

No. _____

In the
Supreme Court of the United States

FINESSE WIRELESS LLC,

Petitioner,

v.

AT&T MOBILITY LLC & NOKIA OF AMERICA
CORPORATION,

Respondents.

**On Petition for Writ of Certiorari to the
United States Court of Appeals for the Federal
Circuit**

PETITION FOR WRIT OF CERTIORARI

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QUESTION PRESENTED

Despite sometimes highly technical subject matter, federal courts have always trusted lay juries to resolve patent disputes, including by evaluating expert testimony. That has been the rule since the Patent Act of 1790, which the First Congress passed and President Washington signed even before the States ratified the Seventh Amendment and its no-re-examination mandate in 1791. And deference to juries in patent cases was also the touchstone in every regional circuit before Congress created the Federal Circuit in 1982, in a statute that did not (and could not) change that constitutional norm. But as numerous commentators—including the United States—have observed, the Federal Circuit has since claimed the authority to second-guess a jury's evaluation of expert credibility on the basis of a cold appellate record, and overrule jury verdicts based on its own assessment of the expert testimony.

The question presented is:

Whether a purported inconsistency in the testimony of an expert witness is an issue of credibility for the jury to resolve, as every regional circuit holds, or whether it instead supplies a basis for judgment as a matter of law, as the Federal Circuit held below and routinely holds in other cases.

PARTIES TO THE PROCEEDING

Petitioner (plaintiff-appellee below) is Finesse Wireless LLC. Respondents are AT&T Mobility LLC (defendant-appellant below) and Nokia of America Corporation (intervenor defendant-appellant below). Ericsson Inc. (intervenor defendant in the district court) qualifies as a party under Supreme Court Rule 12.6.

CORPORATE DISCLOSURE STATEMENT

Finesse Wireless LLC's parent corporation is FWHC, LLC. No publicly held company owns 10% or more of Finesse Wireless LLC's stock.

STATEMENT OF RELATED PROCEEDINGS

United States Court of Appeals (Fed. Cir.):

Finesse Wireless LLC v. AT&T Mobility LLC,
No. 2024-1039 (judgment entered September 24,
2025; rehearing denied November 10, 2025).

United States District Court (E.D. Tex.):

*Finesse Wireless, LLC v. Cellco Partnership d/b/a
Verizon Wireless*, No. 2:21-cv-317-JRG
(judgment entered Feb. 8, 2023; post-trial
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PETITION FOR WRIT OF CERTIORARI

Two terms ago, this Court reiterated what Justices from Story to Scalia have underscored across generations: “The right to trial by jury is of such importance and occupies so firm a place in our history and jurisprudence that any seeming curtailment of the right ... should be scrutinized with the utmost care.” *SEC v. Jarjesy*, 603 U.S. 109, 121 (2024). But although that right is “justly dear to the American people,” the court below gave the jury trial right and the Seventh Amendment’s no-re-examination mandate considerably less “interest and solicitude,” *Parsons v. Bedford*, 28 U.S. (3 Pet.) 433, 434 (1830), than it deserves. Unfortunately, the decision below does not stand alone, but is an exemplar of a trend when it comes to reviewing and re-examining jury verdicts in the Federal Circuit. In that court—and that court alone—circuit precedent has become “so enamoured of judges in general, and federal judges in particular,” that it has allowed judicial pride to overcome “this sacred bulwark of the nation.” *Neder v. United States*, 527 U.S. 1, 32, 40 (1999) (Scalia, J., concurring in part and dissenting in part).

That trend has not gone unnoticed. For decades, a vocal minority of Federal Circuit judges has called attention to the court’s unjustifiable “complexity exception” to the Seventh Amendment for patent cases,” which has had “the effect of ... mak[ing] the judicial process a charade” where “notwithstanding any trial level activity, this court will do pretty much what it wants under its de novo retrial.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 993 (Fed. Cir. 1995) (Mayer, J., concurring in the judgment); *see also*,

e.g., *EcoFactor, Inc. v. Google LLC*, 137 F.4th 1333, 1357-58 (Fed. Cir. 2025) (Stark, J., concurring in part and dissenting in part) (“I worry that today’s opinion may encourage future panels of this court to engage in improper appellate factfinding.”); *NexStep, Inc. v. Comcast Cable Commc’ns, LLC*, 119 F.4th 1355, 1386 (Fed. Cir. 2024) (Reyna, J., concurring in part and dissenting in part) (chastising circuit law for failing to “recognize[] the role and resolve of the jury”); *Johns Hopkins Univ. v. Datascope Corp.*, 543 F.3d 1342, 1351 (Fed. Cir. 2008) (Newman, J., dissenting) (“[I]t is not our province to reweigh the evidence.”); *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1367 (Fed. Cir. 2007) (Newman, J., dissenting) (“[M]y colleagues simply reweigh selectively extracted evidence.”).

Nor has that criticism been limited to dissenting Federal Circuit judges. Legal academics, practicing lawyers, and even the United States have been calling out the Federal Circuit’s “improper appellate factfinding” for decades as well. *Hughes Aircraft Co. v. United States*, 140 F.3d 1470, 1474 n.2 (Fed. Cir. 1998). This Court’s intervention is long overdue.¹

¹ See, e.g., Patrick M. Arenz & Ari B. Lukoff, *Death by a Thousand Cuts: The Slow Erosion of the Right to Trial by Jury in Patent Cases*, 17 Sedona Conf. J. 781 (2016); Kelly Casey Mullally, *Legal (Un)Certainty, Legal Process, and Patent Law*, 43 Loy. L.A. L. Rev. 1109 (2010); William C. Rooklidge & Mathew F. Weil, *Judicial Hyperactivity: The Federal Circuit’s Discomfort With Its Appellate Role*, 15 Berkeley Tech. L.J. 725 (2000); Ted D. Lee & Michelle Evans, *The Charade: Trying a Patent Case to All “Three” Juries*, 8 Tex. Intell. Prop. L.J. 1 (1999); Gregory D. Leibold, *In Juries We Do Not Trust: Appellate Review of Patent-Infringement Litigation*, 67 U. Colo. L. Rev. 623 (1996).

The decision below is a perfect candidate to correct the Federal Circuit’s course. Petitioner Finesse Wireless sued AT&T for patent infringement; after extensive testimony by dueling experts debating the meaning of technical diagrams, the jury agreed with Finesse and awarded \$166 million in damages, and the district court denied AT&T’s post-trial motions for judgment as a matter of law (“JMOL”). In every other circuit—including the Fifth Circuit, where the district court was located—that would have limited AT&T’s options and prospects on appeal, given the traditional (and constitutionally mandated) appellate deference to jury findings. But this was a patent case, and so the appeal went to the Federal Circuit, and appellate re-examination of jury factfinding ensued, with the Federal Circuit applying a standard of review bearing no resemblance to the rule used in the Fifth Circuit or in any other court of appeals. The Federal Circuit breezily swept aside the jury’s considered decision to credit Finesse’s expert because (in the panel’s view) the expert did not offer a “clear or detailed explanation” for what the panel deemed “contradictory testimony.” App.9. And that, according to the panel, rendered the evidence “not sufficient to support the jury verdict,” leading the panel to wipe out the jury’s \$166 million judgment in toto; no remand, no retrial. App.9-10. To be clear, the Federal Circuit did not deem the expert evidence inadmissible—it could not, as AT&T had not preserved a *Daubert* objection. Instead, the panel deemed perceived contradictions in the testimony to be a sufficient basis to re-examine the jury’s verdict.

That result is profoundly out of step with decisions from this Court and literally every regional

circuit, which uniformly hold that “inconsistency within the testimony of [an] expert witness is an issue of credibility for the jury to resolve.” *Poertner v. Swearingen*, 695 F.2d 435, 436 (10th Cir. 1982). That longstanding rule recognizes that any cross-examination worth its salt exposes some contradictions, and it is jurors, not appellate courts, who have the opportunity to determine from an expert witness’s “demeanor upon the stand, and the manner in which he gives his testimony, whether he is worthy of belief.” *Mattox v. United States*, 156 U.S. 237, 259-60 (1895). That rule reflects not just the jury’s superior opportunity to determine credibility, but also the Seventh Amendment’s command, which is why “[c]ases of this Court reaching back into the early 19th century establish that the Constitution forbids federal appellate courts to ‘reexamine’ a fact found by the jury at trial.” *Gasperini v. Ctr. for Humanities, Inc.*, 518 U.S. 415, 458 (1996) (Scalia, J., dissenting). Some other countries might conclude that the complexity of patent cases makes them more suitable for panels of experts, but both the text of the Seventh Amendment and an unbroken history dating back to 1790 foreclose any patent exception to the Seventh Amendment.

Correcting the Federal Circuit’s overreach in this area is imperative. As Blackstone warned centuries ago, intrusions on the jury right, “though begun in trifles,” have an innate tendency to “gradually increase and spread.”⁴ William Blackstone, *Commentaries* *344. The kind of appellate re-examination exemplified by the decision below not only eviscerates “the confidence of litigants and the public in the decisions of the trial courts,” and “multiplies the number of appeals,” *Malta v.*

Schulmerich Carillons, Inc., 952 F.2d 1320, 1332 (Fed. Cir. 1991) (Newman, J., dissenting), but also robs the American patent system of the stability that companies need in structuring their affairs and in deciding where to do business. This Court should grant the petition and reverse.

OPINIONS AND ORDERS BELOW

The Federal Circuit's opinion is reported at 156 F.4th 1221 and reproduced at App.1-16. The Federal Circuit's order denying panel rehearing is unreported but reproduced at App.17-18. The district court's opinion denying AT&T's motion for judgment of noninfringement as a matter of law is reported at 689 F.Supp.3d 332 and reproduced at App.19-71.

JURISDICTION

The Federal Circuit entered its judgment on September 24, 2025, and denied panel rehearing on November 10, 2025. This Court has jurisdiction under 28 U.S.C. §1254(1).

CONSTITUTIONAL PROVISION INVOLVED

The Seventh Amendment provides:

In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

STATEMENT OF THE CASE

A. Legal Background

1. Although the “increasing complexity of technology and the corresponding patents that protect it” has caused some to second-guess “the propriety of jury resolution of patent cases,” Kimberly A. Moore, *Judges, Juries, and Patent Cases – An Empirical Peek Inside the Black Box*, 99 Mich. L. Rev. 365, 369, 371-72 (2000), “there is no dispute that infringement cases today must be tried to a jury, as their predecessors were more than two centuries ago,” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 377 (1996). Debates about “the fitness of the jury as a tribunal to determine the diversity or identity in principle of two mechanical instruments” are nothing new. *Tucker v. Spalding*, 80 U.S. (13 Wall.) 453, 455 (1871). But as this Court acknowledged long ago, it “cannot be questioned” that the Framers cast a decisive—and dispositive—vote in favor of trusting juries to decide patent infringement cases. *Id.*

The Seventh Amendment’s explicit commands that “the right of trial by jury shall be preserved,” and that “no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law,” U.S. Const. amend. VII, resulted from the Framers’ concern that making judges the “masters as to facts” in civil disputes would result at best in “arbitrary proceedings,” Letter from a Federal Farmer (Jan. 18, 1788), in 2 The Complete Anti-Federalist 321-22 (Herbert Storing ed. 1981), and at worst in “lordly court[s] of justice, always ready to protect the officers of government against the weak and helpless citizen,”

Essay of a Democratic Federalist (Oct. 17, 1787), in 3 The Complete Anti-Federalist 61. *See also* The Declaration of Independence para. 20 (U.S. 1776) (rebuking the Crown “[f]or depriving us, in many cases, of the benefits of Trial by Jury”). Indeed, even before the Bill of Rights was ratified in 1791, the same Congress that drafted the Seventh Amendment enacted the Patent Act of 1790, which enshrined a right to seek damages “assessed by a jury” for patent infringement. Act of April 10, 1790, §4, 1 Stat. 109, 111. *See generally* Davin M. Stockwell, *A Jury of One’s (Technically Competent) Peers?*, 21 Whittier L. Rev. 645, 664-68 (2000) (overviewing historical practice and concluding that “in traditional patent litigation, the roles of the court and jury did not generally deviate significantly from their respective functions in other types of civil trials”).

Enthusiasm for lay jurors in patent cases proliferated throughout the nineteenth century, even as the Industrial Revolution made the technology at issue ever more complex. As far back as 1850, this Court recognized the trend of patent cases presenting “a great number of facts [that] must be ascertained and determined from” “the testimony of witnesses; the examination of the models and drawings, or of the machines themselves; and the application of mechanical principles and combinations,” *Wilson v. Barnum*, 49 U.S. (8 How.) 258, 261-62 (1850), and the corresponding need for jurors to rely on “evidence [from] persons skilled in the art to which the patent appertains,” *Wood v. Underhill*, 46 U.S. (5 How.) 1, 5-6 (1847). But despite the growing complexity of the relevant technology, neither this Court nor Congress saw any reason to doubt lay jurors’ capacity to

compare “the identity of the machine used by the defendant with that of the plaintiff’s, or whether they have been constructed and act on the same principle.” *Battin v. Taggart*, 58 U.S. (17 How.) 74, 85 (1854).²

As technologies grew more complex, Congress doubled down on the jury’s role, amending the Patent Act of 1870 to make clear that, even though equity courts would have the power to award damages for infringement, *see* Act of July 8, 1870, §55, 16 Stat. 198, 206, Congress still intended lay jurors to play a role even in that (traditionally judge-dominated) context, *see* Act of Feb. 16, 1875, §2, 18 Stat. 315, 316. In short, what had always been true of civil litigation generally remained true of nineteenth-century patent-infringement litigation specifically: Courts “lay down to the jury the law which should govern them … and may, if they disregard instructions, set aside their verdict, [but] the ultimate response to the question must come from the jury.” *Tucker*, 80 U.S. at 455.

By the twentieth century, the “mass of highly technical factual information” present in virtually every infringement case had led every regional court of appeals to echo this Court’s pronouncements that the factfinder’s role in resolving “[c]onflicts in the

² That same understanding prevailed on the other side of the Atlantic at the time as well. *See, e.g., Neilson v. Harford*, Webster’s Patent Cases 295, 368 (1841) (Eng.) (“The court cannot be supposed to know any thing about the shape and size of boilers, or of the shape of vessels for heating air. The jury, by means of evidence, would know whether a particular direction for making a vessel to heat air had a particular meaning or not.”), *cited with approval in Mayo Collaborative Servs. v. Prometheus Lab’ys, Inc.*, 566 U.S. 66, 83 (2012), and in *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 114 (1853).

evidence” based on a “first hand evaluation of the various witnesses’ credibility … must be respected.” *Carborundum Co. v. Wilbanks, Inc.*, 420 F.2d 43, 49 (9th Cir. 1969); *accord U.S. Philips Corp. v. Ferro Corp.*, 522 F.2d 1100, 1101-02 (6th Cir. 1975) (“The resolution of conflicting evidence, credibility of witnesses and the weight of the evidence are matters within the province of the jury[] Even complex patent cases are no exception to this rule.”); *White v. Mar-Bel, Inc.*, 509 F.2d 287, 292 (5th Cir. 1975). One Ninth Circuit case put it in especially stark terms:

If there is not firm adherence to [the factfinder’s evidentiary weighing], everything is cast adrift. ... If appellate courts exercise no self-restraint, then, after the primary facts are thus found, these same facts are found anew twice over, with varying results. Not only is there no finality, but the findings may change with shifting personnel or on subsequent hearings. Not only finality, but stability is lost. All is confusion.

Jacuzzi Bros. v. Berkeley Pump Co., 191 F.2d 632, 634 (9th Cir. 1951). Likewise, in one of the last reported regional-circuit cases before Congress redirected all patent appeals to the Federal Circuit, the en banc Seventh Circuit went out of its way to underscore its “belie[f] that the judicial dispute resolution system established by our Constitution should not be infringed by the *ad hoc* shortcut of dispensing with trial judge and jury”: “In a patent case, as in any other, due regard must be given to the jury’s opportunity to judge the credibility of the witnesses and to appraise the significance of conflicting

testimony.” *Roberts v. Sears, Roebuck & Co.*, 723 F.2d 1324, 1343 (7th Cir. 1983) (en banc); *see id.* at 1327.

2. That respect for the jury’s role as factfinder is reflected in the rules governing JMOL practice, which apply in patent cases as they do in all other cases. *See generally* Fed. R. Civ. P. 1 (“These rules govern the procedure in all civil actions.”). As the Federal Rules make clear, JMOL is decidedly *not* a free pass for a court to revisit the jury’s findings and revise them as it sees fit. Instead, it is simply a mechanism that allows courts “to remove from the jury’s consideration cases or issues when the facts are sufficiently clear that the law requires a particular result.” Wright & Miller, *Federal Practice & Procedure* §2521 (3d ed. 2025 update).

More specifically, once a party “has been fully heard on an issue during a jury trial,” Federal Rule of Civil Procedure 50(a)(1) allows a court to resolve that issue against the party only if “the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Although that standard obviously requires a court to “review all of the evidence in the record,” it just as obviously forbids “mak[ing] credibility determinations or weigh[ing] the evidence.” *Reeves v. Sanderson Plumbing Prods.*, 530 U.S. 133, 150 (2000). That is because “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). In other words, a court must assess a JMOL motion against what is effectively the worst-case record for the movant, “disregarding all evidence

favorable to the moving party that the jury is not required to believe” and “draw[ing] all reasonable inferences in favor of the nonmoving party,” *Reeves*, 530 U.S. at 150-51—and, as especially relevant here, following the traditional rule that “reasonable factfinder[s]” may “credit part of [a] witness’ testimony without’ necessarily ‘accepting it all,’” *Garland v. Ming Dai*, 593 U.S. 357, 366 (2021) (second alteration original) (quoting *Banks v. Chi. Grain Trimmers Ass’n*, 390 U.S. 459, 467 (1968)). That rule is critical to ensuring that JMOL practice does not displace the proper role of the jury or run afoul of the Re-examination Clause. It is one thing for an appellate court to find that expert evidence is inadmissible as a matter of law and that, with the expert excluded, the resulting trial record includes insufficient evidence to support the jury’s verdict. But to simply disregard the properly admitted testimony of a lay or expert witness because it is “arguably inconsistent with other parts of his testimony” is judicial usurpation and a violation of the Re-examination Clause. *Banks*, 390 U.S. at 467.

B. District Court Proceedings

1. This case involves technology to reduce the interference—in technical terms, “passive intermodulation,” or “PIM”—that results when telecommunications companies use a multi-band radio to send and receive cell phone signals on multiple spectrum bands at once. C.A.App.14721, 14892. Combining multiple spectrum bands into a single radio provides considerable benefits for these companies, as deploying fewer radios means less tower space to pay for and less maintenance costs; but

at the same time, combining multiple spectrum bands into a single radio inevitably introduces interference that degrades network performance, leading to dropped calls and poor download speeds. C.A.App.14720, 14802, 14808, 14892, 15135, 15371, 15374-75.

Working late one night in early 2001, Army-captain-turned-inventor Frank Smith had a “lightbulb moment”: Just like noise-canceling headphones improve sound quality for audiophiles by sampling ambient noise and generating an inverse signal to cancel it out, a cellular service radio can improve its signal quality by sampling its own outgoing signals, predicting the PIM that will result when those outgoing signals mix together, and generating an inverse signal that cancels out the PIM from an incoming band, leaving only the original incoming signals without the PIM. C.A.App.14714-20, 14727-29. That insight ultimately led to multiple patents owned by Smith’s company Finesse Wireless, two of which are at issue here: U.S. Patent No. 7,346,134 (the ’134 patent, C.A.App.175-207) and U.S. Patent No. 9,548,775 (the ’775 patent, C.A.App.208-26).

