

FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

ZUNUM AERO, INC.,

*Plaintiff-ctr-defendant -
Appellant,*

v.

THE BOEING COMPANY;
BOEING HORIZONX VENTURES,
LLC,

*Defendant-ctr-claimants -
Appellees.*

No. 24-5212

D.C. No.
2:21-cv-00896-
JLR
Western District
of Washington,
Seattle

ORDER

ZUNUM AERO, INC.,

*Plaintiff-ctr-defendant -
Appellant,*

v.

THE BOEING COMPANY;
BOEING HORIZONX VENTURES,
LLC,

*Defendant-ctr-claimants -
Appellees.*

No. 24-5751

D.C. No.
2:21-cv-00896-
JLR
Western District
of Washington,
Seattle

Filed August 26, 2026

Before: Johnnie B. Rawlinson, Bridget S. Bade, and Lucy
H. Koh, Circuit Judges.

Order by Judge Koh;
Concurrence by Judge Bade

SUMMARY*

Trade Secrets / Appellate Jurisdiction

The panel filed an order denying a petition for panel rehearing following the panel’s reversal, in a memorandum disposition, of the district court’s reversal of a jury award and the district court’s grant of judgment as a matter of law and a conditional new trial in favor of The Boeing Co. and Boeing HorizonX Ventures, LLC (“Boeing”).

In 2020, Zunum Aero, Inc. (“Zunum”) sued Boeing in King County (Washington) Superior Court. Zunum brought 12 Washington state law claims, including breach of contract claims, tortious interference claims, and a trade secret misappropriation claim involving 30 trade secrets. In support of its trade secret misappropriation claim, Zunum alleged, *inter alia*, that two Boeing patents contained information that Boeing misappropriated from Zunum. Zunum raised many other facts and theories to support its trade secret misappropriation claim. Boeing counterclaimed

* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

and sought a declaration that Boeing was the sole inventor of one of the patents. Boeing removed the case to federal district court on the basis of its patent inventorship counterclaim, after which Boeing added an additional counterclaim seeking to establish the inventorship of Boeing's second patent.

The district court granted Boeing summary judgment regarding both of its patent counterclaims. By contrast, there was an eight-day jury trial on Zunum's trade secret misappropriation claim and several other state law claims. After a jury awarded Zunum over \$92 million in damages, the district court granted Boeing's motion for judgment as a matter of law and for a conditional new trial.

After the panel reversed the district court, Boeing argued for the first time in its petition for rehearing and rehearing en banc that this court lacks appellate jurisdiction. According to Boeing, the Federal Circuit has exclusive jurisdiction because this case involves a compulsory counterclaim arising under federal patent law. The panel held that Boeing's patent inventorship counterclaims arose under federal patent law but were not compulsory, and therefore the Ninth Circuit has jurisdiction. Applying Ninth Circuit precedent, the panel held that Boeing's counterclaims were not compulsory because they were not "logically related" to Zunum's trade misappropriation claim, in that (1) the same operative facts did not serve as the basis of both Zunum's trade secret misappropriation claim and Boeing's patent inventorship counterclaims; and (2) the aggregate core of facts upon which Zunum's trade secret misappropriation claim rests did not activate additional legal rights otherwise dormant in Boeing, specifically, the right to file declaratory judgment claims to resolve patent inventorship. Boeing won on its patent inventorship counterclaims at summary

judgment whereas Zunum won on its trade secret misappropriation claim at a jury trial because Zunum had many theories to support its trade secret misappropriation claim, only one of which suggested that Boeing was not the sole inventor of its patents. The panel held that Federal Circuit precedent did not control. However, it noted that Boeing's counterclaims would also not be compulsory under Federal Circuit precedent, which examines the "extent of factual overlap between what the plaintiff *must* establish to prove its claim and what the defendant *must* establish to prove its counterclaim." *Nasalok Coating Corp. v. Nylok Corp.*, 522 F.3d 1320, 1326 (Fed. Cir. 2008).

The panel rejected Boeing's fallback argument that if its patent inventorship counterclaims are permissive, then the district court necessarily erred in exercising supplemental jurisdiction over Zunum's state law claims. Agreeing with the only other circuits to address this question, the First, Second, and Seventh Circuits, the panel held that a federal district court may exercise supplemental jurisdiction over state law claims based on a permissive rather than compulsory counterclaim. Because Zunum's state law claims and Boeing's federal counterclaims shared a common nucleus of operative fact—Boeing's access to and alleged misuse of confidential information regarding Zunum's hybrid electric aircraft technology—the district court properly exercised supplemental jurisdiction over Zunum's state law claims.

Concurring in part and concurring in the order denying the petition for panel rehearing, Judge Bade agreed with the majority's conclusion that Boeing's counterclaims were permissive, thus making jurisdiction proper in this court, but she did not agree with the majority's analysis of that issue. Specifically, she disagreed with the majority's view

that a counterclaim is compulsory whenever it has a “logical relationship” to the plaintiff’s claim. Instead, Federal Rule of Civil Procedure 13(a) requires the court to identify the occurrence or occurrences that are essential to maintaining both the claim and counterclaim and evaluate whether these occurrences are sufficiently related to one another such that they can be said to be part of the same transaction. Applying that standard, Boeing’s counterclaims were permissive, not compulsory.

ORDER

KOH, Circuit Judge:

After this panel ruled against the Boeing Co. and Boeing HorizonX Ventures, LLC, (collectively, “Boeing”) on appeal, Boeing argued for the first time in its petition for panel rehearing and rehearing en banc that this court lacks appellate jurisdiction over this case. Boeing claims that the Federal Circuit has exclusive appellate jurisdiction because this is an appeal from an action involving compulsory counterclaims that arise under federal patent law. Further, Boeing claims that if this court concludes to the contrary and determines that this case only involved permissive, *i.e.*, non-compulsory, patent counterclaims, then the district court necessarily erred in holding that it had supplemental jurisdiction over Zunum’s state law claims based on those permissive counterclaims. For the reasons stated below, we

reject both of Boeing’s arguments and deny its petition for panel rehearing.¹

I. PROCEDURAL HISTORY

In 2020, Zunum sued Boeing in the Superior Court of the State of Washington for King County for misusing confidential information related to Zunum’s hybrid electric aircraft technology. Zunum’s sprawling 576-paragraph First Amended Complaint (“FAC”) brought 12 claims under Washington state law, including multiple claims for breach of contract, tortious interference with various business expectancies, and violations of the Washington Consumer Protection Act, and a single claim for trade secret misappropriation under the Washington Trade Secrets Act.

