

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

SIPCO, LLC,
Appellant

v.

EMERSON ELECTRIC CO.,
Appellee

**ANDREI IANCU, UNDER SECRETARY OF
COMMERCE FOR INTELLECTUAL PROPERTY
AND DIRECTOR OF THE UNITED STATES
PATENT AND TRADEMARK OFFICE,**
Intervenor

2018-1635

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. CBM2016-
00095.

Decided: November 17, 2020

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Before O'MALLEY, REYNA, and CHEN, *Circuit Judges*.

CHEN, *Circuit Judge*.

This appeal has returned to us on remand from the Supreme Court of the United States. In its prior appearance in this court, SIPCO appealed from a final written decision of the Patent Trial and Appeal Board (Board) in a covered business method (CBM) review of SIPCO's U.S. Patent No. 8,908,842 ('842 patent). After instituting CBM review, the Board found claims 1, 7, 9, 16, and 17 of the '842 patent to recite patent-ineligible subject matter under 35 U.S.C. § 101. The Board also found the claims unpatentable for obviousness under 35 U.S.C. § 103 in view of U.S. Patent No. 5,157,687 (Tymes).

In determining that the '842 patent qualifies for CBM review, the Board found that the patent is not excluded from review under the statutory "technological invention" exception. *See* America Invents Act (AIA), Pub. L. No. 112-29, § 18(d), 125 Stat. 284, 331 (2011). Under 37 C.F.R. § 42.301(b), the Board is required to consider "whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution." Applying just the second part of this regulatory standard, the Board found that the patent contained no technical solution to a technical problem.

We reversed the Board's finding that the '842 patent does not satisfy the second part of the regulation defining

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“technological invention.” *SIPCO, LLC v. Emerson Elec. Co.*, 939 F.3d 1301, 1313 (Fed. Cir. 2019), *judgment vacated*, 207 L. Ed. 2d 1049 (June 15, 2020). We then vacated and remanded for the Board to consider the applicability of § 42.301(b)’s first part.

Emerson petitioned for rehearing en banc, which this court denied. Emerson then filed a petition for a writ of certiorari in the Supreme Court presenting the following question:

Whether 35 U.S.C. [§] 324(e) permits review on appeal of the Director’s threshold determination, as part of the decision to institute CBM review, that the challenged patent qualifies as a CBM patent.

Petition for a Writ of Certiorari at I, *Emerson Elec. Co. v. SIPCO, LLC*, 2020 WL 550758 (Jan. 30, 2020) (No. 19-966). The Supreme Court granted the petition, vacated our prior opinion, and remanded “for further consideration in light of *Thryv, Inc. v. Click-to-Call Technologies, LP*,” 140 S. Ct. 1367 (2020). *Emerson Elec. Co. v. SIPCO, LLC*, 207 L. Ed. 2d 1049 (June 15, 2020).

Following remand, we recalled our mandate, reopened this appeal, and ordered supplemental briefing on July 21, 2020. Both parties responded with supplemental briefing addressing the effect of *Thryv* on this appeal. The Director of the Patent Office moved to intervene on September 4, 2020, and we granted the motion on September 28, 2020.

The Supreme Court’s decision in *Thryv*, we hold, makes clear that the threshold determination that SIPCO’s ’842 patent qualifies for CBM review is a decision that is non-appealable under 35 U.S.C. § 324(e). We therefore are precluded from reviewing SIPCO’s challenge to that threshold determination. As to the Board’s unpatentability decision, we affirm the Board’s determination that the challenged claims would have been obvious in view of Tymes without

reaching the Board's patent-ineligibility decision under § 101.

BACKGROUND

The '842 patent describes a two-step communication path in which a remote device first communicates through a low-power wireless connection to an intermediate node, which in turn connects to a central location. '842 patent at claim 1. For example, a user may wish to replace the bank and credit cards he or she carries with a remote transmitting unit, similar to an automobile remote key, that has one or more buttons each associated with a bank or credit card. *Id.* at col. 5 ll. 9–64. When the user depresses the button, the remote transmitter transmits the user's banking card account and PIN information to, for example, the ATM. *Id.* at col. 5 ll. 43–61. The ATM then transmits the information over a network (e.g., a public-switched telephone network) to the central location for verification. *Id.* at col. 7 ll. 41–44.

