

# United States Court of Appeals for the Federal Circuit

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**WASH WORLD INC.,**  
*Plaintiff-Appellant*

v.

**BELANGER INC., FKA PISTON OPW INC.,**  
*Defendant-Appellee*

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2023-1841

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Appeal from the United States District Court for the  
Eastern District of Wisconsin in No. 1:19-cv-01562-WCG,  
Chief Judge William C. Griesbach.

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Decided: March 24, 2025

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MICHAEL DAVID GANNON, Baker & Hostetler LLP, Chicago, IL, argued for plaintiff-appellant. Also represented by ALAINA LAKAWICZ, Philadelphia, PA; SHERRY DAWN COLEY, TIFFANY WOELFEL, Amundsen Davis LLC, Green Bay, WI.

CHRISTOPHER ROBERT DILLON, Fish & Richardson P.C., Boston, MA, argued for defendant-appellee. Also represented by WHITNEY REICHEL; NITIKA GUPTA FIORELLA, Wilmington, DE.

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Before LOURIE, PROST, and STARK, *Circuit Judges*.

STARK, *Circuit Judge*.

Resolution of this case requires us to consider when a litigant fairly presents an issue to the trial court judge. Appellant-adjudicated infringer Wash World Inc. (“Wash World”) seeks to reverse a final judgment that it infringed Appellee-patentee Belanger Inc.’s (“Belanger”) 8,602,041 patent (the “041 patent”). Wash World’s principal contentions are that the district court erred in connection with construing – or, more accurately, *not* construing – three claim terms, and that Belanger could not prove infringement under the correct constructions. Wash World also quarrels with the jury’s decision to award Belanger \$9.8 million in lost profits damages and specifically asks us to direct the district court to subtract approximately \$2.6 million from this figure by ordering remittitur.

For its part, Belanger asserts that every issue Wash World presses on appeal was forfeited by not being preserved in or in some instances not even being presented to, the district court. Belanger points to distinctions between the claim constructions proposed by Wash World below and those Wash World now asks us, on appeal, to adopt. It further insists that Wash World did not do enough to make clear to the district court that among the remedies it was seeking with respect to damages was remittitur of approximately \$2.6 million.

We conclude that neither side is completely correct. With respect to claim construction, for two of the three terms it asks us to construe ourselves, Wash World proposes a materially different construction than it did in the district court, so Wash World’s requests come too late. For the remaining term, we agree with the district court’s implicit construction. Finally, on damages, while Wash World was somewhat vague in the district court about what relief it was seeking, it did enough to let Belanger and the court know that it was asking for remittitur of

approximately \$2.6 million. Because, on the merits, we agree with Wash World that the jury did not have sufficient evidence to include the \$2.6 million as part of its damages award – since this amount corresponds to Belanger’s losses for nonpatented “convoyed sales,” yet the requirements for such damages were not met – and because Belanger is judicially estopped from arguing that we do not know the basis for the jury’s damages award, we will remand with instructions that the district court remit the damages.

## I

Belanger manufactures car wash systems and is the owner of the ’041 patent. The ’041 patent, entitled “Vehicle Spray Washer with Lighted Spray Arm,” generally discloses a spray type car wash system that comprises “the combination of a wash system having a lighting system to provide a visual cue for centering a vehicle within the envelope of the wash apparatus while entering the bay.” ’041 patent 1:38-45. The system has “twin, laterally spaced-apart spray arms” which each include lights for providing visual cues to drivers entering the car wash. *Id.* at 1:46-47. The patent further describes “additional features to prevent damage to the spray arm or arms or light supports such as soft or resilient arm structures and a breakaway joint.” *Id.* at 1:65-67. The spray arms “depend pivotally from a carriage which is mounted on longitudinally extending overhead rails,” and can wash and rinse the car by “travel[ing] along and around the exterior of a vehicle parked in the bay” during the wash and rinse phases. *Id.* at 2:16-19.

An embodiment of the car wash system is illustrated in Figure 1, which is reproduced below. It shows a wash bay (10) from the perspective of an entering vehicle (12). *Id.* at 2:29-30. The wash bay (10) is wide enough to receive a car and is typically around 25 feet long; it may be fully enclosed or essentially open in warmer climates. *Id.* at 2:39-44. The L-shaped spray arms (30, 32) carry a water supply

conduit and are equipped with inwardly-directed nozzles (34); they direct water and other chemicals toward the vehicle when it reaches the appropriate position in the bay. *Id.* at 2:59-65. Elongate tubular lights (38, 40) are attached to and extend along the vertical portion of the L-shaped arms. *Id.* at 3:22-24. The lights may be operated in an intermittent flashing mode by means of a data line (42) extending from the control (26) to the individual light devices (38, 40), *see id.* at 3:22-27, which are themselves made up of translucent yellow plastic tubes of specified dimensions, *see id.* at 3:28-31. The illuminated lights are intended to have a “goal-post” effect, helping the driver maneuver the vehicle through the center of the L-shaped arms, and maintain that position until the end of the bay. *Id.* at 3:31-38.