In support of its breach of contract claims and tortious interference claims, Zunum alleged that, *inter alia*, Boeing had breached its contracts with Zunum by misusing confidential information and tortiously interfered with Zunum’s business expectancies by using Zunum’s confidential information to develop its own hybrid electric aircraft.

In support of its trade secret misappropriation claim, Zunum alleged, *inter alia*, that two Boeing patents contained information that Boeing misappropriated from Zunum. First, Zunum alleged that the Thin Haul Hybrid Electric Propulsion System patent (“Thin Haul patent”), “borrows heavily from Zunum’s ZA10 architecture, which Zunum [had] yet to disclose publicly.”² Second, Zunum alleged that

¹ Boeing also raised challenges to the merits of the panel’s decision. We do not find them persuasive.

² The Thin Haul patent, U.S. Patent No. 11,110,811, was granted to Boeing by the U.S. Patent Office on September 7, 2021.

the Active Voltage Control for Hybrid Electric Aircraft patent (“Active Voltage patent”), contained information that “relates closely to issues addressed by . . . [a] patent filed by Zunum in August 2018.”³ According to Zunum, the Active Voltage patent supported Zunum’s allegations of misappropriation because a “precondition for patent issuance is representation of inventorship, which means that [the invention covered by the patent] did not exist previously, and that someone else did not invent it.” Zunum further alleged that one of the inventors listed on Boeing’s Active Voltage patent attended Boeing’s “‘investment’ assessment of Zunum’s intellectual property.”

Zunum raised many other facts and theories to support its trade secret misappropriation claim in its FAC. Zunum alleged that Boeing obtained access to trade secrets pursuant to agreements that strictly prohibited any use other than to evaluate or manage Boeing’s investment in Zunum or to explore other collaborations with Zunum. Zunum listed over 30 such trade secrets that Boeing allegedly misappropriated. Zunum alleged that Boeing misappropriated these trade secrets by, for example, improperly using those secrets to “replicate Zunum’s proprietary aircraft design,” and improperly disclosing Zunum’s trade secrets to multiple “third parties,” including Safran, S.A.

In response, Boeing served interrogatories that sought to clarify whether Zunum was challenging the inventorship of Boeing’s patents. Zunum responded and stated that “patents filed by Boeing . . . derive from the unique hybrid electric architecture of the Zunum aircraft.”

³ The Active Voltage patent, U.S. Patent No. 10,589,635, was granted to Boeing by the U.S. Patent Office on March 17, 2020.

Subsequently, Boeing counterclaimed in state court and sought a declaration that Boeing’s “employees, affiliates, or associates” were the “sole inventors” of the Active Voltage patent.

In July 2021, Boeing removed the case to the United States District Court for the Western District of Washington, Seattle Division, under 28 U.S.C. §§ 1331, 1338(a), 1454(a), on the sole basis of its patent inventorship counterclaim. Boeing’s notice of removal stated that “Zunum’s response to Boeing’s . . . interrogatory prompted Boeing to bring a counterclaim seeking a declaratory judgment as to the inventorship of [the Active Voltage] patent.” According to Boeing, that was because Zunum’s response stated that certain Boeing patents “*derive from* the unique hybrid electric architecture of the Zunum aircraft,” and “[d]erivation is a legal concept that relates to an inventorship dispute under federal patent laws; it signifies that the claimed invention was ‘constructed’ from the invention of another.” Boeing also invoked supplemental jurisdiction over Zunum’s state law claims under 28 U.S.C. § 1367(a), on the basis that those claims were related to the only federal claim in the case at the time, *i.e.*, Boeing’s counterclaim seeking declaratory judgment to establish the validity of its Active Voltage patent. *See also id.* § 1454(d).

Before the federal district court, Boeing filed an additional counterclaim in December 2021 seeking declaratory judgment to establish the validity of Boeing’s Thin Haul patent.⁴ In April 2024, the district court granted

⁴ Boeing could not seek a declaratory judgment concerning the Thin Haul patent at the time of removal to the district court because the patent had not issued at that time.

Boeing's motion for summary judgment regarding both of its patent counterclaims.

However, the district court denied Boeing's motion for summary judgment regarding Zunum's trade secret misappropriation claim. That claim was eventually tried to a jury over an eight-day trial in May 2024 along with several other of Zunum's state law claims. The jury found that Boeing had misappropriated 11 of 19 alleged trade secrets presented at trial, breached one of two contracts, and tortiously interfered with Zunum's business expectancy with a potential investor, Safran, S.A. The jury awarded Zunum \$67.08 million in actual damages and \$14.15 million in unjust enrichment on Zunum's trade secret misappropriation claim. The jury did not award damages regarding Boeing's breach of contract to avoid double recovery. The jury awarded Zunum \$11.56 million in damages for Boeing's tortious interference with Zunum's business expectancy with Safran, S.A.

After the jury trial, the district court granted Boeing's motion for judgment as a matter of law ("JMOL") and Boeing's motion for a conditional new trial and thus vacated the jury verdict. On appeal, this panel reversed the district court's grant of JMOL and conditional grant of a new trial and remanded with the instruction that this case be assigned to a different district judge on remand.⁵ Subsequently, Boeing filed its petition for panel rehearing and rehearing en banc, in which Boeing argued that the Ninth Circuit lacks appellate jurisdiction.

⁵ The case was reassigned because the judge presiding over the case in the district court acquired Boeing stock twice through his spouse during the pendency of litigation and did not promptly disclose these transactions to the parties.

II. DISCUSSION

“Every federal appellate court has a special obligation to satisfy itself not only of its own jurisdiction, but also that of the lower courts in a cause under review,” even when the issue is raised for the first time in a petition for rehearing, and even when it is raised by the party that originally invoked federal jurisdiction. *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 95 (1998) (citation modified); *see Preblich v. Battley*, 181 F.3d 1048, 1054 (9th Cir. 1999).

We first address the jurisdiction of this court. Although this case involves counterclaims that arise under federal patent law, these counterclaims are permissive, not compulsory, because they do not arise from the same transaction or occurrence as Zunum’s claims. Thus, we hold that the Ninth Circuit has appellate jurisdiction over this case. We reach this conclusion under both Ninth Circuit and Federal Circuit law governing compulsory counterclaims.

