

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COPELAND COMFORT CONTROL LP,

Petitioner,

v.

OLLNOVA TECHNOLOGIES LTD.,

Patent Owner.

Case IPR2023-00626

Patent 7,746,887

PATENT OWNER'S SUR-REPLY

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

CHALLENGED CLAIMS.....	iv
I. INTRODUCTION.....	1
II. CLAIM CONSTRUCTION	3
A. “Transmission interval” is properly construed as “the space of time between successive transmission periods.”	4
B. “Wherein transmission ... is suspended” is properly construed as “wherein the transmission ... that would otherwise occur is stopped.”	7
III. KATES-711 (GROUNDS 1-4) AND KATES-505 (GROUNDS 5- 12) DO <u>NOT</u> DISCLOSE “TRANSMISSION INTERVALS”	11
IV. KATES-711 (GROUNDS 1-4) AND KATES-505 (GROUNDS 5- 12) AND MUELLER (GROUNDS 9-12) DO <u>NOT</u> DISCLOSE “WHEREIN TRANSMISSION ... IS SUSPENDED”	14
A. Mueller does <u>not</u> disclose that “transmission is ... suspended” because Mueller’s discussion of not transmitting unless the new sensed temperature is different by a pre-defined amount does not disclose “wherein the transmission ... that would otherwise occur is stopped.”	15
V. CONCLUSION	16

TABLE OF AUTHORITIES

Cases

<i>Applied Med. Res. Corp. v. U.S. Surgical Corp.</i> , 448 F.3d 1324 (Fed. Cir. 2006)	6
<i>CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG</i> , 224 F.3d 1308 (Fed. Cir. 2000)	6
<i>Callaway Golf Co. v. Acushnet Co.</i> , 576 F.3d 1331 (Fed. Cir. 2009)	3
<i>Intel Corp. v. Qualcomm Inc.</i> , 21 F.4th 801 (Fed. Cir. 2021)	7
<i>MicroStrategy Inc. v. Bus. Objects Americas</i> , 238 F. App'x 605 (Fed. Cir. 2007).....	6
<i>Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.</i> , 868 F.3d 1013 (Fed. Cir. 2017)	4
<i>Synqor, Inc. v. Artesyn Techs., Inc.</i> , 709 F.3d 1365 (Fed. Cir. 2013)	3
<i>U.S. Surgical Corp. v. Ethicon, Inc.</i> , 103 F.3d 1554 (Fed. Cir. 1997)	4
<i>Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.</i> , 200 F.3d 795 (Fed. Cir. 1999)	4

PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Fourth Amended Docket Control Order, <i>Ollnova Technologies Limited v. ecobee Technologies ULC</i> , No. 2:22-cv-00072-JRG, Dkt. No. 119 (E.D. Tex. May 22, 2023)
2002	Claim Construction Memorandum Opinion and Order, <i>Ollnova Technologies Limited v. ecobee Technologies ULC</i> , No. 2:22-cv-00072-JRG, Dkt. No. 105 (E.D. Tex. Apr. 10, 2023)
2003	Docket Sheet, <i>Ollnova Technologies Limited v. ecobee Technologies ULC</i> , No. 2:22-cv-00072-JRG, (E.D. Tex. Jul. 5, 2023)
2004	Ollnova Technologies Ltd.'s Notice Regarding Claim Reduction, <i>Ollnova Technologies Limited v. ecobee Technologies ULC</i> , No. 2:22-cv-00072-JRG, Dkt. No. 103 (E.D. Tex. Mar. 27, 2023)
2005	Expert Report of Dr. John Martens Regarding Invalidity of US Patents 8,224,282, 7,746,887, 7,860,495, and 8,264,371, dated April 24, 2023
2006	Declaration of Erik de la Iglesia in Support of Patent Owner's Response
2007	Curriculum Vitae of Erik de la Iglesia
2008	Merriam-Webster Dictionary