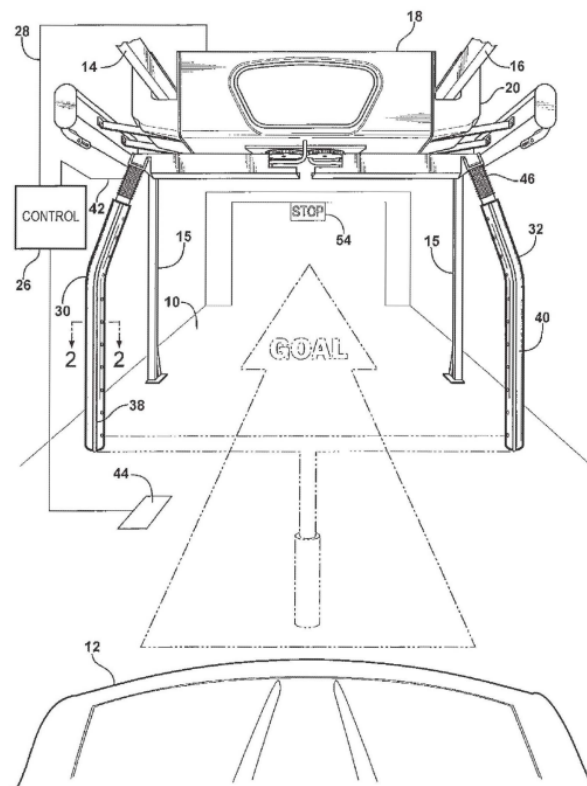


FIG. 1

Claim 7 is illustrative of the issues on appeal. It recites:

A spray-type car wash system comprising:

a carriage for translating a vertically oriented spray arm relative to *a predefined wash area*;

wherein the vertically oriented *spray arm is dependingly mounted from the carriage* so as to extend substantially vertically into the wash area for controlled travel relative to a vehicle in the area; said arm comprising a fluid conduit and a plurality of vertically spaced apart nozzles arranged along a vertical axis for directing fluids laterally of the arm toward a vehicle in the wash area; and

a lighting system comprising a plurality of light sources carried by the arm and distributed along substantially the entire vertical length of the arm so as to be capable of producing illumination along substantially the entire vertical length of the arm, wherein at least a portion of the light sources and at least a portion of the nozzles are partially enclosed within *an outer cushioning sleeve* that encloses the fluid conduit of the spray arm.

'041 patent at 5:24-41 (emphasis added).

In May 2018, Belanger sent a cease-and-desist letter to Wash World, another car wash system manufacturer. Belanger alleged that Wash World's "Razor EDGE" car wash system infringes the '041 patent. The Razor EDGE employs a single lighted spray arm called a "LumenArch" designed to move around a car as the arm washes it. The LumenArch's spray arm is enclosed within a blue-colored

plastic covering. In response to Belanger's letter, Wash World sued Belanger, seeking a declaratory judgment that its Razor EDGE car wash system did not infringe the '041 patent. Belanger counterclaimed, asserting infringement and seeking damages.

The parties filed claim construction briefs and the district court decided it did not need to hold a claim construction hearing. It issued an opinion addressing several claim construction disputes. In particular, the court sided with Belanger and held that "no construction is needed" of any disputed term. J.A. 19. This included two terms at issue in this appeal: "outer cushioning sleeve" and "predefined wash area." J.A. 5-19.

For "outer cushioning sleeve," the district court held that "the terms do not require additional construction" and explained that "Wash World's proposed constructions would unnecessarily narrow the claims." J.A. 13. The court repeatedly noted that "outer cushioning sleeve" is "perfectly understandable when [its] components are given their plain and ordinary meanings, – i.e., cushion ('to protect against force or shock'), [and] sleeve ('a tubular part designed to fit over another part')." J.A. 14 (citing MERRIAM-WEBSTER DICTIONARY).

With respect to "predefined area," the district court rejected Wash World's proposed construction, "substantially centrally within a wash area," reasoning that "the terms are understandable under their plain and ordinary meanings and require no further construction." J.A. 11-12. The court added that, under the plain and ordinary meaning, "the wash area is predetermined by the location and operation of the equipment that performs the washing." J.A. 12.

Following claim construction, Wash World moved for summary judgment of noninfringement, arguing that its Razor EDGE system did not meet the "outer cushioning sleeve" or "predefined wash area" limitations. Wash World

contended that its system lacks an “outer cushioning sleeve” because the LumenArch’s “hard plastic cover is not ‘cushioning’ and is not intended to perform a cushioning function.” J.A. 2911. Wash World further asserted that its LumenArch “does not translate a spray arm relative to a predefined wash area” because it instead “determines the path of the spray arm based on the dimensions of the vehicle and where the vehicle is located in relation to the spray arm, which are measured via sonars.” J.A. 2910. Wash World also argued that the Razor EDGE does not have a spray arm “dependingly mounted” from the carriage (another claim requirement) because the LumenArch spray arm is mounted to a trolley, and that trolley is connected to the carriage. J.A. 2921. The district court rejected each of these arguments and denied Wash World’s motion.