Evidence admitted at trial showed that the ability to predict and cancel PIM offers considerable value to telecommunications companies, which are always looking for ways to maximize their multi-billion-dollar investment in spectrum licenses. C.A.App.14722, 15062. The evidence also showed that PIM cancellation was uniquely valuable to AT&T, because its licensed frequency bands fall especially close together on the spectrum, thereby increasing the probability that PIM would interfere with network

performance. C.A.App.14891-92, 15303-04; *see also* C.A.App.25544 (email acknowledging that PIM “is inevitable based on [AT&T’s] frequency plan” and “compounded further by having ... both bands in same [radio]”); C.A.App.25777 (internal document explaining that addressing PIM makes AT&T’s spectrum “much more valuable”).

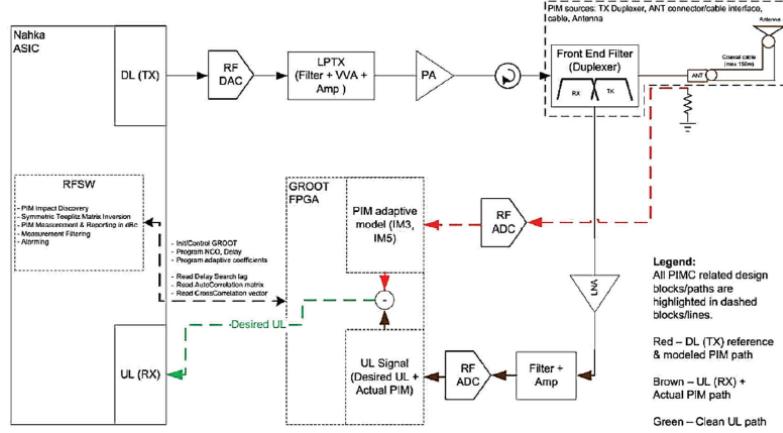
To address its “need for a [radio] that does as much as possible ... to eliminate or control PIM,” AT&T worked with Nokia to develop bespoke multiband radios with built-in PIM cancellation. C.A.App.25763, *see* C.A.App.14804-05, 25775. Nokia came up with a computer chip (specifically, a “field-programmable gate array,” or “FPGA”) called “GROOT”—an acronym for “Getting Rid of Offensive Tones.” D.Ct.Dkt.283 at 37-38. Those radios sample the outgoing signals and send them to GROOT, which predicts the interference that transmitting those signals together would cause, and subtracts the modeled interference from the incoming band. C.A.App.14908-12.

AT&T ultimately commissioned and deployed tens of thousands of GROOT-enabled radios nationwide. C.A.App.14805-06, 15221, 15290. When Smith later came across industry marketing materials touting GROOT’s PIM-cancellation capabilities, he recognized his own invention. D.Ct.Dkt.282 at 223. So Finesse sued AT&T in the Eastern District of Texas for infringing the ’134 and ’775 patents, C.A.App.267-86, and Nokia intervened as a defendant, C.A.App.389-90.

2. As relevant here, the ’134 patent claims a method “to reduce interference in signals subject to

intermodulation products” by sending “the entire band in which there can be signals of interest or signals that can generate interference” into a receiver, “isolat[ing] signals of interest and interfering signals,” and then “cancel[ing] out” the resulting interference. C.A.App.175. The ’775 patent claims a method for modeling PIM through various multiplications, including “given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$.” C.A.App.224. To prove that GROOT-enabled radios infringed those claims, Finesse called Dr. Jonathan Wells, an expert witness with an electronics Ph.D. and over 35 years of experience in wireless communications, C.A.App.14879-83—experience so extensive that AT&T did not even attempt to argue that Dr. Wells was unqualified or unreliable when it came to explaining how PIM-cancellation worked, *see* C.A.App.4341, 4350-51.

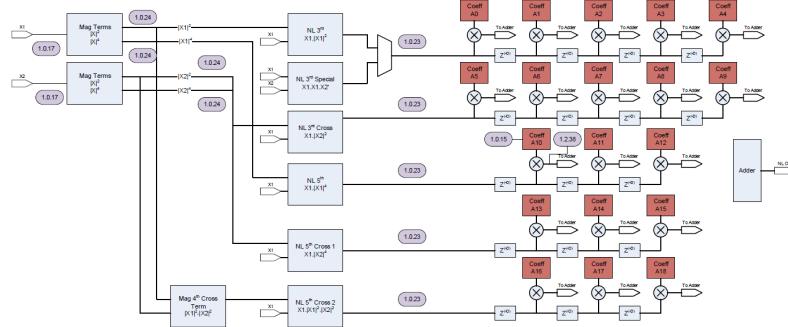
Dr. Wells used the following diagram (produced by Nokia during discovery) to explain how GROOT-enabled radios cancel PIM:



C.A.App.26421. The radio's outgoing signals—“DL(TX),” or “downlink(transmit)” —start in the box at the top left as digital signals, are converted into analog signals by the “RF DAC” (i.e., digital-to-analog converter), and travel along the horizontal path at the top of the diagram to the radio’s antenna (in the dashed box at the top right). C.A.App.14908-09. Of course, in addition to sending those outgoing analog signals, the antenna is also receiving incoming analog signals—“UL(RX)” or “uplink(receive)” —which are separated out by a front-end filter and sent down the vertical black line with brown arrows. Meanwhile, a coupler (the black zigzag depicted underneath the antenna) copies the outgoing signals to produce “DL(TX) reference” signals that travel down the dashed red path to a receiver that converts them from analog to digital (i.e., the “RF ADC,” or analog-to-digital converter). C.A.App.14909-14; *see* C.A.App.14927, 15340-41. The RF ADC then sends those digital signals on to the GROOT FPGA, which models the resulting PIM through the aptly named “PIM adaptive model.” GROOT then subtracts that

modeled PIM from the signals on the incoming band (which includes both the signals the radio is trying to receive as well as the interference caused by the outgoing signals). The result is a cleaned-up receive band including only the signals that the radio is trying to receive, which exits GROOT on the dashed green line. C.A.App.14909-21.

To explain the particulars of GROOT's PIM adaptive model, Dr. Wells used the following diagram (from another document produced by Nokia during discovery):



C.A.App.26485. As the next page of the document explains, the signals from the dashed red line—X1 and X2—enter the PIM adaptive model and get multiplied together in as many as 19 different ways (“Coeff A0” through “Coeff A18” on the diagram above, or a_0 through a_{18} on the list below):

Using the two transmit bands input signals (X_1 and X_2), the Non-Linear block is capable of modeling IM3 with 5 taps, IM3 cross bands with 5 taps, IM5 with 3 taps and two types of cross bands IM5 with 3 taps:

$p(n) = a_0 x_1(n-2*D) ^2 x_1(n-2*D) +$	IM3 or IM3_Special
$a_1 x_1(n-1*D) ^2 x_1(n-1*D) +$	IM3 or IM3_Special
$a_2 x_1(n) ^2 x_1(n) +$	IM3 or IM3_Special
$a_3 x_1(n+1*D) ^2 x_1(n+1*D) +$	IM3 or IM3_Special
$a_4 x_1(n+2*D) ^2 x_1(n+2*D) +$	IM3 or IM3_Special
$a_5 x_2(n-2*D) ^2 x_1(n-2*D) +$	IM3_Cross
$a_6 x_2(n-1*D) ^2 x_1(n-1*D) +$	IM3_Cross
$a_7 x_2(n) ^2 x_1(n) +$	IM3_Cross
$a_8 x_2(n+1*D) ^2 x_1(n+1*D) +$	IM3_Cross
$a_9 x_2(n+2*D) ^2 x_1(n+2*D) +$	IM3_Cross
$a_{10} x_1(n-1*D) ^4 x_1(n-1*D) +$	IM5
$a_{11} x_1(n) ^4 x_1(n) +$	IM5
$a_{12} x_1(n+1*D) ^4 x_1(n+1*D) +$	IM5
$a_{13} x_2(n-1*D) ^4 x_1(n-1*D) +$	IM5_Cross1
$a_{14} x_2(n) ^4 x_1(n) +$	IM5_Cross1
$a_{15} x_2(n+1*D) ^4 x_1(n+1*D) +$	IM5_Cross1
$a_{16} x_2(n-1*D) ^2 x_1(n-1*D) ^2 x_1(n-1*D) +$	IM5_Cross2
$a_{17} x_2(n) ^2 x_1(n) ^2 x_1(n) +$	IM5_Cross2
$a_{18} x_2(n+1*D) ^2 x_1(n+1*D) ^2 x_1(n+1*D)$	IM5_Cross2

The Non-Linear engine is capable of modeling:

$X_1 |X_1|^2$ or $X_1.X_1.X_2^2$
 $X_1 |X_2|^2$
 $X_1 |X_1|^4$
 $X_1 |X_2|^4$
 $X_1 |X_1|^2, |X_2|^2$

C.A.App.26486.

After several days of evidence featuring Dr. Wells' testimony and AT&T's cross-examination, as well as the testimony and cross-examination of AT&T's counter-expert, AT&T moved for judgment of noninfringement as a matter of law. C.A.App.15709. The district court denied the motion and sent the case to the jury, D.Ct.Dkt.285 at 176, which ultimately found that the accused radios infringed both the '134 and '775 patents, and awarded Finesse \$166 million in damages, C.A.App.166-72.

After the verdict, AT&T renewed its motion for JMOL on noninfringement, and separately moved for JMOL on damages and for a new trial. Nowhere in any of those motions did AT&T argue that Dr. Wells' testimony was inadmissible under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 589 (1993), and

its progeny. *See* C.A.App.13673-13756, 14310-14408. After “hear[ing] lengthy oral argument,” App.20, the district court denied all three motions in extensive written opinions. *See* App.19-71 (denying JMOL as to infringement); C.A.App.42-57 (denying JMOL as to damages); C.A.App.58-72 (denying new trial).

C. The Federal Circuit’s Decision

1. AT&T appealed to the Federal Circuit, which reversed the district court, vacated the jury’s \$166 million damage award, and awarded JMOL to AT&T with no possibility of retrial, all in a scant fourteen pages. Although the decision paid lip service to the need to “review a district court’s denial of JMOL under the law of the regional circuit, here the Fifth Circuit,” App.3, the panel did not cite a single Fifth Circuit case anywhere in its opinion. In fact, notwithstanding the sizable stakes, the Federal Circuit’s analysis barely cited any law at all, and tellingly, the lone case that the panel *did* cite in support of overturning the jury’s infringement verdict—*Johns Hopkins University v. Datascopic Corp.*, 543 F.3d 1342 (Fed. Cir. 2008), *see* App.9—is a case infamous for “exemplify[ing] the Federal Circuit’s willingness to review factual determinations made by juries.” Arnez & Lukoff, *supra* n.1, at 787-91; *see Datascopic*, 543 F.3d at 1351 (Newman, J., dissenting) (chiding the majority for choosing to “reweigh the evidence”).

The panel here followed *Datascopic* down that same forbidden road. As to the ’134 patent, the panel viewed this case as turning on whether Dr. Wells contradicted himself when explaining which signals travel along the dashed red line from the coupler into the ADC receiver. And as to the ’775 patent, the panel

viewed this case as turning on whether Dr. Wells correctly identified the seven multiplications claimed in the patent within the nineteen multiplications performed in GROOT's PIM adaptive model, and correctly concluded that the accused products performed the claimed multiplications despite also applying additional modulus and complex conjugate operations.

As to the '134 patent, Dr. Wells' ultimate conclusion was that the accused radios infringe by sending "the entire band in which there can be signals of interest or signals that can generate interference" into the RF ADC on the dashed red line, C.A.App.175, because the RF ADC meets the technical definition of a "receiver," C.A.App.25811. On direct examination, Dr. Wells testified (in accordance with the diagram's legend) that the red line depicted the DL(TX) reference signals plus the modeled PIM path. *E.g.*, C.A.App.14918-21. But on cross-examination, counsel for AT&T pointed out that the modeled PIM is created in GROOT (i.e., downstream from the ADC receiver), which prompted Dr. Wells to clarify that the signals going into the ADC are the DL(TX) reference signals—i.e., copies of the outgoing signals—that GROOT's PIM adaptive model ultimately multiplies together to *create* the modeled PIM path. *E.g.*, C.A.App.15011, 15018 (referring to "x1 and x2"). After watching and hearing all of the direct examination, cross-examination, and re-direct examination in person, the jury credited Dr. Wells' testimony and found that the GROOT-enabled radios infringed the '134 patent. The Federal Circuit panel, however, simply disagreed, and resolved what it perceived to be a contradiction differently. The panel faulted Dr. Wells because he

“offered no clear or detailed explanation” for what the panel deemed a “confusing change of course.” App.9-10. In the panel’s view, that purported failure rendered Dr. Wells’ testimony too “unclear” “to support the jury verdict.” App.8-9. And based solely on that purported lack of clarity, the panel reversed the jury’s ’134 infringement verdict. To be clear, the panel did not deem Dr. Wells’ testimony inadmissible as a matter of law. That was not even an option for the panel, as AT&T had failed to preserve any *Daubert* objection to Dr. Wells and his testimony. Instead, the panel simply seized on the perceived contradiction in Dr. Wells’ testimony to disregard the portion of the contradictory testimony that supported the jury’s verdict.

The panel’s treatment of the ’775 infringement verdict was, if possible, even more cursory. The panel concluded “that no reasonable jury could have found the accused radios perform the seven claimed multiplications,” because the radios also performed modulus and complex conjugate operations, and because (the panel said) “Dr. Wells did not testify how” the “distinct multiplications” “list[ed]” in the internal Nokia document “map onto the seven claimed multiplications” from the patent, App.13-14.

2. Finesse petitioned for rehearing. As to the ’134 patent, Finesse emphasized AT&T’s failure to preserve a *Daubert* claim, and thus, “[e]ven on the assumption that Dr. Wells’ testimony was at times confusing and arguably inconsistent, it was still perfectly proper for the jury to choose to credit those portions of the testimony that supported infringement.” C.A.Dkt.70 at 9-10. As to the ’775

patent, Finesse emphasized that Dr. Wells *did* “testify how” GROOT’s multiplications “map onto the seven claimed multiplications” regardless of the modulus and complex conjugate operations. *Id.* at 14 n.1. In fact, that testimony was glaringly obvious to anyone who was actually in the courtroom: Dr. Wells used the courtroom’s audiovisual technology to physically “draw out” how the patent’s multiplications reduce to GROOT’s multiplications when “S1 would be x1, S2 would also be x1, and S3 would be x2 prime.” C.A.App.14968-70.

The panel denied Finesse’s petition for rehearing without explanation. App.17-18.

REASONS FOR GRANTING THE PETITION

The decision below exemplifies the Federal Circuit’s steady march away from the commands of the Seventh Amendment. This Court has said many times, in many different contexts, that perceived problems with expert testimony “are within the province of the jury to resolve.” *Barefoot v. Estelle*, 463 U.S. 880, 902 (1983). And the Court has maintained that same rule in the patent context for well over a century: After recognizing that patent-infringement cases almost “undoubtedly” involve “the evidence of experts,” the Court nonetheless held in 1869 that infringement remains “a question of fact for the jury,” and cautioned that it is improper for a court to “set aside a verdict unsatisfactory to itself, as against the weight of [the] evidence.” *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 814 (1869). The Court has been equally emphatic about the JMOL standard under Rule 50, forbidding courts from “impermissibly substitut[ing]

[their] judgment concerning the weight of the evidence for the jury's." *Reeves*, 530 U.S. at 153.

To be sure, there is plenty of dubious expert testimony out in the world, and this Court has developed an entire body of jurisprudence to keep juries from relying on junk science. *See generally Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999); *Daubert*, 509 U.S. 579. But once the reliability of the competing experts is established and the jury hears their competing views, including any claimed contradictions on cross-examination, there is no valid basis for appellate second-guessing of the jury's resolution of the battle of the experts. Employing a judicially perceived contradiction in one side's expert testimony to disregard that testimony and enter JMOL against the party that prevailed before the jury is a clear usurpation and a violation of the Seventh Amendment. Reams of caselaw from the regional circuits recognize as much and make clear that, even in "extreme" cases when expert testimony "appears contradictory," the jury may nonetheless choose to credit that testimony. *Poertner*, 695 F.2d at 437. That is well-nigh the opposite of what the Federal Circuit held below and in far too many other cases.

This Court should intervene and correct this troubling pattern. Members of this Court routinely describe questions of "who decides" as "immensely important," *Trump v. CASA, Inc.*, 606 U.S. 831, 871-72 (2025) (Kavanaugh, J., concurring) (emphasis omitted), and that is especially true of the division of labor between judge and jury. And the recurring instances of improper factfinding by the Federal Circuit defy any attempt to dismiss this case as a one-

off; instead, “[i]n patent-infringement cases,” the Federal Circuit has made itself “ringleader, and the trial is becoming more of a sideshow every day.” Leibold, *supra* n.1, at 625-26. This Court should not allow the Federal Circuit’s disregard of the jury’s role in patent cases to continue.

I. The Decision Below Is Profoundly Wrong.

The Federal Circuit’s decision below runs roughshod over the basic principle that juries, not appellate judges, are responsible for weighing expert testimony in patent cases just as in all other cases. The Federal Circuit’s “clear misapprehension” of that principle warrants correction by this Court. *Tolan v. Cotton*, 572 U.S. 650, 659 (2014).

1. For well over a century, this Court has made clear that juries are entrusted with evaluating expert evidence in patent cases to determine factual issues, and that courts have no special license to set aside a jury’s factual findings in patent cases. As the Court explained in *Bischoff* more than 150 years ago, it is “undoubtedly the common practice” in patent cases to rely on “the evidence of experts”; it would be the rare patent case that is “so clear that the court may feel no need of an expert.” 76 U.S. at 814. Nevertheless, the Court warned, a court must resist the temptation “to set aside a verdict unsatisfactory to itself, as against the weight of evidence,” just because it may have a different view of the expert evidence. *Id.* In all infringement cases, regardless of whether experts are involved, “the identity or diversity of the several inventions” remains “a question of fact for the jury.” *Id.* The Court thus emphatically rejected any suggestion that the special need for expert testimony

in patent cases justifies some special license for judges to review the jury’s findings, explaining that the ordinary “control[s] which the courts can always exercise over unsatisfactory verdicts will enable them to prevent any wrong or injustice” in patent cases too. *Id.* at 815. After all, if appellate courts were “to decide on these often recondite and difficult questions” themselves, without hearing live testimony from the “scientific persons familiar with the subjects of the inventions,” they “might be led into irremediable errors, which would produce great injustice to suitors.” *Id.*

That is an apt description of what happened here, and underscores the Federal Circuit’s error in ignoring this Court’s longstanding precedent. The principles adopted in *Bischoff* were a regular feature of regional circuit law in patent cases before the Federal Circuit was established—but the case has since been virtually ignored in the Federal Circuit, where it has been cited just twice in the past twenty years (once in a nonprecedential opinion and once in a Judge Newman dissent). That is a profound mistake, as Congress did not—and could not—authorize a patent exception to the Re-examination Clause in creating a specialized appellate court for patent appeals. While *Bischoff* has fallen into desuetude in the Federal Circuit, *Datascope*, the *ne plus ultra* of appellate re-examination, has been cited a dozen times since it was decided, and its progeny have been cited several times more. That substitution of Federal Circuit precedent for this Court’s controlling rule warrants this Court’s attention.

