

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

**WIRTGEN AMERICA, INC.,**

*Plaintiff,*

v.

**CATERPILLAR, INC.,**

*Defendant.*

**Case No. 1:17-cv-00770-JDW-MPT**

**MEMORANDUM**

This patent litigation between Wirtgen America, Inc. and Caterpillar, Inc. concerns patents for road construction and repair. Both sides have moved for partial summary judgment. I conclude that Wirtgen doesn't infringe on Claims 1 and 8 of Caterpillar's '618 Patent and Caterpillar doesn't infringe on Claim 17 of the '641 Patent. Further, IPR estoppel will apply against Caterpillar, and there was no improper broadening of the '268 Patent. Conflicting expert testimony precludes granting summary judgment on the remaining issues.

**I. BACKGROUND**

Wirtgen and Caterpillar sell road construction machinery. On June 16, 2017, Wirtgen filed this suit alleging that Caterpillar's road-milling machines infringe twelve of Wirtgen's patents. Wirtgen later amended its Complaint to cover thirteen patents. Caterpillar counterclaimed, alleging that Wirtgen infringes three of its patents.

On July 19, 2017, Wirtgen filed a complaint with the ITC, claiming infringement of five of the twelve patents in Wirtgen's initial complaint. Judge Andrews stayed this case until the resolution of the ITC proceedings. The ITC found infringement for three patents and issued a limited exclusion order. *See Caterpillar Prodotti Stradali S.R.L. v. Int'l Trade Comm'n*, 847 Fed. App'x 893, 894 (Fed. Cir. 2021) (affirming infringement findings for the '530 and '309 Patents); D.I. 221-22 (ITC's issuance of a modified exclusion order to include the '641 Patent).

Both Parties moved for partial summary judgment. Those Motions cover eight patents: seven belong to Wirtgen;<sup>1</sup> and one belongs to Caterpillar.<sup>2</sup> Wirtgen seeks summary judgment declaring that Caterpillar infringes Claims 5, 16, and 22 of its '530 Patent; Claim 29 of its '309 Patent; and Claims 11, 17, and 18 of its '641 Patent. Wirtgen also seeks a ruling that it does not infringe Claims 1 and 8 of Caterpillar's '618 Patent. Caterpillar seeks judgment finding that it does not infringe Claims 17 and 18 of Wirtgen's '641 Patent, Claim 10 of the '309 Patent, Claim 13 of the '972 Patent, and any Claims of the '474 and '788 Patents. Caterpillar asks me to hold that it does not willfully infringe on any of the asserted patents. Wirtgen also seeks summary judgment that it

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<sup>1</sup>(1) U.S. Patent No. 7,828,309 ('309 Patent); (2) U.S. Patent No. 7,530,641 ('641 Patent); (3) U.S. Patent No. 9,656,530 ('530 Patent); (4) U.S. Patent No. 8,690,474 ('474 Patent); (5) U.S. Patent No. 7,946,788 ('788 Patent); (6) U.S. Patent No. 8,424,972 ('972 Patent); (7) U.S. Patent No. RE48,268 ('268 Patent).

<sup>2</sup> U.S. Patent No. 9,371,618 ('618 Patent).

didn't improperly broaden its '268 Patent during reissue and that IPR estoppel applies against Caterpillar. Caterpillar moves for a finding that Wirtgen did improperly broaden the '268 Patent.

## **II. LEGAL STANDARD**

Federal Rule of Civil Procedure 56(a) permits a party to seek, and a court to enter, summary judgment "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party has the initial burden of proving the absence of a genuinely disputed material fact relative to the claims in question. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 330 (1986). Material facts are those "that could affect the outcome" of the proceeding, and "a dispute about a material fact is 'genuine' if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party." *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)).

The burden then shifts to the nonmovant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986). A nonmoving party that asserts a genuine dispute about a fact must support its assertion by: "(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations ..., admissions, interrogatory answers, or other materials; or (B)

showing that the materials cited [by the opposing party] do not establish the absence ... of a genuine dispute ....” Fed. R. Civ. P. 56(c)(1). When determining whether a genuine issue of material fact exists, a judge must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party’s favor. *See Scott v. Harris*, 550 U.S. 372, 380 (2007).