Following a four-day trial, a jury returned a general verdict finding that Wash World’s Razor EDGE car wash system infringes independent claim 7 and dependent claims 11-14 of Belanger’s ’041 patent. The jury awarded Belanger lost profit damages of \$9,800,000 as well as \$260,000 in reasonable royalties for a total damages award of \$10,060,000. The district court entered judgment consistent with this verdict and enjoined Wash World’s use, manufacture, or sale of the Razor EDGE car wash system.

Subsequently, Wash World moved for judgment as a matter of law that claim 7 is not infringed and, alternatively, for a new trial or remittitur of the damages award. In its motion, Wash World addressed each of the three limitations it had disputed at trial, arguing (1) the “outer cushioning sleeve” should have been construed as “a thick sleeve of extruded foam plastic that acts as a protective cushion to prevent damage, thereby suggesting that the sleeve should be made of material that could be compressed and spring back into shape,” J.A. 7191; (2) the “predefined wash area” limitation “required that the spray arm move in a manner established by the location of the equipment that performs the washing,” J.A. 7199; and (3) the

LumenArch was not “dependingly mounted” because it was not directly mounted to the carriage, J.A. 43-44. Wash World also challenged the jury’s damages award on several grounds, including, as relevant here, that Belanger had failed to prove it was entitled to lost profits based on convoyed sales.

The district court denied Wash World’s motion in its entirety. For the “outer cushioning sleeve,” the district court explained that it had “never construed ‘outer cushioning sleeve’ to be a sleeve that acts like a cushion” and it would not now “narrow the plain and ordinary meaning of ‘outer cushioning sleeve’ in the way that Wash World suggests.” J.A. 41-42. The court rejected Wash World’s “pre-defined wash area” arguments, explaining that “the jury was free to credit” testimony “that the claims require movement relative to a car and to the predefined wash area and that Wash World’s products do both.” J.A. 43. With respect to the “dependingly mounted” limitation, the court noted that the jury could have found the LumenArch was “dependingly mounted” because it was *indirectly* mounted to the carriage, and “there is no requirement in the claim limitations or the ’041 Patent that the spray arm must be directly mounted to the carriage.” J.A. 43-44.

Turning to damages, the district court upheld the jury’s award. It interpreted Wash World’s challenge to Belanger’s convoyed sales evidence as an argument that Belanger had failed to present sufficient evidence of apportionment. So viewed, the court rejected Wash World’s contentions.

Wash World appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## II

We review a district court’s rulings on post-trial motions, including for judgment as a matter of law or a new trial, under the law of the regional circuit. *See Finjan, Inc.*



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*v. Secure Computing Corp.*, 626 F.3d 1197, 1202 (Fed. Cir. 2010). Under Seventh Circuit law, denial of a motion for judgment as a matter of law is reviewed de novo and requires “examin[ing] the evidence presented, combined with any reasonably drawn inferences, and determin[ing] whether that evidence sufficiently supports the verdict when viewed in the light most favorable to the non-moving party.” *E.E.O.C. v. AutoZone, Inc.*, 707 F.3d 824, 834-35 (7th Cir. 2013). Reversal of a trial court’s denial of such a motion is appropriate only “if no rational jury could have found for the prevailing party.” *Id.* at 835. The Seventh Circuit reviews the denial of a motion for a new trial, or for remittitur of damages, for abuse of discretion, and is generally extremely deferential to a district court’s decision on these types of motions. *See id.* at 832-33.

Claim construction, reviewed under Federal Circuit law, is “a question of law we review de novo where, as here, it is decided on the intrinsic evidence.” *Best Med. Int’l, Inc. v. Elekta Inc.*, 46 F.4th 1346, 1355 (Fed. Cir. 2022) (internal citation omitted). Vacatur and remand for a new trial is necessary when a legally erroneous claim construction had a prejudicial effect on the jury’s verdict. *See Avid Tech., Inc., v. Harmonic, Inc.*, 812 F.3d 1040, 1047 (Fed. Cir. 2016).

### III

Wash World challenges the district court’s constructions of “outer cushioning sleeve,” “predefined wash area,” and “dependingly mounted from.” Each of Wash World’s challenges is either forfeited or fails on the merits.

#### A

Wash World failed to preserve the claim construction position it presses before us with respect to “outer cushioning sleeve.” On appeal, Wash World insists that the proper construction of this term is “an outer sleeve that is soft or resilient (i.e., can be compressed and spring back into

shape, like a cushion).” Open. Br. at 43 (internal capitalization altered). It never proposed this construction to the district court. When the meaning of the term was being litigated in the district court, Wash World’s proposed construction was “thick sleeve of extruded foam plastic that acts as a protective cushion to prevent damage.” J.A. 2117. Wash World gave no indication to the trial court that it was contending the “outer cushioning sleeve” had to be “soft and resilient” and had to be capable of being “compressed [to] spring back into shape.” The district court, therefore, had no opportunity to evaluate this position (one with which Belanger disagrees) and we find it is forfeited. See *Digital-Vending Servs. Int’l, LLC v. Univ. of Phx., Inc.*, 672 F.3d 1270, 1273-74 (Fed. Cir. 2012) (noting that “party may not, as a general rule, change the scope of its claim construction on appeal” and refusing to consider “new construction [that was] substantially different” from that presented to district court) (internal citations omitted); *Conoco, Inc. v. Energy & Environ. Int’l, L.C.*, 460 F.3d 1349, 1359 (Fed. Cir. 2006) (“[L]itigants [may not] present new claim construction disputes if they are raised for the first time after trial.”) (internal citation omitted).