2. The Federal Circuit's approach conflicts not only with settled law in the patent context, but with the division of labor between judges and juries more generally. The Federal Rules of Civil Procedure apply equally to "all civil actions and proceedings," Fed. R. Civ. P. 1; they "do[] not vary from one substantive context to the next," David Marcus, *Trans-Substantivity and the Processes of American Law*, 2013 BYU L. Rev. 1191, 1191 (2013). In the patent context as in all other contexts, a court "substituting its judgment concerning the weight of the evidence for the jury's" is always "impermissible." *Reeves*, 530 U.S. at 153.

The decision below thus commits the same error that this Court corrected in *Reeves*, where this Court reversed a Fifth Circuit decision that "disregarded critical evidence favorable to [the plaintiff]" in granting JMOL for the defendant. 530 U.S. at 152. So too here: The Federal Circuit simply "disregarded critical evidence favorable to [Finesse]" by employing perceived contradictions in Dr. Wells' testimony as an opening to disregard the half of the supposedly contradictory statements that favored Finesse and that the jury evidently credited. *Id.* Here, as in *Reeves*, that is an error of constitutional dimension that fully warrants reversal.

The decision below also practically guarantees lower-court confusion. This case comes from the Eastern District of Texas, which has become the busiest court for patent cases in the nation. *See* Theresa Schliep, *EDTX Eases Sherman Caseload in Assignment Order*, Law360 (Mar. 3, 2025), <https://perma.cc/T8V9-KQRJ>. And the Fifth Circuit

has long articulated an “especially deferential” standard for post-trial JMOL motions, *Brown v. Bryan Cnty.*, 219 F.3d 450, 456-57 (5th Cir. 2000), repeatedly emphasizing that “inconsistent testimony ‘present[s] questions of credibility which require jury resolution,’” *Sanchez v. Young Cnty.*, 956 F.3d 785, 793 (5th Cir. 2020). That deference accords with everything that this Court has said about the need for appellate courts to respect the jury’s “first-hand knowledge of witnesses, testimony, and issues” and “give due consideration to the first-instance decisionmaker’s ‘feel for the overall case.’” *Weisgram v. Marley Co.*, 528 U.S. 440, 443 (2000). The decision below, however, means that cases filed in the Eastern District of Texas will face two different standards of review on appeal after the jury enters its verdict: the Fifth Circuit’s traditional deferential standard for everything but patent cases, and the Federal Circuit’s nearly de novo review of the evidence (and especially of any expert testimony) in patent cases alone. That is untenable.

Nor has the Federal Circuit ever offered any plausible justification for its uniquely intrusive appellate review of jury verdicts in patent cases and the expert testimony on which they rely. In *Datascope*, for instance, the panel majority could not bring itself to say that “the jury … necessarily acted unreasonably.” 543 F.3d at 1349 n.3. But the panel majority nevertheless threw out the jury’s verdict and found no infringement as a matter of law, because it thought—based on a single line of questioning plucked from cross-examination and stripped of context—that the expert testimony showing infringement was “contradictory.” *Id.* at 1349. *But cf. id.* at 1350 (Newman, J., dissenting) (“There is no sufficient

ground for this court’s independent appellate trial of the factual issues that were decided by the jury and sustained by the district court.”).

And since *Datascope*, things have only gotten worse. In *Smith v. Garlock Equipment Co.*, for instance, the Federal Circuit wiped away a jury verdict for the inventor and replaced it with judgment for the defendant, believing that *Datascope* gave it the authority to deem the inventor’s expert “not credible.” 658 F.App’x 1017, 1026-27 (Fed. Cir. 2016). As in this case, the Federal Circuit did not mean that the expert’s testimony was unreliable and thus should have never been heard by the jury. Instead, it just substituted its own views about how to resolve admissible but arguably contradictory evidence for the jury’s views as reflected in the verdict. Or consider *ParkerVision, Inc. v. Qualcomm Inc.*, in which the Federal Circuit acknowledged that “the finder of fact is normally free to believe a witness, even if that witness’s testimony is impeached and even if the witness’s direct and cross-examination are not entirely consistent,” but then went on to assert that *Datascope* created an exception to that general rule. 627 F.App’x 921, 923-24 (Fed. Cir. 2015). That is not remotely consistent with Rule 50, this Court’s precedent, or the Seventh Amendment. *See Reeves*, 530 U.S. at 152-53; *Bischoff*, 76 U.S. at 814-15.

This case is only the latest example of that same troubling trend. The Federal Circuit’s decision to second-guess the jury’s decision to credit Dr. Wells’ testimony was not justified based on some theory of the Re-examination Clause or some articulated legal defect in his testimony. To the contrary, re-

examination of jury verdicts based on judicially identified contradictions in one side’s testimony has become so second nature in the Federal Circuit that the panel perceived no need to justify its appellate re-examination. But the costs of that unjustified re-examination are substantial. Decisions like this “undermine the legitimacy of the district courts, multiply appeals, and needlessly reallocate judicial authority.” *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 324-25 (2015) (ellipses omitted) (reversing the Federal Circuit for improper de novo review).

The lack of justification for the Federal Circuit’s appellate re-examination is no accident. That re-examination is a nonstarter under the Seventh Amendment and the traditional rules governing JMOL. Those rules are trans-substantive and binding everywhere—if anything, they deserve even greater respect in the patent context, because patent law is “a field where so much depends upon familiarity with specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience.” *Id.* at 327. The decision below nevertheless flouts those controlling rules, and drives a wedge between patent practice and civil litigation by creating a de facto “complexity exception” to the Seventh Amendment for patent cases.” *Markman*, 52 F.3d at 993 (Mayer, J., concurring in judgment). This Court should not countenance that result.

II. The Decision Below Contravenes Decisions From Other Courts of Appeals.

The decision below entrenches a clear conflict between the Federal Circuit and the other courts of

appeals over the proper standard of appellate review for jury verdicts. The Federal Circuit's approach in *Datascope* and its progeny, including the decision below, cannot be squared with precedent from the other circuits.

In *Poertner v. Swearingen*, for instance, the Tenth Circuit confronted a case in which the plaintiff's sole expert offered testimony that "appear[ed] contradictory," and "several defense experts testified" against liability. 695 F.2d at 437. But in the Tenth Circuit, unlike the Federal Circuit, the jury's decision to credit the plaintiff's apparently inconsistent expert testimony carried the day. As the Tenth Circuit explained, "inconsistency within the testimony of [the plaintiff's] expert witness is an issue of credibility for the jury to resolve," making the Tenth Circuit properly "unwilling to weigh" the "conflicting testimony of plaintiff's single witness against the strong contrary expert testimony defendant presented." *Id.* at 436, 438; *accord, e.g., City of Fort Collins v. Open Int'l, LLC*, 146 F.4th 929, 947 (10th Cir. 2025) (explaining that even for "conclusory, self-serving, and self-contradictory" testimony, it is "the jury's role to assess the witnesses' credibility and weigh the evidence"). Put simply, if this case had been appealable to the Tenth Circuit instead of the Federal Circuit, Finesse would have prevailed.

So too in the Sixth Circuit, as illustrated by *Teti v. Firestone Tire & Rubber Co.*, 392 F.2d 294 (6th Cir. 1968). There, a "skillful" cross-examination by defense counsel "destroy[ed] the strength of" the plaintiff's expert testimony by getting the expert to contradict himself. *Id.* at 298. Nonetheless,

“[k]eeping in mind that we must view the evidence most favorably toward [the] plaintiff” in considering a JMOL motion, the Sixth Circuit refused to “usurp the function of a jury and determine the credibility of a witness,” and vacated the trial court’s judgment for the defendant. *Id.* That cannot be reconciled with the Federal Circuit’s refusal here to permit the jury to disregard the purported contradictions in Dr. Wells’ testimony and its decision instead to seize on the perceived contradictions to disregard the portions of the testimony that affirmatively support the jury’s verdict.

The First Circuit likewise agrees with the Sixth and Tenth Circuits, as illustrated by *Payton v. Abbott Labs*, 780 F.2d 147 (1st Cir. 1985), a decision joined by then-Judge Breyer. In *Payton*, a defendant who lost at trial appealed the denial of its post-verdict JMOL motion, arguing that the jury’s verdict could not be sustained on the basis of inconsistent expert testimony. The First Circuit agreed with the defendant that “[t]he expert testimony in this case was certainly not free of ambiguity and uncertainty,” but upheld the verdict nonetheless, because “it is a matter for the jury to resolve any inconsistencies in expert testimony.” *Id.* at 156-57; *see also, e.g., Samuels v. Hood Yacht Sys. Corp.*, 70 F.3d 150, 153 (1st Cir. 1995) (“Where [the witness] was self-contradictory, the jury could believe whichever account it chose.”).

The list could go on. Legions of cases stand for the “well established” proposition that “[i]t is the province of the jury and not of the court to determine whether a witness who may have been inaccurate, contradictory and even untruthful in some respects

was nonetheless entirely credible in the essentials of his testimony.” *United States v. Flores*, 945 F.3d 687, 710-11 (2d Cir. 2019) (alteration original; emphasis omitted); *see also, e.g.*, *Vasquez v. District of Columbia*, 110 F.4th 282, 290 (D.C. Cir. 2024); *Whitehead v. Bond*, 680 F.3d 919, 927 (7th Cir. 2012); *Digsby v. McNeil*, 627 F.3d 823, 832 (11th Cir. 2010). In other words, given the need to “credit all reasonable inferences that support the verdict,” “a witness’ testimony is not insufficient to establish a point simply because he or she later contradicts or alters it.” *United States v. Boone*, 279 F.3d 163, 189 (3d Cir. 2002); *see also Batsell v. United States*, 403 F.2d 395, 401 (8th Cir. 1968) (“Evidence is not necessarily insufficient merely because a witness’ testimony has been contradictory and the explanations therefor difficult of belief.”). That is not just established practice; it is a rule “whose underpinnings rest in the United States Constitution,” which requires that “jury verdicts receive the respect to which they are entitled under the Seventh Amendment.” *Mallick v. Int’l Bhd. of Elec. Workers*, 644 F.2d 228, 234 (3d Cir. 1981).

The Federal Circuit appears to view the creation of a specialized court for patent appeals as an excuse to deviate from that well-established rule in the regional circuits. That is doubly problematic. First, the proper standard for reviewing jury verdicts and reviewing JMOL denials is a procedural issue on which the Federal Circuit is duty bound to apply regional circuit precedent. *See, e.g.*, *Wi-LAN, Inc. v. Apple Inc.*, 811 F.3d 455, 461 (Fed. Cir. 2016). Despite lip-service to that effect, the fact that the Federal Circuit is citing its own misguided precedents like *Datascope* in lieu of citing *Bischoff* or any regional

circuit precedent is proof positive that the Federal Circuit has charted its own path. Second, whatever other benefits of uniformity or expertise Congress perceived in creating the Federal Circuit, Congress had zero intent and zero ability to create a patent exception to the Seventh Amendment. This Court should grant review and restore those first principles.

III. Correcting The Federal Circuit’s Overreach Is Exceptionally Important, And This Case Is An Ideal Vehicle.

The Federal Circuit’s unique position in the federal judiciary makes its refusal to defer to jury findings enormously consequential. Once a patent case makes it to the jury, the case will almost necessarily turn on the jury’s assessment of the admissible evidence, which will routinely feature contradictory expert witness testimony. Indeed, the need for expert testimony inheres in patent disputes, as the patent was only issued because a patent examiner thought the technology was nonobvious. Moreover, as a practical matter, any cross-examination worth its salt will expose arguable contradictions in the testimony of the other side’s expert. If that is enough to create an opening for an appellate court to pick which side of the apparent contradiction it finds more persuasive, then no jury verdict is safe. That makes the Federal Circuit’s unpredictable standard for reviewing jury findings based on expert testimony both exceptionally important and profoundly destabilizing for inventors, accused infringers, and their investors—not to mention busy district courts.

The decision below is not some outlier, but part of a well-acknowledged pattern. This Court itself acknowledged “not insubstantial” concerns about the Federal Circuit’s predilections for appellate factfinding just four years after the Federal Circuit was created. *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809, 810 (1986). And although the Federal Circuit’s penchant for non-deferential review has not been *limited* to jury findings in patent cases, *see, e.g.*, *Teva Pharms.*, 574 U.S. at 334-36 (reversing the Federal Circuit for reviewing district court factual findings *de novo*); *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 572 U.S. 559, 560-61 (2014) (reversing the Federal Circuit for failing to defer to district court fee determinations), it has been at its worst in that context. *See, e.g.*, Lee & Evans, *supra* n.1, at 14; *see generally supra* n.1. And that is not just the assessment of a few disgruntled litigants or ivory-tower academics; instead, calls for this Court’s intervention have regularly come from inside the Federal Circuit itself, where a frustrated minority has spent years protesting as their colleagues “climb[] Jacob’s Ladder in search of perfection in the jury verdict.” *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1266 (Fed. Cir. 2010) (Gajarsa, J., dissenting) (“[B]y substituting its own fact finding for that of the jury, [the majority] fails to allow the jury to perform its proper function.”); *see supra* pp.1-2.

The Federal Circuit’s freewheeling factfinding in patent-infringement cases is not only profoundly wrong, but carries significant real-world costs. “Clarity is essential to promote progress, because it enables efficient investment in innovation.” *Festo*

Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730-31 (2002). Stable verdicts promote clarity, *see Peña-Rodriguez v. Colorado*, 580 U.S. 206, 218 (2017); the Federal Circuit’s unpredictable disregard of jury verdicts destroys it, *see Jacuzzi Bros.*, 191 F.2d at 634. An appellate panel will always be able to find some inconsistency in an expert witness’s testimony, since “[a]s every trial lawyer knows, the testimony given in court rarely conforms precisely.” *Goldberg v. United States*, 425 U.S. 94, 127-28 (1976) (Powell, J., concurring in the judgment). If the Federal Circuit can disregard a jury verdict any time it finds an inconsistency in the expert testimony supporting that verdict, every verdict is subject to appellate re-examination. Still worse, that approach creates perverse incentives for litigants, who will have every reason to appeal no matter how definitive the jury’s verdict as reviewed by the district court judge who actually observed the trial rather than just a cold paper record on appeal.

This case supplies both a perfect example of the problem and a perfect opportunity to correct the Federal Circuit’s course. The panel’s disagreement with the jury’s decision to credit Dr. Wells was the sole reason that the panel gave for directing judgment for AT&T as to the ’134 patent. *See App.9-10*. The court did not—and could not—find that Dr. Wells’ testimony on this point was inadmissible as a matter of law. But under Federal Circuit precedent there was no need to deem Dr. Wells’ testimony inadmissible as a matter of law; the court could simply deem Dr. Wells’ testimony contradictory, pick the portion of the testimony it found more credible, cite *Datascope* and call it a day. That is precisely what AT&T invited the Federal

Circuit to do as the lead argument in its brief on appeal, *see* C.A.Dkt.28 at 34-39 (citing *Datascope*), providing a vivid illustration of how patent defendants (and their counsel) know that even after losing at trial, they can always “roll the dice in hope that the Federal Circuit will ... find facts not found by the lower tribunal.” Rooklidge & Weil, *supra* n.1, at 751-52 (footnote omitted). And it is the same species of judicial “self-esteem” that infected the panel’s analysis of the ’775 patent, leading the panel to overlook Dr. Wells’ clear testimony explaining specifically how the ’775 patent performed each of the claimed multiplications. *Neder*, 527 U.S. at 39 (Scalia, J., concurring in part and dissenting in part). This Court should intervene to stop the Federal Circuit’s ongoing usurpation of the jury’s role, and to remind the Federal Circuit to assess patent infringement verdicts with the deference required by the Seventh Amendment.

CONCLUSION

The Court should grant certiorari and reverse.

Respectfully submitted,

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February 6, 2026

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Appendix A

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

No. 24-1039

FINESSE WIRELESS LLC,

Plaintiff-Appellee,

v.

AT&T MOBILITY LLC, NOKIA OF AMERICA CORP.,

Defendants-Appellants,

ERICSSON, INC.,

Defendant.

Decided: Sept. 24, 2025

Before: Moore, *Chief Judge*, Linn and Cunningham,
Circuit Judges.

OPINION

Moore, *Chief Judge*.

AT&T Mobility LLC (AT&T) and Nokia of America Corporation (Nokia; collectively, Appellants) appeal the United States District Court for the Eastern District of Texas' denial of judgment as a matter of law (JMOL) of noninfringement for the asserted claims of U.S. Patent Nos. 7,346,134 and 9,548,775. Appellants also appeal the district court's

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denial of a new trial on damages. For the following reasons, we reverse the denial of JMOL and vacate the damages award.

BACKGROUND

Finesse Wireless LLC (Finesse) owns the '134 and '775 patents, which generally relate to methods for mitigating intermodulation product (IMP)¹ interference in radios. '134 patent at Abstract, 1:23-27; '775 patent at Abstract, 1:19-24. Finesse sued AT&T for allegedly infringing claims 1-3 of the '134 patent and claims 1, 4, 9, 16, 21, 29, and 36 of the '775 patent by using the PIM cancellation (PIM-C) feature in Nokia radios. J.A. 267-87. Nokia intervened. J.A. 389-90.

The jury found all asserted claims valid and infringed, and awarded \$166,303,391 in lump-sum damages for the remaining life of the '134 and '775 patents. J.A. 169-71. Appellants moved for JMOL of noninfringement, JMOL on damages, and a new trial, all of which the district court denied. J.A. 1-72. Appellants appeal. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

¹ Radios avoid signal interference by operating on different frequencies, but their transmit signals can combine when encountering obstacles (e.g., metal fences, loose cable connections, rusted connectors) to form new frequencies called “intermodulation products” (IMPs). J.A. 14892, 14920. IMPs caused by passive obstacles are called “passive intermodulation products” (PIM). J.A. 14895. Internal PIM is caused by mechanical issues inside the radio, while external PIM is caused by sources outside the radio. J.A. 15223-24.

DISCUSSION

I. JMOL of Noninfringement

We review a district court's denial of JMOL under the law of the regional circuit, here the Fifth Circuit. *Wi-LAN, Inc. v. Apple Inc.*, 811 F.3d 455, 461 (Fed. Cir. 2016). The Fifth Circuit reviews denials of JMOL de novo, reversing "only if, when viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable jurors could not arrive at any contrary conclusion." *Id.* (citing Fifth Circuit law).

We review a jury's finding of infringement for substantial evidence. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 969 (Fed. Cir. 2022). "A factual finding is supported by substantial evidence if a reasonable jury could have found in favor of the prevailing party in light of the evidence presented at trial." *Id.* (internal citations omitted). We review claim construction de novo and any underlying factual findings supporting the district court's construction for clear error. *Wi-LAN*, 811 F.3d at 461.

A. '134 Patent

The '134 patent claims a method for reducing IMP interference by isolating "signals of interest" from "interference generating signals" and then canceling out the "interference generating signals" using a computed estimate of the IMPs. '134 patent at Abstract, 2:1-18. Claim 1 is representative.

1. A method comprising:

[a] over-sampling, at a desired frequency, a passband of received signals to create a bit

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stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;

[b] isolating signals of interest in the bit stream using one or more decimating filters;

[c] isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;

[d] computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;

[e] cancelling out one or more inband intermodulation products using the estimate of the intermodulation products; and

[f] performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.

Id. at 28:2-26 (emphases added).

