

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**EMERSON ELECTRIC CO.,**  
*Appellant*

v.

**SIPCO, LLC,**  
*Appellee*

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2017-1866

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2015-01973.

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Decided: August 29, 2018

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DOUGLAS HALLWARD-DRIEMEIER, Ropes & Gray LLP, Washington, DC, argued for appellant. Also represented by STEVEN PEPE, New York, NY; JAMES RICHARD BATCHELDER, JAMES LAWRENCE DAVIS, JR., East Palo Alto, CA.

GREGORY J. GONSALVES, The Gonsalves Law Firm, Falls Church, VA, argued for appellee. Also represented by THOMAS F. MEAGHER, Meagher Emanuel Laks Goldberg & Liao, LLP, Princeton, NJ.

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Before NEWMAN, TARANTO, and STOLL, *Circuit Judges*.  
STOLL, *Circuit Judge*.

Emerson Electric Co. challenged various claims of SIPCO, LLC's U.S. Patent No. 8,013,732 in an inter partes review. The U.S. Patent and Trademark Office's Patent Trial and Appeal Board determined that Emerson failed to show that certain claims would have been unpatentable as obvious. Because the Board did not adequately explain its reasoning on a point that was central to its analysis and its conclusion on that point was contrary to another Board opinion on nearly identical facts, we vacate the Board's determination as to the appealed claims and remand for further proceedings.

## I

### A

SIPCO's '732 patent is titled "Systems and Methods for Monitoring and Controlling Remote Devices." It describes and claims systems and methods for "monitoring a variety of environmental and/or other conditions within a defined remotely located region," such as utility meters in a specific area. '732 patent, Abstract.

The patent effectively takes a prior art wired sensor network and converts it to a wireless network. *Compare id.* Fig. 1, *with id.* Fig. 2, *and* col. 4 ll. 42–43, *and* col. 7 ll. 33–56. Independent claim 13 is illustrative of the invention, which is directed to a system for wirelessly monitoring conditions in a defined region:

13. In a system comprising a plurality of wireless devices configured for remote wireless communication and comprising a device for monitoring and controlling remote devices, the device comprising:

a transceiver having a unique identification code and being electrically interfaced with a sensor, the transceiver being configured to receive select information and identification information transmitted from another wireless transceiver in a predetermined signal type;

the transceiver being further configured to wirelessly retransmit in the predetermined signal type the select information, the identification information associated with the nearby wireless transceiver, and transceiver identification information associated with the transceiver making retransmission; and

a data controller operatively coupled to the transceiver and the sensor, the data controller configured to control the transceiver and receive data from the sensor, the data controller configured to format a data packet for transmission via the transceiver, the data packet comprising data representative of data sensed with the sensor.

*Id.* at claim 13.

## B

In September 2015, Emerson petitioned for inter partes review of claims 13, 14, 16–21, and 23–35 as obvious under 35 U.S.C. § 103. Each ground Emerson articulated included Kahn<sup>1</sup> in view of the Admitted Prior Art.<sup>2</sup>

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<sup>1</sup> Robert E. Kahn et al., *Advances in Packet Radio Technology*, 66 Proceedings of the IEEE 1468 (1978) (Ex. 1002) (“Kahn”), J.A. 376–404.

<sup>2</sup> Petitioner defined the “Admitted Prior Art” as the disclosures found in the ’732 patent at column 1, lines 54 through 65; column 2, lines 27 through 29; column 5, lines 32 through 44; and Figure 1. *Emerson Elec. Co. v.*

Kahn discloses a wireless packet radio network. Kahn at 1468 col. 1, J.A. 376. Indeed, Kahn explained that one capability of the packet radio network was rapid and convenient deployment. Kahn at 1470, J.A. 378. The Admitted Prior Art discloses monitoring and control systems, including sensor actuators electrically coupled to a local controller. See '732 patent, col. 5 ll. 32–37. Emerson, in its petition, relied on Kahn for the motivation to use the wireless packet radio of Kahn as a communication network for the prior art monitoring and control systems described in the Admitted Prior Art. Petition Requesting Inter Partes Review, *Emerson Elec. Co. v. SIPCO, LLC*, IPR2016-01973, Paper 2 at 14 (P.T.A.B. Sept. 25, 2015) (“*Petition*”), J.A. 82. Specifically, Emerson argued that a skilled artisan:

would have recognized the advantage of using the communication infrastructure disclosed in Kahn to allow the sensors and actuators of the [Admitted Prior Art] to be moved from location to location without having to re-install physical cables and wires to connect the sensors and actuators.

*Id.* In March 2016, the Board instituted inter partes review based on all of the grounds in Emerson’s petition.<sup>3</sup>

At the oral hearing, Emerson for the first time referred to an article by Bill Greeves, *SCADA Uses Radio to Bridge the Gap*, 14 Sensor Review, no. 2, 1994, at 31 (“Greeves”), J.A. 1368–72, to support its argument regard-

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*SIPCO, LLC*, No. IPR2015-01973, Paper 25 at 2 n.2 (P.T.A.B. Mar. 27, 2017) (“*Final Written Decision*”).