Claims 1 and 17 are representative for the purposes of SIPCO's challenge to the Board's obviousness ruling. Claim 1 recites the following:

1. A device for communicating information, the device comprising:

a low-power transceiver configured to wirelessly transmit a signal comprising instruction data for delivery to a network of addressable devices;

an interface circuit for communicating with a central location; and

a controller coupled to the interface circuit and to the low-power transceiver, *the controller configured to establish a communication link between at least one device in the network of addressable devices and the central location using an address included in the signal, the communication link*

comprising one or more devices in the network of addressable device[s], the controller further configured to receive one or more signals via the low-power transceiver and communicate information contained within the signals to the central location.

Id. at claim 1 (emphases added). Claim 17 is similar to claim 1, but instead of a low-power transceiver that wirelessly *transmits* a signal to a network of addressable devices, claim 17 recites “a low-power transceiver that is configured to wirelessly *receive* a signal including an instruction data from a remote device.” *Id.* at claim 17 (emphasis added).

In its final written decision, the Board determined that claims 1 and 17 would have been obvious to a skilled artisan in view of Tymes. Three claim limitations are relevant to this appeal. First, the Board construed “low-power transceiver” as “encompass[ing],” but not limited to, a device that “transmits and receives signals having a limited transmission range.” *Emerson Electric Co. v. Sipco*, No. CBM2016-00095, 2018 WL 446681, at *19 (P.T.A.B. Jan. 16, 2018). At the same time, however, the Board determined the claims would have been obvious even under SIPCO’s proposed construction of “low power” as requiring a limited transmission range. *Id.*

Second, the Board construed “instruction data” as “items of information that allow[] a computer system to identify a function or an instruction to be performed.” *Id.* Based on that construction, the Board concluded that Tymes discloses a low-power transceiver that “wirelessly transmit[s] a signal comprising instruction data for delivery to a network of addressable devices” as recited in claim 1, and also discloses “a low-power transceiver that is configured to wirelessly receive a signal including an instruction data from a remote device” as recited in claim 17. *Id.* at *23–24.

Finally, the Board found that Tymes disclosed a “controller configured to establish a communication link between at least one device in the network of addressable devices and the central location using an address included in the signal.” *Id.* at *24.

DISCUSSION

I. The Board’s Decision to Institute CBM Review

In *Thryv*, the Supreme Court held that the Patent Office’s decision as to whether earlier litigation bars institution of inter partes review under 35 U.S.C. § 315(b) is “final and nonappealable” under the “No Appeal” provision of 35 U.S.C. § 314(d). *See* 140 S. Ct. at 1373. Section 315(b) provides that “[a]n inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.” The Court explained that “a party generally cannot contend on appeal that the agency should have refused ‘to institute an inter partes review.’” *Thryv*, 140 S. Ct. at 1373. In particular, judicial review is not available “where the grounds for attacking the decision to institute inter partes review consist of questions that are closely tied to the application and interpretation of statutes related to the Patent Office’s decision to initiate inter partes review.” *Id.* (quoting *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2141–42 (2016)). “Because § 315(b) expressly governs institution and nothing more, a contention that a petition fails under § 315(b) is a contention that the agency should have refused ‘to institute an inter partes review.’” *Id.* (citing § 314(d)).

Our court has recently considered *Thryv*’s application to the petition requirement in 35 U.S.C. § 312(a)(2), which requires a petitioner to identify “all real parties in interest.” *ESIP Series 2, LLC v. Puzhen Life USA, LLC*, 958 F.3d 1378, 1385–86 (Fed. Cir. 2020). We explained that, for purposes of applying the “No Appeal” provision in

§ 314(d), a challenge based on a petitioner's failure to identify all "real parties in interest" was no different than the challenge to § 315(b)'s time bar in *Thryv*. *Id.* at 1386. Both were contentions that the agency should have refused to institute inter partes review, and thus § 314(d) barred judicial review.