As the plaintiff, Finesse bore the burden of proving the accused radios sample a passband of signals that includes both the “signals of interest” and “interference generating signals.” *Id.* at 28:1-6

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(limitation 1[a]). Appellants argue Finesse failed to show the accused radios sample the “signals of interest” and “interference generating signals.” Appellants Br. 35-45. We agree.

At trial, Finesse’s infringement expert, Dr. Jonathan Wells, testified the accused radios infringe the asserted claims of the ’134 patent by relying on a Nokia technical document depicting how the accused radios operate. *See* J.A. 14914-21, 15009-19; J.A. 26421 (Nokia document, re-produced below).

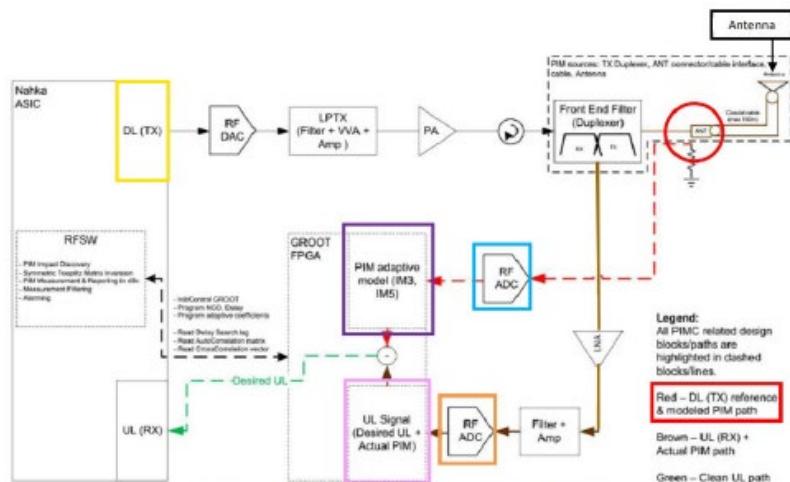


Figure 1: PIMC Overall Behavioral Architecture

Finesse Br. 15 (annotating J.A. 26421).

Dr. Wells testified the radio frequency analog-to-digital converter (RF ADC, depicted in blue box) is a receiver that samples the claimed “signals of interest” and “interference generating signals” (both depicted in dashed red path) to create a bit stream. J.A. 14914 at 46:8-10, 14918 at 50:20-24, 14925 at 57:3-8. Dr. Wells consistently and repeatedly testified he mapped “signals of interest” to the downlink transmit (DL(TX))

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reference and “interference generating signals” to the modeled PIM path (both depicted in the dashed red path as explained in red box under legend). *See, e.g.*, J.A. 14918 at 50:16-19 (“The downlink TX reference is the signal of interest.”), 14920-21 at 52:22-53:1 (“the model PIM path would be ... the signal [that] is causing the intermodulation products in band at the signal of interest”), 15009 at 141:10-14 (“[Q.] So here you identified the modeled PIM path to be the interference generating signals capable of generating intermodulation products in-band of the signal of interest. Correct? A. Yes, I did.”). Dr. Wells’ expert report similarly opined “[t]he ‘DL (TX) reference’ signal ... meets the agreed construction of a ‘signal(s) of interest’” and “the ‘modeled PIM signal’ is the ‘interference generating signal.’” J.A. 4476-77 ¶ 343.

On cross-examination, Appellants’ counsel pointed out the RF ADC cannot sample the modeled PIM path because the modeled PIM path is generated downstream of the RF ADC after sampling occurs, and signals cannot be sampled before they are generated. J.A. 15010 at 142:12-14; *see also* J.A. 15010-11 at 142:21-143:5, 15019 at 151:4-13. The result being that the modeled PIM path *cannot* be the claimed “interference generating signals.” In response, Dr. Wells pivoted and testified, “there’s two signals on that red path because we know that because there’s the x1 and the x2.” J.A. 15010 at 142:15-16. Dr. Wells did not testify that x1 and x2 map onto the “signals of interest” and “interference generating signals” and instead continued to testify “the—two signals are the downlink TX reference and the modeled PIM path.” J.A. 15010 at 142:19-20; *see also* J.A. 15011 at 143:20-22 (“[T]he red path is the downlink TX reference and

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the modeled PIM path. It's the two signals."), 15017 at 149:7-9 ("[Q.] But you identify the interference generating signal as the modeled PIM path? Correct? A. Yes, that's right. ... the second signal on that red path."), 15017 at 149:12-13 ("[T]he red path is the downlink TX reference and the modeled PIM path."). When asked to clarify whether he was testifying "x1 is the modeled PIM path," he responded, "I'm saying that x1 and x2 are the two inputs here that are represented by those two signals that are on the red path." J.A. 15018 at 150:16-18. Again, he did not map x1 or x2 onto either the "signals of interest" or the "interference generating signals" as required by the claims. The jury found all asserted claims of the '134 patent infringed. J.A. 169.

At JMOL, Appellants argued Dr. Wells mapped "interference generating signals" to the modeled PIM path and there can be no infringement because the accused radios' receiver does not sample a passband of received signals that includes interference generating signals since those signals are not generated until after sampling occurs. J.A. 19-20. The court acknowledged "[t]he 'modeled PIM path is the only thing Dr. Wells expressly mapped to the 'interference generating signals'" and "Dr. Wells also testified that the PIM Model is generated in the GROOT FPGA." J.A. 21-22 (citing J.A. 15019 at 151:4-8). As such, if the modeled PIM path is the claimed "interference generating signals," then limitation 1[a] cannot be met because the accused radios' receiver does not sample a passband of received signals that includes interference generating signals since those signals are not generated until after sampling occurs. See J.A. 28303. The court, however, held there was sufficient

evidence for the jury to find the RF ADC in the accused radios samples both the “signals of interest” and “interference generating signals” because it was persuaded by Finesse’s argument that the modeled PIM path is not the “interference generating signals.” J.A. 7-16, 19-22.

On appeal, Finesse argues Dr. Wells identified the two signals on the red path as the DL(TX) reference for “signals of interest” and the modeled PIM path for “interference generating signals” because he was relying on the Nokia document’s legend, which says “Red – DL (TX) reference & modeled PIM path,” when he was really referring to x1 and x2. Oral Arg. at 31:01-32:20 (citing J.A. 26421);² *see also* Finesse Br. 30-31. Finesse claims Dr. Wells was “laboring under the misimpression that x1 and x2 correspond to DL[(TX) reference] and modeled PIM [path].” Oral Arg. at 35:10-19.

Dr. Wells’ testimony was confusing and unclear even after he was made aware of his alleged misimpression. *See* J.A. 15010-19. Dr. Wells continued to testify the modeled PIM path is the “interference generating signals” and never clarified he meant x1 and x2 when he was saying DL(TX) reference and modeled PIM path. *See* J.A. 15011 at 143:6-22, 15012 at 144:5-11, 15014 at 146:1-3, 15017 at 149:7-10. At JMOL, the district court found “Dr. Wells testified that there are two signals entering the RF ADC, and that those are signals of interest and the interference generating signals. Dr. Wells is clearly referring to x1

² Available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=24-1039_07102025.mp3.

and x2.” J.A. 10-11 (citing J.A. 15010-11 at 142:12-16, 143:10-13). There is nothing clear about Dr. Wells’ testimony. Dr. Wells never testified x1 and x2 correspond to the “signals of interest” and “interference generating signals.” *See* J.A. 15010-19. Instead, Finesse makes that inference by piecing together parts of Dr. Wells’ testimony over ninety pages apart in the record. Finesse Br. 30 (citing J.A. 15018 at 150:17-18 (“x1 and x2 are the two inputs here that are represented by those two signals that are on the red path”), 14925 at 57:5-7 (“this red path, it includes the signals of interest, it includes the interference generating signals”)).

Even if Dr. Wells did testify x1 and x2 are the “signals of interest” and “interference generating signals,” he repeatedly testified the DL(TX) reference and modeled PIM path correspond to the claimed signals, and offered no clear or detailed explanation for his contradictory testimony. *See* J.A. 15010-19. This sort of confusing change of course is not sufficient to support the jury verdict. When the party with the burden of proof, such as Finesse, rests its case on an expert’s self-contradictory testimony, we may conclude the evidence is insufficient to satisfy that standard. *Johns Hopkins Univ. v. Datascopic Corp.*, 543 F.3d 1342, 1349 (Fed. Cir. 2008) (despite expert opining the accused device contacts the vessel in three dimensions, “no reasonable jury could have found that the [accused] device literally met this limitation based on [expert’s] opinion, given his contradictory

testimony that the device only contacts the vessel in two places”).³

We reverse the district court’s denial of JMOL of non-infringement for the asserted claims of the ’134 patent because the jury’s infringement verdict is not supported by substantial evidence.⁴

B. ’775 Patent

The ’775 patent claims a method for reducing IMP interference in a receiver by digitally multiplying three signals in seven multiplications to generate IMP cancellation signals. ’775 patent at Abstract. Claim 1 is representative.

1. A method for performing interference cancellation in a receiver, with a transmitter and the receiver being *co-located* with each other, the method comprising:

[a] generating intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of transmitter signals of the transmitter,

³ Appellants also argue this x1/x2 theory, where one of x1 and x2 is the “signals of interest” and the other is the “interference generating signals,” is an unsupported theory that Finesse disclaimed in its JMOL briefing. Appellants Br. 40–44; Appellants Reply Br. 9–14 (citing J.A. 13838). We do not agree. Finesse presented this theory in its JMOL briefing and relied on Dr. Wells’ testimony. *See* J.A. 13836 (citing, *e.g.*, J.A. 14920 at 52:5, 14927 at 59:18–20, 15011 at 143:12–13).

⁴ The parties also dispute the correct construction of “receiver.” Appellants Br. 46 n.3; Finesse Br. 37–38. Because we reverse the denial of JMOL of noninfringement, we do not reach this issue.

- [b] wherein the passive IMPs are generated in passive transmitter components of the transmitter and receiver components of the receiver after a high powered amplifier (HPA) and transmitter filter of the transmitter,
- [c] wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter,
- [d] wherein generating the ICSs is based on a power series description of a non-linear process for generating the IMPs, and includes generating an n-th order ICS by, given *three signals S1, S2 and S3, digitally multiplying and filtering S1×S1×S2 and S1×S2×S2 and S1×S2×S3 and S1×S1×S3 and S2×S2×S3 and S1×S3×S3 and S2×S3×S3*, where n is an integer.

Id. at 16:54–17:6 (emphases added).

At summary judgment, the district court construed “three signals S1, S2 and S3” to be “separately identifiable,” but not “unique.” J.A. 115. The court concluded the intrinsic evidence does not limit “S1, S2 and S3” to unique input signals and also credited inventor testimony, as extrinsic evidence, that “S1, S2 and S3” represent signals generally and can be the same signal or different signals. J.A. 109-14. The key claim limitation at issue on appeal is that seven third order multiplications of the three signals must take place to meet the claim limitation.

At trial, Dr. Wells testified the accused radios infringe the asserted claims of the '775 patent by relying on a Nokia technical document depicting how the accused radios operate. *See* J.A. 14965-70; J.A.

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26485-86 (Nokia document). Specifically, Dr. Wells testified the accused radios multiply three separately identifiable signals and equated the three distinct multiplications listed in the Nokia document to the seven claimed multiplications. J.A. 14965-69 at 97:21-101:11; J.A. 14970 at 102:5-15 (citing J.A. 28416-17). The jury found all asserted claims of the '775 patent infringed. J.A. 169.

At JMOL, the district court rejected Appellants' argument that "S1, S2 and S3" must be unique signals as waived because Appellants failed to raise it at the Rule 50(a) stage.⁵ J.A. 38, 40. The court found using two signals, plus a copy of one of those signals, was sufficient to meet its construction of three separately identifiable signals. J.A. 38. The court also found only three distinct multiplications are produced when two unique signals are used, and that was sufficient to show infringement because each of those three distinct multiplications corresponds to two or three of the seven claimed multiplications. J.A. 38-39.

Appellants argue no reasonable jury could have found the accused radios generate cancellation signals by multiplying three signals because the accused radios only use two signals: x1 and x2. Appellants Br. 49-55. Specifically, Appellants argue Finesse surrendered claim scope over two signals when it amended the claims during prosecution to recite "three signals," instead of "two or three signals," to overcome the Filipovic prior art reference that teaches generating cancellation signals using two inputs. J.A.

⁵ Appellants do not appeal the district court's holding that "S1, S2 and S3" need only be separately identifiable, not unique. Appellants Br. 49 (citing J.A. 115).

1021-22 (original claims); J.A. 1006-10 (obviousness rejection); J.A. 967-86 (response to rejection). Appellants also argue no reasonable jury could have found the accused radios perform the seven claimed multiplications because Dr. Wells only identified three multiplications. Appellants Br. 55-58.

We do not agree that Finesse surrendered claim scope over two signals. The examiner rejected a claim reciting “digitally multiplying two or three signals” as obvious over Filipovic and secondary references, J.A. 1006-07, but Finesse overcame that rejection in part by explaining “Filipovic is limited to mitigating active IMPs” and not passive IMPs that the claimed method also addresses. J.A. 985; *see also* J.A. 941 (Notice of Allowance). Although Finesse also amended claims to add the limitation of digitally multiplying “three signals S1, S2 and S3” in seven multiplications, that does not rise to the level of “clear and unambiguous” disavowal of claim scope over products, like the accused radios, with two unique input signals. *Cont'l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 798 (Fed. Cir. 2019); *see also* J.A. 110-11. At most, Finesse’s amendment requires three separately identifiable signals and does not require any specific number of unique input signals. *See* J.A. 968-69.

We agree, however, that no reasonable jury could have found the accused radios perform the seven claimed multiplications. At trial, Dr. Wells relied on a Nokia document to show the accused radios perform the claimed multiplications. J.A. 14966-68 at 98:3-100:12; J.A. 26485-86 (Nokia document). But the document involves modulus and complex conjugate operations and does not show the accused radios

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perform the seven claimed multiplications. J.A. 26485-86. Instead, it only lists three distinct multiplications— $x_1 \cdot |x_1| \cdot |x_1|$, $x_1 \cdot x_1 \cdot x_2'$, and $x_1 \cdot |x_2| \cdot |x_2|$ —and there is no evidence any multiplications are repeated such that all seven claimed multiplications are performed, as required by limitation 1[d]. J.A. 26486 (reproduced below).

$p(n) = a_0 x_1 ^{n-2*D} +$		IM3 or IM3_Special
$a_1 x_1 ^{(n-1*D)} ^2 x_1^{(n-1*D)} +$		IM3 or IM3_Special
$a_2 x_1(n-) ^2 x_1(n-) +$		IM3 or IM3_Special
$a_3 x_1(n+1*D) ^2 x_1(n+1*D) +$		IM3 or IM3_Special
$a_4 x_1(n+2*D) ^2 x_1(n+2*D) +$		IM3 or IM3_Special
$a_5 x_2(n-2*D) ^2 x_1(n-2*D) +$		IM3_Cross
$a_6 x_2(n-1*D) ^2 x_1(n-1*D) +$		IM3_Cross
$a_7 x_2(n-) ^2 x_1(n-) +$		IM3_Cross
$a_8 x_2(n+1*D) ^2 x_1(n+1*D) +$		IM3_Cross
$a_9 x_2(n+2*D) ^2 x_1(n+2*D) +$		IM3_Cross
$a_{10} x_2(n-1*D) ^4 x_1(n-1*D) +$		IM5
$a_{11} x_1(n-) ^4 x_1(n-) +$		IM5
$a_{12} x_1(n+1*D) ^4 x_1(n+1*D) +$		IM5
$a_{13} x_2(n-1*D) ^4 x_1(n-1*D) +$		IM5_Cross1
$a_{14} x_2(n-) ^4 x_1(n-) +$		IM5_Cross1
$a_{15} x_2(n+1*D) ^4 x_1(n+1*D) +$		IM5_Cross1
$a_{16} x_2(n-1*D) ^2 x_1(n-1*D) ^2 x_1(n-1*D) +$		IM5_Cross2
$a_{17} x_2(n-) ^2 x_1(n-) ^2 x_1(n-) +$		IM5_Cross2
$a_{18} x_2(n+1*D) ^2 x_1(n+1*D) ^2 x_1(n+1*D)$		IM5_Cross2

The Non-Linear engine is capable of modeling:

$x_1 |x_1|^2$ or $x_1 x_1 x_2'$
 $x_1 |x_2|^2$
 $x_1 |x_1|^4$
 $x_1 |x_2|^4$
 $x_1 |x_1|^2 \cdot |x_2|^2$

Moreover, Dr. Wells did not testify how those three distinct multiplications map onto the seven claimed multiplications. J.A. 14966-70 at 98:3-102:19 (citing J.A. 28416-17). Finesse attempts to clarify the mapping on appeal, but that evidence was never presented to the jury. Finesse Br. 17-18 (citing J.A. 28417; J.A. 26485-86). And because the document does not disclose multiplying x_1 and x_2 , but their complex conjugate and modulus, Finesse's mapping is flawed because it requires, for example, S3 to be mapped onto the signal x_2 , its complex conjugate x_2' , and its modulus $|x_2|$. *Id.* at 17.

At oral argument, Finesse explained the accused radios perform the seven claimed multiplications because Nokia's documents show the accused radios perform not just seven multiplications, but ten. Oral Arg. at 25:05-20 (citing J.A. 28416); *see also id.* at 28:21-29:41; J.A. 26486 (referencing $p(n) = a_0$ through a_9). Nowhere do Finesse or Dr. Wells explain which subset of the ten multiplications listed in the Nokia document corresponds to the seven claimed multiplications. Finesse Br. 14-18; J.A. 15025-29 (Wells Testimony). Nor do they provide a mapping from the ten multiplications to the three distinct multiplications that Finesse mapped onto the seven claimed multiplications. Finesse Br. 17-18. Under these circumstances, no reasonable jury could have found that the accused radios perform the seven claimed multiplications.

We reverse the district court's denial of JMOL of non-infringement for the asserted claims of the '775 patent because the jury's infringement verdict is not supported by substantial evidence.⁶

II. Damages

We review a district court's denial of a motion for a new trial under regional circuit law. *Wi-LAN, Inc.*, 811 F.3d at 461. The Fifth Circuit reviews a denial of a new trial for abuse of discretion. *Id.* (citing Fifth Circuit law).

⁶ The parties also dispute the correct construction of "co-located." Appellants Br. 59-61; Finesse Br. 51-55. Because we reverse the denial of JMOL of noninfringement, we do not reach this issue.

After the jury verdict, Appellants moved for JMOL on damages or, in the alternative, a new trial. J.A. 13732-56. The district court denied both motions. J.A. 42-57 (denying JMOL on damages); J.A. 58-65 (denying new trial on damages). Because we reverse the denial of JMOL of non-infringement for all asserted claims of the '134 and '775 patents, we vacate the damages award.

CONCLUSION

For the foregoing reasons, we reverse the denial of JMOL of noninfringement and vacate the damages award.

**REVERSED AND VACATED
COSTS**

Costs to Defendants-Appellants.

Appendix B

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

No. 24-1039

FINESSE WIRELESS LLC,
Plaintiff-Appellee,
v.

AT&T MOBILITY LLC, NOKIA OF AMERICA CORP.,
Defendants-Appellants,
ERICSSON, INC.,
Defendant.

Decided: Nov. 10, 2025

Before: Moore, *Chief Judge*, Linn and Cunningham,
Circuit Judges.

ORDER

Per Curiam.