<sup>3</sup> Because the Board issued a Final Written Decision addressing all the claims that Emerson challenged, this case is not impacted by the Supreme Court’s recent decision in *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

ing motivation to combine. Emerson relied on Greeves to show that a person of ordinary skill in the art would have been motivated to combine Kahn and the Admitted Prior Art, noting that Kahn itself affirmed that the need for cost reduction described in the Admitted Prior Art was a known problem. The Board, however, determined that it would be improper for it to rely on Greeves as evidence of motivation to combine because Emerson did not rely on it until oral argument. It was SIPCO's declarant who introduced Greeves into the record for the purpose of showing challenges with radio technology. Emerson did not even mention Greeves in its briefing or its expert declaration. Accordingly, the Board focused its analysis only on Kahn and the Admitted Prior Art.

The Board, in its Final Written Decision, concluded that it was "not persuaded that Kahn provides a rationale, separate and apart from hindsight, which would motivate one of ordinary skill in the art to combine the teachings of Kahn and the [Admitted Prior Art]." *Final Written Decision* at 12. Accordingly, the Board held that Emerson had not proven by a preponderance of the evidence that the challenged claims of the '732 patent were unpatentable. Emerson timely appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

## II

Emerson raises two main issues on appeal: (1) whether the Board erred by not considering Greeves; and (2) whether the Board erred in finding that one of ordinary skill would not have been motivated to combine the teachings of Kahn and the Admitted Prior Art. A patent claim is invalid "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the [relevant] art [(‘PHOSITA’)].” 35 U.S.C. § 103(a)<sup>4</sup>; *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). We must “be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1343, 1368 (Fed. Cir. 2012) (quoting *In-nogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 n.3 (Fed. Cir. 2008)).

We review the Board’s Final Written Decision “to ensure that [it is] not ‘arbitrary, capricious, an abuse of discretion, . . . otherwise not in accordance with law . . . [or] unsupported by substantial evidence.’” *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 992 (Fed. Cir. 2017) (quoting 5 U.S.C. § 706(2)(A), (E)) (alterations in original). “[I]n order to ‘allow effective judicial review, . . . the agency is obligated to “provide an administrative record showing the evidence on which the findings are based, accompanied by the agency’s reasoning in reaching its conclusions.”” *Id.* (quoting *Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1322 (Fed. Cir. 2016), *overruled in another respect by Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017)). “For judicial review to be meaningfully achieved within these strictures, the agency tribunal must present a full and reasoned explanation of

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<sup>4</sup> Congress amended § 103 when it enacted the Leahy-Smith America Invents Act (“AIA”). Pub. L. No. 112-29, § 3(c), 125 Stat. 284, 287 (2011). However, because the application that led to the ’732 patent has never contained (1) a claim having an effective filing date on or after March 16, 2013, or (2) a reference under 35 U.S.C. §§ 120, 121, or 365(c) to any patent or application that ever contained such a claim, the pre-AIA § 103 applies. *See id.* § 3(n)(1), 125 Stat. at 293.

its decision.” *In re Lee*, 277 F.3d 1338, 1342 (Fed. Cir. 2002). The Board must articulate “logical and rational reasons for [its] decision [.]” *Pers. Web*, 848 F.3d at 992 (alterations in original) (quoting *Synopsys*, 814 F.3d at 1322).

At the outset, we conclude that the Board did not err by disregarding Greeves. As we have previously acknowledged, “the PTO has advised participants in its Board proceedings that, at oral argument, [a] party . . . may only present arguments relied upon in the papers previously submitted. No new evidence or arguments may be presented at the oral argument.” *Dell Inc. v. Accelaron, LLC*, 818 F.3d 1293, 1301 (Fed. Cir. 2016) (alterations in original) (quoting Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012)). Under this rule, it was improper for Emerson to rely on Greeves for the first time at the hearing before the Board.

Turning to the second issue on appeal, we agree with Emerson only to the extent that the Board did not adequately explain and support its conclusion that Kahn would not have motivated one of ordinary skill in the art to combine the teachings of Kahn and the Admitted Prior Art for flexibility and rapid deployment. *See Final Written Decision* at 12. In analyzing this issue, the Board reproduced portions of Dr. Heppe’s declaration, the Kahn reference, and Emerson’s briefs. Aside from those direct quotes, the Board’s analysis consisted of only two conclusory sentences: “[a]s previously noted, however, Petitioner does not identify discussion of physical cables or wires in Kahn,” and “Kahn, however, does not seem to discuss such issues.” *Id.* at 11–12. Without any further reasoning, the Board concluded that Kahn does not provide a rationale, separate from hindsight, that would have motivated a skilled artisan to combine the teachings of Kahn and the Admitted Prior Art.

