Prods.*, 480 F.3d at 1346 (Rader, J., concurring) ("*Festo* itself recognizes that rebuttals under the tangential principle will be rare."). And case law applying the exception has made clear the Court means what it says. Since the Supreme Court's *Festo* decision, this Court has repeatedly rejected attempts by patentees to invoke the exception, while holding that the exception applied in only a handful of cases.[6] With few examples to turn to, the district court and Lilly relied primarily on just two decisions from this Court applying the "tangential" exception. Both are readily distinguishable.

[6] *See* DRL Br. 35-36 & nn. 1, 2 (collecting decisions); *see generally* Rachel C. Hughey & Linhda Nguyen, *Exceptions to Prosecution History Estoppel Are Hardly a Dime a Dozen: An Analysis of the Federal Circuit's Application of the Narrow Exceptions to Prosecution History Estoppel Twelve Years After* Festo, 7 Cybaris An Intell. Prop. L. Rev. 57, 72-94, 109 (2015) (surveying this Court's decisions and noting the case law "confirm[s] that the three potential exceptions to PHE are indeed narrowly applied").

The district court's analysis centered on *Regents of University of California v. Dakocytomation California Inc.*, 517 F.3d 1364 (Fed. Cir. 2008). *See* Appx35-36. But the court failed to acknowledge that, in that case, the patentee's amendment did not change the key claim language that was at issue for purposes of the doctrine of equivalents.

The claimed invention in *Regents* covered a method of staining chromosomal DNA (for the purpose of identifying chromosomal abnormalities) in which nucleic acids are used to block repetitive sequences while probes target unique sequences. During prosecution, the patentee amended the claim to add the limitation "blocking" before the term "nucleic acid" in order to distinguish prior art that used methods other than "blocking" for detecting unique DNA sequences. *Id.* at 1376-78. The patentee then brought infringement claims against a product that used synthetic nucleic acids ("peptide nucleic acid") rather than human DNA. This Court held that estoppel did not apply to the "blocking nucleic acid" limitation because the prosecution history showed that "in narrowing the claim to overcome the prior art rejection, the focus of the patentee's arguments centered on the method of blocking—not on the particular type of nucleic acid that could be used for the blocking." *Id.* at 1378. This Court further noted that the relevant limitation—"nucleic acid"—had appeared in the earlier version of the patent

application, "was never narrowed during prosecution[,] and was not at issue in the office action rejecting the claims." *Id.*

This case is fundamentally different. The limitation at issue for purposes of estoppel—"pemetrexed *disodium*"—did not appear in Lilly's patent application before the relevant claim amendment. Rather, it was added by Lilly as part of the new claim language (changing "antifolate" to "pemetrexed disodium") specifically intended to overcome the examiner's prior-art objection. *See* pp. 12-13, *supra*. And as discussed, p. 15, *supra*, Lilly cannot point to anything in the prosecution history to explain why it chose to claim a particular salt form of pemetrexed.

The only other Federal Circuit decision that Lilly relied on below, *Insituform Techs., Inc. v. CAT Contracting, Inc.*, 385 F.3d 1360 (Fed. Cir. 2004), is similarly inapposite. There, this Court considered a claim describing a method of making resin tube liners. *Id.* at 1368-70. During prosecution, the claim was amended to require the application of a vacuum using a single cup near where the resin was injected, in order to distinguish prior art (Everson) disclosing a vacuum source at the far end of the tube. *Id.* at 1369. (The original claim in the patent application did not specify either the number or the location of vacuum cups.) This Court held that the alleged equivalent, which used multiple cups instead of a single cup, was tangential to the reason for the amendment because the patentee "made it clear that the difference between its process and Everson" was the position of the vacuum,

not the number of cups. *Id.* at 1370. The Court added that there was "no indication in the prosecution history of any relationship between the narrowing amendment and a multiple cup process, which is the alleged equivalent in this case." *Id.*

Thus, the amendment in *Insituform* was directed to a distinct aspect of a claim (where to place vacuum cups) that only incidentally implicated the limitation at issue for the doctrine of equivalents (how many cups to include). That is not the situation here. Lilly faced an objection to claiming antifolates as a class and responded by claiming, for its method of administration patent, only the specific chemical compound found in its commercial product. Lilly may now believe that the scope of its surrender was ill-advised. But it cannot show that its rationale for the amendment was tangential to the asserted equivalent.