Finesse Wireless LLC filed a petition for panel
rehearing.

Upon consideration thereof,

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IT IS ORDERED THAT:

The petition for panel rehearing is denied.

FOR THE COURT



Jarrett B. Perlow
Clerk of Court

November 10, 2025

Date

Appendix C

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS**

No. 21-CV-00316 (Lead Case)

FINESSE WIRELESS LLC,
Plaintiff,
v.
AT&T MOBILITY LLC,
Defendant.

No. 21-CV-00317 (Member Case)

FINESSE WIRELESS LLC,
Plaintiff,
v.
CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS,
Defendant.

Decided: Aug. 30, 2023

MEMORANDUM OPINION AND ORDER

I. Introduction

Before the Court is Defendant AT&T Mobility LLC's and Intervenor-Defendant Nokia of America Corporation's (collectively, "Defendants") Rule 50(b)

Motion for Judgment as a Matter of Law of Non-Infringement (the “Motion”). (Dkt. No. 294.) The Court heard lengthy oral argument on the matter. (See Dkt. Nos. 330, 333.) For the following reasons, the Motion should be **DENIED**.

II. Background

Plaintiff Finesse Wireless LLC (“Finesse” or “Plaintiff”) filed a complaint on August 23, 2021, alleging infringement of U.S. Patent Number 7,346,134 (the “134 Patent”) and U.S. Patent Number 9,578,775 (the “775 Patent”) (collectively, the “Asserted Patents”). (See *generally*, Dkt. No. 1.) Specifically, Finesse accused Defendants of using certain infringing cellular base stations—commonly referred to as cell towers. (See *id.*)

A jury trial was held on the Asserted Patents in January of 2023. On January 13, 2023, the jury returned a verdict finding that the Defendants infringed all asserted claims: Claims, 1, 2 and 3 of the ’134 Patent, and Claims 1, 4, 9, 16, 21, 29, and 36 of the ’775 Patent (collectively, the “Asserted Claims”). (Dkt. No. 273 at 4.) The jury also found that Defendant had failed to prove that any of the Asserted Claims were invalid. (*Id.* at 5.) The jury awarded damages in the form of a lump sum for the remaining life of the patents in the amount of \$166,303,391.00. (*Id.* at 6.)

A. Background of the Technology

Base stations include radios that send and receive signals. A signal that is sent by the radio station is called a downlink signal (e.g., the signal that is sent to a cell phone), and a received signal (e.g., a signal that is received by a cell phone) is called an uplink signal.

Sometimes, signals interact with one another to create interference. The resulting interference is sometimes called intermodulation, intermodulation products, passive intermodulation, or harmonics. The patents-in-suit describe methods and apparatuses for removing this type of interference.

B. The '134 Patent

The '134 Patent provides a method and apparatus for removing intermodulation products from signals of interest. It explains that wireless communications systems are often subject to interfering signals that inhibit the receiver from receiving the intended signal. *Id.* at 1:55-60. To address this problem, the patent teaches sampling the entire band in which signals of interest *and* the interference generating signals may be received to create a bit stream.¹ *See id.* at 2:5-8. The resulting bit stream is then processed to isolate the two types of signals, after which the interference is cancelled from the information signals. *See id.* at 2:8-18.

Claim 1, which is exemplary, recites:

1. A method comprising:

over-sampling, at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest;

¹ A bit stream is a digital representation of the analog signals.

- isolating signals of interest in the bit stream using one or more decimating filters;
- isolating source signals that generate one or more inter modulation products inband of the signal of interest using one or more decimating filters;
- computing an estimate of each of the one or more intermodulation products from the source signals that generate the one or more intermodulation products;
- cancelling out one or more inband intermodulation products using the estimate of the intermodulation products; and
- performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.

C. The '775 Patent

The '775 Patent is concerned with minimizing the effect of intermodulation products (“IMPs”) on “co-located” devices. It frames the underlying problem as relating to “self communications terminals” and “self-terminals,” which are “[t]he receiver and transmitter of [a] target system.” *Id.* at 5:65-67. There may be additional transmitters “co-located” relative to a self-

terminal, and receivers that are located “in the vicinity of the self-terminal,” but are otherwise unrelated. *Id.* at 6:7-12. Transmission by the self-terminal may cause interfering IMPs for nearby receivers. *See, e.g., id.* at 6:37-46 (describing sources of IMPs as including those generated by high-power signals in receivers and IMPs generated in co-located high power transmitters).

Generally, the '775 Patent teaches actively cancelling IMPs by digitally copying the IMPs and canceling the system-generated IMPs in real time. '775 Patent at 6:50-53. “This is accomplished by extracting and isolating copies of the signals that create the IMPs and digitally multiplying them together in the time domain to create a copy of the IMPs generated in the transmitters and receivers.” *Id.* at 6:53-57.

Claim 1, which is exemplary of the asserted claims, recites:

1. A method for performing interference cancellation in a receiver, with a transmitter and the receiver being co-located with each other, the method comprising:

generating intermodulation product (IMP) cancellation signals (ICSs) to cancel passive IMPs in the receiver, continuously and near real time, using copies of transmitter signals of the transmitter, wherein the passive IMPs are generated in passive transmitter components of the transmitter and receiver components of the receiver after a high powered amplifier (HPA) and

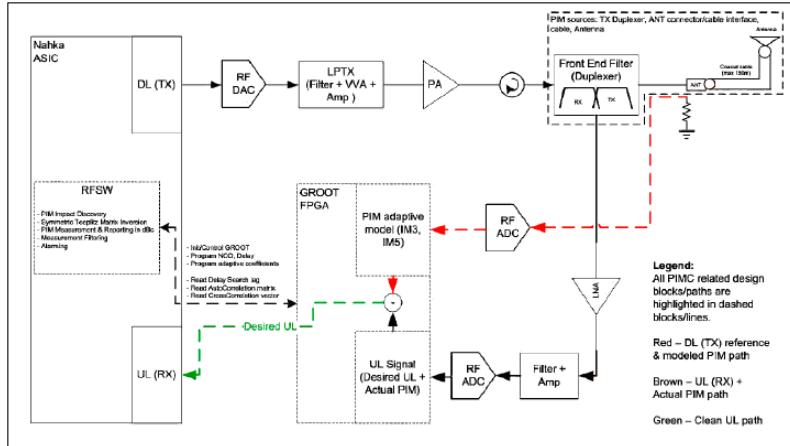
transmitter filter of the transmitter, wherein the transmitter filter is coupled between the HPA and an antenna used by the transmitter, wherein generating the ICSs is based on a power series description of a nonlinear process for generating the IMPs, and includes generating an n-th order ICS by, given three signals S1, S2 and S3, digitally multiplying and filtering $S1 \times S1 \times S2$ and $S1 \times S2 \times S2$ and $S1 \times S2 \times S3$ and $S1 \times S1 \times S3$ and $S2 \times S2 \times S3$ and $S1 \times S3 \times S3$ and $S2 \times S3 \times S3$, where n is an integer.

'775 Patent at 16:54-17:6. Here, S1, S2, and S3 are the signals creating the IMPs.

D. Accused Product Overview

At issue are specific Nokia radios, known internally within Nokia as “Galaxy” radios, and marketed under the name “Airscale” (the “Accused Products”). (Dkt. No. 284 (hereinafter “1/11/2023 Trial Tr.) at 116:2-117:10.) Both parties’ experts explained the accused functionality with reference to Figure 1 from the Galaxy PIMC (“Passive Intermodulation Cancellation”) Functional Specification.

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PX-844 at 14; DX-287 at 14.

The accused PIMC functionality is implemented in a field-programmable gate array (“FGPA”) referred to as “GROOT” internally to Nokia. (See, e.g., Dkt. No. 283 (hereinafter “1/10/2023 Trial Tr.”) at 17:1-11.) The parties agree that the PIMC feature in the accused radios cancels only internal passive intermodulation (“PIM”) caused by the radio’s own downlink transmit signals. (See, e.g., *id.* at 59:17-25, 151:14-16; 1/11/2023 Trial Tr. at 129:10-14, 206:25-207:3; DX-281 at 76.)

The experts both agreed that prior to the RF ADC in the red path in the image above, there are two signals in that path, x1 and x2; these signals are “some of” the downlink transmit signal. (1/10/2023 Trial Tr. at 41:23-42:3, 142:12-16 (Wells). *See* 1/11/2023 Trial Tr. at 206:4-10 (Proctor).)

III. Legal Standard

“Judgment as a matter of law is proper when ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th

Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify “substantial evidence” to support its positions. *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). “Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

“The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury’s verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must “resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations.” *Gomez v. St. Jude Med. Daig. Div. Inc.*, 442 F.3d 919, 937-38 (5th Cir. 2006).

IV. Analysis

A. Whether Finesse Presented Sufficient Evidence for the Jury to Find Infringement of the '134 Patent

- i. Whether there was substantial evidence presented for the jury to find that the Accused Product do not sample any “passband of received signals” to create a “bitstream” that includes both the “signals of interest” and “the interference generating signals.”**

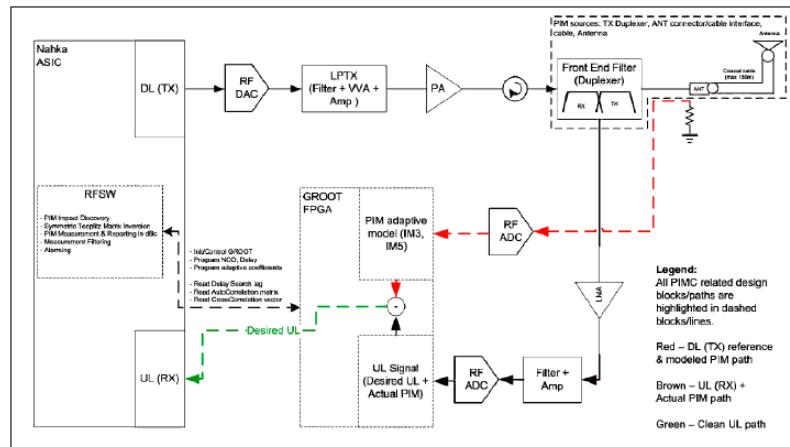
Each asserted claim of the '134 Patent (claims 1-3) contains the following element:

[over-sampling/sampling], at a desired frequency, a passband of received signals to create a bit stream, wherein the received signals include signals of interest and interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest.

Defendants make three arguments as to why this element was not satisfied: (1) the Accused Products do not create a bit stream with two types of signals, (2) the accused “downlink transmit reference signals” cannot be the claimed “signals of interest,” and (3) the accused “modeled PIM path” cannot be the claimed “interference generating signals.”

(a) Whether the Accused Product creates a bit stream with “signals of interest” and “interference generating signals.”

Defendants first argue that there was insufficient evidence for the jury to find that the Accused Products do not create a bit stream with two types of signals, as is required by the claims. (Dkt. No. 294 at 8-10.) According to Defendants, Dr. Wells, Finesse’s expert, could not identify a bit stream including both types of signals because the Nokia radios never sample a passband of signals that includes more than one type of signal. (*Id.* at 8-9 (citing DX-287 at 14; *id.* at 41:23-42:3 (Wells)).) Indeed, at trial Dr. Wells explained that the uplink receive path is the brown path and “is the path that’s received from the cell phone ... and it has the actual PIM path ... [s]o that’s the signals that’s got the interference on it.” (*Id.* at 8-9 (citing 1/10/2023 Trial Tr. at 42:10- 24).)



(DX-287 at 14). Thus, the received uplink signals and the transmitted downlink signals are sent to the GROOT FGPA via separate paths, and they are processed using separate analog-to-digital converters, so “they never are combined into a single bit stream,” as Defendants’ expert, Mr. James Proctor, testified. (*Id.* at 9 (citing 1/11/2023 Trial Tr. at 216:17-217:2 (Proctor)).)

In opposition, Plaintiff contends that the Accused Products infringe the “bit stream” claim limitations. (Dkt. No. 308 at 6.) The ADC accepts as inputs the analog signals on the red path and creates a digital stream. (*Id.* at 6:7 (citing 1/10/2023 Trial Tr. at 47:9-20; 49:9-14; 55:6-23; 56:1-10).) Moreover, the sampled passband of signals contains both a signal of interest and interference generating signals. (*Id.* at 8.) Evidence was presented that the RF ADC samples two signals (1/10/2023 Trial Tr. at 52:5) (“that red path has two inputs”); Nokia’s documentation confirms that two signals are carried on the red path, (*id.* at 143:20-22 (“[Fig. 1] is saying that the red path is the downlink TX reference and the modeled PIM path. It’s the two signals.”), 164:1-11 (“this modeled/reference PIM signal is obtained ... from the combined carrier transmit signal”); PX-855 at Fig. 1, PX-1963); the two signals converted by the RF ADC correspond to the signal of interest and the interference generating signals, (1/10/2023 Trial Tr. at 143:12-13 (“It converts the two signals coming into it, which are the interference generating signal and the signal of interest.”)); the red path following the RF ADC containing both the signal of interest and the interference generating signals is a bit stream, (*id.* at 47:15-20 (“we have a digital signal, a bit stream,

coming out on the left [from the ADC”), 56:8-10 (“I know this is all in the bit stream because that is all happening in that digital signal processing. It is going on digital signals, so it’s being done on a bit stream.”)); and those two signals are used in the PIM adaptive model to generate the estimates of the intermodulation products, (*id.* at 59:18-20 (“there’s actually two inputs, X1 and X2. So this is that red path that contains two signals, and it comes into this non-linear block.”)). (Dkt. No. 308 at 8 (also citing 1/10/2023 Trial Tr. at 40:12-43:17, 46:17-47:10, 49:7-53:1, 56:21-57:19, 58:4- 7, 58:14-22, 59:15-25, 61:2-8, 75:19-24, 163:10-164:11; Dkt. 281-3).)

Plaintiff argues that Dr. Wells did not identify the brown path as the path containing interference generating signals. (*Id.* at 8-9) Moreover, the jury was not required to believe Defendants’ witness, Mr. Proctor. (*Id.* at 9-10 (citing *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 151 (2000); *Gomez*, 442 F.3d at 933 (court must “resolve all conflicting evidence in favor of [the verdict]”).)

In reply, Defendants argue that Dr. Wells admitted that x1 and x2 are downlink transmit reference signals. (Dkt. No. 313 at 2 (citing 1/10/2023 Trial Tr. at 59:17-25, 151:14-16).) Dr. Wells’ conclusory mapping of x1 and x2 to both the “signals of interest” and the “interference generating signals” is insufficient as a matter of law. (*Id.* (citing *Yoon Ja Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1320 (Fed. Cir. 2006) (affirming judgment as a matter of law of noninfringement where patentee’s expert offered only conclusory, unsupported testimony)).) Defendants further argue that Dr. Wells did not show how either

x1 or x2 “mix in the nonlinearities to produce intermodulation products that fall inband of the signal of interest.” (*Id.* at 5.) This is required for the “interference generating signals” limitation. (*Id.* at 5 (citing Dkt. No. 294 at 12).)

Plaintiff, in its sur-reply, argues that Defendants waived the argument that Finesse did not prove the “interference generating signals” that produce intermodulation products “inband of the signal of interest” because it was not raised in 50(a), was not present in Defendants’ opening brief (other than in a conclusory footnote) and was raised for the first time in reply. (Dkt. No. 329 at 1, 6.) The Court rejected Defendants’ theory that the base stations only try to receive the uplink signal. (*Id.* at 2 (citing Dkt. No. 241 at 23).)

Plaintiff further argues it presented evidence that the ADC samples two signals, the signal of interest and the interference generating signal. (*Id.* at 5.) Defendants’ argument that Finesse did not show the interference generating signal mixing in the nonlinearities to produce PIM inband of the signal of interest is waived because it was not raised at the Rule 50(a) stage. (*Id.* at 7.) In addition to the evidence cited in the Response, there was evidence that the Accused Products cause their own inband PIM. (*Id.* (citing Dkt. No. 282 (hereinafter “1/9/2023 Trial Tr.”) 290:25-291:9, 294:4-11).) The jury also heard testimony explaining how that occurs in the bands of spectrum allocated to AT&T’s network and used in the bands in the Accused Products. (*Id.* (citing 1/10/2023 Trial Tr. 23:17-24:9; Dkt. 281-3 at 14-16).) Further, Dr. Wells specifically testified that one of the two signals in the

red path was “causing the intermodulation products in band at the signal of interest.” (*Id.* (citing 1/10/2023 Trial Tr. at 52:22-53:1).)

The Court finds that Plaintiff presented sufficient evidence for the jury to find that a bit stream is created with signals of interest and interference generating signals. During cross examination, Dr. Wells testified that there are two signals entering the RF ADC, and that those are signals of interest and the interference generating signals. (1/10/2023 Trial Tr. at 143:10-13 (“Q. So I'll try this. The RF ADC does not convert from analog-to-digital a modeled PIM path. Correct? A. It converts the two signals coming into it, which are the interference generating signal and the signal of interest.”).) Dr. Wells is clearly referring to x1 and x2. (*Id.* at 142:12-16 (“Q. So then upstream of the RF ADC, before the copy of the transmit signal gets to the RF ADC, there is no modeled PIM on that signal, is there? A. Well, there's—there's two signals on that red path because we know that because there's the x1 and the x2.”).) Moreover, it is the RF ADC that creates the bit stream. (*See, e.g., id.* at 143:10-13.)

Defendants' argument that Dr. Wells did not demonstrate that the “interference generating signals” are “signals that mix in the nonlinearities to produce intermodulation products that fall inband of the signal of interest”² is faulty on two grounds. First, this argument was not made at 50(a), so it is waived.

² Dr. Wells testified that “source signals” and “interference generating signals” are the same. (Dkt. No. 294 at 12 (citing 1/10/2023 Trial Tr. at 144:21–23.) Defendants' argument is based on the Court's construction of “source signals,” which is provided. (Dkt. No. 294 at 12 (citing Dkt. No. 88-1).)

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Second, there was sufficient evidence for the jury to find that this limitation was met. By way of background, Dr. Wells provided the testimony discussed below in connection with these limitations:

- isolating signals of interest in the bit stream using one or more decimating filters;
- isolating source signals that generate one or more inter modulation products inband of the signal of interest using one or more decimating filters;

Dr. Wells testified as follows:

Q. And where in GROOT are the decimating filters?

A. So that's shown in this excerpt here from PX 855. It says, the post linear block consists of an RxFIR filter, so it consists of a filter, whose primary aim is to decimate the modeled signal. In other words, that's a decimating filter.

Q. And how do you know that the decimating filter is isolating the signals of interest?

A. Well, we know that from the second sentence because it says that this decimating filter is needed to LPF, that means to low pass filter, the desired intermodulation signals falling in the uplink band from the transmit carrier. The transmit carrier is what was shown in red on that previous slide there.

So it's saying that this decimating filter, it needs to low pass filter, it needs to take the desired intermodulations away from that red path. So it's saying it takes it, filters out, it

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isolates that red path. That red path contains the signals of interest.

...

Q. And so what was your overall conclusion for this limitation?

A. So this requirement is present in GROOT, so I put a tick, a checkmark, on the right-hand side.

...

Q. And if we look back at figure 1, where do you see the source signals coming in?

A. Well, we know that this red path, it includes the signals of interest, it includes the interference generating signals, which is also the source signals. So we know that comes in through the red path.

Q. And how do you know that these source signals are signals that mix in the nonlinearities to produce intermodulation products?