When the moving party would bear the burden of proof at trial, it must “show that it has produced enough evidence to support the findings of fact necessary to win.” *El v. Se. Pennsylvania Transp. Auth. (SEPTA)*, 479 F.3d 232, 237 (3d Cir. 2007) (citation omitted). In that instance, summary judgment is only appropriate if “a reasonable juror would be compelled to find [the moving party’s] way on the facts needed to rule in its favor on the law.” *Id.* “[D]oubts as to the sufficiency of the movant’s proof” suffice to defeat summary judgment. *Id.*

When two experts offer conflicting opinions, so long as those opinions are admissible and on point, there is a battle of the experts and summary judgment is inappropriate. *See Metro Life Ins. Co. v. Bancorp Svcs. LLC*, 527 F.3d 1330, 1338-39 (Fed. Cir. 2008). Because these expert issues are complex, my Policies And Procedures require parties to file contemporaneous *Daubert* motions with summary judgment. The Parties complied with that policy and filed motions to exclude certain expert opinions. However, there are other instances in which one side or the other did not file a *Daubert* motion but does challenge the applicability or weight of an expert’s analysis. For the purposes

of summary judgment, absent an applicable *Daubert* motion, I must assume that the expert's position is admissible and treat it as part of the factual record. Therefore, when there's conflicting expert testimony on the record, as there is for many of the issues presented below, I will deny summary judgment.<sup>3</sup>

### **III. ANALYSIS**

#### **A. Infringement**

Infringement occurs when a person "without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent ...." 35 U.S.C. § 271(a). "Determining infringement requires two steps: construing the claims and comparing the properly construed claims to the accused product." *Advanced Steel Recovery, LLC v. X-Body Equip., Inc.*, 808 F.3d 1313, 1316–17 (Fed. Cir. 2015).

When construing a claim, words "are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*)). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and

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<sup>3</sup> Wirtgen's technical experts are Dr. John Lumkes, Dr. John Meyer, and Dr. Christopher David Rahn. Caterpillar's technical experts are Dr. Joseph F. Rakow and Dr. Adam Sorini.

claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1314. If the meaning isn't readily apparent, "the court should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history." *Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001). Then, a court may review extrinsic evidence, cognizant of its potential unreliability and bias. *See Phillips*, 415 F.3d at 1318.

A judge may depart from a word's ordinary and customary meaning only when a patentee (1) sets out a definition and acts as his own lexicographer, or (2) disavows the full scope of a claim term either in the specification or during prosecution. *See Thorner*, 669 F.3d at 1365. The judge must interpret the claim "with an eye toward giving effect to all terms in the claim." *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) (citation omitted). Readings that render claim language "superfluous" or "meaningless" are disfavored. *Id.* (collecting cases).

Infringement is a question of fact. *See Thorner*, 669 F.3d at 1317. Accordingly, summary judgment of noninfringement "is proper when no reasonable jury could find that every limitation recited in a properly construed claim is found in the accused device either literally or under the doctrine of equivalents." *Id.* (citation omitted).<sup>4</sup> The patentee

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<sup>4</sup> Caterpillar has filed a separate motion to exclude Wirtgen's experts from opining that Caterpillar infringes under the doctrine of equivalents. Because I don't rely on Wirtgen's

has the burden of proving infringement by a preponderance of the evidence. *See Duncan Parking Techs., Inc. v. IPS Grp., Inc.*, 914 F.3d 1347, 1360 (Fed. Cir. 2019). For literal infringement, “every limitation set forth in a claim must be found in an accused product, exactly.” *Id.*

Because Wirtgen would bear the burden of proof for its infringement claims at trial, summary judgment is only appropriate if a reasonable juror would be compelled to find in Wirtgen’s favor. *See El*, 479 F.3d at 237. When Caterpillar can point to gaps in the evidence or legitimate reasons to doubt the credibility of Wirtgen’s experts, summary judgment will be denied. *See id.* at 247.

### **1. ‘530 Patent**

I can’t grant summary judgment for Wirtgen on Claim 1 of the ‘530 Patent because a jury could credit Caterpillar’s expert and find that Wirtgen hasn’t carried its burden. Claim 1 requires that the “lifting position sensor is coupled to two or more components within its respective lifting column.” (D.I. 226-7 at 8:4-6.) Claims 5, 16, and 22 of the ‘530 Patent depend on Claim 1. Wirtgen’s expert, Dr. Lumkes, opines that the lifting position sensor in the Accused Machines has two connection points with the lifting column. Caterpillar’s experts, Dr. Rakow and Dr. Sorini, conclude that Dr. Lumkes “has not shown that the Large Milling Machines satisfy Claim 1.” (D.I. 221-6 ¶ 73.)

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experts’ DOE-related opinions in my analysis, or the doctrine of equivalents at all, I do not reach that issue in this Memorandum. I will address it in a separate Memorandum that resolves the various, pending *Daubert* issues.