Covered business method patent review is subject to a similar, materially identical "No Appeal" provision in 35 U.S.C. § 324(e), which recites that "[t]he determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable." Just as "[s]ection 315(b)'s time limitation is integral to, indeed a condition on, institution" of inter partes review, *Thryv*, 140 S. Ct. at 1373, AIA § 18(a)(1)(E) likewise commands that "[t]he Director may institute a transitional proceeding [CBM review] only for a patent that is a covered business method patent." 125 Stat. at 329–30. AIA § 18(d) further conditions institution of CBM review for only those patents that "claim[] a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." *Id.* at 331. The determination that a patent qualifies for CBM review is thus expressly and exclusively tied to the decision to institute the proceeding.

Although SIPCO urges that the Board exceeded its authority in conducting a CBM review for a patent that SIPCO contends is not a CBM patent, *Thryv* held that the "No Appeal" provision barred judicial review of the threshold decision to institute inter partes review despite the argument that the Board exceeded its statutory authority in doing so. *See* 140 S. Ct. at 1380 (Gorsuch, J., dissenting) (arguing that the holding in *Thryv* permits the agency to "act in defiance of plain congressional limits on its authority"). We also note that, contrary to SIPCO's argument that judicial review is necessary to "[e]nsure that post

grant review ‘proceeds in accordance with the law’s demand,’” Appellant’s Supplemental Br. at 10, and in contrast to joinder decisions “made *after* a determination that a petition warrants institution,” *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020), SIPCO’s “appeal challenges not the manner in which the agency’s review ‘proceeds’ once instituted, but whether the agency should have instituted review at all,” *Thryv*, 140 S. Ct. at 1376. We see no meritorious distinction between the application of § 314(d) to prohibit judicial review of § 315(b)’s time bar or § 312(a)(2)’s “real parties in interest” requirement and the application of § 324(e) to prohibit review of AIA § 18(b)’s restriction on CBM review to only certain patents. Under *Thryv*, § 324(e) prohibits judicial review of SIPCO’s challenge because it is nothing more than a contention that the agency should have refused to institute CBM review.¹

II. Obviousness

Obviousness “is a question of law based on underlying findings of fact.” *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). We review the Board’s findings regarding the scope and content of the prior art for substantial evidence. *Rambus Inc. v. Rea*, 731 F.3d 1248, 1251–52 (Fed. Cir. 2013).

¹ We recognize that *Thryv* has abrogated our practice of reviewing whether the Board’s institution of CBM review breached the limits on its authority imposed by AIA § 18(d). See, e.g., *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1322 (Fed. Cir. 2015). But “[i]t is established that a later panel can recognize that the court’s earlier decision has been implicitly overruled as inconsistent with intervening Supreme Court authority.” *Troy v. Samson Mfg. Corp.*, 758 F.3d 1322, 1326 (Fed. Cir. 2014).

The Board correctly applied *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc), rather than the broadest reasonable interpretation standard, when construing terms of this expired patent. *Emerson Electric Co.*, 2018 WL 446681, at *7; see also *In re Rambus Inc.*, 694 F.3d 42, 46 (Fed. Cir. 2012). We review factual determinations concerning extrinsic evidence underlying the Board's claim construction for substantial evidence and the ultimate construction de novo. *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1365 (Fed. Cir. 2019).

SIPCO's challenge to the Board's obviousness ruling focuses on claim limitations relating to "low power transceiver," "instruction data," and "establishing a communication link." We address each in turn.

a. Low Power Transceiver

SIPCO argues that the Board should have construed "low power transceiver" to require "a device that transmits and receives signals having a limited transmission range." Appellant's Br. at 20. But the Board determined that the claimed "low power transceiver" would have been obvious over Tymes regardless of whether "low power" restricts the transceiver to having limited transmission range. We conclude that the Board's obviousness determination was supported by substantial evidence even under SIPCO's proposed construction.²

² In our prior, now vacated, opinion in this appeal, we explained that "a skilled artisan would understand 'low power' to mean that the transceiver operates at a power level corresponding to 'limited transmission range.'" *SIPCO*, 939 F.3d at 1308 (footnote omitted). We see no need to revisit that construction because we find that the Board's obviousness determination is supported by substantial evidence even under the construction of that term proposed by SIPCO. While we recently resolved a claim

Tymes discloses a system in which remote units, such as barcode readers, communicate with a central computer. Tymes at col. 3 ll. 38–41. Like SIPCO’s claimed invention, Tymes’s remote units utilize a two-step communication path in which base stations serve as intermediate nodes for communication between the remote units and the central computer. *Id.* at col. 1 ll. 8–13. SIPCO argues that, under its proposed construction of a low power transceiver as a “transceiver that transmits and receives signals having a limited transmission range,” Appellant’s Br. at 20, the Board was not supported by substantial evidence in determining that it would have been obvious to utilize low power transceivers in Tymes’s base stations. We disagree.