CHALLENGED CLAIMS

Claim	Text
[1.pre]	A wireless automation device, comprising:
[1.a]	a transceiver operable to wirelessly communicate packets of information over a wireless network;
[1.b]	a sensor operable to generate a indicator for a sensed condition;
[1.c]	a controller configured to poll the sensor at a polling interval to read the indicator during a current period of the polling interval and to selectively operate the transceiver to communicate information associated reading of the indicator; and
[1.d]	a memory, the controller storing a reading of the indicator during the current period in the memory, where the memory stores at least one prior reading of the indicator, the prior reading of the indicator made during a prior period of the polling interval,
[1.e]	wherein the transceiver is configured to transmit a most recent reading of the indicator stored in the memory during a period of a transmission interval in response to detecting a change in the sensed condition outside a predetermined range and wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is suspended in response to detecting a chance in the sensed condition within the predetermined range.
[3]	The wireless automation device of claim 1 where an upper limit and a lower limit of the predetermined range may be varied.
[4]	The wireless automation device of claim 3 where the upper limit and lower limit may be varied according to an analysis of the most current reading of the indicator and the at least one prior reading of the indicator.

Claim	Text
[5]	The wireless automation device of claim 1 where the transceiver is configured to transmit the most recent reading of the indicator stored in the memory during a period of the transmission interval in response to detecting a sensed condition beyond a band limit.
[6]	The wireless automation device of claim 5 where an upper band limit and a lower band limit may be varied.
[7]	The wireless automation device of claim 5 where the upper band limit and lower band limit may be varied according to an analysis of the most current reading of the indicator and the at least one prior reading of the indicator.
[8]	The wireless automation device of claim 1 where the transceiver is configured to transmit the most recent reading of the indicator stored in the memory in response to an externally-received transmission control signal received over the wireless network.
[14]	The wireless automation device of claim 1 where the memory stores timing data associated with the most recent reading and the at least one prior reading of the indicator.
[15]	The wireless automation device of claim 1 where the transceiver is configured to transmit the timing data.
[18]	The wireless automation device of claim 1, where the sensor is configured to sense an environmental condition.

I. INTRODUCTION

Patent Owner Ollnova Technologies Ltd. (“Patent Owner”) submits this Sur-reply to Paper 17, Petitioner’s Reply to Patent Owner Response (“Reply”) by Copeland Comfort Control LP (“Petitioner”) in the *inter partes* review of U.S. Patent No. 7,446,887 (“the ’887 Patent”).

Neither the Petition nor the Reply establish that the challenged claims of the ’887 patent are unpatentable because the prior art does not teach or disclose either (1) “a transmission interval” or (2) “wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is suspended in response to detecting a change in the sensed condition within the predetermined range” in limitation [1.e] of the sole independent claim and, therefore, all challenged claims.

Petitioner relies on two substantially identical references for the disclosure of “transmission interval,” U.S. Patent No. 7,528,711 to Kates (“Kates-711,” Ex. 1004) and U.S. Patent No. 7,102,505 to Kates (“Kates-505,” Ex. 1022). Petitioner relies on Kates-711, Kates-505 and U.S. Patent No. 6,513,723 to Mueller et al. (“Mueller,” Ex. 1031) for the disclosure of “wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is

suspended in response to detecting a change in the sensed condition within the predetermined range.”¹

The prior art does not disclose the “transmission interval” of limitation [1.e] because neither the “periodic monitoring” (allegedly corresponding to the “polling interval” of limitation [1.c]) nor the “report block 707” of Kates-711 and Kates-505 is a “transmission interval.” The “periodic monitoring” that supposedly corresponds to the “polling interval” addresses a separate limitation and does not equate to a “transmission interval,” as taught by the ’887 Patent. In addition, the “report block 707” in Kates-711 and Kates-505 is simply a step in a flowchart of periodic monitoring that takes place after taking a sensor reading. Ex. 1004, 15:50-62, Fig. 7 *see also* Ex. 1022, 12:32-44, Fig. 7.