Citing our decision in *Vectura Limited v. Glaxosmithkline LLC*, 981 F.3d 1030, 1038 (Fed. Cir. 2020), Wash World argues that its “soft and resilient” construction on appeal is sufficiently similar to the construction it proposed to the trial court such that we should not find forfeiture. To be sure, a party is not always confined to the precise wording of the constructions it advanced below, and on appeal it may “present[] new or additional arguments in support of the scope of [its] claim construction.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1359 (Fed. Cir. 2008). In doing so, however, a party must still “incorporate an understanding of the parties’ dispute that has developed through the course of litigation.” *Id.* at 1360.

Here, Wash World seeks to go further than simply offering new arguments, and new words, to resolve essentially the same dispute with essentially the same construction. In the district court, the parties' dispute centered on whether the "outer cushioning sleeve" had to be a "thick sleeve of extruded foam plastic," as Wash World proposed, or was not limited to such material, as Belanger advocated. J.A. 2721-22. The district court resolved this dispute by adopting the plain and ordinary meaning and finding the sleeve is not limited to thick extruded foam plastic. On appeal, Wash World has dropped its prior proposal that the "outer cushioning sleeve" be "thick" and made of "extruded foam plastic," and instead urges us to hold that the sleeve must be "soft and resilient" and, therefore, "can be compressed and spring back into shape." That is, on appeal Wash World has conceded the dispute it presented to the district court ("thick . . . extruded foam plastic") and presses only a dispute it did not fairly present to that court ("soft and resilient . . . and [can] spring back into shape"). Although Wash World can point to places in the trial court record where it used the words "soft and resilient" in connection with discussing the "outer cushioning sleeve," *see* J.A. 2117 ("[T]his construction is supported by the plain and ordinary meaning of 'to cushion,' which is to soften or lessen the impact thereof."); J.A. 2118 ("The specification discusses that the invention comprises additional features to prevent damage to the spray arm . . . such as soft or resilient arm structures. . . .") (internal emphasis omitted), at no point did it propose "soft and resilient" (or anything like it) be made part of the construction, nor did it, in any other way, alert the district court that there was a dispute over "soft and resilient."<sup>1</sup>

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<sup>1</sup> The closest Wash World came was when it stated in its claim construction brief, "Therefore, the term

We have previously held that where, as here, “there is no indication that the [district] court was aware of the supposed [claim construction] dispute, a party is considered to have forfeited” it, “and cannot resurrect its argument on appeal by pointing to ambiguous statements in the record.” *Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1369 (Fed. Cir. 2022). The focus of Wash World’s district court arguments was that “[c]ushioning must be construed as limiting the purpose of the sleeve,” with the purpose being “to prevent damage.” J.A. 2117. Wash World did not attempt to show that this purpose could only be served by “soft and resilient” materials. Thus, nothing about Wash World’s earlier argument indicated that Wash World was proposing to limit the term to “soft and resilient” materials, as it now asks us to do on appeal.

We may excuse forfeiture under exceptional circumstances. *See In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020) (“[A] position not presented in the tribunal under review will not be considered on appeal in the absence of exceptional circumstances.”). No such circumstances are present here. Wash World chose what construction to propose to the district court, was fully heard on its reasoning for its proposal, and never – at claim construction, at summary judgment, or in preparing jury instructions – indicated to the trial court that there was a dispute over whether the “outer cushioning sleeve” had to be made of “soft and resilient” material. The case,

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‘cushioning’ should be construed to require a softening or protective function to the outer sleeve.” J.A. 2118. Even here, however, its contention was that the construction should be based on the function of the sleeve, which was *either* to soften *or* to protect – and Wash World never argued that only soft and resilient sleeves could protect. Wash World also failed to show that even a “softening” could only be accomplished by a “soft” material.

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therefore, proceeded through trial without a construction imposing such a requirement. We see no reason to absolve Wash World of the consequences of its decision not to pursue, in a timely manner in the trial court, the claim construction it now wishes us to adopt. *See Kaufman*, 34 F.4th at 1370 (“A proper claim construction provides a legal standard for the jury to apply, and so the requirement of clear, timely raising of an argument for claim construction reflects the strong requirement of timely raising of distinct objections to jury instructions.”); *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 975 (Fed. Cir. 2018) (finding claim construction position forfeited where party “fail[ed] either to request that the district court modify or clarify its claim construction earlier in the litigation proceedings or to object to the jury instructions”).

Thus, we will not reverse the district court based on its construction of “outer cushioning sleeve.”

## B

Wash World likewise forfeited the position it presently takes with respect to the proper construction of “predefined wash area.” In the district court, Wash World proposed that “predefined wash area” be construed as “substantially centrally within a wash area,” arguing that a car to be washed had to be “positioned so that it is centrally located” within the wash area. J.A. 2109-10. Wash World further advanced a construction of “wash area” as the “area in which a vehicle to be washed is positioned.” J.A. 2103.