Drs. Rakow's and Sorini's opinions are not conclusory. Dr. Lumkes concludes that the sensor is attached to the rod which in turn is attached to the column. In Drs. Rakow's and Sorini's opinions, Dr. Lumkes hasn't adequately shown how the sensor is connected to the rod. Additionally, while Dr. Lumkes considers a component magnet as part of the "lifting position sensor," Drs. Rakow and Sorini opine that Dr. Lumkes hasn't sufficiently explained why that is true. (D.I. 221-6 ¶ 72.) If a jury were to credit one or both of Drs. Rakow's and Sorini's opinions, it could find that Wirtgen hasn't carried its burden of proving infringement. That's enough to deny summary judgment. *See El*, 479 F.3d at 237.

## **2. '309 Patent**

Caterpillar seeks summary judgment on Claim 10 of the '309 Patent, and Wirtgen moves on Claim 29. Dueling expert testimony precludes granting summary judgment on either.

### **a. Claim 10**

Conflicting expert testimony with regards to whether a pulley is a "wheel" precludes granting summary judgment for Caterpillar on Claim 10. Claim 10 of the '309 Patent claims "a road-building machine ... characterized in that the valve control is designed such that all the wheels are raised in a first operating mode and are lowered in a second operating mode." (D.I. 226-4 at 12:51-54.) Caterpillar argues that their machines use a "caterpillar track assembly," which isn't equivalent to a wheel, so there's no infringement. (*See* D.I. 226-14 ¶¶ 55, 58.) But Dr. Lumkes opines that the round



pulleys and gears in those track assemblies are literally wheels. I can't discount that section of Dr. Lumkes's report because Caterpillar didn't move to exclude it. Caterpillar's expert disagrees, so there's a battle of the experts. A jury will have to resolve this claim.

**b. Claim 29**

Claim 29 of the '309 Patent describes a four-sided stability pattern "in which the widest transverse dimension falls within the milling rotor footprint." (D.I. 226-4 at 14:33-37.) Dr. Lumkes opines that the Accused Machines "include this claim element." (D.I. 221-4 ¶ 145.) Dr. Rakow says that opinion is lacking because Dr. Lumkes has not provided "any references, calculations, or analyses" to support that conclusion. (D.I. 240-2 ¶ 72.) Dr. Rakow concludes that without "valid references and calculations regarding the nature, shape, and placement of the stability pattern of the Accused Products," Dr. Lumkes hasn't shown infringement. (D.I. 240-2 ¶ 75.) Wirtgen hasn't moved to exclude Dr. Rakow's opinion, so I must view it as part of the factual record. If a jury were to credit this portion of Dr. Rakow's opinion, Wirtgen wouldn't be able to prove infringement. As a result, I can't grant summary judgment on infringement of the '309 Patent.

**3. '641 Patent**

There's a genuine dispute of material fact as to whether the Caterpillar machines practice Claims 11 and 18 of the '641 Patent, which relate to a machine's "reverse travel shutoff feature" that controls when a machine should automatically disengage to avoid the milling drum hitting an obstacle. There's no such dispute as to Claim 17.

**a. Claim 11**

Claim 11 requires that the machine “monitor[]” “the distance ... between the rotating, raised milling drum and the ground.” (D.I. 226-3 at 8:17-18.) Although Wirtgen contends that the Accused Machines indirectly monitor that distance, the only evidence that it offers to support its position is the ITC’s written decision. The ITC’s decision is not factual evidence. It is, instead, a decision that weighs evidence and applies the law. Wirtgen’s reliance on the ITC decision as the sole evidence to support its argument means that I could deny the motion just for a failure of proof. But there are other problems as well.

Even if I treated the ITC’s decision as evidence, it would not suffice to carry Wirtgen’s burden. The decision is not binding on me. *See Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1569 (Fed. Cir. 1996). And the decision came in a different procedural posture. The ITC weighed the parties’ evidence and reached a conclusion, much like I would do after a bench trial. But, at this stage of the proceedings, I can’t weigh the evidence. Instead, I have to credit any contrary evidence that Caterpillar offers, and it has offered evidence from its Engineering Manager. Mr. Engelmann describes Caterpillar’s reverse travel shutoff feature in a way that suggests that Caterpillar monitors the position of machine components—and, indirectly, the rotor—compared to the machine frame, not compared to the ground.

Finally, even if I look under the hood at the evidence that the Parties submitted to the ITC, there's not enough there for me to grant summary judgment. The ITC decision credits certain Caterpillar internal documents that suggest that Caterpillar's reverse travel shutoff feature indirectly monitors the ground position. And while a trier of fact could reasonably reach the same conclusion that the ITC did, I can't credit those presentations in the face of other evidence that explains the technology differently. Because there is a factual dispute, a jury will have to resolve this issue.