We then address the district court’s exercise of supplemental jurisdiction over Zunum’s state law claims. Consistent with every other circuit that has addressed this question, we hold that a federal district court may exercise supplemental jurisdiction over state law claims that share a common nucleus of operative fact with the claim that supplies the basis for federal jurisdiction, even when those claims do not arise from the same transaction or occurrence. Thus, because Zunum’s state law claims and Boeing’s federal counterclaims share a common nucleus of operative fact—Boeing’s access to and alleged misuse of confidential information regarding Zunum’s hybrid electric aircraft technology—the district court properly exercised supplemental jurisdiction over all claims in this action. Boeing’s petition for panel rehearing is therefore denied.

A. Appellate Jurisdiction

The Federal Circuit has “exclusive jurisdiction” over an appeal “in any civil action in which a party has asserted a compulsory counterclaim arising under[] any Act of Congress relating to patents.” 28 U.S.C. § 1295(a)(1). That is true regardless of whether such a counterclaim is at issue on appeal. *See Breed v. Hughes Aircraft Co.*, 253 F.3d 1173, 1178 (9th Cir. 2001). Accordingly, we must consider whether Boeing’s patent inventorship counterclaims arise under patent law, and if so, whether they are compulsory. For the reasons explained below, we conclude that Boeing’s patent inventorship counterclaims arise under federal patent law but are not compulsory. Therefore, this court has appellate jurisdiction over this appeal.

1. Boeing’s patent inventorship counterclaims arise under federal patent law.

As a preliminary matter, Boeing’s patent inventorship counterclaims arise under federal patent law. The parties agree on this point. A counterclaim arises under federal patent law when “federal patent law creates the cause of action” or the “right to relief necessarily depends on resolution of a substantial question of federal patent law.” *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 808-09 (1988). In this case, federal patent law “creates the cause of action” for Boeing to seek declaratory judgments to resolve inventorship disputes over patents. *See Medtronic v. Mirowski Fam. Ventures*, 571 U.S. 191, 196-98 (2014) (holding that a “declaratory judgment” question arose under federal patent law when the “hypothetical threatened action” that could have been “brought in the absence of a declaratory judgment” arises under federal patent law); *see also Breed*,

253 F.3d at 1177-78 (patent law creates a claim for correction of inventorship).

2. Boeing’s patent inventorship counterclaims are not compulsory under either Ninth Circuit or Federal Circuit law, and therefore this panel has jurisdiction.

However, Boeing’s patent inventorship counterclaims are not compulsory under either Ninth Circuit law, which binds this court, or Federal Circuit law. *See Hart v. Massanari*, 266 F.3d 1155, 1171 (9th Cir. 2001) (“Circuit law . . . binds all courts within [the] circuit, including the court of appeals itself.”). Thus, the Ninth Circuit and not the Federal Circuit has jurisdiction over this appeal.

Although Congress did not specifically define “compulsory counterclaim” in 28 U.S.C. § 1295(a)(1), it is clear from the statutory context that Congress intended for this phrase to incorporate the compulsory counterclaim test prescribed by Federal Rule of Civil Procedure (“FRCP”) 13(a). *See Sekhar v. United States*, 570 U.S. 729, 732-33 (2013); *Advanced Integrative Med. Sci. Inst., PLLC v. Garland*, 24 F.4th 1249, 1256 (9th Cir. 2022). Such counterclaims are denominated compulsory because they will be barred under the doctrine of res judicata if not asserted. *See Union Paving Co. v. Downer Corp.*, 276 F.2d 468, 470 (9th Cir. 1960) (“If a party fails to plead [compulsory counterclaims], he is held to have waived them and is precluded by res judicata from ever suing upon them again.”).

FRCP 13(a) provides that a counterclaim is compulsory if it “arises out of the transaction or occurrence that is the subject matter of the opposing party’s claim.” Fed. R. Civ. P. 13(a)(1)(A). To determine whether a counterclaim “arises

out of” the same “transaction or occurrence” as the claim under FRCP 13(a), the Ninth Circuit applies the “logical relationship” test. *See Mattel v. MGA Ent., Inc.*, 705 F.3d 1108, 1110 (9th Cir. 2013) (explaining that a counterclaim is compulsory if there is a “logical relationship” between the claim and the counterclaim). We have further explained that a “logical relationship” exists between a claim and counterclaim if the counterclaim “arises from the same aggregate set of operative facts as the initial claim, in that the same operative facts serve as the basis of both claims or the aggregate core of facts upon which the claim rests activates additional legal rights otherwise dormant in the defendant.” *Id.* (quoting *In re Pegasus Gold Corp.*, 394 F.3d 1189, 1196 (9th Cir. 2005), and citing *Moore v. N.Y. Cotton Exch.*, 270 U.S. 593, 610 (1926)). Therefore, a logical relationship ordinarily exists where either (1) the “same operative facts serve as the basis of both” Zunum’s trade secret misappropriation claim and Boeing’s patent inventorship counterclaims; or (2) “the aggregate core of facts upon which [Zunum’s trade secret misappropriation claim] rests activates additional legal rights otherwise dormant in [Boeing]” to bring its patent inventorship counterclaims.⁶ *Id.* (citation omitted).

⁶ The concurrence objects to our reliance on *Mattel*, which applied this court’s earlier precedent, which itself relied on U.S. Supreme Court precedent. *See* Concurrence at 25-28. However, Ninth Circuit precedent binds this panel. *Reynaga Hernandez v. Skinner*, 969 F.3d 930, 940 (9th Cir. 2020) (“Absent intervening, controlling authority, a three-judge panel may not overrule a prior decision of this court.”). Additionally, the concurrence does not dispute that the Ninth Circuit applies the logical relationship test to determine whether a counterclaim is compulsory, which requires us to examine whether the counterclaim “arises from the same aggregate set of operative facts as the initial claim.” *Mattel*, 705 F.3d at 1110 (citation omitted).

Neither requirement is met in this case. First, “the same operative facts” do not “serve as the basis of both” Zunum’s trade secret misappropriation claim and Boeing’s patent inventorship counterclaims. *Id.* (citation omitted). The same operative facts serve as the basis of a claim and counterclaim when both share “[e]ssential facts,” *Moore*, 270 U.S. at 610, or “the facts necessary to prove the two claims substantially overlap,” *Pochiro v. Prudential Insurance Co. of America*, 827 F.2d 1246, 1251 (9th Cir. 1987). “What matters is not the legal theory but the *facts*.” *Mattel*, 705 F.3d at 1110.

