NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

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**CATERPILLAR PAVING PRODUCTS INC.,**
*Appellant*

**v.**

**WIRTGEN AMERICA, INC., JOSEPH VOGELE AG,**
*Appellees*

**ANDREW HIRSHFELD, PERFORMING THE FUNCTIONS AND DUTIES OF THE UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,**
*Intervenor*

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2020-1261

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2018-01200.

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Decided: February 10, 2020

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JOSHUA GOLDBERG, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Washington, DC, argued for

appellant. Also represented by DANIEL CRAIG COOLEY, Fairfax, VA.

TYLER DUTTON, Sterne Kessler Goldstein & Fox, PLLC, Washington, DC, argued for appellees. Also represented by DONALD BANOWIT, RALPH WILSON POWERS, III, JON WRIGHT; MARK ANDREW KILGORE, RYAN D. LEVY, SETH R. OGDEN, Patterson Intellectual Property Law, PC, Nashville, TN.

MONICA BARNES LATEEF, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for intervenor. Also represented by DANIEL KAZHDAN, THOMAS W. KRAUSE, FARHEENA YASMEEN RASHEED.

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Before O'MALLEY, CLEVENGER, and TARANTO, *Circuit Judges*.

O'MALLEY, *Circuit Judge*.

These parties have been involved in substantial litigation in multiple forums. They own various patents on technology relating to paving and milling machines. This appeal involves one of those many cases.

Caterpillar Paving Products Inc. ("Caterpillar") appeals from a final written decision of the Patent Trial and Appeal Board ("Board"). *See Wirtgen Am., Inc v. Caterpillar Paving Prod. Inc.*, No. IPR2018-01200, 2019 WL 6999868 (P.T.A.B. Nov. 13, 2019) ("*Board Decision*"). Following inter partes review ("IPR"), the Board found challenged original claims 1–6, 8, 9, and 12–17 of U.S. Patent No. 9,045,871 B2 ("'871 patent") invalid as obvious pursuant to 35 U.S.C. § 103. The Board further denied Caterpillar's motion to amend, finding proposed substitute claims

21–24, 26, 27, and 30–33 obvious.[1] Caterpillar appeals only the Board's decision as to the proposed substitute claims. Because the Board applied an incorrect claim construction during its analysis of those claims, we *vacate* and *remand*.

## I. BACKGROUND

### A. '871 Patent

The '871 patent, entitled "Paving Machine with Operator Directed Saving and Recall of Machine Operating Parameters," discloses "a system for automatically performing one or more set-up functions for a screed assembly of a paving machine." '871 patent, col. 1, ll. 8–10. The patent explains that a paving machine's screed assembly, located at the back of the machine, spreads and compacts paving material to form a mat of pavement. *Id.* at col. 2, ll. 50–53. The screed assembly is comprised of multiple components that can be adjusted to meet the required parameters of a particular paving job—the width, thickness, and crown angle of newly laid paving material can all be fine-tuned. *Id.* at col. 1, ll. 27–32. The '871 patent identifies the sheer number of adjustable variables as presenting a problem during setup in prior art machines. Manually setting every parameter was time consuming, labor intensive, and error prone. *Id.* at col. 1, ll. 33–40.

As a solution to the difficulties of manually configuring a paving machine, the '871 patent discloses a system and method for configuring the screed assembly using sensors and actuators to detect and store sets of parameters. The patent describes a "controller" configured to save sets of parameters and capable of assigning different identifiers to

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[1] The Board declined to consider proposed substitute claims 25, 28, 29, 34–36 for reasons not challenged on appeal.

each saved set in response to save commands issued by an operator via a user interface. *Id.* at col. 7, ll. 6–37. The patent describes a "first save command" to save a first set of parameters and a "second save command" to save a second set of parameters. *Id.* at col. 2, ll. 16–20.

The '871 patent explains that the saved parameter sets can be used during setup. This is done via a "recall command" that causes the machine to automatically configure itself consistent with the saved variables. *Id.* at col. 8, ll. 23–26. If there are multiple sets of parameters saved, "the operator may recall the desired set of parameters using the assigned identifier." *Id.* at col. 8, ll. 26–28; *see also id.* at col. 9, ll. 14–16 ("If multiple sets of parameters are stored in memory, the operator can recall the desired set of parameters using the respective identifier.").

B. Prior Art

Though the Board considered several pieces of prior art during the IPR, only a single reference, Panoushek,[2] is at issue on appeal. Panoushek discloses saving and recalling parameters during the operation of a component of an agricultural combine known as a "header." Headers are configurable to various heights and positions.

Panoushek describes three operator inputs: a first operator input 50, a second operator input 52 (resume switch 52); and a third operator input 54. The first operator input 50 allows the operator to manually control the header. The third operator input 54 allows the operator to store two sets of position settings—"set 1" and "set 2." The second operator input 52—the resume switch—is "successively momentarily actuable for inputting successive input signals or

[2] Header Height Resume, U.S. Patent No. 6,871,483 B1 (issued March 29, 2005).

commands" to move the header between two stored sets of position settings. J.A. 1651, col. 5, ll. 13–14.