**b. Claim 18**

Claim 18 depends on Claim 15 which requires, in relevant part, "that the milling drum is raised by a *pre-determined amount* that is larger than a minimum distance between the milling drum and the ground surface." (D.I. 226-3 at 8:43-46 (emphasis added)). I'll adopt the ordinary meaning of the word and define "pre-determined" as something that's known ahead of time. Wirtgen says whenever the drum is raised *at least* an amount that is larger than a minimum distance between the drum and the ground, there's infringement. But this interpretation reads the term "pre-determined" out of the patent. "[I]nterpretations that render some portion of the claim language superfluous are disfavored." *SimpleAir, Inc. v. Sony Ericsson Mobile Commc'ns AB*, 820 F.3d 419, 429 (Fed. Cir. 2016). None of Wirtgen's citations to the intrinsic evidence require me to depart from this principle. Wirtgen argues that Caterpillar's construction is divorced from the intrinsic or extrinsic record, but all Caterpillar asks me to do is apply the "widely accepted meaning

of commonly understood words” to the claim language. *Phillips*, 415 F.3d at 1314. The pre-service mode on the Accused Machines, which raise the milling drum by an amount that is known ahead of time, would satisfy this reading of the claim.

There’s a factual dispute as to whether Caterpillar actively induces infringement by instructing operators to use the pre-service mode. Wirtgen proffers evidence of inducement of the “reverse shutoff feature” on the Accused Machines. However, there’s an aspect of that feature which would infringe Claim 18 (the pre-service mode) and an aspect which wouldn’t (whenever the drum is raised to a height that isn’t known ahead of time). So, while this proffered evidence is relevant to whether Caterpillar induces use of the pre-service mode, it isn’t conclusive. *See Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990) (plaintiff holds the burden of proof for establishing induced infringement). At this stage, Wirtgen hasn’t presented evidence that would compel me to find in its favor. *See El*, 479 F.3d at 237. A jury will weigh this evidence against Caterpillar’s contention that it doesn’t require or instruct operators to use the pre-service mode.

**c. Claim 17**

There’s no infringement on Claim 17 because, when driven in reverse, the scraper blade in a Caterpillar machine isn’t behind the milling drum. Claim 17 of the ‘641 Patent is a method claim where “a scraper blade ... is arranged *behind* the milling drum *when seen in the direction of travel* is used as a sensing device.” (D.I. 226-3 at 8:65-66

(emphasis added)). Acting as his own lexicographer, the patentee defined “direction of travel” as when the milling drum and the traveling device rotate in the same direction. (*See id.* at 2:2-5.) There are two possible directions of travel: forwards and backwards.

The location of the scraper blade on the Accused Machines is fixed and undisputed. When the machine is driven forwards, the scraper blade is behind the milling drum. When the machine is driven in reverse, the opposite is true: relative to the milling drum, the scraper blade is now in front.

Wirtgen’s interpretation of the claim language reads out the phrase “when seen in the direction of travel.” *See SimpleAir, Inc.*, 820 F.3d at 429 (interpretations that render claim language superfluous are disfavored). Wirtgen argues that because the position of the scraper blade is fixed, the blade always remains behind the milling drum. And if the phrase “when seen in the direction of travel” didn’t exist, then that reading might be right. But the word “when” adds another element to the claim: the machine can be travelling either forwards or backwards and, in both cases, the blade must be behind the drum. Because the position of Caterpillar’s blade is fixed, it’s only “behind” the milling drum in one direction.

There’s a reason that doctors use the terms anterior and posterior to mean what a layperson may think of as “front” and “back”— those terms don’t change based on the location of the observer or the orientation of the patient. Terms like “in front of” or “behind” can be ambiguous because they depend on your point of view. The claim

requires me to consider relative locations “seen in the direction of travel” (both forwards and backwards). Wirtgen may have meant to write the claim so that it would encompass Caterpillar’s machines. But since I must give meaning to the language “when seen in the direction of travel,” Wirtgen’s argument that the blade remains behind the drum at all times can’t succeed.