As the Board correctly noted, Tymes itself emphasizes that its network of remote units, base stations, and a central computer is a *low power* network:

It is an object of the present invention to provide an improved, low-cost, *low-power*, data communication network in which a number of remote terminal units are able to send packets of data to a central station, and, in most cases, to receive acknowledge signals and data from the central station, preferably a network using an RF link.

construction dispute involving the same parties where we agreed with the Board that “low power RF signal,” in the context of the claims at issue in that case, did not require a limited transmission range, *Emerson Elec. Co. v. SIPCO, LLC*, No. 19-1301, 2020 WL 5816758 (Fed. Cir. Sept. 30, 2020), that decision has no impact on our earlier decision or on our decision here. Importantly, that case involved different patents, in entirely different patent families, with different specifications. We find it unsurprising that similarly worded claims may be construed differently when presented in such different contexts and different records.

Tymes at col. 2 ll. 36–41 (emphasis added). Tymes further explains that its system “may be needed in a commercial facility (usually indoor),” which the Board found to indicate that the transceivers need only transmit over the limited distances within a building. *Id.* at col. 2 ll. 44–49. As Tymes explains, the range of its wireless communications “is about 500 feet, in a commercial environment, at a power of about one watt.” *Id.* at col. 16 ll. 55–58. Moreover, Tymes discloses that it employs wireless links that are unlicensed. *Id.* at col. 3 ll. 55–59 (“A particular advantage of this type of RF data link is that a band may be used which does not require site licensing by the F.C.C.”). SIPCO does not dispute that such unlicensed communications must operate at less than or equal to one watt of power. *See Emerson Electric Co.*, 2018 WL 446681, at *21. The Board further credited the petitioner’s expert, Mr. Geier, who explained that a skilled artisan would have understood such transmissions to be both low-power and limited-range. *See id.*; J.A. 1321–22.³ In view of the express disclosure in Tymes and Mr. Geier’s testimony, the Board was supported by substantial evidence in concluding that it would have been obvious to use low-power transceivers having limited range in Tymes’s base station.

b. Instruction Data

Two “instruction data” limitations are disputed by the parties. Claim 17 requires the low-power transceiver to “receive a signal including an *instruction data* from a remote device,” whereas claim 1 requires the transceiver to “transmit a signal comprising *instruction data* for delivery

³ Although SIPCO criticizes Mr. Geier’s level of knowledge in the art of wireless communications and argues that Mr. Geier is less accomplished than SIPCO’s expert, Dr. Almeroth, “[w]e defer to the Board’s findings concerning the credibility of expert witnesses.” *Yorkey v. Diab*, 601 F.3d 1279, 1284 (Fed. Cir. 2010).

to a network of addressable devices.” ’842 patent at claims 1, 17 (emphases added). The Board found that these limitations were disclosed by a signaling mechanism through which Tymes’s remote unit is reassigned to a new base station.

Tymes’s remote unit is assigned to a particular base station through which the remote unit can communicate with the central station. Tymes at col. 20 ll. 56–59. These remote units (e.g., barcode readers) are mobile and each base station only covers a limited transmission range. When a remote unit moves outside the range of its assigned base station, it broadcasts a distress call from each of its two antennas. Any base station that receives the distress call then communicates with the currently assigned base station to reassign the remote unit, i.e., “pass the baton.” *Id.* at col. 21 ll. 40–45. The newly assigned base station then transmits a “response packet” to the remote unit. *Id.* at col. 21 ll. 45–47.

The Board found that receiving the distress call at a base station was equivalent to “receiv[ing] a signal including an instruction data from a remote device” as recited in claim 17, because the distress call instructs the base station to communicate with the currently assigned base station to determine how to reassign the remote unit. *Emerson Electric Co.*, 2018 WL 446681, at *23. The Board also found that transmission of the response packet by the newly assigned base station disclosed claim 1’s “transmit[ting] a signal comprising instruction data for delivery to a network of addressable devices,” because the response packet instructed Tymes’s remote unit to cease broadcasting the distress call and use a particular antenna for communications with the newly assigned base station. *Id.* at *23–24.