The prior art does not disclose “wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is suspended in response to detecting a change in the sensed condition within the predetermined range” in limitation [1.e] because there is no disclosure of suspension of a transmission that would have otherwise occurred in Kates-711, Kates-505, or Mueller.

¹ Petitioner does not rely on Mueller for disclosure of a “transmission interval.” Paper 17, Reply, 9 n.5.

Since the prior art does not teach or disclose limitations of the sole independent claim, it does not anticipate or render obvious any of the claims of the '887 Patent. *Synqor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1375 (Fed. Cir. 2013) (“Th[e] court need not consider Defendants’ arguments that certain dependent claim limitations would have been obvious where the base claim has not been proven invalid.”); *see also Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1344 (Fed. Cir. 2009) (holding verdict irreconcilably inconsistent where jury found dependent claim obvious and found independent claim nonobvious).

II. CLAIM CONSTRUCTION

Petitioner identified two terms for claim construction in its reply: (1) “transmission interval” (Paper 17, Reply, 1-5); and (2) “wherein transmission ... is *suspended* in response to detecting a change in the sensed conditions within the predetermined range.” Paper 17, Reply, 5-8.² Petitioner does not propose a construction for “transmission interval” other than saying it should be given its plain meaning. *Id.*, 1-5. Petitioner similarly does not propose a construction for the wherein clause and “suspended” beyond saying it should be given its plain meaning. *Id.*, 5-8.

² Petitioner’s bracketed [g] in the claim term (Paper 17, Reply, 5) disregards the Certificate of Correction. Ex. 1001, 14.

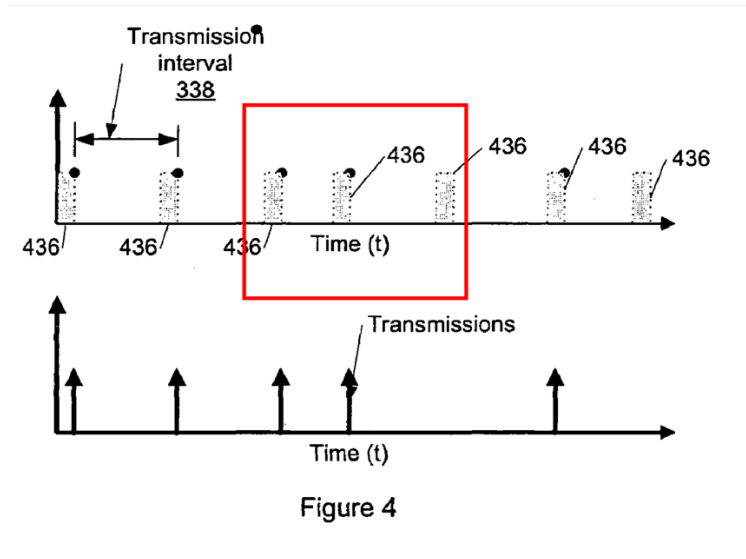
Claim terms that are in dispute and for which resolution of such dispute is “necessary to resolve the controversy” must be construed. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). This threshold for construing claim terms is applicable in IPR proceedings. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

A. “Transmission interval” is properly construed as “the space of time between successive transmission periods.”

As discussed in Paper 16, Patent Owner’s Response to Petition (“POR”) at 15-16, the plain and the ordinary meaning of “interval” is “a space of time between events or states.” *See* Ex. 2008, *Merriam-Webster Dictionary*. This is consistent with the specification of the ’887 Patent which describes both the polling interval and transmission interval as “periodic.” *See* Ex. 1001, ’887 Patent, 2:13-15, 2:19-20; *see also* Ex. 2006, *Declaration of Erik de la Iglesia in Support of Patent Owner’s Response*, ¶ 46 (“Decl.”). The “polling interval” is therefore the space of time between successive polling periods, and the “transmission interval” is the space of time between successive transmission periods. *See* Ex. 2006, Decl., ¶ 46.