#### **4. ‘972 Patent**

Claim 13 of the ‘972 Patent requires that the controller establish “the parallel orientation of the machine frame relative to the ground surface *only when* the controller performs a readjustment of the milling depth of the milling roller or a setting of a predefinable milling depth.” (D.I. 226-5 at 13:14-19 (emphasis added)). Wirtgen interprets the phrase “only when” to mean “in the event that.” Its expert, Dr. Lumkes, opines that the controller on the Accused Machines performs a “readjustment of the milling depth of the milling roller or a setting of a predefinable milling depth ... *only after* a milling adjustment.” (D.I. 226-13 ¶ 363 (emphasis added)). A jury could credit this opinion and find infringement.

I won’t limit the phrase “only when” to mean “during,” as Caterpillar urges. The ordinary and customary meaning of “when” is not as limited as the definition Caterpillar offers. *See Finjan, Inc. v. Bitdefender Inc.*, No. 17-CV-04790-HSG, 2019 WL 634985, at \*14 (N.D. Cal. Feb. 14, 2019) (noting that “when” can have both a conditional and temporal meaning). Caterpillar’s position that I depart from this meaning is based solely

on a portion of the patent that is a preferred embodiment. But I won't "limit claim terms by a preferred embodiment," so I decline to adopt Caterpillar's reading. *Bell Atl.*

*Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d 1258, 1273 (Fed. Cir. 2001).

Because the disputed phrase isn't as limited as Caterpillar proposes, Dr. Lumkes's opinion isn't foreclosed as a matter of law. A jury could credit his opinion that the controller performs a "readjustment of the milling depth of the milling roller or a setting of a predefinable milling depth ... only *after* a milling adjustment." (D.I. 226-13 ¶ 363.) The record does not support Caterpillar's contention that Dr. Lumkes hasn't opined that the Accused Machines perform these functions only under two conditions. (*See* D.I. 226 at Nos. 83-84.) Accordingly, there's a genuine dispute of material fact for the jury to resolve.

## **5. '474 and '788 Patents**

Wirtgen's expert testimony precludes summary judgment on the '474 and '788 Patents. The '474 Patent is a continuation of the '788 Patent. Both Patents share claim language that requires "a plurality of indication and setting devices[,] with "each indication and setting device being operable to indicate the current actual value." (*See* D.I. 226-1 at 8:61-65; D.I. 226-2 at 7:13-18.) The Accused Machines have multiple displays: two at the operator's station and one ground display on either side of the machine. Wirtgen's expert, Dr. Rahn, opines that these displays meet the Claim's "plurality of ... devices" requirement. Dr. Rahn has also opined that each of those

displays can indicate the current actual value of each operating parameter. (*See, e.g.*, D.I. 226-17 ¶¶ 312, 325; *id.* at Appx. D.1.2 p. 42). That's enough to create a factual dispute about infringement.

## **6. '618 Patent**

Claims 1 and 8 of Caterpillar's '618 Patent recite "a water reservoir mounted on the frame and configured to enclose water." (D.I. 230-7 at 9:36-37; *id.* at 12:8.) Unlike the other Patents discussed, Caterpillar, not Wirtgen, would have the burden of proving infringement of this Patent at trial. I construe the phrase "mounted on" consistent with its ordinary and accustomed meaning. The intrinsic record does little to illuminate the meaning of this phrase, so the Parties cite opposing extrinsic evidence. *See Phillips*, 415 F.3d at 1317 (citing dictionaries and expert testimony as examples of extrinsic evidence). Caterpillar consults an expert, Dr. Sorini, who proffers that "mounted on" means "at the top of" to a person of ordinary skill in the art. Wirtgen uses a dictionary definition to insist that the phrase requires one component that is attached to a support. I am left "with the considerable task of filtering the useful extrinsic evidence from the fluff." *Id.* at 1318.

I won't follow Dr. Sorini's interpretation because it reads out the word "mounted" from the claim. Dr. Sorini puts so much emphasis on the word "on" that he renders "mounted" superfluous. That contravenes the understood principle that claims must be "interpreted with an eye toward giving effect to all terms in the claim." *Becton, Dickinson & Co.*, 616 F.3d at 1257 (citations omitted). While I am mindful of the pitfalls that can



occur from relying on a general dictionary in construing a claim, I find that Wirtgen's interpretation doesn't "extend patent protection beyond what should properly be afforded." *Phillips*, 415 F.3d at 1322. Instead, it permissibly applies the "widely accepted meaning of commonly understood words" to the claim language. *Id.* at 1314.

Wirtgen's water reservoir is made from a void in the frame, so the reservoir isn't mounted on the frame; it's part of the frame. Therefore, there's no infringement. Even though the reservoir is created by welding pieces of metal together, and sits towards the top of the frame, it is created by the frame's weldments.