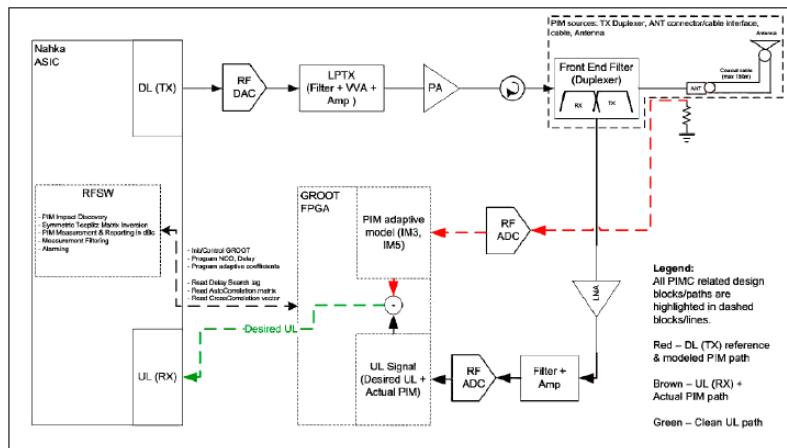
A. Because that's what—that's what causes these intermodulation products. It's the combination of the interference generating signal.

Q. And how do you know that it's making intermodulation products that fall inband of the signal of interest?

A. Because that's what we're trying to cancel out. We're trying—this causes the inband intermodulations that we're trying to cancel out of the receive signal.

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(1/10/2023 Trial Tr. at 55:6-57:19.) When discussing the “isolating signals of interest” limitations Dr. Wells testified that there is a decimating filter in GROOT, that the decimating filter isolates the signal of interest, and further confirmed that this limitation was met because these steps took place in GROOT. (*Id.* at 55:6-56:14.) Then, shortly thereafter, when asked “where do you see the source signals coming in?” Dr. Wells testified that the red path contains signals of interest and interference generating signals, which are the same as source signals. (*Id.* at 57:3-8.) Based on the preceding testimony, it was reasonable for the jury to infer that Dr. Wells the source signals enter GROOT via the red path.



DX-287 at 14. A reasonable jury could also infer that since the source signals enter GROOT from the red path, they are sampled by the RF ADC. DX-287 shows that the signals entering GROOT come from the RF ADC alone. Taking this in combination with Dr. Wells’ testimony that he knew the source signals in GROOT “mix in the non-linearities to produce intermodulation products” “[b]ecause that’s what ... causes these

intermodulation products” and that he knew the source signals are “making intermodulation products that fall in-band of the signal of interest” “[b]ecause that’s what we’re trying to cancel out,” it was reasonable for the jury to infer that the interference signals (which are the same as source signals) entering the RF ADC are signals that are sampled to create a bit stream and are “signals that mix in the nonlinearities to produce intermodulation products that fall inband of the signal of interest.”

Defendants cite *CommScope Techs. LLC v. Dali Wireless Inc.* in their “Legal Standard” section for the proposition that an expert who offers conclusory testimony should not be credited, but it is distinguishable. (Dkt. No. 294 at 6 (citing *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1297 (Fed. Cir. 2021).) There, the Federal Circuit reversed the District Court’s denial of judgment as a matter of law of noninfringement. *CommScope Techs.*, 10 F.4th at 1291. The key limitation was “switching a controller off to disconnect signal representative of the output of the power amplifier.” *Id.* at 1291. The Federal Circuit affirmed the construction of “switching a controller off” as “switching a controller to a nonoperating state.” *Id.* at 1295-96. The District Court, in denying judgment as a matter of law of noninfringement, relied upon the following evidence:

[A.] ... So the first step in this operating phase is to switch a controller off. And the [district court] define[d] that [to] mean[] placing the controller in a non-operating state so that you disconnect the signal from the output of the [power amplifier]. So in a sense you turn the

feedback off. And the [internal] documents show a switch. This is the simplest schematic I could find. And I have circled it in red there. And various other schematics show that switch as well. So it meets this limitation.

Q. And what did you identify as the switch?

A. Well, the actual switch circuit is a series of transistors that switch the actual RF signal on and off. And it is also associated with a logic that controls it that is on the [Field Programmable Gate Array], all those things being on the [motherboard].

Id. at 1296. In reversing the District Court, the Federal Circuit reasoned:

The key portion of Dr. Kenney's testimony above never states that either the switch or the controller is rendered "nonoperating." Rather, the testimony points to the result that "you turn the feedback off" rather than the specific mechanism claimed to achieve that result—"switching a controller off." This testimony from Dr. Kenney thus does not provide substantial evidence to support the jury's finding that the FlexWave meets the district court's claim construction.

Id. at 1297. The Federal Circuit also relied on unrebutted testimony showing that the controller was not switched off. *See id.* at 1297-98. Here, by contrast, Dr. Wells identified an "interference generating signal," testified that it was the same as a "source signal," and put forward sufficient evidence for the jury to infer that the "source signal" met its construction and was sampled by the RF ADC.

Yoon Ja Kim v. ConAgra Foods, Inc. is also distinguishable. 465 F.3d 1212 (Fed. Cir. 2006). There, the Federal Circuit affirmed the District Court's grant of judgment as a matter of law of non-infringement. *Id.* at 1317, 1326. The patent-at-issue's claims began with the preface "consisting essentially of," which means there can be "no infringement where the accused product contains additional, unclaimed [elements] that materially affect the basic and novel properties of the invention." *Id.* at 1319-20. At trial, Plaintiff's expert testified that the accused product did not contain additional elements that would have materially affected its characteristics. *Id.* However, the expert "did not support this determination with any examinations or tests of the actual accused products." *Id.* Accordingly, the Federal Circuit affirmed the District Court's decision to grant judgment as a matter of law with respect to non-infringement. The present case is different. As discussed above, Dr. Wells provided much more than a bare conclusory statement that the Accused Products "[over-sample/sample], a passband of received signals to create a bit stream, wherein the received signals include ... interference generating signals, the interference generating signals capable of generating intermodulation products inband of the signals of interest."

The Court is also not convinced by Defendants' argument Dr. Wells mapped both "signals of interest" and "interference generating signals" to the same component. Dr. Wells testified that "upstream of the RF ADC" "there's two signals on that red path because we know that because there's the x1 and the x2." (1/10/2023 Trial Tr. at 142:12-16.) Dr. Wells then

testified that the RF ADC “converts the two signals coming into it, which are the interference generating signal and the signal of interest.” (1/10/2023 Trial Tr. at 143:12-13.) Dr. Wells mapped the two signals entering the RF ADC to two separate elements in the claims, not one signal to two separate elements.

(b) Whether the “downlink transmit reference signals” can be the claimed “signals of interest.”

Defendants next argue that the accused “downlink transmit reference signals” cannot be the claimed “signals of interest.” The Court construed “signal(s) of interest” to be “with respect to the receiver, a signal that the receiver is trying to receive and send, in digital form, to the baseband processor,” as it was explicitly defined in the patent. (Dkt. No. 294 at 10 (citing Dkt. No. 88-1; PX-3 at 6:7-9).) Dr. Wells mapped the “downlink transmit reference signals” to the claimed “signals of interest.” (*Id.* (citing 1/10/2023 Trial Tr. (Wells) at 50:18-19).) This is not the signal that the receiver is trying to receive and process. (*Id.*) Thus, Dr. Wells improperly conflated received signals with the transmitted signals. (*Id.*)

The downlink transmit reference signals are not the signals the radio receiver is trying to receive, but the signals the radio is transmitting to a handset. (*Id.* at 10-11 (citing 1/11/2023 Trial Tr. at 127:1-3, 219:16-25, 221:20-222:5).) As a matter of law, sampling transmitted signals cannot satisfy the requirement of sampling “received signals.” (*Id.* at 11 (citing *Omega Patents, LLC v. CalAmp Corp.*, 920 F.3d 1337, 1345 (Fed. Cir. 2019) (“receiver” limitation not met where accused product contained only a transmitter); *RFID*

Tracker, Ltd. v. Wal-Mart Stores, Inc., 342 F. App'x 628, 632 (Fed. Cir. 2009) (similar).) A claim limitation cannot be construed as encompassing its antithesis. (*Id.* (citing, among others, *Moore U.S.A., Inc. v. Standard Reg.*, 229 F.3d 1091, 1106 (Fed. Cir. 2000); *Asyst Techs., Inc. v. Emtrak, Inc.*, 402 F.3d 1188, 1195 (Fed. Cir. 2005) (similar); *Brilliant Instruments, Inc. v. GuideTech, LLC*, 707 F.3d 1342, 1347-48 (Fed. Cir. 2013) (similar).))

Defendants further contend that Dr. Wells improperly mapped an analog-to-digital converter as a “receiver,” and this does not comport with the description of the receiver in the specification of the patent. (*Id.* at 11-12 (citing 1/10/2023 Trial Tr. at 21:4-7; DX-287 at 14; PX- 3 at Figure 2A; PX-3 at 3:49-54; 1/11/2023 Trial Tr. (Proctor) at 293:18-19).)

Moreover, Defendants contend that Dr. Wells improperly mapped the GROOT FPGA as the “baseband processor” because unrebutted testimony confirmed that the GROOT FPGA does not operate at baseband—at a frequency near 0 Hz. (*Id.* at 11-12 (citing Dkt. No. 88-1; PX-3 at 6:7-9; 1/10/2023 Trial Tr. at 51:3-10 (Wells); 1/11/2023 Trial Tr. at 126:5-10 (Proctor).) Baseband operations occur elsewhere, on a different chip. (*Id.* at 12 (citing 1/11/2023 Trial Tr. at 125:2-24 (Proctor)).)

In opposition, Plaintiff argues that the Accused Products infringe the “signals of interest” claim limitations. (Dkt. No. 308 at 3.) The parties previously agreed on a construction for “signal(s) of interest” so Defendants cannot now argue against it. (*Id.*) The agreed construction is: “with respect to the receiver, a signal that the receiver is trying to receive and send,

in digital form, to the baseband processor.” (*Id.* (citing Dkt. No. 79 at 2.) Neither the claims nor the construction equate “signal of interest” with “received uplink signal.” (*Id.*) Dr. Wells testified that the “downlink TX reference is the signal of interest,” and testified that it is being “received because ... we have this RF ADC that receives th[e] signal and it converts it into a digital path.” (*Id.* at 4 (citing 1/10/2023 Trial Tr. at 50:14-51:23).) Further, Dr. Wells testified that “even though it’s labeled downlink TX, it’s actually with respect to the receiver a signal that the receiver is trying to receive. Therefore, it meets the Court’s construction of a signal of interest.” (*Id.* (citing 1/10/2023 Trial Tr. at 51:20-23).) In Defendants’ own documentation the red path below shows that the “DL (TX) reference” signal is flowing towards a receiver, the RF ADC, and not away from one. (*Id.*) Moreover, the documentation for the RF ADC shows that the manufacturer, TI, titles it and describes it as a receiver. (*Id.* at 5 (citing PX-827 at 1).) Thus, as Dr. Wells testified, the DL (TX) reference signal is received, not transmitted. (Dkt. No. 308 at 4-5 (citing 1/10/2023 Trial Tr. at 51:11-23).) Defendants cannot now raise claim construction arguments as to “receiver,” in order to argue that an ADC is not a receiver. (*Id.* at 5.)

Plaintiff further argues that the jury saw evidence that the GROOT FGPA was considered a baseband processor. (*Id.* (citing PX-839 at 286).) Defendants also ignore Dr. Wells’ testimony that the GROOT FPGA sets the baseband signal. (*Id.* (citing 1/10/2023 Trial Tr. at 105:22-106:3).) Moreover, Defendants’ own witness testified that the PIM-C was deployed at the baseband. (*Id.* (citing 1/10/2023 Trial Tr. (Loddeke) at

290:15-21.) Defendants' arguments that the baseband processor must operate near 0 Hz and that baseband operations are performed on a different chip lack documentary support and the jury was entitled to weigh the credibility of the witnesses to reject Defendants' theories in finding for Finesse. (*Id.* at 5-6.)

In reply, Defendants contend that they are not asking the Court to reconstrue "signal of interest." (Dkt. No. 313 at 3.) The ADC is not a receiver as claimed by the patent—the whole point of the patent is to remove a specific type of interference from a signal that the receiver is trying to receive. (*Id.* at 4.)

In its sur-reply, Plaintiffs re-urge that Defendants are simply trying to re-argue the claim construction of "signal of interest." (Dkt. No. 329 at 2.)

The Court finds that Defendants' arguments are flawed. The downlink transmit signals can be the claimed "signals of interest." The agreed construction of this term was "with respect to the receiver, a signal that the receiver is trying to receive and send, in digital form, to the baseband processor." (Dkt. No. 79 at 2.) The jury heard evidence that the downlink transmit signals enter the RF ADC. (See, e.g., 1/10/2023 Trial Tr. at 143:10-13.) Moreover, Plaintiff put on evidence that the RF ADC was a receiver and was trying to send the downlink transmit signal to the GROOT FPGA, which it identified as a baseband processor. (*Id.* at 50:14-51:23, 105:22-106:3.) This is sufficient. Plaintiff need not show that the baseband processor operates at or near 0 Hz as Defendants suggest. This was neither in the claims nor in the agreed construction. Finally, the cases Defendants

cite for the proposition that a claim cannot be construed to encompass its antithesis are distinguishable—those cases all concerned structural components, not digital components. *See Moore U.S.A.*, 229 F.3d at 1094-1105; *Asyst Techs.*, 402 F.3d at 1190-92; *Brilliant Instruments*, 707 F.3d at 1343.

(c) Whether the “modeled PIM path” can be the claimed “interference generating signals.”

Finally, Defendants argue that the accused “modeled PIM path” cannot be the claimed “interference generating signals. (Dkt. No. 294 at 12-14.) Dr. Wells’ infringement analysis fails, according to Defendants, because, even if the downlink transmit reference signals were the “signals of interest,” he does not identify “interference generating signals.” (*Id.* at 12.) The Court did not construe “interference generating signals” though it did construe “source signals” and the experts agree the two terms are one and the same. (*Id.* (citing 1/10/2023 Trial Tr. at 144:21-23.) The construction of “source signals” is “signals that mix in the nonlinearities to produce intermodulation products that fall inband of the signal of interest.” (*Id.* (citing Dkt. No. 88-1).)

Defendants argue that Dr. Wells improperly mapped the “interference generating signals to the “modeled PIM path” because it is not input to the analog-to-digital converter along that path. (*Id.* at 13 (citing 1/10/2023 Trial Tr. at 141:10-14 (Wells); 1/11/2023 Trial Tr. (Davis) at 128:21-23, 129:19-24; *id.* at (Proctor) 220:15-24; 1/10/2023 Trial Tr. (Wells) at 151:14-16; 1/11/2023 Trial Tr. (Davis) at 129:10-14).)

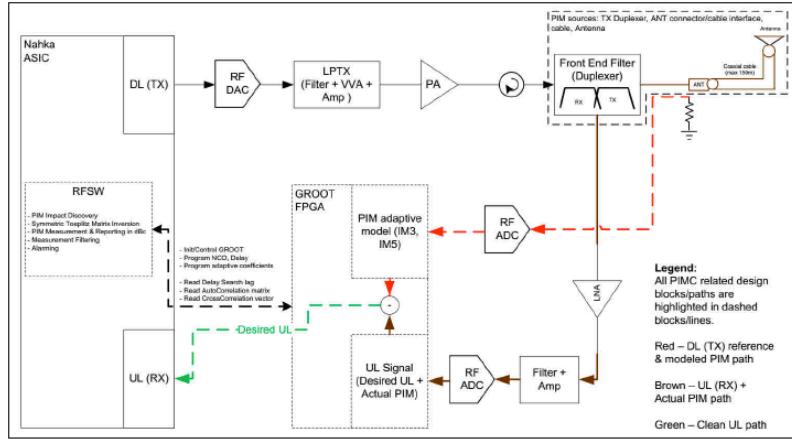
Further, if the “modeled PIM path” is not the interference generating signal, the only other possible thing that Dr. Wells has pointed to would be the downlink reference signals, which he already mapped to the claimed “signals of interest.” (*Id.* at 13; Dkt. No. 333 at 55:7-56:13.) Of course, the downlink transmit reference signals that Dr. Wells identified cannot be both the “signals of interest” and the “interference generating signals.” (Dkt. No. 294 at 13 (citing *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561-62 (Fed. Cir. 1991); *Lantech, Inc. v. Keip Mach. Co.*, 32 F.3d 542, 546 (Fed. Cir. 1994).)

Defendants point out that Finesse argued in closing that whether the “modeled PIM path” is on the red line does not matter, but the only thing Dr. Wells expressly identified as an interference generating signal is the modeled PIM path. (*Id.* (citing Dkt. No. 286 (hereinafter “1/13/2023 Trial Tr.”) (Finesse’s closing) at 44:23-45:2; 1/10/2023 Trial Tr. at 141:10-14.) Moreover, the part of the diagram that Finesse identified in closing as being part of the PIM path is well after the bit stream ends, and thus shows that Dr. Wells did not identify an “interference generating signal.” (*Id.* (citing 1/13/2023 Trial Tr. (Finesse’s closing) at 45:3-6; DX-287 at 14; DDX-5.030).) Per the claim language, the “interference generating signal” must be received and sampled to *create* the bit stream (that includes the “interference generating signal” and the “signals of interest,” not be a part of the bit stream after it is created. In other words, the thing that Dr. Wells identified as the “interference generating signal,” the PIM path, cannot satisfy the claim language because it is the bit stream, not a “received signal” as required by the claim. (*See id.* at 13-14.)

In opposition, Plaintiff argues that Dr. Wells explained to the jury that the red path in PX- 855 contains two signals and that the documentation describes these signals as the downlink reference signal and the modeled PIM path. (Dkt. No. 308 at 10 (citing 1/10/2023 Trial Tr. at 47:15-20, 52:5, 56:8-10, 56:21-57:19, 141:19-23, 143:12-13, 143:20-22, 164:1-11.) Moreover, Dr. Wells never identified either x1 or x2 as both the “signal of interest” and the “interference generating signal.” (*Id.*) Plaintiff further argues that it is not required to demonstrate infringement in accordance with Defendants’ viewpoint—Plaintiff is not required to identify another type of signal sampled in the same passband as the downlink transmit reference signal. (Dkt. No. 308 at 10-11 (citing *OPTi, Inc. v. VIA Techs., Inc.*, 65 F. Supp. 3d 465, 479 (E.D. Tex. 2014) (“Presented with clearly sufficient expert testimony of equivalence, VIA cannot obtain JMOL simply by demanding another and further level of specificity, much like a young child repeatedly asking a parent ‘but why’ after each successive explanation.”).)

The Court finds Defendants’ arguments persuasive to the extent that the modeled PIM cannot be the claimed “interference generating signal,” but this does not warrant granting judgment as a matter of law. Under Plaintiff’s theory, the Accused Products infringe because the red path in the image below contains the “DL (TX) reference signal & modeled PIM.”