Petitioner presents three arguments against this construction, each of which fail. Petitioner’s first argument, that a space of time between successive transmission periods cannot include an intermediate transmission period, is a red

herring. As an initial matter, Patent Owner identified a transmission interval that includes a transmission period during which transmission was suspended in the POR. *See* Paper 16, POR, 4-6, including annotated Figure 4, reproduced below.



Ex. 1001, '887 Patent, Fig. 4 (annotated to show varying “transmission intervals” and showing “transmission intervals” where transmission is “suspended”). In addition, Petitioner’s arguments appear to be premised on citations to the discussion in the '887 Patent of polling intervals, not transmission intervals. Paper 17, Reply, 2-3. In the '887 Patent specification, sensor polling and timing is discussed from column 9, line 18 to column 10, line 56 and refers to Figure 3. *See* Ex. 1001, '887 Patent, 9:18-10:56. Transmission timing is discussed from column 10, line 57 to column 12, line 3 and refers to Figure 4. *See* Ex. 1001, '887 Patent, 10:57-12:3.

Petitioner’s second argument, that Patent Owner contends that a “period” must be a regular “periodic interval” is also a red herring. *See* Paper 17, Reply, 3-4.

Patent Owner argued that a single step in a flowchart in Kates-711 and Kates-505, “report block 707,” is neither periodic nor an interval. *See* Paper 16, POR, 16 (citing Ex. 2006, ¶ 50). This is because the “report block” is, in fact, neither periodic nor an interval. *See* Ex. 1004, 15:60-62; Ex. 1022, 12:42-44 (“The sensor data is subsequently sent to the monitoring computer 113 in a report block 707.”).

Petitioner’s third argument, that the polling interval and the transmission interval can be a single polling interval, Paper 17, Reply, 4-5, is equally flawed. Construing two separate terms in a claim as having separate meanings is not adding a negative limitation – it is just construing two different terms in the same claim as having two different meanings. The Federal Circuit “instructs that different claim terms are presumed to have different meanings.” *MicroStrategy Inc. v. Bus. Objects Americas*, 238 F. App’x 605, 609 (Fed. Cir. 2007) (citing *CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (“In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings.”); *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333 n.3 (Fed. Cir. 2006) (“[T]he use of two terms in a claim requires that they connote different meanings”).

The claim recites a “polling interval” and a “transmission interval.” Petitioner’s apparent construction conflating the claimed “polling interval” and the claimed “transmission interval” into a single interval would render the term

“transmission” meaningless or superfluous and is therefore improper. “It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.” *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 810 (Fed. Cir. 2021) (citations omitted).

B. “Wherein transmission ... is suspended” is properly construed as “wherein the transmission ... that would otherwise occur is stopped.”

As discussed in Paper 16, POR, 8-9, the clause “wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is **suspended** in response to detecting a change in the sensed condition within the predetermined range” of limitation [1.e] is properly construed as “wherein the transmission of the most recent reading of the indicator **that would otherwise occur is stopped** in response to detecting a change in the sensed condition within the predetermined range.” This conforms to the claim construction from the District Court in *Ollnova Technologies Limited v. ecobee Technologies ULC*, No. 2:22-cv-00072-JRG (E.D. Tex.) as set forth in Ex. 2002, Claim Construction Memorandum Opinion and Order, *Ollnova Technologies Limited v. ecobee Technologies ULC*, No. 2:22-cv-00072-JRG, Dkt. No. 105 (E.D. Tex. Apr. 10, 2023) (“Order”).

As the *ecobee* Court noted, the plain and ordinary meaning of “suspend” is “[t]o cause to stop for a period; interrupt” or “[t]o halt a process temporarily.” *See*

Ex. 2002, Order, 7. The *ecobee* Court also found that this ordinary meaning was consistent with the specification of the '887 Patent which describes that “the processor 216 may control the transceiver 216 to suspend the transmission of information, notwithstanding a flag being set identifying a transmission may be pending.” See Ex. 2002, Order, 7 (citing Ex. 1001, '887 Patent, 11:8-11).