## **7. Willfulness**

"[T]he concept of 'willfulness' requires a jury to find no more than deliberate or intentional infringement." *Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d 1367, 1378 (Fed. Cir. 2020). The accused infringer's "culpability is generally measured against the knowledge of the actor at the time of the challenged conduct." *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 105 (2016). A jury should resolve factual questions pertaining to the willfulness determination. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016); *see also Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prod. Grp., LLC*, 879 F.3d 1332, 1353 (Fed. Cir. 2018).

Wirtgen offers facts that, when credited, could establish willfulness. For example, by Wirtgen's telling, Caterpillar tracked, dissected, and copied patented features of Wirtgen's machines. From Caterpillar's point of view, that's just standard industry

practice. But whether those facts rise to the level of “deliberate or intentional” infringement is a question for the jury. *See WBIP, LLC*, 829 F.3d at 1341.

Because intentional infringement can arise from post-suit conduct, the jury will likewise decide if Caterpillar willfully infringed on the ‘268 and ‘530 Patents. Willfulness requires knowledge of the patents-in-suit, and Caterpillar argues that it gleaned this knowledge from the Initial or Amended Complaints. I have previously held that the requisite knowledge of the patent-in-suit can’t be based *only* on the complaint in a case. *See Pact XPP Schweiz AG v. Intel Corp.*, No. 1:19-CV-01006-JDW, 2023 WL 2631503, at \*5 (D. Del. Mar. 24, 2023), *reconsideration denied*, No. 1:19-CV-01006-JDW, 2023 WL 3934058 (D. Del. June 9, 2023) (citing *Bos. Sci. Corp. v. Nevro Corp.*, 560 F. Supp. 3d 837, 845 (D. Del. 2021)). So, if Caterpillar’s contention were undisputed, maybe that would be enough. But, by Wirtgen’s telling, Caterpillar knew of the ‘530 Patent from an alert sent ten days before the Complaint was filed and the ‘268 Patent from a Notice of Infringement dated a week before the Amended Complaint.

Caterpillar counters that because it didn’t know of the infringement allegations until just before Wirtgen sued, there’s no way for a jury to find willful infringement. But post-suit conduct may give rise to a finding of willfulness. *See Apple Inc. v. Samsung Elecs. Co.*, 258 F. Supp. 3d 1013, 1027 (N.D. Cal. 2017); *see also Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1296 (Fed. Cir. 2017). Wirtgen contends that Caterpillar “chose to continue to manufacture, import, and sell” the machines “after having been

found to infringe the '530 Patent" during the ITC proceedings. (*See* D.I. 226 at No. 116.) After Wirtgen filed its Amended Complaint, Caterpillar "continued to design, manufacture, and sell the accused machines" that infringed on the '268 Patent. (*See* D.I. 226 at No. 115.) A jury could find willfulness on these grounds. *See Eko Brands, LLC*, 946 F.3d at 1378.

## **B. Invalidity**

### **1. Claim broadening of the '268 Patent**

Wirtgen's '268 Patent is a reissue of its '659 Patent. The '268 Patent amended various portions of the '659 Patent. Caterpillar argues that changes to Claim 1 improperly broadened the patent.<sup>5</sup> Claim 1 of the original patent included: "supporting the subset of the components from the machine frame with a second spring stiffness, the second spring stiffness being relatively higher than the first spring stiffness." (D.I. 226-9 at 6:38-41.) The reissued patent amended this Claim with an addition and a deletion as follows: "supporting the subset of the components from the machine frame *in a rigid manner or* with a second spring stiffness, ~~the second spring stiffness~~ being relatively higher than the first spring stiffness." (D.I. 226-6 at 7:34-37.) I previously construed "spring stiffness" as "resistance to deformation." (D.I. 168 at 2.) Claim 23 is a method claim based on Claim 1 with the same at-issue language.

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<sup>5</sup> Wirtgen seeks summary judgment that the '268 Patent didn't introduce new matter from the original '659 Patent, but Caterpillar says it's not making such an argument, so there's no dispute to resolve.

A patent holder may seek reissue of an existing patent. *See* 35 U.S.C. § 251. The reissue procedure “allows a patentee to broaden the scope of an existing patent to include subject matter that had been erroneously excluded from that patent.” *Yoon Ja Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1321–22 (Fed. Cir. 2006) (citing 35 U.S.C. § 251)). However, a patentee who “regain[s] through reissue the subject matter that he surrendered in an effort to obtain allowance of the original claims” violates the recapture rule. *Id.* at 1322. Therefore, when reissued “claims that are broader than the original patent claims in a manner directly pertinent to the subject matter surrendered during prosecution,” the patent is invalid. *In re Mostafazadeh*, 643 F.3d 1353, 1358 (Fed. Cir. 2011) (citation omitted).