On appeal, Wash World presses a more elaborate, and materially different, construction. It begins by proposing that “the wash area inside the wash bay is defined before the vehicle enters the car wash and does not change after the vehicle enters the car wash.” Open. Br. at 51 (internal capitalization altered). These timing-related constraints were never even mentioned to the district court. For the first time on appeal, Wash World further asserts that

“predefined” requires that “the spray arms . . . cannot be moved laterally from side-to-side, which means that the dimensions of the wash area (defined by the movement of the spray arms . . . around the sides, front, and rear of the vehicle) are exactly the same for every vehicle.” Open. Br. at 52.

Wash World directs us to several statements it made during the district court proceedings that it contends were “substantially similar” to its current construction, but these statements say nothing about restricting the lateral movement of the spray arms or otherwise restricting the boundaries of the wash area. *See* J.A. 2107-09 (arguing “wash area” is different from “wash bay”); J.A. 2820 n.4 (same); J.A. 2106 (arguing “there is a specific area to which the driver should be navigated”); J.A. 2833 (“[T]he specification clearly disavows a general, undefined wash area and identifies that the wash area must have a positional component.”). In the district court, the only issue Wash World urged upon the court relating to this term was whether the car being washed had to be located essentially in the center of the wash area. Wash World did nothing to alert the court to its present concern that the wash area must be kept constant for all cars at all times.

Wash World’s position before us is too far removed from its district court construction to be considered simply new arguments for essentially the same claim construction and is, therefore, forfeited.<sup>2</sup> No exceptional circumstances are

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<sup>2</sup> Wash World preserved its related argument concerning the general relationship between the “wash area” and “wash bay.” *Compare* Open. Br. at 55 (“[A] ‘wash area’ . . . is different than a ‘wash bay. . . .’”) *with* J.A. 2109 (“[T]he Court should reject any argument by Belanger to construe ‘wash area’ as ‘wash bay’ and instead construe ‘wash area’ as the ‘area in which a vehicle is positioned.’”).

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present to excuse that forfeiture. We will not reverse the district court based on its construction of “predefined wash area.”

### C

Wash World preserved its challenge to the district court’s construction of “dependingly mounted,” but we agree with that court’s construction. Claim 7 of the ’041 patent includes the limitation “wherein the vertically oriented spray arm is *dependingly mounted* from the carriage so as to extend substantially vertically into the wash area.” ’041 patent at 5:24-41 (emphasis added). Although neither party identified “dependingly mounted” as requiring construction during the claim construction stage of the district court proceedings, a dispute over the scope of this term became apparent during briefing on Wash World’s motion for summary judgment. *See generally Conoco*, 460 F.3d at 1359 (“[A] district court may engage in claim construction during various phases of litigation.”). In its motion, Wash World contended that the Razor EDGE does not infringe claim 7 because it lacks a direct connection between the LumenArch spray arm and the carriage. Instead, the LumenArch spray arm is directly connected to a trolley, which is itself directly connected to the carriage, leaving the spray arm of the accused system only *indirectly* connected to the carriage via the trolley. Wash World argued in support of summary judgment that the “dependingly mounted” limitation requires that the spray arm be connected *directly* to the carriage. In denying Wash World’s request for summary judgment of non-infringement, the district court rejected Wash World’s contention,

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But no material dispute remains on this point. As Belanger notes, the district court did not construe “wash area” as having the same meaning as “wash bay,” and Belanger does not question this (or any other of the district court’s constructions).

holding “there is no requirement in the claim limitations or the ’041 Patent that the spray arm must be directly mounted to the carriage.” J.A. 43. While neither the parties nor the district court expressly referenced “claim construction,” they were plainly addressing the scope of the claims and were, thereby, engaging in claim construction. *See Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1055 (Fed. Cir. 2024) (“If the outcome of the analysis of the claim term establishes the scope (e.g., boundaries) and meaning of the patented subject matter, the court (or the Board) has mostly likely construed the claim.”) (internal emphasis omitted).

On appeal, Wash World is more explicit that its argument is one of claim construction, and we find no forfeiture. This is because Wash World’s “direct connection” argument has always been one of claim construction, whether described that way or not, and the substantive position it presses on us is identical to what it argued to the district court. Before us, Wash World contends that the district court erred by finding “no requirement in the claim limitations of the ’041 Patent that the spray arm must be directly mounted to the carriage.” J.A. 43. We must resolve this issue on the merits. *See Google*, 92 F.4th at 1056-57 (resolving implicit claim construction dispute not recognized as claim construction by tribunal being reviewed).

Doing so, we agree with the district court that claim 7 is not limited to direct connections between the spray arm and the carriage and, instead, permits the presence of intervening structures. Nothing in the claim language – “wherein the vertically oriented spray arm is dependingly mounted from the carriage so as to extend substantially vertically into the wash area for controlled travel relative to a vehicle in the area” – suggests the claim is limited to direct connections. In general, a structure can be “dependingly mounted” from another structure either by being attached directly to it (for example, a poster taped to a wall) or by being attached indirectly to it (such as a framed



poster hung on a nail attached to the wall). That the specification of the '041 patent only depicts embodiments having a direct connection, *see, e.g.*, '041 patent at Figures 1-3, does not exclude indirect connections from the scope of the claims. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967 (Fed. Cir. 2022) (“Embodiments in the specification – even if there is only one embodiment – cannot limit the scope of the claims absent the patentee’s words or expressions of manifest exclusion or restriction.”).