For example, in *Mattel*, we concluded that there was insufficient factual overlap between competing claims that trade secrets were stolen, even if “some of the trade secret information” that one party allegedly misappropriated from the second party “incorporated trade secret information” that the second party had allegedly stolen from the first. *Id.* The mere fact that “the same information may have shuttled back and forth between Mattel and MGA” was not “a sufficient nexus to support a compulsory counterclaim.” *Id.*

Similarly, in *Hydranautics v. FilmTec Corp.*, 70 F.3d 533 (9th Cir. 1995), we acknowledged that plaintiff’s patent infringement claim and defendant’s antitrust counterclaim for predatory patent litigation shared a factual overlap—namely, who owned the patent—but concluded that the “significant difference . . . between the facts which control the patent infringement claim and the facts which control the antitrust claim” meant that the antitrust counterclaim was merely permissive, not compulsory. *Id.* at 537.

Here, the factual overlap between Zunum’s trade secret misappropriation claim and Boeing’s patent inventorship counterclaims is similarly insufficient to establish that the “same operative facts serve as the basis of both claims” such

that Boeing's counterclaims are compulsory. *Mattel*, 705 F.3d at 1110 (citation omitted). As discussed earlier, Boeing's counterclaims arose out of just two of the 576 paragraphs in Zunum's complaint. Zunum had many theories to support its trade secret misappropriation claim. Specifically, Zunum alleged in its FAC that Boeing had misappropriated over 30 alleged trade secrets by either using or disclosing those trade secrets in many different contexts, of which Boeing's patents were just one. Additionally, Boeing won on its patent inventorship counterclaims at summary judgment whereas Zunum won on its trade secret misappropriation claim at a jury trial.⁷ Thus, there was no need for Zunum to prove that Boeing was not the sole inventor of Boeing's patents to prevail on Zunum's trade secret misappropriation claim. Therefore, although the claims share some facts, they do not share "[e]ssential facts," *Moore*, 270 U.S. at 610, and the facts do not "substantially overlap," *Pochiro*, 827 F.2d at 1251.

Second, for similar reasons, the "aggregate core of facts upon which [Zunum's trade secret misappropriation claim] rests" did not "activate[] additional legal rights otherwise dormant in" Boeing, *id.* (emphasis added) (citation omitted), specifically, the right to file declaratory judgment claims to resolve patent inventorship.

⁷ Contrary to the concurrence's suggestion, we do not hold that that "logical compatibility between a claim and counterclaim . . . necessarily demonstrates an insufficient factual overlap between the two claims." Concurrence at 29 (emphasis added). Instead, we agree with the concurrence that "the possibility that both the plaintiff's claim and the defendant's counterclaim could be successful often, but not always, indicates that the two claims arise from different transactions." Concurrence at 31.

Even if Zunum’s trade secret misappropriation claim activated Boeing’s ability to seek a declaratory judgment to establish patent inventorship, the “aggregate core” of facts upon which Zunum’s trade secret misappropriation claim rests did not do so. Boeing argues that Zunum’s claim “activate[d]” Boeing’s right to file its counterclaims because Boeing would not have been able to seek a declaratory judgment against Zunum if Zunum had not attempted to prove Boeing’s trade secret misappropriation by challenging the inventorship of Boeing patents. *In re Pegasus*, 394 F.3d at 1196. A patent holder seeking declaratory judgment regarding the inventorship of a patent must establish “that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment” in order to satisfy the case-or-controversy requirement of Article III. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007) (citation omitted); *see also* 35 U.S.C. § 282(a) (“A patent shall be presumed valid.”). As the district court held, Zunum’s trade secret misappropriation claim established a “substantial controversy” for Boeing’s patent inventorship counterclaims because Zunum made it clear that it sought to prove misappropriation in part by challenging Boeing’s inventorship of its patents.

However, as Boeing conceded at oral argument, it is possible for a claim to activate a defendant’s dormant legal right to bring a counterclaim, and yet not activate that dormant right based on the “aggregate core of facts upon which [the claim] rests.” *Mattel*, 705 F.3d at 1110 (citation omitted). As explained above, Zunum had many theories to support its trade secret misappropriation claim that were unrelated to Boeing’s patents. Further, Zunum prevailed on its trade secret misappropriation claim even though Boeing

prevailed on its counterclaims, and Boeing's patent inventorship counterclaims did not even need to go to a jury trial, unlike Zunum's trade secret misappropriation claim. Thus, the "aggregate core" of facts upon which Zunum's trade secret misappropriation claim rests did not activate Boeing's right to file its patent inventorship counterclaims.

Boeing's remaining argument fails on its own terms. Boeing contends that it need only show adequate factual overlap between its patent inventorship counterclaims and a single theory supporting Zunum's trade secret misappropriation claim. But FRCP 13(a) frames the inquiry at the level of the claim, not a theory within the claim. A counterclaim is compulsory if it "arises out of the transaction or occurrence that is the subject matter of the opposing party's *claim*," Fed. R. Civ. P. 13(a)(1)(A) (emphasis added). Further, under *Mattel*, we examine whether the counterclaim "arises from the same aggregate set of operative facts as the initial *claim*" to determine whether the counterclaim is compulsory. 705 F.3d at 1110 (emphasis added) (citation omitted). Boeing conceded at oral argument that no precedent supports its theory-level approach and that adopting it would require us to create new law. We decline to do so.

The concurrence would instead resolve this case by analogy to *Hydranautics*, 70 F.3d at 536-37. According to the concurrence, *Hydranautics* stands for the proposition that "a claim is generally not a compulsory counterclaim 'to the original suit which furnishes its predicate.'" Concurrence at 30 (quoting *Hydranautics*, 70 F.3d at 537). We disagree with that interpretation of *Hydranautics*. *Hydranautics* looked to "whether the *essential facts*" of the claim and counterclaim at issue in that case were "so logically connected that considerations of judicial economy and

fairness dictate that all the issues be resolved in one lawsuit.” 70 F.3d at 536 (emphasis added) (quoting *Pochiro*, 827 F.3d at 1249). Ultimately, *Hydranautics* held that an antitrust claim for predatory patent litigation was not a compulsory counterclaim to the prior suit for patent infringement in light of the “difference in which facts control . . . the patent infringement claim and the facts which control the antitrust claim.” *Id.* at 537. Thus, on the facts in that case, “there was not much point in litigating [the] antitrust claims until [the] infringement case was resolved.” *Id.*

Not only is the concurrence’s reading of *Hydranautics* inaccurate, it is directly at odds with *Pochiro*, where we held that “an abuse of process counterclaim is a compulsory counterclaim in the very action which allegedly is abusive.” *Pochiro*, 827 F.2d at 1252. *Hydranautics* itself relied on *Pochiro* for its formulation of the compulsory counterclaim test. *See Hydranautics*, 70 F.3d at 537 (quoting *Pochiro*, 827 F.2d at 1249). The concurrence emphasizes that *Pochiro* does not control because *Pochiro* analyzed state law. *See* Concurrence at 30 n.4. However, *Pochiro* analyzed Arizona Rule of Civil Procedure 13(a) (“Arizona Rule 13(a)”), which *Pochiro* observed “is identical to [FRCP] 13(a).”⁸ 827 F.2d

⁸ At the time *Pochiro* was decided, Arizona Rule 13(a), like FRCP 13(a), provided that a counterclaim is compulsory “if it arises out of the transaction or occurrence that is the subject matter of the opposing party’s claim.” *Pochiro*, 827 F.2d at 1249 (emphasis in original); *see* Fed. R. Civ. P. 13(a)(1)(A) (providing that a counterclaim is compulsory if it “arises out of the transaction or occurrence that is the subject matter of the opposing party’s claim.”).