Panoushek discloses a controller that assigns an identifier to the stored sets of position settings—WORK SET 1 for the values of set 1 and WORK SET 2 for the values of set 2. "Controller 42 is programmed to operate in an automatic state such that successive actuations of second operator input 52 will serve as input commands or signals to automatically . . . move header 14 successively between two predetermined positions and modes . . . ." *Id.* at col. 6, ll. 21–27. Thus, the operator actuates the resume switch, causing the controller to use a toggling routine to determine whether WORK SET 1 or WORK SET 2 parameters should be loaded.

C. Board Proceedings

Wirtgen filed a petition seeking IPR of claims 1–6, 8, 9, and 12–17 of the '871 patent on June 7, 2018. The Board issued an institution decision on November 14, 2018, instituting on all claims and grounds. Caterpillar thereafter filed a response and a contingent motion to amend.

Caterpillar's motion to amend made numerous changes to the original claims. As amended, representative claim 21 requires an "operator input device" and a "controller." The "operator input device" is "configured to allow an operator of the paving machine to enter a first save command, a second save command and a recall command." J.A. 463. The "controller" is configured to save, in response to a first save command, a first set of configuration and operation parameters and to "assign a first unique identifier to a first set of parameters comprising the first set of configuration parameters and the first set of operation parameters." J.A. 463–64 (underlining omitted). The claimed controller must do the same in response to a second save command. J.A. 464–65. And the controller must:

> recall, using the first or second unique identifier, either one of the first set or second set of the configuration parameters and the corresponding respective first set or second set of the operation parameters from memory in response to the recall command . . . , *wherein the recall command includes the respective first or second unique identifier*.

J.A. 465 (underlining omitted; emphasis added).

In its motion to amend, Caterpillar argued that its proposed substitute claims were patentable over the prior art. As relevant to this appeal, it contended:

> None of the cited prior art references disclose "recall[ing], *using the first or second unique identifier*, either one of the first set or second set of the configuration parameters and the corresponding respective first set or second set of the operation parameters from memory in response to the recall command . . . , *wherein the recall command includes the respective first or second unique identifier*," as required by claim 21.

J.A. 456 (first alteration in original).

In response to Caterpillar's motion to amend, Wirtgen contended that the substitute claims were obvious, lacked written description support, and were patent ineligible. Wirtgen argued that the prior art taught the "recall command" limitation, because "Panoushek uses the unique identifiers WORK SET 1 and WORK SET 2 (and corresponding pointers / memory addresses) during recall." J.A. 559.

In reply, Caterpillar argued that Wirtgen failed to articulate how the alleged identifiers are *included* in the recall command. It contended, "whether Panoushek uses any of these identifiers during recall has nothing to do with whether the recall command includes such identifiers. The

alleged recall command does not." J.A. 605. Caterpillar argued that the signal that is sent from Panoushek's resume switch 52 does not contain any identifiers. It argued that the resume switch 52 transmits only "successive input signals or commands" not different types of signals or commands. J.A. 606. This, it contended, means that activation of the resume switch 52 by the operator merely sent an instruction to the control system 12 to recall stored parameters.

Wirtgen, in sur-reply, responded that "initiating a recall command that uses an identifier is precisely what the '871 patent discloses." J.A. 649. It contended, "Panoushek's controller uses WORK SET 1 and WORK SET 2 (i.e., assigned identifiers) when an operator initiates the recall command by pressing a resume switch. Panoushek's recall command includes an identifier because the controller uses an identifier when executing the recall command—just like the '871 patent." J.A. 650 (citation omitted). Wirtgen thus concluded that the identifier is part of the recall command, as contemplated by the specification.[3]

The Board held an Oral Hearing on July 30, 2019. It issued a Final Written Decision on the original and substitute claims on November 13, 2019.

The Board found all challenged original claims obvious over the prior art. That decision is not challenged on appeal, though one aspect is potentially relevant to the

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[3] Wirtgen also argued that the recall command limitation would have been obvious given a reference not at issue in this appeal, U.S. Patent Pub. No. 2009/0187979 ("Sever"), and Caterpillar's expert's work as a graduate student. *See* J.A. 650–52. The Board did not reach those contentions and we decline to address them for the first time on appeal.

substitute claims. During the claim construction section of the Board's decision, where the Board rejected Caterpillar's contention that the original claims required identifiers, it noted that "[i]dentifiers are described in the context of their use by controller 66 as the mechanism for recalling data." *Board Decision*, 2019 WL 6999868 at *5 (citing '871 patent, col. 7, ll. 39–42).