Thus, the district court was correct to conclude that claim 7 encompasses both indirect and direct connections between the spray arm and the carriage. As it is undisputed that the accused Razor EDGE includes a LumenArch that is indirectly “dependingly mounted” to that system’s carriage, by virtue of its direct connection to a trolley, we have no basis to reverse the district court’s judgment of infringement.<sup>3</sup>

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<sup>3</sup> Wash World faults the district court for relying on our decision in *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed. Cir. 2002), whose overruling we have recognized several times, *see, e.g.*, *Philips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005) (en banc) (holding *Texas Digital* approach “improperly restricts the role of the specification in claim construction”). While *Texas Digital* no longer sets out the proper approach courts should follow in undertaking claim construction, *see, e.g.*, *Trustees of Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) (“*Phillips* makes clear that . . . . [t]he only meaning that matters in claim construction is the meaning in the context of the patent.”), any error the district court may have committed by relying on it is harmless, given our rulings today.

## IV

Wash World also challenges the jury's award of \$9.8 million in lost profits damages. According to Wash World, the district court abused its discretion by entering judgment on a damages award that improperly included \$2,577,848 (i.e., approximately \$2.6 million) in lost profits from auxiliary products lacking any functional relationship to Belanger's patent claim. We agree.

## A

As an initial matter, we must explain our rejection of Belanger's contention that Wash World forfeited its request for remittitur by failing to ask the district court to remit any part of the damages award. It is true that remittitur did not feature prominently in Wash World's briefing in support of its motion for judgment as a matter of law or a new trial. At no point in the district court did Wash World plainly and expressly request a reduction of a specific amount (\$2,577,848) or set out the number of infringing units (182) or lost-profits-per-unit that it wanted deducted from the jury's verdict (\$14,164).<sup>4</sup>

In context, however, we conclude that Wash World preserved its remittitur argument. First, Wash World indisputably preserved its objection to Belanger obtaining any lost profits damages for convoyed sales. "A 'convoyed sale' refers to the relationship between the sale of a patented product and a functionally associated non-patented product." *Am. Seating Co. v. USSC Grp., Inc.*, 514 F.3d 1262, 1268 (Fed. Cir. 2008). Wash World pressed the convoyed

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<sup>4</sup> It is undisputed that Wash World adequately presents the remittitur issue to us on appeal. See Oral Arg. at 26:24-28:00 (Counsel for Belanger: "I believe it's [the remitter issue] in the blue brief"), available at [https://oralarguments.ca9.uscourts.gov/default.aspx?fl=23-1841\\_10102024.mp3](https://oralarguments.ca9.uscourts.gov/default.aspx?fl=23-1841_10102024.mp3).

sale issue in its *Daubert* motion challenging the opinions of Belanger's expert, Dr. McDuff, ("[I]t was inappropriate and contrary to federal law for Dr. McDuff to base his lost profits off of the entire car wash system under a convoyed sales theory."); moved during trial for judgment as a matter of law based on the record lacking sufficient evidence to satisfy the requirements for lost profits based on convoyed sales, J.A. 7222-25; *see also* J.A. 6931 (jury instruction on "collateral products" including: "Belanger may not recover lost profits on other products that might be sold along with the patented product for convenience or business advantage but that are not functionally part of the patented product."); and it renewed this argument in its post-trial motion for judgment as a matter of law, J.A. 7183 ("Belanger's lost profits award includes lost profit on convoyed sales for which there is no evidence in the record.") (internal capitalization altered). From this repeated objection, Belanger and the district court were on notice of Wash World's position that any lost profits damages for convoyed sales would not be warranted, and could not be proven. The district court had an opportunity to consider these issues and sided with Belanger on them. J.A. 36-64, 74, 5291-92.

Second, all the specific data supporting Wash World's request for remittitur was included in its opening brief in support of its renewed motion for judgment as a matter of law. In a section of that brief with the header "Belanger's Lost Profits Award Includes Lost Profit on Convoyed Sales for Which There is No Evidence in the Record," Wash World wrote:

Dr. McDuff improperly opined that if Belanger captured 20% of the Wash[ W]orld accused products sales, it would be entitled to lost profits on 182 units at \$53,866 per unit for a total of \$9.8 million. The jury appears to have adopted that calculation in awarding \$9.8 million in lost profits. However, the \$9.8 million is based on a \$53,866 per unit

profit, which encompasses convoyed sales of items that were never identified and for which there is no evidence to support the convoyed sale. As such, *Dr. McDuff's lost profit analysis overinflated Belanger's lost profits by over \$14,000 per unit, resulting in a lost profits award that is almost \$2.6 million greater than can be supported by any evidence in the record.*

J.A. 7222 (emphasis added).