Moreover, the current version of Arizona Rule 13(a) is substantially the same as the version in effect at the time *Pochiro* was decided in 1987. *See* Ariz. R. Civ. P. 13(a)(1)(A) (“A pleading must state as a counterclaim any claim that—at the time of its service—the pleader has

at 1249. Thus, *Pochiro* explicitly relied on federal caselaw that interpreted FRCP 13(a). *Id.* at 1249 n.7. Because the concurrence misinterprets *Hydranautics*, as explained above, we need not resolve whether the concurrence’s misinterpretation of *Hydranautics* conflicts with *Pochiro*.

Zunum asks us to apply Federal Circuit precedent instead of Ninth Circuit precedent. Doing so would not change the outcome in this case.⁹ The outcome would not differ under Federal Circuit law, which also compels the conclusion that Boeing’s counterclaims are permissive, not compulsory. The Federal Circuit uses “three tests to determine whether the ‘transaction or occurrence test of [FRCP] 13(a) is met.’” *In re Rearden LLC*, 841 F.3d 1327, 1332 (Fed. Cir. 2016) (quoting *Nasalok Coating Corp. v. Nylok Corp.*, 522 F.3d 1320, 1325-26 (Fed. Cir. 2008)). These tests are: “(1) whether the legal and factual issues raised by the claim and counterclaim are largely the same; (2) whether substantially the same evidence supports or refutes both the claim and the counterclaim; and (3) whether there is a logical relationship between the claim and the counterclaim.” *Id.*

against an opposing party if the claim arises out of the transaction or occurrence that is the subject matter of the opposing party’s claim . . .”).

⁹ We note that the Ninth Circuit is not compelled to apply Federal Circuit law to determine whether we have jurisdiction, even if our jurisdictional inquiry addresses whether the Federal Circuit has exclusive jurisdiction. The U.S. Supreme Court acknowledged in *Christianson* that courts of appeals may permissibly reach different jurisdictional conclusions in the same case because their respective precedents require different answers. *See* 486 U.S. at 818-19. When courts of appeals reach different conclusions on a close jurisdictional question in the same case, the Supreme Court instructs the second court of appeals that answers the jurisdictional question to “adher[e] strictly to principles of law of the case” and generally abide by the jurisdictional decision of the first circuit court to avoid “a perpetual game of jurisdictional ping-pong.” *Id.*

(quoting *Nasalok*, 522 F.3d at 1325-26). Ultimately, “[i]n each of the three tests,” the “question is the extent of factual overlap between what the plaintiff *must* establish to prove its claim and what the defendant *must* establish to prove its counterclaim.” *Nasalok*, 522 F.3d at 1326 (emphasis in original).

Under Federal Circuit law, Boeing’s patent inventorship counterclaims are not compulsory because the degree of overlap between “what [Zunum] *must* establish to prove its [trade secret misappropriation] claim and what [Boeing] *must* establish to prove its [patent inventorship] counterclaim[s]” is low.¹⁰ *Id.* (emphasis in original). As discussed above, Zunum had multiple theories that supported its trade secret misappropriation claim and had no need to prove that Boeing was not the sole inventor of Boeing’s patents to prevail on that claim. Ultimately, Boeing prevailed on its patent inventorship counterclaims on summary judgment and Zunum prevailed on its trade secret misappropriation claim at a jury trial. This demonstrates that what Zunum “must establish to prove” its claim had little

¹⁰ Although Boeing in its appellate briefing claimed that the “*must* establish” language in *Nasalok* is dictum, Boeing conceded it is not dictum at oral argument. Boeing’s petition for rehearing and rehearing en banc relied on the concurrence from Judge Newman in *Nasalok* to argue that the majority opinion is dictum. In her concurrence, Judge Newman stated that it was unnecessary to decide whether the counterclaim in *Nasalok* was compulsory. *See Nasalok*, 522 F.3d at 1330-31 (Newman, J., concurring). However, the panel majority in *Nasalok* held that it was necessary to determine whether the counterclaim in that case was compulsory and decided it was not because “the extent of factual overlap between what the plaintiff *must* establish to prove its claim and what the defendant *must* establish to prove its counterclaim” was low. *Id.* at 1326-28 (majority opinion) (emphasis in original).

overlap with what Boeing “must establish to prove” its counterclaims.

Thus, Boeing’s patent inventorship counterclaims are permissive under Ninth Circuit and Federal Circuit law, and the Ninth Circuit has jurisdiction over this appeal. Because we hold that Boeing’s patent inventorship counterclaims are permissive, we next address Boeing’s argument that supplemental jurisdiction may not be exercised based on permissive counterclaims.

B. The District Court’s Supplemental Jurisdiction

As a fallback argument, Boeing argues that if its patent inventorship counterclaims are permissive, then the district court necessarily erred in exercising supplemental jurisdiction over any of Zunum’s claims under Washington state law for trade secret misappropriation, breach of contract, and tortious interference with various business expectancies. Boeing reasons that if its patent inventorship counterclaims do not “arise[] out of the transaction or occurrence that is the subject matter of [Zunum’s] claims” so as to be compulsory, Fed. R. Civ. P. 13(a)(1)(A), then those claims and counterclaims necessarily do not “form part of the same case or controversy under Article III,” 28 U.S.C. § 1367(a), and the district court thus could not exercise jurisdiction over Zunum’s state law claims absent an independent basis of federal jurisdiction. We reject this argument and hold that the district court had supplemental jurisdiction over the state law claims in this case.