Courts evaluate violations of the recapture rule using three steps: “(1) first, we determine whether, and in what respect, the reissue claims are broader in scope than the original patent claims; (2) next, we determine whether the broader aspects of the reissue claims relate to subject matter surrendered in the original prosecution; and (3) finally, we determine whether the reissue claims were materially narrowed in other respects, so that the claims may not have been enlarged, and hence avoid the recapture rule.” *Medtronic, Inc. v. Guidant Corp.*, 465 F.3d 1360, 1373 (Fed. Cir. 2006). Caterpillar must establish surrender of recaptured subject matter by clear and convincing evidence. *See Yoon Ja Kim*, 465 F.3d at 1322. On a motion for summary judgment,

where the evidence is construed in favor of the nonmovant, “[t]he burden of proving invalidity ... is high.” *Schumer v. Lab. Comput. Sys.*, 308 F.3d 1304, 1316 (Fed. Cir. 2002).

The Parties dispute the first step of the test: whether the reissued claim is broader in scope than the original claims. Caterpillar argues that the addition of “in a rigid manner or” broadened the Claim because “in a rigid manner” is not synonymous with “second spring stiffness.” As Caterpillar reads the Claim, when “in a rigid manner” was added to the Claim with a disjunctive “or,” there was an addition and thus broadening. Wirtgen argues that “in a rigid manner” is just a subset of “resistance to deformation,” so there wasn’t a broadening. According to Wirtgen’s expert, Dr. Rahn, a “rigid manner” represents the highest resistance to deformity. The language of Claim 1 already required that one component have a higher resistance to deformity than the other. So, the added language clarifies that the component with the higher resistance may have the highest level of resistance possible.

I don’t have to resolve that dispute because, even assuming that Caterpillar’s reading of the claim language is correct, Caterpillar fails on the second step. Caterpillar hasn’t shown that the amended language “relates to subject matter that was surrendered during prosecution of the original-filed claims.” *N. Am. Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1350 (Fed. Cir. 2005). “Surrender” in this context requires “deliberate action” to obtain the patent. *Id.* at 1375. Caterpillar needs to point to prosecution history that would demonstrate to an objective observer that “the

purpose of the patentee's amendment or argument concerning a particular claim was ... to overcome prior art and secure the patent." *Greenliant Sys., Inc. v. Xicor LLC*, 692 F.3d 1261, 1267 (Fed. Cir. 2012) (citation omitted).

Caterpillar hasn't cited anything in the prosecution history to suggest that the inventors or Wirtgen GmbH (the assignee) surrendered this subject matter in the original patent only to try and recapture it during the reissue. Caterpillar does not show that Wirtgen GmbH encountered prior art rejection. Instead, the record suggests that the examiner amended Claims 1 and 23 to harmonize the language with the remainder of the patent. That type of amendment fixes "the kind of inadvertence or mistake that the reissue doctrine was meant to remedy." *See Medtronic, Inc.*, 465 F.3d at 1375 (finding that a clarifying amendment did not violate the recapture rule). Because the '268 Patent doesn't violate the recapture rule, I'll grant the pertinent part of Wirtgen's Motion.

## **2. IPR estoppel**

"The petitioner in an *inter partes review* of a claim in a patent under this chapter that results in a final written decision under section 318(a) ... may not assert either in a civil action arising in whole or in part under section 1338 of title 28 ... that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during the *inter partes review*." 35 U.S.C. § 315(e)(2). The words "reasonably could have raised" refer to all grounds that a petitioner could have included in an IPR petition. *See Cal. Inst.*

*of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 991 (Fed. Cir. 2022). The raisable bases for invalidity during IPR are limited to “prior art consisting of patents or printed publications.” 35 U.S.C. § 311(b). There is a split, however, as to whether a combination of prior art references that includes a physical device is a different “ground” under the statute.

Section 315 does not define the word “ground.” I therefore must give it its ordinary meaning. *See Wis. Cent. Ltd. v. United States*, 138 S. Ct. 2067, 2070 (2018); *Pugach v. Office of Personnel Mgmt.*, 46 F.3d 1081, 1083 (Fed. Cir. 1995). In 2011, when Congress passed the America Invents Act and adopted Section 315, “ground” meant “the reason that something (as a legal claim or argument) relies on for validity.” *Ground*, Black’s Law Dictionary (10th ed. 2009). When a party relies on a printed publication before the PTAB and then relies on a physical device in court, it relies on the same “ground” if the printed publication and the physical device provide the same information. Because the printed publication and the physical device fill the same gap in the combination, the combination as a whole is the same ground for arguing invalidity. Other judges to consider the question have reached the same conclusion. *See, e.g., Wasica Fin. GmbH v. Schrader Int’l, Inc.*, 432 F. Supp. 3d 448, 453 (D. Del. 2020). I find Judge Stark’s decision in *Wasica* persuasive. To hold otherwise would allow for a mammoth loophole: an IPR petitioner would always add a physical device that is

identical to patents or printed publications in the subsequent civil case just to evade estoppel.