E. The Rationale Underlying Prosecution Estoppel Counsels Against Extending the Tangential Exception to this Case.

Finally, the Court should also reject Lilly's attempt to escape estoppel here because applying the tangential exception to the facts of this case would be inconsistent with the purposes underlying both the doctrine of prosecution history estoppel and the doctrine of equivalents. As discussed, pp. 8-11, *supra*, "[t]he doctrine of equivalents is premised on language's inability to capture the essence of innovation." *Festo*, 535 U.S. at 734. The prosecution record here completely

"undercuts" any assertion by Lilly that it "lacked the words to describe the subject matter in question." *Id.*

The patent examiner put Lilly on notice that its "antifolate" claim was anticipated by the prior art, and Lilly then made the choice to narrow its claims to "pemetrexed disodium." If Lilly had wanted to surrender less claim scope by claiming all salt forms of pemetrexed, it had the linguistic tools to do so. Indeed, as DRL recounts (DRL Br. 6-7), Lilly used broader claim language in other patent applications associated with ALTIMA—language that does not single out any particular pemetrexed salt. Appx2426-2427. For example, Lilly drafted the European equivalent of the '209 patent to claim "pemetrexed," and then used a dependent claim to claim pemetrexed disodium in particular. Appx2427. Lilly also filed an application that issued as U.S. Patent No. 6,686,365, which claimed a composition comprising "pemetrexed" and "the stable salts, acids and free base forms thereof," again using a dependent claim to claim pemetrexed disodium in particular. Appx2426. Lilly thus clearly knew how to formulate an independent claim that did not specify pemetrexed in any particular salt form. But, for reasons known only to its prosecution counsel, Lilly chose not to do so for the '209 patent.

In district court, Lilly did not dispute that it could have amended its claims to literally encompass pemetrexed ditromethamine (and other pemetrexed salts). Lilly tried, however, to brush off its concession by arguing that the ready

availability of alternative claim language only showed that the pemetrexed salt equivalent at issue here was "foreseeable." Appx2612. According to Lilly, foreseeability is irrelevant to this case, because its argument for avoiding prosecution history estoppel relies entirely on the "tangential" exception. But Lilly errs in suggesting that the Court must ignore the ease with which it could have claimed the pemetrexed ditromethamine equivalent merely because Lilly has disclaimed reliance on *Festo*'s foreseeability exception.

Contrary to Lilly's argument below, the Supreme Court's *Festo* decision did not announce three completely separate exceptions to estoppel, whose meaning and scope are completely unrelated. Rather, the Court explained that *all three* exceptions to estoppel are intended to identify cases in which "at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." 535 U.S. at 741. For the reasons provided, Lilly plainly could have been expected to draft a claim that encompassed other pemetrexed salts if Lilly had wanted to do so. Lilly did not, and the public was entitled to rely on that decision as establishing the metes and bounds of Lilly's claimed invention.

CONCLUSION

The Court should reverse the district court's decision and hold that prosecution history estoppel bars Lilly from relying on the doctrine of equivalents to assert infringement claims.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

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October 16, 2018 /s/ Brian T. Burgess

CERTIFICATE OF SERVICE

I hereby certify that on October 16, 2018, I electronically filed the foregoing motion and all attachments with the Clerk of Court of the United States Court of Appeals for the Federal Circuit through the appellate CM/ECF filing system.

October 16, 2018 /s/ Brian T. Burgess