In 1990, Congress vested the district courts with “supplemental jurisdiction over all other claims that are so related to claims in the action within such original jurisdiction that they form part of the same case or controversy under Article III.” Federal Courts Study

Committee Implementation Act of 1990, Pub. L. No. 101-650, tit. III, § 310(a), 104 Stat. 5104, 5113 (codified at 28 U.S.C. § 1367(a)). Thus, to exercise supplemental jurisdiction over a state law claim, “[t]he state and federal claims must derive from a common nucleus of operative fact.” *United Mine Workers of Am. v. Gibbs*, 383 U.S. 715, 725 (1966); *see Owen Equip. & Erection Co. v. Kroger*, 437 U.S. 365, 371 (1978) (“It is apparent that *Gibbs* delineated the constitutional limits of federal judicial power.”).¹¹ The enactment of supplemental jurisdiction in 28 U.S.C. § 1367 raised the question of whether district courts may exercise supplemental jurisdiction only over compulsory counterclaims or also over permissive counterclaims, *i.e.* whether the “common nucleus of operative fact” test for supplemental jurisdiction over state law claims is broader than the “transaction or occurrence” test for compulsory counterclaims.

Every circuit to have addressed this question since 28 U.S.C. § 1367(a) was enacted has held that the supplemental jurisdiction test is broader than the compulsory counterclaim test. Specifically, the First, Second, and Seventh circuits have held that federal courts may exercise supplemental jurisdiction based on a permissive counterclaim. *See Glob.*

¹¹ Prior to this enactment, courts analyzed supplemental jurisdiction over state law claims under the doctrines of “pendent” and “ancillary” jurisdiction. *See Artis v. District of Columbia*, 583 U.S. 71, 75 (2018). Circuit courts generally held that pendent and ancillary jurisdiction could only be exercised on the basis of a compulsory counterclaim, but not on the basis of a permissive one. *See Jones v. Ford Motor Credit Co.*, 358 F.3d 205, 210-11 (2d Cir. 2004) (collecting cases); *but see Ambromovage v. United Mine Workers of Am.*, 726 F.2d 972, 976, 988-93 (3d Cir. 1984) (concluding that a permissive counterclaim arising under state law was within the ancillary jurisdiction of the district court because of the presence of a “common nucleus of operative fact”).

NAPs, Inc. v. Verizon New England Inc., 603 F.3d 71, 87 (1st Cir. 2010); *Jones v. Ford Motor Credit Co.*, 358 F.3d 205, 212-13 (2d Cir. 2004); *Channell v. Citicorp Nat'l Servs., Inc.*, 89 F.3d 379, 385 (7th Cir. 1996). No circuit has held otherwise.

We join our sister circuits. Although both supplemental jurisdiction and compulsory counterclaims require some factual overlap, the overlap required for supplemental jurisdiction is merely a “loose factual connection,” *Channell*, 89 F.3d at 385, and the overlap required for a compulsory counterclaim is “substantial[],” *Pochiro*, 827 F.2d at 1251. *See also* 13D WRIGHT & MILLER, FEDERAL PRACTICE & PROCEDURE § 3567.1 (3d ed. 2008) (“*Gibbs* is broader than transaction or occurrence, and embraces all claims with a loose factual connection to the jurisdiction-invoking claim.”). That makes sense, given that failure to raise a compulsory counterclaim precludes a defendant from ever raising that claim in a future litigation. *See Union Paving Co.*, 276 F.2d at 470 (“If a party that fails to plead [compulsory counterclaims], he . . . is precluded by res judicata from ever suing upon them again.”). By contrast, when the district court lacks supplemental jurisdiction over a claim, it typically either dismisses without prejudice or remands to a court of competent jurisdiction. *Tijerino v. Stetson Desert Project, LLC*, 934 F.3d 968, 971 n.2 (9th Cir. 2019) (“[W]e note that, in general, dismissal for lack of subject matter jurisdiction should be without prejudice.”).

The legislative history of 28 U.S.C. § 1367 demonstrates that Congress intentionally made the test for supplemental jurisdiction broader than the test for compulsory counterclaims. The original “statutory language proposed by the [Federal Courts Study] Committee would have authorized supplemental jurisdiction over any claim arising

out of the same ‘transaction or occurrence.’” *Baer v. First Options of Chicago, Inc.*, 72 F.3d 1294, 1299 (7th Cir. 1995) (quoting Report of the Federal Courts Study Committee 47 (Apr. 2, 1990)). In other words, the Federal Courts Study Committee originally proposed using the compulsory counterclaim test for supplemental jurisdiction. However, “the enacted statute” ultimately “authorizes supplemental jurisdiction coextensive with the ‘case or controversy’ requirement of Article III.” *Id.*

Thus, some *permissive* counterclaims which do not arise out of the same transaction or occurrence as the original claim may nonetheless share a “common nucleus of operative fact” with the original claim, allowing the district court to exercise supplemental jurisdiction over the permissive counterclaim. *Gibbs*, 383 U.S. at 725.

In this case, Boeing’s *permissive* counterclaim and Zunum’s state law claims share a “common nucleus of operative fact.” *Id.* Boeing’s patent inventorship counterclaims and Zunum’s trade secret misappropriation claim, breach of contract claims, and tortious interference claim are all related to Boeing’s access to and alleged misuse of confidential information regarding Zunum’s hybrid electric aircraft technology. Zunum originally alleged that Boeing had misused confidential information and thus misappropriated trade secrets; breached its contracts with Zunum by misusing confidential information; and tortiously interfered with Zunum’s business expectancies by, *inter alia*, using Zunum’s confidential information to develop Boeing’s own hybrid electric aircraft. Boeing’s counterclaims alleged that its patents were not “derived from any information obtained from Zunum.” Zunum’s state law claims and Boeing’s patent inventorship counterclaims therefore share a loose connection and thus “the entire action

before the court comprises but one constitutional ‘case.’” *City of Chicago v. Int’l Coll. of Surgeons*, 522 U.S. 156, 165 (1997) (quoting *Gibbs*, 383 U.S. at 725). Accordingly, the district court properly exercised supplemental jurisdiction over Zunum’s state law claims under 28 U.S.C. § 1367(a).

III. CONCLUSION

For the foregoing reasons, Boeing’s petition for panel rehearing is **DENIED**.