I am aware that some judges have reached a different conclusion. Recently, for example, Judge Bryson, sitting by designation, held that any physical device prior art (or combination involving a physical device) is a separate “ground” for invalidity. *Prolitec Inc. v. Scentair Techs., LLC*, No. CV 20-984-WCB, 2023 WL 8697973, at \*23 (D. Del. Dec. 13, 2023). Respectfully, I disagree. Judge Bryson based his conclusion on a distinction between a “ground” and the evidence supporting that ground. And I agree that there’s a difference. But the physical device is not just a piece of evidence. It is part of the basis that animates the claim of invalidity. And if a party challenging a patent can make the same claim based on information in a printed publication, then it’s the same grounds for an invalidity argument, even if the components are different.

For estoppel to apply under Section 315(e)(2), Wirtgen must “show that each and every material limitation present in the physical device is disclosed in the estopped reference.” *Bos. Sci. Corp. v. Cook Grp. Inc.*, 653 F. Supp. 3d 541, 594 (S.D. Ind. 2023). Caterpillar must then “point[] to a material limitation that is disclosed in the physical device that is *not* disclosed in the estopped reference.” *Id.* (emphasis in original). The burden will again revert to Wirtgen “to show why said limitation is (1) either *not* material or (2) is in fact specifically disclosed in the estopped reference.” *Id.* (emphasis in original).



Wirtgen has shown that the physical products on which Caterpillar seeks to rely are “entirely cumulative” of the printed publications. In response, Caterpillar cites two patents where its experts relied on the physical device to form their opinions. (See D.I. 239 at 31-32.) But just because Caterpillar’s experts used the physical device to form their opinions doesn’t preclude the fact that a written material disclosed the same limitations that the experts found when examining the physical devices. The estoppel provision “applies to *grounds* ... even if the *evidence* used to support those grounds was not available to be used in the IPR.” *Wasica Fin. GmbH*, 432 F. Supp. 3d at 454 (citing 35 U.S.C. § 315(e)(2)) (emphasis in original).

Further, Caterpillar’s experts don’t opine that the physical devices showed material limitations that weren’t available in the prior publications. For Claim 29 of the ‘309 Patent, Dr. Rakow testified that the physical inspection of the Accused Machines added “nothing of note” compared to the literature. (D.I. 221-10 at 76:19.) Dr. Rakow submitted a signed declaration stating that “[a]lthough the product literature included illustrations ... of the machines, my inspection allowed me to physically measure and confirm specific dimensions relevant to this claim.” (D.I. 241 ¶ 2.) I don’t read this statement as citing a material limitation in the physical device that wasn’t in the publication (which is Caterpillar’s burden). See *Bos. Sci. Corp.*, 653 F. Supp. 3d at 594. To the extent that this affidavit directly contradicts Dr. Rakow’s “nothing of note” testimony, I’m not willing to credit it. See *Jiminez v. All Am. Rathskeller, Inc.*, 503 F.3d 247, 253 (3d Cir. 2007) (instructing

disregard of “sham affidavit[s]” which “indicate only that the affiant cannot maintain a consistent story or is willing to offer a statement solely for the purpose of defeating summary judgment”).

The same is true for Claim 2 of the '530 Patent. While Dr. Sorini examined source code to confirm the presence of a claim element in the Accused Machines, he doesn't opine that this source code differed in a material manner from the prior publication. (See D.I. 219 at No. 231.)

Wirtgen has also established that the product literature it cites is prior art. Accordingly, IPR estoppel applies.

#### **IV. CONCLUSION**

Wirtgen is entitled to summary judgment that it doesn't infringe Claims 1 and 8 of the '618 Patent. Caterpillar is entitled to the same for Claim 17 of the '641 Patent. IPR estoppel will apply against Caterpillar. There was no improper broadening of the '268 Patent. The rest of the issues will proceed to a jury. An appropriate Order follows.

#### **BY THE COURT:**

*/s/ Joshua D. Wolson*

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JOSHUA D. WOLSON, J.

January 4, 2024