As to the proposed substitute claims, the Board began its analysis by concluding that Caterpillar had met the procedural and statutory requirements for proposing substitute claims. This included a determination that, as the Board then understood the scope of the proposed claims, the proposed claims had written description support. Relevant to this appeal, the Board then considered Caterpillar's argument that Panoushek's alleged resume switch signal does not include unique identifiers. The Board explained:

> Considering Patent Owner's . . . contention that none of the prior art references teach *use* of the unique identifiers in the recall command, we also find Patent Owner's assertions to be unconvincing. Although we agree with Patent Owner that Panoushek's method requires successive actuation of resume switch 52, we do not see this requirement as nullifying the fact that Panoushek's method *uses* the unique identifiers "WORK SET 1" and "WORK SET 2" to recall the saved parameters.

*Id.* at *25 (emphases added). Given this finding, along with numerous other findings that are not contested on appeal, the Board found all proposed substitute claims obvious.

Caterpillar timely appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

## II. ANALYSIS

We review the Board's factual findings for substantial evidence and the Board's legal conclusions de novo. *IPCom GmbH & Co. v. HTC Corp.*, 861 F.3d 1362, 1369 (Fed. Cir. 2017). In the absence of subsidiary fact findings, we review the Board's claim construction, a question of law, de novo. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1280 (Fed. Cir. 2015). Because the petition in this case was filed prior to November 13, 2018, the claims are given their broadest reasonable interpretation. 37 C.F.R. § 42.100(b) (2016); *see also Cuozzo*, 793 F.3d at 1279.

Caterpillar argues that the Board failed to address its contention that, in the proposed claims, the claimed recall command "includes the respective first or second unique identifier." As part of that contention, Caterpillar contends that the recall command is a command issued by the operator and that the controller is responding to the recall command upon receiving it, not issuing a recall command. And Caterpillar contends that substantial evidence does not support a finding that Panoushek meets the "recall command" limitation when understood in this way. Wirtgen argues in response that substantial evidence supports the Board's determination that Panoushek "uses" the unique identifiers as part of the process of recalling the saved parameters, which Wirtgen contends is sufficient to render the substitute claims obvious.

Though the parties frame their arguments as questions of substantial evidence or improper procedure, we disagree. It is clear after a review of the parties' briefs and the Board's decision that this case is about claim construction. That is, under the broadest reasonable interpretation of the proposed substitute claims, is mere "use" by a system sufficient to establish that the "recall command includes the respective first or second unique identifier?" We hold that it is not.

The claim construction issue presented by this appeal is resolved by the claims themselves. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) ("[T]he context in which a term is used in the asserted claim can be highly instructive."). Proposed substitute claim 21 requires "an operator input device configured to allow an *operator* of the paving machine *to enter . . . a recall command*." J.A. 463 (emphasis added). The claim also states that "the *controller*" is "configured to . . . *recall*, using the first or second unique identifier, either one of the first set or second set of the configuration parameters and the corresponding respective first set or second set of the operation parameters from memory *in response to the recall command*." J.A. 463–65 (underlining omitted; emphases added). The claim further mandates "the recall command includes the respective first or second unique identifier." J.A. 465 (underlining omitted).

Thus, claim 21 differentiates between the recall command and the functions of the controller. The operator enters the recall command, and the controller receives it: the controller takes the "recall" actions, *i.e.*, summoning saved configuration and operation parameters, "in response to" the recall command. *See* '871 patent, col. 1, ll. 57–59 (controller acts "in response to" a recall command); *id.* at col. 7, ll. 48–50 (same); *id.* at col. 8, ll. 23–28 (operator "enter[s] the recall command"). Because it is the "recall command" that must "include[] the respective first or second unique identifier," the identifier must be included in a command entered by the operator. It is not enough that the unique identifier is included in an instruction given by the controller in response to the command entered by the operator. Still less is it enough that the controller, or the system as a whole, "uses" the identifier. The plain language of the claims thus requires more than mere use by the system to meet the limitation. And, although the '871 patent specification contemplates the controller being involved with the unique identifiers, *see, e.g.*, '871 patent, col. 7, ll. 39–52,

nothing in the specification overcomes the plain language of the claims or renders a broader interpretation reasonable.

It is apparent from the Board's decision that its understanding of the claims encompassed mere use by the system. *See Board Decision*, 2019 WL 6999868 at *25 ("Panoushek's method *uses* the unique identifiers 'WORK SET 1' and 'WORK SET 2' to recall the saved parameters." (emphasis added)). This was error. As discussed, the language of the claims themselves forecloses such an interpretation. We must, therefore, remand for the Board to consider whether Panoushek, or the other art cited by Wirtgen, discloses or renders obvious a "recall command" that "includes the respective first or second unique identifier," beyond mere use of the unique identifier by the controller in response to the recall command.

## III. CONCLUSION

Because the Board applied an incorrect claim construction when evaluating the patentability of the proposed substitute claims, we vacate and remand. On remand, the Board is free to consider any argument it deems properly before it. We note, moreover, that the Board may reevaluate its written description determination in light of the correct construction of "recall command" in the proposed substitute claims.

**VACATED AND REMANDED**