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(DX-287 at 14.) This was Plaintiff's main theory at trial. The "modeled PIM path" is the only thing Dr. Wells expressly mapped to the "interference generating signals." (Dkt. No. 294 at 13 (citing 1/10/2023 Trial Tr. at 141:10-14).) The problem with this is that Dr. Wells also testified that the PIM Model is generated in the GROOT FPGA. (1/10/2023 Trial Tr. at 151:84-8 ("Q. Okay. Now, if we go back to the previous slide, your slide 58, there is no modeled PIM until the signal reaches the block, the non-linear block that we just looked at, which is within the GROOT FPGA. Correct? A. That's where the PIM model is generated.").) The plain language of the claim requires that the Accused Products contain a "passband of received signals" that is "over-sampled" or "sampled," and the claim further requires that the over-sampled/sampled signals include "interference generating signals." The PIM model cannot be the "interference generating signal[]," because Plaintiff's expert testified that it is *generated* in the GROOT FPGA, which is after the RF ADC. (*Id.*) Thus, the RF ADC never "samples" or "over-samples" the PIM

model to create a bit stream. Plaintiff argues that there was substantial evidence for the jury to find infringement under this theory because testimony and documentary evidence show that the red path contains two signals, the downlink reference signal and the PIM path. This is true. But the claims do not require a pathway containing two types of signals. They require that two types of signals be sampled/oversampled to create a bit stream. And the PIM path is not sampled.

However, as explained above, the Court finds that there was sufficient evidence for the jury to find that the Accused Products create a bit stream with both a “signal of interest” and a “interference generating signal.” Accordingly, notwithstanding that the modeled PIM path cannot be the claimed “interference generating signal,” the Court finds that judgment as a matter of law as to non-infringement of the ‘134 Patent is not warranted.

ii. Whether there was substantial evidence for the jury to find that the accused radios isolate the “signals of interest” and the “interference generating signals” from the bit stream used in the decimating filter.

Claims 1-3 contain the following two elements:

isolating signals of interest in the bit stream using one or more decimating filters;

isolating source signals that generate one or more intermodulation products inband of the signal of interest using one or more decimating filters;

Defendants argue that the accused radios do not “isolate” the “signals of interest” and the “interference generating signals” from the bit stream because, as described above, no bit stream containing both the “signals of interest” and the “interference generating signals” is ever created—they are processed in separate data streams. (Dkt. No. 294 at 14 citing (DX-287 at 14; 1/11/2023 Trial Tr. (Proctor) at 217:19-25).)

Defendants further argue that Dr. Wells did not show “isolating” because he equated “removing,” *i.e.*, discarding, the signal to isolating the signal. (Dkt. No. 294 at 14 (citing 1/10/2023 Trial Tr. at 54:5-6 (Wells)).) This is inconsistent with the way the patent specification uses the word “isolating” which makes clear that isolation is done to “keep” the signals so that they can be used to cancel the intermodulation products. (Dkt. No. 294 at 14-15 (citing ’134 Patent at Claims 1-3; *id.* at 11:28-31; *id.* at 11:8-11).) Dr. Wells does not show how the “isolated” signals are used. (Dkt. No. 294 at 15 (citing 1/10/2023 Trial Tr. (Wells) at 54:1-56:14).)

In opposition, Plaintiff argues that there was sufficient evidence for the jury to find that the Accused Products “isolate[e]” the signals of interest and the interference generating signals. The red path in PX-855 contains two signals, the signal of interest and the interference generating signal. (Dkt. No. 308 at 11 (citing 1/10/2023 Trial Tr. at 47:15-20, 52:5, 56:8-10, 56:21-57:19, 141:19-23, 143:12-13, 143:20-22, 164:1-11).) Plaintiff argues that the claim says “isolate” not “keep.” (*Id.*) Defendants are improperly attempting to read in a limitation into the claim. (*Id.* (citing *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*,

242 F.3d 1337, 1340 (Fed. Cir. 2001); *Tech Pharm. Servs. v. Alixa Rx*, 2018 WL 11351583, at *6 (E.D. Tex. Dec. 20, 2018) (party may not propose a new definition post-trial, even if it is attempting to provide a more detailed definition of the common meaning), *aff'd*, 810 F. App'x 887 (Fed. Cir. 2020)).) The term was afforded its plain and ordinary meaning, which the jury was free to rely upon at trial. (*Id.* at 11-12 (citing *KAIST IP US LLC v. Samsung Elecs. Co.*, 439 F. Supp. 3d 860, 874 (E.D. Tex. 2020)).) Moreover, Plaintiff argues it put forth substantial evidence that the "isolation" limitation was met. (*Id.* at 12-13 (citing 1/10/2023 Trial Tr. at 53:8-16, 53:19-22, 53:23-24, 55:6-23, 57:5-58:10, 55:6-23, 83:23-84:1; PX-839 § 3.4; PX-855 at - 1973).) Dr. Wells testified that the decimating filter isolated the signals of interest and the source signals in the path, and that the low pass filter "t[ook] the desired intermodulation away from [the] red path." (*Id.* at 13 (citing 1/10/2023 Trial Tr. at 55:6-23, 57:5-58:10, 83:23-84:10).)

In reply, Defendants argue that "removing" the signal is not isolating it; the claims require using the isolated interference generating signals to model and cancel the PIM. (Dkt. No. 313 at 6.)

In its sur-reply, Plaintiff argues that Defendants waived their "isolate" argument. (Dkt. No. 329 at 1.) Moreover, Defendants are improperly reading a limitation into the claim. (*Id.* at 3-4.) Defendants presented substantial evidence as to the meaning of "isolation." (*Id.* at 6.)

The Court is not persuaded by Defendants' arguments. Plaintiff and Defendants presented conflicting evidence on the plain and ordinary

meaning of “isolate,” and the jury was entitled to credit the version presented Plaintiff. (See 1/10/2023 Trial Tr. at 53:8-16, 53:19-22, 53:23-24, 55:6-23, 57:5-58:10, 55:6-23, 83:23-84:1; PX-839 § 3.4; PX-855 at - 1973.) Moreover, the Court will not read a limitation from the specification into the claim language, particularly at this stage. *SciMed Life*, 242 F.3d at 1340.

iii. Whether there was substantial evidence for the jury to find that the accused radios perform phase and amplitude adjustments “in a closed loop manner.”

Claims 1-3 contain the following element:

performing phase and amplitude adjustment on estimations of the intermodulation product interfering signals in a closed loop manner, wherein performing phase and amplitude adjustment of the estimations comprises performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product interfering signals.

Defendants make two arguments as to why the evidence presented to the jury was not sufficient to show that the Accused Products infringed this element: (1) the “closed loop” limitation is not satisfied, and (2) the Accused Products do not meet the “sub sample phase shift” limitation. (Dkt. No. 294 at 15-22.)

Defendants also note that the following claim limitation was added in during prosecution to obtain

allowance: “performing sub-sample phase shifts to make a phase adjustment on the estimations of the intermodulation product signals.” (*Id.* at 15 (citing PX-1 ('134 Patent File History) 7/30/2007 Response to Office Action at 3; *id.* at 10-18-2007 Notice of Allowance).)

(a) Whether there was substantial evidence that the Accused Products infringe the “closed loop manner” limitation.

Defendants first argue that the accused radios do not perform phase and amplitude adjustment “in a closed loop manner.” (Dkt. No. 294 at 15.) Defendants requested construction of this term in summary judgment briefing, but the Court declined to construe this term. (*Id.* (citing Dkt. No. 241 (Report & Recommendation) at 18-19; Dkt. No. 253 (Order Adopting R&R)).) The Defendants maintain that this was legal error. (*Id.* at 16 (citing *Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1319-20, (Fed. Cir. 2016) (citing *O2 Micro Int'l, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008)) (“By determining only that the terms should be given their plain and ordinary meaning, the court left this question of claim scope unanswered, leaving it for the jury to decide. This was legal error.”)).)

Proper construction of the term would require feedback to refine the estimates of the intermodulation products using the output of the passive intermodulation cancellation. (*Id.* at 16-17 (citing Dkt. No. 135 (Mot. for Summ. J. '134 Patent) at 4-7, 15-18; Dkt. 174 at 1-4; Dkt. No. 249 (Objections to

Report and Recommendation) at 1-4; Webster's New Collegiate Dictionary (9th ed. 1991); Collins Dictionary (2023), <https://www.collinsdictionary.com/us/dictionary/english/closed-loop>; Newton's Telecom Dictionary (26th ed. 2011); Comprehensive Dictionary of Electrical Engineering 110 (1999); PX- 3 at 9:45-59, 16:53-63, 17:4-51.) Defendants' experts explained at trial the plain meaning of "closed loop" to a POSITA means controlling the output using feedback. (*Id.* at 17 (citing 1/11/2023 Trial Tr. (Davis) at 138:12-20; *id.* at 229:2-7.) Defendants' expert further explained that open loop systems, by contrast, have no feedback. (*Id.* (citing 1/11/2023 Trial Tr. at 138:21-24).) The patent confirms that a closed loop system requires feedback. (*Id.* at 17-18 (citing PX-3 at Figure 2a (annotated); *id.* at 9:45-59, 16:53-63, 17:4-51).)

Defendants argue that Plaintiff's contrary understanding of the term's scope is unsubstantiated and wrong. (*Id.* at 18.) Finesse did not provide substantial evidence that the delay search in the accused product is performed in a closed loop manner. (*Id.*) Finesse's expert, Dr. Wells, testified that a POSITA would understand closed loop to be "where you take some sort of signal or something and you try and hold it at a certain value." (*Id.* (citing 1/10/2023 Trial Tr. at 66:13-22).) Dr. Wells identified a "wide delay search" and a "narrow delay search" as supposedly showing closed loop but did not provide substantial evidence that the delay search is performed in a closed loop manner. (*Id.* (citing 1/10/2023 Trial Tr. at 66:23-67:18 (discussing PX 855 at NOK_FIN_00001979)).) Finesse offered no response or rebuttal to testimony from Defendants' experts that the PIMC feature in the Accused Products is not a

closed loop but instead an open loop. (*Id.* at 18-19 (citing 1/10/2023 Trial Tr. at 138:25-139:6, 229:20-22; 139:7-12; 138:25- 139:6, 229:20-22).) The product documentation that Dr. Wells relies on does not show that the “delay search” is performed “in a closed loop manner” because Dr. Wells does not identify any feedback. (*Id.* at 19-20 (citing ’134 Patent at Claims 1-3; PX-855; PX 855 at NOK_FIN_00001979; 1/10/2023 Trial Tr. (Wells) at 67:3-18).) Dr. Wells’ testimony as to the delay search was so conclusory and contrary to evidence that no reasonable juror could have relied on it under any construction. (*Id.* at 20.) Another witness, Mr. Davis, offered unrebutted testimony that the accused radios do not implement a “wide delay search” or a “narrow delay search” but simply a delay search, and that a review of the source code would have confirmed how the delay search is actually implemented. (*Id.* (citing 1/11/2023 Trial Tr. at 140:18-142:1).) Dr. Wells testified that he was not relying on the source code for his infringement analysis and that he was not an expert in reading and writing source code. (*Id.* (citing 1/11/2023 Trial Tr. at 18:13-14, 18:24-19:1).) No reasonable jury could have relied on Dr. Wells’ basis for concluding that the Accused Products meet the limitation. (*Id.*)

In its opposition, Plaintiff argues that the term “closed loop” was unconstrued and unchallenged. (Dkt. No. 308 at 13.) This same argument, that “closed loop” requires “feedback” was rejected at the summary judgment stage. (*Id.* at 13-14 (citing Dkt. No. 253; *U.S. Silica Co. v. Amberger Kaolinwerke Eduard Kick GmbH & Co. KG*, No. 2:20-cv-298-JRG, 2023 WL 2542600, *4 (E.D. Tex. Mar. 15, 2023))). The jury was entitled to listen to Plaintiff’s expert and not

Defendants'. (*Id.* at 14 (citing *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1261 (Fed. Cir. 2013); *KAIST IP US LLC v. Samsung Elecs. Co., Ltd.*, 439 F. Supp. 3d 860, 874 (E.D. Tex. 2020)).)

Plaintiff further contends that Dr. Wells provided substantial evidence regarding the plain and ordinary meaning of the term "closed loop manner" and that it was satisfied. (*Id.*) Dr. Wells testified as to the meaning of "closed loop manner": that it meant "where you take some sort of signal or something and you try and hold it at a certain value, and then this is in a closed loop manner." (*Id.* (citing 1/10/2023 Trial Tr. at 66:13-17, 6:18-22; 66:23-68:6, 79:17-81:24).) Further, Dr. Wells demonstrated how the Nokia radios operate in a closed loop manner. (*Id.* at 14-15.) He then testified that the Nokia radios continuously update and align the cancellation signal with the uplink signal from a user device. (*Id.* at 15 (citing 1/10/2023 Trial Tr. at 66:19-22, 67:8-11).) The annotated figure that Defendants present in their brief was never presented to the jury. (*Id.* (citing *LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc.*, 275 F.3d 1347, 1353 (Fed. Cir. 2001)).) The Defendants' attacks on the delay searches identified by Dr. Wells fails on multiple grounds. (*Id.*)

Plaintiff argues that it had no obligation to rebut Defendants' witness's testimony that the system was open loop. (*Id.* at 15-16 (citing 1/11/2023 Trial Tr. at 138:25-139:6, 300:19-301:18).) The jury was free to entirely reject the testimony of Defendants' witnesses. (*Id.* at 16 (citing *Reeves*, 530 U.S. at 150 (weighing evidence and credibility is jury function); *Core Wireless*, 880 F.3d at 1364 (jury may reject expert's

testimony that has been contradicted or impeached); *Hearing Components*, 2009 WL 593836 at *1 (jury may reject testimony of “interested witness”); *X Techs., Inc. v. Marvin Text Sys., Inc.*, 719 F.3d 406, 411 (5th Cir. 2013) (court “disregard[s] all evidence favorable to the moving party that the jury is not required to believe”)). The Defendants’ construction is not the Court’s construction. (*Id.*) “Feedback” is not required by the claim. (*Id.* at 16-17.)

In its reply Defendants argue that Finesse does not address the *O2 Micro* issue raised by Defendants. (Dkt. No. 313 at 6.) Defendants presented unrebutted evidence that the system was completely open loop. (*Id.* at 7 (citing 1/11/2023 Trial Tr. at 138:12-139:18).) Well’s testimony that running PIM estimation “again and again” does not show that there is feedback, or that it meets Well’s own definition of closed loop: “where you take some sort of signal and hold it at a certain value.” (*Id.* at 7.) Plaintiff’s argument that Figure 1 of PX-855 shows feedback is unsupported attorney argument. (*Id.*) Dr. Wells’ testimony and definition of “sub-sample phase adjustment” is contrary to the specification of the patent. (*Id.*)

In its sur-reply, Plaintiff argues that the Court has already ruled that “closed loop manner” should not foreclosed from its plain and ordinary meaning. (Dkt. No. 329 at 2, 4 (citing Dkt. No. 241 at 16-20).) The Defendants are improperly importing limitations from the specification re the “sub-sample phase shift” limitation. (*Id.* at 4-5.) Defendants failed to raise this argument at either the *Markman* or the 50(a) stage. Defendants ignore the difference between “closed loop” and “closed loop manner.” (*Id.* at 7.) The jury was

allowed to disregard Mr. Davis' testimony to the contrary. (*Id.* at 8.) Any *O2 Micro* issue is waived at the judgment as a matter of law stage. (*Id.* (citing *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1321 (Fed. Cir. 2003); *Tech Pharm. Servs.*, 2018 WL 11351583, at *6.) Defendants' suggestion that the jury could not look at an arrow in Figure 1 clearly pointing back and forth between Nahka and GROOT deprives it of its basic role as a fact finder. (*Id.*)

The Court does not find Defendants' arguments persuasive. "Closed loop manner" was given its plain and ordinary meaning and "it is too late at the JMOL stage to argue for or adopt a new and more detailed interpretation of the claim language and test the jury verdict by that new and more detailed interpretation." *HP*, 340 F.3d at 1321. Moreover, as described above, both sides gave conflicting evidence as to its definition and whether it was present in the Accused Products. (See 1/10/2023 Trial Tr. at 66:13-17, 6:18-22; 66:23-68:6, 79:17-81:24; 1/11/2023 Trial Tr. at 138:12-139:18.) The jury was entitled to credit Plaintiff's evidence, and apparently did. *Reeves*, 530 U.S. at 151; *Gomez*, 442 F.3d at 933.

(b) Whether there was substantial evidence that the Accused Products infringe the "sub-sample phase shifts" limitation.

Defendants also argue that Finesse has not introduced substantial evidence that the Accused Products meet the "sub sample phase shifts" limitation. (Dkt. No. 294 at 20-22.) Dr. Wells testified that "a sub-sample phase shift means that you perform that phase shift after everything has been

reduced in sampling which is after that decimating filter,” and that the Accused Products perform sub-sample phase shifts due to a delay built into the decimating filter. (*Id.* at 21 (citing 1/10/2023 Trial Tr. at 65:20-23; *id.* at 65:24-4 (discussing PX-839)).) This indicates that because the samples are filtered, the phase shift is being done on a subset of samples, which is not a “sub-sample phase shift.” (*Id.* (citing 1/10/2023 Trial Tr. at 65:24-4 (discussing PX-839)).) This conclusion is bare and unsupported and cannot form a substantial basis for the jury’s verdict. (*Id.* (citing *Kim*, 465 F.3d at 1320; *Dominion Energy, Inc. v. Alstom Grid LLC*, 725 F. App’x 980, 986 (Fed. Cir. 2018)).) It does not establish that the phase shifts are being done on a subsampled basis, let alone explain how or why such phase shifts are accomplished. (*Id.*) The ’134 Patent explains that “subsample phase shift” means performing a phase shift with a delay of less than one sample by interpolating between samples. (*Id.* (citing PX-3 at 27:55-60, Figure 11, Figure 13).) Mr. Davis provided unrebutted testimony that the RX Delay cited by Dr. Wells is not performed at a sub-sample level. (*Id.* (citing 1/11/2023 Trial Tr. at 142:12-143:1).)

In opposition, Plaintiff argues that Dr. Wells’ testimony as to infringement of the “phase and amplitude” limitations was backed by evidence. (Dkt. No. 308 at 17.) He testified that he had reviewed the source code. (*Id.* (citing 1/10/2023 Trial Tr. at 18:15-23).) Defendants’ expert did not review the source code. (*Id.* at 17:18 (citing 1/11/2023 Trial Tr. at 141:17-142:1, 149:18-25).) Besides, there was substantial evidence of “feedback.” (*Id.* at 18 (citing PX-855, 1/9/2023 Trial Tr. at 303:1-11 (“So just like the NL generates a model, the correlator generates the exact

same model. ... let's say an IM3 was the primary area of concern, then the correlator would run delay search on an IM3, and then that delay, whatever it finds, would be put in the respective NL engine, and that's when cancellation happens."); 302:20-304:2; PX-832 at -408; PX-839/DX-281 at -751, -752; PX-855 at -1979; PX-858 at -2164.) PX-855 shows phase and amplitude information passed from the GROOT FPGA to the Nahka ASIC and back. (*Id.* at 18.)