But the Board came to the opposite conclusion on nearly the same facts in another inter partes review. The '732 patent at issue here is related to U.S. Patent No. 8,754,780, which was also subject to an inter partes review (IPR2016-00984). *Emerson Elec. Co. v. SIPCO, LLC*, No. IPR2016-00984, 2017 WL 4862106 (P.T.A.B. Oct. 25, 2017) (“*IPR2016-00984 Final Written Decision*”).<sup>5</sup> In IPR2016-00984, the Board observed that the two patents “share nearly the same specification” and have “nearly identical claims.” *Id.* at \*10. In particular, claim 13 of the '732 patent and claim 1 of the '780 patent differ only by a few words—differences the Board found were non-substantive. In October 2017, the Board issued a Final Written Decision in IPR2016-00984, finding '780 patent claim 1 (and other claims) unpatentable over the same combination of Kahn and the Admitted Prior Art at issue here.<sup>6</sup> *Id.* at \*23.

The Board came to opposite conclusions on patentability of these nearly identical claims despite considering nearly identical evidence in both cases. As discussed above, the Board found that the differences between the two patents' claims and specifications were non-substantive. Both inter partes reviews considered the same Kahn reference in searching for a motivation to combine, although we acknowledge that the Greeves reference was properly raised and considered by the Board in IPR2016-00984. Dr. Heppe's declarations were identical in relevant part regarding motivation to combine. *Compare* Decl. of Dr. Heppe, Ex. 1004, *Emerson Elec. Co. v. SIPCO, LLC*, IPR2015-01973, J.A. 435–39,

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<sup>5</sup> This IPR is also on appeal before this court. *See SIPCO, LLC v. Emerson Elec. Co.*, No. 18-1364 (Fed. Cir. filed Dec. 21, 2017).

<sup>6</sup> Indeed, the same panel of Administrative Patent Judges decided the two inter partes reviews.



¶¶ 29–32 (P.T.A.B. Sept. 25, 2015), *with* Decl. of Dr. Heppe, Ex. 1018, *Emerson Elec. Co. v. SIPCO, LLC*, IPR2016-00984, ¶¶ 40–43 (P.T.A.B. Apr. 29, 2016). And, in IPR2016-00984, the Board found “credible Petitioner’s arguments and Dr. Heppe’s opinion” that “an advantage of using *wireless* . . . networks was to avoid the need for *wires*” and that a skilled artisan “would have been motivated to use a wireless . . . network . . . to enhance flexibility in rapid deployment and reconfiguration.” *IPR2016-00984 Final Written Decision*, 2017 WL 4862106, at \*16. Here, in contrast, the Board considered the same testimony and came to the opposite conclusion.

Under these circumstances, we conclude that the Board’s decision in this case does not adequately explain a key element of its analysis. The decision “does not address, or at least does not clearly address,” why the statement in Kahn—that deployment of the packet radio net should be rapid and convenient—does not provide a rationale that would have motivated a skilled artisan to combine the teachings of Kahn and the Admitted Prior Art. *Pers. Web*, 848 F.3d at 993. Further, as we have held, “where a panel simultaneously issues opinions on the same technical issue between the same parties on the same record, and reaches opposite results without explanation, we think the best course is to vacate and remand these findings for further consideration.” *Vicor Corp. v. SynQor, Inc.*, 869 F.3d 1309, 1322 (Fed. Cir. 2017).

Some Board explanations can suffice even if brief, as when the patent and the art are both clear and readily understandable. *Pers. Web*, 848 F.3d at 994. In addition, “we will uphold a decision of less than ideal clarity if the agency’s path may reasonably be discerned.” *Bowman Transp., Inc. v. Ark.–Best Freight Sys., Inc.*, 419 U.S. 281, 286 (1974); *see In re NuVasive, Inc.*, 842 F.3d 1376, 1382–83 (Fed. Cir. 2016). But, understood in light of our scrutiny of the patent and the prior art, the Board’s “own explanation must suffice for us to see that the agency has

done its job and must be capable of being ‘reasonably . . . discerned’ from a relatively concise [Board] discussion.” *In re NuVasive*, 842 F.3d at 1383 (quoting *In re Huston*, 308 F.3d 1267, 1281 (Fed. Cir. 2002)). Here, the Board did not explain why an explicit statement in Kahn regarding a potential motivation to combine was not enough, nor did it explain how it determined that impermissible hindsight would be required to conclude that Kahn provided the requisite motivation to combine, particularly given its seemingly opposite conclusions in IPR2016-00984.

### III

We have considered the parties’ remaining arguments and find them unpersuasive. We vacate the Board’s decision and remand for further proceedings consistent with this opinion, including to address the seemingly opposite finding from the IPR2016-00984 Final Written Decision.

### **VACATED AND REMANDED**

#### COSTS

Costs to appellant.