BADE, Circuit Judge, concurring in part and concurring in the order denying the petition for panel rehearing:

Although I agree with the majority’s conclusion that Boeing’s counterclaims were permissive, thus making jurisdiction proper in this court, *see* 28 U.S.C. §§ 1291, 1295(a), I do not agree with the majority’s analysis of that issue.¹

The majority correctly begins with the text of § 1295 and Rule 13(a). *See Order* at 12. But it quickly abandons any focus on the text and instead rigidly applies its interpretation of one sentence of doctrinal synthesis from *Mattel v. MGA Entertainment, Inc.*, 705 F.3d 1108 (9th Cir. 2013). Thus, in the majority’s view, a counter claim is compulsory whenever it has a “logical relationship” to the plaintiff’s claim, and the “requirement[s]” for such a relationship “ordinarily” exist when either (1) “the same operative facts serve as the basis of both claims,” or (2) “the aggregate core of facts upon which the claim rests activates additional legal rights

¹ I join the majority’s analysis of the district court’s supplemental jurisdiction. *See Order* at 21–25.

otherwise dormant in the defendant.” *Order* at 13 (quoting *Mattel*, 705 F.3d at 1110).

But what we must ultimately determine here is not whether there is a “logical relationship” between the claims, whether the “same operative facts” undergird both claims, or whether the “aggregate core of facts” underlying the plaintiff’s claim “activates additional legal rights” in the defendant—those phrases are found nowhere in the text of Rule 13(a). The question we must answer is whether the counterclaim “arises out of the transaction or occurrence that is the subject matter of the [plaintiff]’s claim.” Fed. R. Civ. P. 13(a)(1)(A). Any subsidiary tests we may devise to answer that question cannot be allowed to take precedence over the text of the rule. *See Groff v. DeJoy*, 600 U.S. 447, 468 (2023) (“[S]tatutory interpretation must ‘begi[n] with,’ and ultimately heed, what a statute actually says.” (quoting *Nat’l Ass’n of Mfrs. v. U.S. Dep’t of Def.*, 583 U.S. 109, 127 (2018))).

The key terms in Rule 13(a) are “transaction” and “occurrence.” In a similar context, the Supreme Court has explained that “[t]ransaction’ is a word of flexible meaning. It may comprehend a series of many occurrences, depending not so much upon the immediateness of their connection as upon their logical relationship.” *Moore v. N.Y. Cotton Exch.*, 270 U.S. 593, 610 (1926) (addressing the meaning of “transaction” in former Equity Rule 30, the predecessor to Rule 13);² *see also Williams v. Robinson*, 1 F.R.D. 211, 212–13 (D.D.C. 1940) (“[T]he word ‘transaction’ [in Rule 13(a)]

² *See* Fed. R. Civ. P. 13 advisory committee note (“This is substantially [former] Equity Rule 30 (Answer—Contents—Counterclaim), broadened to include legal as well as equitable counterclaims.”).

denotes something done; a completed action; an affair as a whole; . . . something which has been acted out to the end.”).

The Court’s explanation of “transaction” suggests that an “occurrence” is a component part of a “transaction.” It also suggests that whether an occurrence is part of the same transaction as another occurrence depends on the “logical relationship” between those occurrences. And to determine the set of occurrences from which a claim arose, we must look to that claim’s “[e]ssential facts”—i.e., “the facts necessary for the determination” of entitlement to relief. *Pochiro v. Prudential Ins. Co. of Am.*, 827 F.2d 1246, 1249, 1252 (9th Cir. 1987) (applying Ariz. R. Civ. P. 13); *accord Moore*, 270 U.S. at 610; *Williams*, 1 F.R.D. at 213. Thus, Rule 13(a) requires that we identify the occurrence or occurrences that are essential to maintaining both the claim and counterclaim and evaluate whether these occurrences are sufficiently related to one another such that they can be said to be part of the same transaction. *See Cooper v. Soc. Sec. Admin.*, 131 F.4th 995, 1009 (9th Cir. 2025). This is not the analysis the majority applied.

Instead, the majority’s analysis applies one sentence in *Mattel* as if it encompasses the entire universe of compulsory counterclaims, such that if one of the two prongs of this “test” are not met, then a counterclaim is necessarily permissive.³ *See Order* at 12–17. But nothing in *Mattel*

³ The majority’s statement that a logical relationship “ordinarily exists” when one of the two prongs of the test it derives from *Mattel* is met, *Order* at 13 (emphasis added), suggests that other circumstances could establish a sufficient logical relationship. If so, then the majority’s conclusion that neither prong is met only establishes that Boeing’s counterclaims were not compulsory for the typical reasons; it has not affirmatively resolved that Boeing’s counterclaims were permissive, which is the predicate condition for our jurisdiction.

supports that proposition. Indeed, “there is no formalistic test to determine whether suits are logically related.” *Burlington N. R.R. v. Strong*, 907 F.2d 707, 711 (7th Cir. 1990); cf. *Hydranautics v. FilmTec Corp.*, 70 F.3d 533, 537 (9th Cir. 1995) (“We determine whether a claim arises out of the same transaction or occurrence by analyzing ‘whether the essential facts of the various claims are so logically connected that considerations of judicial economy and fairness dictate that all the issues [must] be resolved in one lawsuit.’” (quoting *Pochiro*, 827 F.2d at 1249)). *Mattel* merely restates a tentative doctrinal synthesis suggested by the Fifth Circuit; it does not set forth a comprehensive definition or an absolute rule. See *Revere Copper & Brass Inc. v. Aetna Cas. & Sur. Co.*, 426 F.2d 709, 714–15 (5th Cir. 1970) (origin of this doctrinal synthesis); see also *Brown v. Davenport*, 596 U.S. 118, 141 (2022) (“[T]he language of an opinion is not always to be parsed as though we were dealing with [the] language of a statute.” (quoting *Reiter v. Sonotone Corp.*, 442 U.S. 330, 341 (1979))); *Ark. Game & Fish Comm’n v. United States*, 568 U.S. 23, 35 (2012) (“[G]eneral expressions, in every opinion, are to be taken in connection with the case in which those expressions are used.” (quoting *Cohens v. Virginia*, 19 U.S. (6 Wheat.) 264, 399 (1821))).

Finally, the majority’s analysis does not persuasively explain why Boeing’s counterclaims were not compulsory. Reasoning by analogy to *Mattel* and *Hydranautics*, the majority states that the “factual overlap” between Zunum’s claim and Boeing’s counterclaims is simply “insufficient” to establish that those claims all arose from the same transaction. *Order* at 14–15. But *Mattel*’s analysis is not relevant or helpful here; instead, it stands for the unremarkable proposition that a de minimis factual overlap between claim and counterclaim is per se insufficient to

render the counterclaim compulsory. *See* 705 F.3d at 1110 (“That both Mattel and MGA claimed they stole each other’s trade secrets isn’t enough to render MGA’s counterclaim compulsory. . . . That the same information may have shuttled back and forth between Mattel and MGA [likewise] isn’t a sufficient nexus to support a compulsory counterclaim.”).