Third, Wash World's briefing supporting its renewed post-trial motion for judgment as a matter of law expressly referred to remittitur as potential relief, J.A. 7228 (asking district court to remit damages for portion of period for which jury awarded damages); *see also* J.A. 7182 (showing that motion was entitled, in part, "Rule 59 Motion for Reduced Damages") (internal capitalization altered and emphasis omitted), and, in another part of its briefing, it also fully articulated why convoyed sales should not have been included in the damages awarded, J.A. 7222-25. Although Wash World did not expressly ask the district court for remittitur of a specific amount based on wrongful inclusion of convoyed sales, it did broadly argue in its opening brief supporting the renewed motion that "[b]ecause the damages calculation includes lost profits for convoyed sales for which there is no evidence to support an award of lost profits, the Court must overturn the jury's damages award," which, in context, could feasibly be read as encompassing a request for remittitur. J.A. 7225. In its reply brief in support of the motion, Wash World was finally explicit, stating: "The Court must either reduce Belanger's damages by \$14,164 per unit or order a new trial on damages." J.A. 7556. As a general rule, requests for new forms of relief in a reply brief are considered untimely. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006) ("[A]rguments not raised in the opening brief are [forfeited].") (internal citation omitted). However, an elaboration on a request that, in context, was

present in the opening brief may be sufficient to preserve the issue, particularly where, as here, the appellee addresses the initial request in its responsive briefing. See *McIntosh v. Dep't of Def.*, 53 F.4th 630, 641 (Fed. Cir. 2022) (noting that party may rely on any “ground for reversal” presented in opening brief); *Xianli Zhang v. United States*, 640 F.3d 1358, 1371 (Fed. Cir. 2011) (noting that “we retain case-by-case discretion over whether” to address arguments presented for first time in reply brief) (citation omitted).

While Wash World certainly could have been clearer in its opening brief that its renewed motion sought, as one form of potential relief, remittitur of approximately \$2.6 million for convoyed sales, our review of the record persuades us that the district court and Belanger understood that this was a component of Wash World’s request.

Even if we were to conclude that Wash World had forfeited its request for remittitur, exceptional circumstances are present that would lead us to reach the merits nonetheless. Those exceptional circumstances are that we can discern the precise amount of damages the jury awarded based on convoyed sales, Belanger is judicially estopped from contending otherwise, and (as explained in the next section) the requirements for obtaining lost profits for convoyed sales are plainly not satisfied in this case.

Belanger’s own arguments to the district court confirmed that Belanger understood the precise amount of damages the jury had attributed to lost profits for convoyed sales. In opposing Wash World’s renewed motion, Belanger explained its position:

The jury considered each side’s arguments regarding whether to include Belanger’s sales of unpatented components in the lost profits damages. WashWorld did not object to Dr. McDuff’s testimony or assert it was insufficient to prove the amount of lost profit. *The jury accepted Dr.*

*McDuff's opinion*, and there is no reason to review or reverse that decision or overturn the jury's damages award.

J.A. 7455 at 25 (emphasis added); *see also* J.A. 7030 (Belanger reiterating, in support of its own post-trial motion, that “the jury *accepted* his [i.e., Dr. McDuff's] damages calculation, awarding damages within his stated range”) (emphasis added). Dr. McDuff's opinion was that “Belanger's lost profit was \$53,866 per unit,” which included \$14,164 for unpatented components, on 182 units. J.A. 3390 (expert report); 6535-36, 6574 (trial testimony). Given that Belanger prevailed on Wash World's renewed motion based, in part, on Belanger's argument that the court could identify the amount of damages the jury awarded based on convoyed sales, it would be inequitable to allow Belanger to prevail on appeal by telling us, in direct contradiction, that we cannot determine the amount of damages that were based on convoyed sales. *See generally Biomedical Pat. Mgmt. Corp. v. Cal., Dept. of Health Servs.*, 505 F.3d 1328, 1341 (Fed. Cir. 2007) (“The doctrine of judicial estoppel provides that ‘where a party assumes a certain position in a legal proceeding, and succeeds in maintaining that position, [it] may not thereafter, simply because [its] interests have changed, assume a contrary position, especially if it be to the prejudice of the [opposing] party.’”) (quoting *New Hampshire v. Maine*, 532 U.S. 742, 749 (2001)); *see also Adkins v. VIM Recycling, Inc.*, 644 F.3d 483, 495 (7th Cir. 2011) (“[A] party who prevails on one ground in a prior proceeding cannot turn around and deny that ground in a later proceeding.”). Thus, even if the remittitur issue had been forfeited in the district court, and it was not, we would excuse such forfeiture based on exceptional circumstances.