SIPCO argues that the Board erred in construing “instruction data” as “items of information that allow[] a computer system to identify a function or an instruction to be

performed.” *Id.* at *10–11. SIPCO urges that the term should be construed as “code identifying a function to be performed or identifying a status that triggers a function to be performed.” Appellant’s Br. at 32. In SIPCO’s view, Tymes’s distress call and response packet do not contain any “code” that can be “decoded.” *Id.* We disagree.

The claims recite “instruction *data*,” not instruction *code*. See ’842 patent at claims 1, 17. The Board correctly rejected SIPCO’s attempt to further restrict the plain meaning of the claim language. Although SIPCO identifies examples in the specification of “instruction code[s]” that map to specific combinations of bits, the Board did not err in declining to import exemplary embodiments of “instruction code” from the specification into the broader claim term “instruction data.” See *Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”).

Even if we were to accept SIPCO’s construction, the Board was supported by substantial evidence in finding that Tymes’s distress call and response packet contain “code identifying a function to be performed.” *Emerson Electric Co.*, 2018 WL 446681, at *23. As the Board observed, Tymes’s distress call is “a short packet consisting of the standard synchronization signal and its serial number.” *Id.*; see also Tymes at col. 21 ll. 29–45. Contrary to SIPCO’s assertion that “the Board did not identify any code within the distress call that identifies a function to be performed,” Appellant’s Br. at 41, the Board reasonably found that combination of information represents a “code” instructing listening base stations to perform the necessary steps for reassigning the remote unit, *Emerson Electric Co.*, 2018 WL 446681, at *23.

Likewise, the Board was supported by substantial evidence in finding that the “response packet” sent by a newly-assigned base station to a remote unit includes a “code”

that instructs the remote unit to stop sending distress calls and instead send packets using a particular antenna to the newly assigned base station. *Emerson Electric Co.*, 2018 WL 446681, at *24. We disagree with SIPCO's argument that "doing nothing (e.g., not sending distress calls) cannot possibly qualify as a function to be performed." Appellant's Br. at 41. If the remote unit truly "d[id] nothing" upon receiving the response packet, then it would continue to send distress calls. Ceasing the performance of a particular task can itself be a function, as Mr. Geier observed and the Board properly credited. *Emerson Electric Co.*, 2018 WL 446681, at *24.

c. Establishing a Communication Link

Claim 1 requires a "controller configured to establish a communication link between at least one device in the network of addressable devices and the central location using an address included in the signal." '842 patent at claim 1. SIPCO argues that the Board should have construed "establishing a communication link" to mean "to set up a communication link that did not previously exist." Appellant's Br. at 42. But, as the Board explained, when Tymes's remote unit moves outside the range of its base station and is subsequently reassigned, the new base station establishes a communication link between the remote unit and the central host computer. *Emerson Electric Co.*, 2018 WL 446681, at *24. This communications link through the new base station did not previously exist. Thus, even under SIPCO's construction, substantial evidence supports the Board's finding that Tymes discloses "establishing a communication link" as claimed.

SIPCO also suggests that the new base station does not establish this new communication link "using an address" as required by claim 1. But the Board found that device identification 74, which the remote unit includes in its distress call, functions as an "address" that is used to establish this new communication link. *Id.* SIPCO does not offer

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any reason why device identification 74 does not meet the “address” limitation, and we see none.

Finally, to the extent that SIPCO argues that the new base station does not “establish” a communications link because Tymes’s remote unit first sends a distress call before the new base station establishes a communications link with the remote unit, we agree with the Board that nothing in the claims “require[s] the controller to initiate the data transmission.” *Id.* SIPCO does not point to anything in the claims or specification suggesting that a communications link cannot be established after the device receives a signal from remote units.

CONCLUSION

For the reasons stated above, we affirm the Board’s determination that the claims at issue would have been obvious in view of Tymes. We have considered SIPCO’s remaining arguments and find them unpersuasive.

AFFIRMED