Plaintiff also argues that the Accused Products infringe the “sub sample phase shift” limitation. (*Id.* at 18.) Dr. Wells testified that the “sub sample phase shift” limitation “means that you perform that phase shift after everything has been reduced in sampling which is after that decimating filter.” (*Id.* at 19 (citing 1/10/2023 Trial Tr. at 65:10-23).) Dr. Wells testified that the delay adjustments are evidence that “the phase shifts are being done on a sub-sampled basis” after the decimating filter. (*Id.* (citing 1/10/2023 Trial Tr. 64:17-23, 66:1-4).) Moreover, Dr. Wells explained that because “GROOT is a processor that includes the delay functionality that performs the phase adjustments,” when the structure (*i.e.*, the block) talks about mapping the new sample into the time slots of the original samples, that means “that as part of the—that phase shift, you take the time samples, and as you shift them, you actually map them to the new time samples ... [t]hat's part of that phase shift, that delay.” (*Id.* (citing 1/10/2023 Trial Tr. at 80:3-20).) Nothing in Dr. Wells’ testimony equates filtering with phase shifting. (*Id.*)

Plaintiff further argues that Defendants attempt to read new limitations into the Asserted Claims by

asserting that the limitation requires “sub sample phase shift’ [to] mean[] performing a phase shift with a delay of less than one sample by interpolating between samples.” Defendants waived this argument long ago. (*Id.* (citing *HP*, 340 F.3d at 1320).) Moreover, patent law prohibits importing limitations into the claim from the specification. (*Id.* at 19-20 (citing *SciMed Life Sys.*, 242 F.3d at 1340); *Wenger Mfg. v. Coating Mach. Sys.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001)).) Mr. Davis’ testimony, which supposedly proves that GROOT does not perform sub-sample phase shifts, is conclusory and inconsistent with the evidence that the Accused Products implemented narrow and wide delay searches. (*Id.* at 20 (citing 1/11/2023 Trial Tr. at 141:1-3, 141:4-6, 140:20-25, PX-855 at 11).) The Court should disregard this testimony, which was directly impeached and contradicted. (*Id.* (citing *Hearing Components*, 2009 WL 593836 at *1).)

Defendants, in their reply, point out that Finesse acknowledges that Dr. Wells’ opinions are based on performing a phase shift on a subset of samples rather than a “sub-sample phase adjustment.” (Dkt. No. 313 at 7 (citing Dkt. No. 308 at 19).) Further, the patent describes performing a phase adjustment with a delay of less than one sample. (*Id.* (citing ’134 Patent at 27:55-60, Figure 11, Figure 13).) Dr. Wells’ interpretation of “sub-sample phase adjustment” is not in the specification. (*Id.* at 7-8.)

Plaintiff, in its sur-reply, argues that Defendants’ arguments regarding “sub-sample phase shifts” depend on their proposed claim construction. (*Id.* at 8-9.) Dr. Wells testified that the RX delay in GROOT

does reduce sampling based on the decimating filter before performing the phase shift. (*Id.* at 9 (citing 1/10/2023 Trial Tr. at 65:10-66:4).) The jury was entitled not to give Defendants' witness any weight. (*Id.* (citing *Hearing Components*, 2009 WL 593836 at *1; *X Techs.*, 719 F.3d at 411).)

Again, the Court does not find Defendants' arguments persuasive. Dr. Wells gave testimony that the Accused Products perform "sub-sample phase shifts," and the jury accepted his testimony. (See 1/10/2023 Trial Tr. 64:17-23, 65:10-23, 66:1-4, 80:3-20.) *Gomez*, 442 F.3d at 933. Moreover, upon a review of the entire record, the Court finds that Dr. Wells' testimony was not conclusory. Further, Plaintiff did not need to rebut Dr. Davis's testimony, which was impeached and contradicted. *Hearing Components*, 2009 WL 593836 at *1.

B. Whether Finesse Presented Sufficient Evidence for the Jury to Find Infringement of the '775 Patent.

i. Whether there was substantial evidence presented to the jury for it to find that the Accused Products include the S1, S2, and S3 signals recited in the claims and that the Accused Products practice seven multiplications.

Defendant argues that each asserted claim of the '775 Patent requires that three signals, S1, S2, and S3 be used to generate the claimed intermodulation product cancellation signals. (Dkt. No. 294 at 22.) For example, claim 1 provides: "generating an n-th order ICS [intermodulation cancellation signal] by, given

three signals S1, S2 and S3, digitally multiplying and filtering S1xS1xS2 and S1xS2xS2 and S1xS2xS3 and S1xS1xS3 and S2xS2xS3 and S1xS3xS3 and S2xS3xS3, where n is an integer.” The Court construed the term “three signals, S1, S2, and S3” to mean “signals which must be separately identifiable, but are not limited to three unique input signals.” (*Id.* at 23 (citing Dkt. No. 241 at 13; Dkt. No. 253).) This limitation is present in all asserted claims from the ’775 Patent.

Defendants further argue that Finesse is precluded from offering a doctrine of equivalents theory (and did not) because that limitation was added during prosecution of the ’775 Patent to distinguish prior art. (*Id.* at 22-23 (citing Dkt. No. 134-5, 8/18/2016 Response to Office Action at 2, 19; *CAE Screenplates Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1319 (Fed. Cir. 2000); 1/10/2023 Trial Tr. (Wells) at 87:4-12 (“Q: And does AT&T infringe these seven claims literally or under the doctrine of equivalents? A: So in my opinion, AT&T infringes all of these claims literally.”)).)

Defendants further argue that the Court’s claim construction improperly undid the patentee’s surrender of claim scope. (*Id.* at 23 (citing *Becton, Dickinson & Co. v. Tyco Healthcare Grp, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (quoting *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)); *Engel Indus., Inc. v. Lockformer Co.*, 96 F.3d 1398, 1404-05 (Fed. Cir. 1996) (where a claim provides for two separate elements, a “second portion” and a “return portion,” these two elements “logically cannot be one and the same”); *HTC Corp. v. Cellular Commc’ns*

Equip., LLC, 701 F. App'x 978, 982 (Fed. Cir. 2017) (“The strongest evidence for this separation is the claim language itself, which plainly recites two different structures. ... The separate naming of two structures in the claim strongly implies that the named entities are not one and the same structure.”); *SandBox Logistics LLC v. Proppant Express Inv. LLC*, 813 Fed. App'x 548, (Fed. Cir. 2020)).

Notwithstanding this, Defendants argue that judgment as a matter of law is warranted even under the Court’s claim construction. (*Id.* at 24.) Defendants argue that Dr. Wells admitted that the Accused Products only include two relevant signals and reused one of the signals for his calculations. (*Id.* (citing 1/10/203 Trial Tr. (Wells) at 150:9-12; *id.* at 155:17-156:3; 1/11/2023 Trial Tr. (Davis) at 131:24-133:16; *id.* (Proctor) at 232:21-234:5; PX-839 (GROOT FGPA Spec.) at NOK_FIN_00000771; DX-832 (Galaxy SW Arch.) at NOK_FIN_00002163); 1/10/2023 Trial Tr. (Wells) at 101:16-102:3; *id.* at 101:2-11; *id.* at 101:16-102:3).)

Defendants contend that, even if the Court’s claim construction could encompass two (as opposed to three) signals, the requirement that they be separately identifiable precludes mapping the same signal twice. (*Id.* (citing Dkt. No. 241 at 13; Dkt. No. 253).) A signal cannot separately identify from itself, the signals must be “distinct component[s].” (*Id.* at 24-25 (quoting *Becton, Dickinson & Co.*, 616 F.3d at 1254).) Dr. Wells cannot pursue a doctrine of equivalents theory because he disclaimed it. (*Id.* at 25.)

Defendants further argue that each asserted claim of the '775 Patent requires that seven different multiplications take place. (*Id.*) For example, claim 1 recites “generating an n-th order ICS [intermodulation cancellation signal] by, given three signals S1, S2 and S3, digitally multiplying and filtering S1xS1xS2 and S1xS2xS2 and S1xS2xS3 and S1xS1xS3 and S2xS2xS3 and S1xS3xS3 and S2xS3xS3, where n is an integer.” By equating one of the two signals (x1 and x2) in the Accused Products to a third signal, there were only three different multiplication possibilities: (x1) x (x1) x (x2), (x1) x (x2) x (x2), and (x2) x (x2) x (x2). (*Id.* at 25-26 (1/10/2023 Trial Tr. at 155:17-158:24).) Even if the same signal can be mapped to two of the claimed signals such that only three multiplications are required, Dr. Wells provided no basis for his conclusion that the Accused Products actually perform such multiplications. (*Id.* at 26.) At most, Dr. Wells referred to PX-858 at 2165, where he testified that the Accused Products meet the claimed multiplications based on the description of the non-linear engine being capable of modeling the multiplications. (*Id.* (citing PX-858 at 2165; 1/11/2023 Trial Tr. at 99:15-101:1).) Dr. Wells never explains how that math maps to the claimed multiplications. (Dkt. No. 294 at 26.)

Defendants further contend that Mr. Proctor explained that Dr. Wells “stopped with a table that showed S1, S2, S3, and then he did a little variable substitution and showed another column with some other formulas, but he didn't connect those formulas that he made with the product. He didn't show it in the product, and there's a good reason for that.” (*Id.* at 27 (quoting 1/11/2023 Trial Tr. at 234:18-22).) Finesse

offered no rebuttal or response to Mr. Proctor's testimony that the Accused Products do not use a multiplication methodology at all. (*Id.*) Mr. Proctor explained that the Accused Products use complex signals instead of real signals, so the intermodulation cancellation signals are calculated with complex math rather than real math, which means that the equations used in the product cannot be mapped to the claimed equations. (*Id.* (quoting 1/11/2023 Trial Tr. (Proctor) at 235:7-236:1).) Even if complex math could be mapped to the claims, Dr. Wells merely explains that certain equations that he identified in the documentation have three factors, and this is not sufficient to show that the claimed multiplications are performed. (*Id.* at 27-28 (citing 1/11/2023 Trial Tr. (Wells) at 99:15-101:1; *Kim*, 465 F.3d at 1320; *Dominion Energy*, 725 F. App'x at 986).)

In opposition, Plaintiff argues that Dr. Wells showed how x_1 and x_2 could be mapped to S_1 , S_2 , and S_3 . (Dkt. No. 308 at 21 (citing Dkt No. 281-3 at 163; 1/10/2023 Trial Tr. at 101:16- 102:19).) Dr. Wells showed where the three unique mathematical results could be found in the GROOT specification, which explains how the two signals can be used to calculate third-order intermodulation products that depend on three signals— S_1 , S_2 , and S_3 . (Dkt. No. 308 at 21-22 (citing 1/10/2023 Trial Tr. at 158:11-18, PX-858 at Fig. 3).) Moreover, Dr. Wells explained PX- 858 to the jury in detail. (*Id.* at 22.)

Plaintiff contends that Defendants are improperly using judgment as a matter of law to revisit claim construction rulings, and they failed to challenge the construction in 50(a). (*Id.* at 23.) There is no

disclaimer, the inventor stated the new claim language in the excerpt, and the inventor did not distinguish prior art based on it. (Dkt. No. 308 at 23 - 24 (citing *Intervet Am. v. Kee-Vet Labs.*, 887 F.2d 1050, 1053 (Fed. Cir. 1989) (cautioning district courts not to add limitations in construing specific words)). Moreover, the words “distinct,” “independent,” and “unique” are not in the claims nor the Court’s construction. (*Id.* at 24 (citing Dkt. Nos. 154, 202).) The cases Defendants cite concern structural components, not digital components. (*Id.* (citing *Becton, Dickinson & Co.*, 616 F.3d at 1254).)

Plaintiff further argues that the Defendants’ argument regarding the meaning of “separately identifiable” is waived and meritless because it was not raised at 50(a) and their caselaw concerns structural components, not digital ones. (*Id.* at 24-25). Neither the claims nor the Court’s construction require there to be seven unique results. Signals are not “used up,” they may be copied. (*Id.* at 25 (citing 1/11/2023 Trial Tr. at 90:11-16).) Moreover, Defendants cannot ask the Court to reweigh credibility issues left to the jury. (*Id.* at 26.) Their argument that it is not possible to multiply complex numbers so the relevant claim limitation was impossible to meet conflicts with Dr. Wells’ testimony. (Dkt. No. 308 at 26.) The jury was not required to credit Mr. Proctor’s testimony. (Dkt. No. 308 at 26 (citing *X Techs.*, 719 F.3d at 411; *Core Wireless*, 880 F.3d at 1364).)

Defendants, in reply, argue that using two signals and reusing one of them to come to a total of three signals is not the same as three “separately

identifiable” signals, and no reasonable jury could find as much. (Dkt. No. 313 at 8.) Finesse admits that Dr. Wells did not show seven multiplications in the product. (*Id.*) Finesse acknowledges that Dr. Wells’ chart showed the jury how two signals could be used to create third-order intermodulation products and does not show any actual multiplication in the products. (*Id.* at 8-9.) Finesse does not map the three claimed multiplications to the claims—and the claims require specific multiplications. (*Id.* at 9.) For example, Dr. Wells attempted to map X1.X1.X2' to S1, S2, and S3 as follows: (1) X1 maps to S1; (2) X1 also maps to S2; and (3) X2' (the complex conjugate of X2) maps to S3. (1/10/2023 Trial Tr. at 100:17-21.) If that is his mapping, then he would have also had to show that the other claimed multiplications were met—for example, S1 x S3 x S3. (*Id.*) But the Accused Products do not include a multiplication for (x1) x (x2') x (x2') and Dr. Wells did not even attempt to show how that multiplication would be met. (*Id.*) Seven distinct multiplications are required, and the signals must be “separately identifiable.” (*Id.* at 9-10.) Dr. Wells did not explain how complex numbers could be mapped to the patent. (*Id.*)

In its sur-reply, Plaintiff argues that Defendant waived their arguments as to claim construction by failing to raise it at 50(a) and their summary judgment motion was not enough; it had already been waived at the summary judgment stage. (Dkt. No. 329 at 1-2.) Moreover, Defendants have no answer to their waiver of any argument on the meaning of “separately identifiable.” (*Id.* at 2.) The Court has already ruled that “S1, S2, and S3 must be separately identifiable.” (*Id.* at 2, 5 (citing Dkt. No. 241 at 10-13).) Signals do

not get “used up” like dollar bills and can be copied and re-used. (*Id.* at 9.) Dr. Wells mapped x1 and x2 to S1, S2, and S3, and explained how they were multiplied together per the GROOT specification. (*Id.*) *Translogic* concerns structural components, not digital components. (*Id.* at 10 (citing 2004 WL 3203958 at *14).) Nothing prohibits complex numbers from being multiplied. (*Id.* (citing *Smith & Nephew, Inc. v. Ethicon, Inc.*, 276 F.3d 1304 (Fed. Cir. 2002) (where method claim “comprises” steps, additional steps may be performed).)

The Court is not convinced by Defendants’ arguments. As a preliminary matter, the Court finds that using two signals, plus a copy of one of those signals is sufficient to meet the Court’s construction of “separately identifiable.” The Court rejected the argument that the signals must be unique at the Summary Judgment stage and will not revisit that ruling here. (Dkt. No. 241 at 13.) Requiring three separate signals would be to require three “unique” signals. Moreover, Plaintiff waived this argument by failing to raise it at the 50(a) stage.

When two signals are used, in addition to a copy of one of those signals, as the three claimed signals, only three multiplications are produced. This too can be sufficient to show infringement because the three multiplications each correspond to multiple of the seven claimed multiplications. In other words, performing three multiplications with two signals and one copy of one of those two signals only produces a maximum of three distinct results, which correspond to two or three of the seven claimed multiplications.

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An example would be helpful. Assume that S1 = a and S2 and S3 = b .

Claimed Multiplication	$S1 = a; S2 = b; S3 = b$
$S1 \times S1 \times S2$	$(a) \times (a) \times (b)$
$S1 \times S2 \times S2$	$(a) \times (b) \times (b)$
$S1 \times S2 \times S3$	$(a) \times (b) \times (b)$
$S1 \times S1 \times S3$	$(a) \times (a) \times (b)$
$S2 \times S2 \times S3$	$(b) \times (b) \times (b)$
$S1 \times S3 \times S3$	$(a) \times (b) \times (b)$
$S2 \times S3 \times S3$	$(b) \times (b) \times (b)$

After substituting a for S1, and b for both S2 and S3, only three unique equations are produced:

- 1: $(a) \times (a) \times (b)$
- 2: $(a) \times (b) \times (b)$
- 3: $(b) \times (b) \times (b)$

Each one of these equations corresponds to more than one claimed multiplication. For example, $(a) \times (a) \times (b)$ maps to both $S1 \times S1 \times S2$ and $S1 \times S1 \times S3$. Accordingly, Plaintiff need only show three equations that correspond to the seven claimed multiplications after substituting the appropriate variables in.

After a fulsome review of the record, the Court finds that it is not so devoid of supporting evidence as to justify overturning the jury verdict. Dr. Wells testified how the Accused Products perform the three multiplications and showed the jury Nokia documentation demonstrating the same. (1/10/2023 Trial Tr. at 99:4-104:13; PX-858 at 10-11.) This is more than a scintilla of evidence. Indeed, the Court finds

that there is substantial evidence to support a finding of infringement.

The Court is not convinced by Defendants' remaining arguments. As mentioned above, the Court will not revisit the same arguments made (and rejected) during claim construction and summary judgment at the judgment as a matter of law stage. *HP*, 340 F.3d at 1321. Moreover, Defendants' reurged claim construction argument was not made at the 50(a) hearing, so it is waived. Further, nothing in the claims prohibits complex numbers from being multiplied.

ii. Whether there was substantial evidence for the jury to find that the Accused Products correct PIM in a “co-located” receiver.

All asserted claims from the '775 Patent require "a transmitter and the receiver being co-located."

Defendants argue that the Court improperly rejected Defendants' claim construction request during claim construction. (Dkt. No. 294 at 28.) The proposed construction was based on explicit definitions of "co-located receiver" and "co-located transmitter." (*Id.* (citing Dkt. No. 86 (citing '775 Patent at 5:63-6:14))). Defendants' proposed construction was "a receiver located in the vicinity of, but not associated with, the transmitter." (*Id.* (quoting Dkt. No. 86 at 22-23).) Transmitters and receivers that are associated are explicitly defined as being a "companion" to each other. (*Id.* (citing PX-4 at 5:63-6:14).) These are mutually exclusive of "co-located" receivers, and the classification depends on whether or not the transmitters and receivers are associated

with each other. (*Id.* (citing PX-4 at 5:63-6:14).) Under a proper construction, no reasonable jury could have found infringement of the '775 Patent because the Accused Products only correct PIM generated by the radio's own transmission signals and do not correct PIM for signals transmitted by a transmitter that is in the vicinity of but not associated with the receiver. (*Id.* at 28-29 (citing 1/10/2023 Trial Tr. (Wells) at 59:17-25; *id.* at 151:14-16; 1/11/2023 Trial Tr. (Davis) at 129:10-14; *id.* (Proctor) at 206:25-207:3; DX-281 at 76; Dkt. 86 at 23-26).)

In opposition, Plaintiff argues that Defendants may not revisit this claim construction argument at the judgment as a matter of law stage, and they have waived this argument by not raising it at 50(a). (Dkt. No. 308 at 26 (citing *HP*, 340 F.3d at 1320-21; *Flowers*, 247 F.3d at 238).) Further, Defendants failed to raise their co-located argument at 50(a) so it too is waived. (Dkt. No. 329 at 2, 5.)

The Court finds that this argument was waived by not raising it at the 50(a) hearing. Moreover, the jury was entitled to credit and accept Plaintiff's definition of "co-located" and evidence showing that this limitation was present in the Accused Products. (See 1/10/2023 Trial Tr. at 88:2-9 (Wells); 1/11/2023 Trial Tr. at 260:21-23 (Proctor).) Finally, the Court will not revisit claim construction arguments at the judgment as a matter of law stage. *HP*, 340 F.3d at 1321.

V. Conclusion

For the foregoing reasons, Defendants' Motion for JMOL of Non-Infringement (Dkt. No. 294) should be and hereby is **DENIED**.

So ORDERED and SIGNED this 29th day of August, 2023.

[handwritten: signature]
Rodney Gilstrap
United States District
Judge