And although *Hydranautics* is a more analogous case, it does not support the majority’s suggestion that logical compatibility between a claim and counterclaim—i.e., that both claims could succeed, as happened here when Zunum prevailed on its trade secrets claim and Boeing prevailed on its patent inventorship counterclaims—necessarily demonstrates an insufficient factual overlap between the two claims (or otherwise renders the counterclaim permissive). For instance, we have recognized that a party has a compulsory counterclaim for recoupment when the claim and counterclaim “arose from a common statutory framework or common fund” or from one contract between the parties, even though success on the counterclaim is logically compatible with success on the primary claim. *Cooper*, 131 F.4th at 1009 (first citing *In re Gardens Reg’l Hosp. & Med. Ctr., Inc.*, 975 F.3d 926, 938 (9th Cir. 2020), then citing *In re TLC Hosps., Inc.*, 224 F.3d 1008, 1013 (9th Cir. 2000), and then citing *Newbery Corp. v. Fireman’s Fund Ins. Co.*, 95 F.3d 1392, 1402–03 (9th Cir. 1996)). The principle relied on by the majority therefore cannot be dispositive.

Nonetheless, the outcome of this case is controlled by *Hydranautics*, but for a different reason than that stated by the majority. *See* 70 F.3d at 536–37 (holding that an antitrust claim for predatory patent litigation was not a compulsory counterclaim to the prior suit for patent infringement); *see*

also Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661, 671 (1944) (“The fact that [an antitrust claim for predatory patent litigation] might have been asserted as a counterclaim in the prior suit by reason of Rule 13(b) . . . does not mean that the failure to do so renders the prior judgment res judicata as respects it.”). And like *Hydranautics*, two key considerations determine the outcome here.

First, a claim is generally not a compulsory counterclaim “to the original suit which furnishes its predicate.”⁴ *Hydranautics*, 70 F.3d at 537. This is because when a claim is asserted in judicial proceedings, ordinarily the underlying transaction from which the claim arose has already “been acted out to the end.” *Williams*, 1 F.R.D. at 213. Here, as

⁴ The majority suggests my reading of *Hydranautics* is incorrect and, in any event, inconsistent with our prior decision in *Pochiro*. See Order at 17–19; *Pochiro*, 827 F.2d at 1249–52 (holding that an abuse-of-process claim resting entirely on the alleged fact that Prudential “br[ought] a lawsuit against [Pochiro] for the ulterior purpose of using it as a tool to dissuade persons from doing business with [him]” was a compulsory counterclaim under Arizona law in the lawsuit that furnished its predicate). But the majority’s reading of *Hydranautics*, if applied faithfully to the facts of *Pochiro*, would counsel a different result, given the logical compatibility between the claims at issue. Cf. *Pochiro*, 827 F.2d at 1252 (“[A] claim for abuse of process under Arizona law does not require that the prior dispute be resolved in favor of the abuse of process claimant, only that the opposing party has attempted to pervert the judicial process to an improper purpose.”). Moreover, the interpretation of state law does not create binding precedent for the interpretation of analogous federal law merely because the court drew from federal precedent as a guide for its decision. See *Cohens*, 19 U.S. at 399 (“If [statements in an opinion] go beyond the case, they may be respected, but ought not to control the judgment in a subsequent suit when the very point is presented for decision.”). But if *Pochiro* provides a controlling interpretation of federal law and is in irreconcilable conflict with *Hydranautics*, then this case should be taken en banc to resolve the conflict.

Boeing acknowledges, the predicate condition for asserting its counterclaims for a declaratory judgment—a substantial controversy between the parties over the inventorship of the '635 and '811 patents—did not arise until Zunum filed its complaint. *See Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273–74 (1941) (explaining that allegation of a substantial controversy is necessary to “state[] a cause of action” for a declaratory judgment). Thus, the occurrence from which Boeing’s counterclaims arose is logically disconnected from the set of occurrences that gave rise to Zunum’s trade-secrets claim.

Second, the possibility that both the plaintiff’s claim and the defendant’s counterclaim could be successful often, but not always, indicates that the two claims arise from different transactions. *Cf. Hydranautics*, 70 F.3d at 537 (“This difference in which facts control shows why there may be a significant difference, and there is a significant difference in this case, between the facts which control the patent infringement claim and the facts which control the antitrust claim.”); *Moore*, 270 U.S. at 610 (“So close is the connection between the case sought to be stated in the bill and that set up in the counterclaim, that it only needs the failure of the former to establish a foundation for the latter; . . .”). And here, there were numerous theoretical pathways for both parties to succeed on their respective claims without producing contradictory rulings. For instance, even if Zunum had shown that it owned trade secrets related to the subject matter of the '635 and '811 patents and that Boeing had wrongfully misappropriated those trade secrets, *see Ed Nowogroski Ins., Inc. v. Rucker*, 971 P.2d 936, 942 (Wash. 1999) (listing the elements of trade secret misappropriation under Washington law), Boeing could nonetheless prevail on its patent-inventorship counterclaims by showing that those

trade secrets were not “sufficient to enable [its employees] to construct and successfully operate the invention[s]” described by the ’635 and ’811 patents, *Brand v. Miller*, 487 F.3d 862, 869–70 (Fed. Cir. 2007) (quoting *Int’l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1376 (Fed. Cir. 2004)) (listing the requirements for showing “derivation” of a patented invention).

These factors provide a more compelling explanation for why Boeing’s counterclaims were permissive than a quantitative assessment of the factual overlap. This is not to say that the quantity of factual overlap cannot be the determinative factor in a proper case. *See, e.g., Mattel*, 705 F.3d at 1110. But as shown by the Supreme Court’s decision in *Moore*, when the defendant’s allegedly breaching conduct constituted just “one of the links in the chain” upon which the counterclaim was based, the two claims can still be part of the same transaction notwithstanding a relatively narrow overlap in essential facts. 270 U.S. at 609–10 (“That they are not precisely identical, or that the counterclaim embraces additional allegations . . . does not matter. To hold otherwise would be to rob this branch of the rule of all serviceable meaning, since the facts relied upon by the plaintiff rarely, if ever, are, in all particulars, the same as those constituting the defendant’s counterclaim.”). For these reasons, although I concur in the decision to deny the petition for rehearing, I cannot join the majority’s analysis of our jurisdiction.