## B

Turning to the merits, we agree with Wash World that there is not sufficient evidence in the record to support damages for convoyed sales.<sup>5</sup>

To prove entitlement to lost profits for convoyed sales, a patentee must prove that the unpatented products and the patented product together constitute a “functional unit,” such that they are “analogous to components of a single assembly or . . . parts of a complete machine.” *Rite-Hite*, 56 F.3d at 1550. Convoyed sales damages are not available for “items that have essentially no functional relationship to the patented invention and that may have been sold with an infringing device only as a matter of convenience or business advantage.” *Id.*

Taking the trial record in the light most favorable to Belanger, no reasonable juror could have found that the

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<sup>5</sup> The district court incorrectly viewed Wash World’s motion as presenting an issue of apportionment rather than as one of convoyed sales. Apportionment, and more generally the *Panduit* factors, apply “when a patentee is seeking lost profits for a device covered by the patent in suit.” *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1548 (Fed. Cir. 1995); *see also Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978). Where, as here, the issue is incremental damages for portions of products *not* covered by the patent, the proper inquiry is whether the unpatented components are convoyed sales. *See, e.g., Am. Seating*, 514 F.3d at 1268 (“A patentee may recover lost profits on unpatented components sold with a patented item, a convoyed sale, if both the patented and unpatented products ‘together were considered to be components of a single assembly or parts of a complete machine, or they together constituted a functional unit.’”) (quoting *Rite-Hite*, 56 F.3d at 1550).

unpatented components of Belanger's Razor EDGE system constitute a functional unit with the patented portions of the system.

The principal evidence Belanger points to as supporting the inclusion of convoyed sales in Belanger's lost profits was the testimony of Dr. McDuff, to the effect that his \$53,866 lost profits per unit calculation included "the typical set of components that are sold with a Belanger system." J.A. 6574; *see also* J.A. 6576 (Dr. McDuff describing dryer as "not some add-on, it's what the customers are buying as part of the car wash package"). Dr. McDuff also testified that approximately three quarters of Belanger's customers purchased the in-bay automatic ("IBA") car wash systems, which practice the patent claims, with an unpatented dryer already installed. J.A. 6574-75. Belanger's general manager responsible for the IBA business line, David Dougherty, similarly testified that the IBAs are "typically" sold as an "entire system," including the unpatented dryers. J.A. 6894. That these additional components were sold as a "package" with the patented car wash system does not demonstrate the requisite functional relationship necessary to establish Belanger's entitlement to the additional lost profits. To the contrary, selling the products together as a package is the exact sort of "matter of convenience or business advantage" that does not, in and of itself, give rise to damages liability. *See Rite-Hite*, 56 F.3d at 1550. As Belanger has not directed us to any other evidence of a functional relationship between Belanger's car wash and the listed additional components, we conclude that there is no evidence in the record that could support awarding damages for convoyed sales.

Belanger contends that, even if we conclude that the record cannot support inclusion of lost profits damages for convoyed sales, the jury's award of \$9.8 million must still be affirmed because the jury could have arrived at that amount without crediting Dr. McDuff's convoyed sales evidence. Belanger observes that the verdict was a general



verdict; the jury was not asked to break down the portion of its award attributable to convoyed sales. In such a situation, Belanger asserts, Seventh Circuit law requires affirmation. *See, e.g., Kossman v. Ne. Ill. Reg'l Commuter R.R. Corp.*, 211 F.3d 1031, 1037 (7th Cir. 2000) (“[W]hen a jury only returns a general verdict, we need only find support in the record for one of the theories presented to the jury in order to affirm the jury award.”) (internal citation omitted).

We are not persuaded. At trial, Dr. McDuff presented five possible lost profits damages amounts, ranging from \$9.8 million to \$29.3 million, all of which included damages for convoyed sales. *See* J.A. 7727. The jury’s verdict is precisely equal to the \$9.8 million bottom figure of Dr. McDuff’s proposed damages calculations. *See* J.A. 3390 (calculating \$53,866 profit per unit based on base profit and ancillary profit, i.e., convoyed sales); J.A. 7727 (calculating \$9.8 million based on \$53,866 profit per unit). As Dr. McDuff never presented the jury with any damages figure that excluded convoyed sales, and the jury verdict is equal to the bottom number in Dr. McDuff’s proposed range, it is overwhelmingly likely that the jury adopted all components of Dr. McDuff’s opinion, and did not coincidentally reach the same figure as he did by some alternative, independent calculation.

Moreover, as we have already explained, our understanding of the jury’s damages calculation is the same as *Belanger’s* own understanding, at least in the trial court. There, Belanger repeatedly told the district court that “*the jury accepted his [i.e., Dr. McDuff’s] damages calculation.*” J.A. 7030 (emphasis added); *see also* J.A. 7478 n.13 (“Dr. McDuff testified that if the jury believed that Belanger would have captured 20% of the infringing sales, then it should award \$9.8 million in lost profit damages and \$260,000 in royalty damages . . . which is what the jury awarded.”). Belanger is estopped from arguing to us that the jury did not accept Dr. McDuff’s opinion, including his convoyed sales opinion, so we need not determine if the jury

could have conceivably arrived at its damages award based on some other theory.

For these reasons, we vacate and remand the damages portion of the judgment. On remand, the district court shall remit the damages award by \$2,577,848 and shall enter judgment in the amount of \$7,482,152 in favor of Belanger.

V

We have considered the parties' remaining arguments and find them unpersuasive. Accordingly, we affirm the district court's judgment of infringement, and we vacate and remand its damages judgment. On remand, the district court shall remit the damages award by \$2,577,848 and shall enter judgment in the amount of \$7,482,152 in favor of Belanger.

**AFFIRMED-IN-PART, VACATED-IN-PART, AND  
REMANDED**

**COSTS**

Each party shall bear its own costs.