The word “suspend” is used consistently in the '887 Patent to describe the prevention of a transmission that would otherwise have occurred during a transmission interval. See Ex. 1001, '887 Patent, 11:3-15 (“the processor 214 may control the transceiver 216 to suspend the transmission of information, notwithstanding a flag being set identifying a transmission may be pending”); 11:50-12:3 (“The transceiver may be controlled to suspend the transmission of information transmission period, until the counter reaches a send limit.”).

The suspensions disclosed in the '887 Patent are within the context of preventing a transmission which would otherwise occur during a transmission interval from being transmitted, and are unrelated to periods during which no transmission is scheduled to occur. See, Ex. 1001, '887 Patent, 11:8-14 (explaining that “the processor 214 may control the transceiver 216 to suspend the transmission of information” in the context of preventing transmissions during transmission intervals from occurring unless a “a number of successive transmission periods in which information was not transmitted” have elapsed); 11:37-41 (“transceiver 216

may transmit information only during a transmission period in which a current difference D_i exceeds the difference limit DL , and may not transmit during intervals in which the current difference D_i does not exceed the difference limit DL "); 11:56-57 (“[t]he transceiver may be controlled to suspend the transmission of information”).

The *ecobee* Court held that, “[b]ased on the ordinary meaning of the term and the intrinsic record, ‘suspended’ is clearly something more than ‘not transmitted.’” Accordingly, the “wherein transmission ... is suspended” clause in claim limitation [1.e] of the ’887 patent should be construed as “wherein the transmission of the most recent reading of the indicator that would otherwise occur is stopped in response to detecting a change in the sensed condition within the predetermined range,” in accordance with the *ecobee* Court’s construction.³ See also Ex. 2006, Decl., ¶ 47.

³ Petitioner correctly notes that the *ecobee* Court’s complete construction is “wherein the transmission of the most recent reading of the indicator that would otherwise occur is stopped for the remainder of the transmission interval in response to detecting a change in the sensed condition within the predetermined range.” Paper 17, Reply, 6 n.6. However, as Petitioner also notes, “the differences in these constructions is immaterial to PO’s arguments.” *Id.*

Petitioner contends that “suspend” is simply “not transmitted.” Petitioner relies on a general statement regarding what “may” occur, Paper 17, Reply, 7, but does not address the disclosures in the ’887 Patent that “[t]ransmission of information during an interval may be suspended in response to an externally received control signal,” Ex. 1001, ’887 Patent, 2:24-26. Nor does Petitioner address the ’887 Patent’s disclosure that transmission could be suspended even after a number of polling intervals when a change is detected, such as when a flag has been set. Ex. 1001, ’887 Patent, 11:53-58.

Petitioner’s argument that teachings of the ’887 Patent regarding not transmitting when “no change in the indicator has been identified” support a contrary interpretation of suspension ignore the plain language of the claim requiring “detecting a change in the sensed condition.” Petitioner’s example, which is premised on there **not** being a change in the sensed condition, is outside of the scope of the claim. *See*, Paper 17, Reply, 7.

Petitioner’s arguments regarding “as a result of the ‘transmission interval’” are directed to a typographical error. Patent Owner intended to assert that neither Kates-711, Kates-505, nor Mueller teach suspending a transmission that would have otherwise occurred **during** a “transmission interval.” *See* Paper 17, Reply, 7-8.

Petitioner’s last argument, that Patent Owner appears to contend that suspension must be notwithstanding a flag being set, is premised upon a

misunderstanding of Patent Owner's Response. *See* Paper 17, Reply, 8. Petitioner's first citations are to a general discussion of the '887 Patent disclosure and to Patent Owner's citations to the *ecobee* Court's Claim Construction Order. *See* Paper 16, POR, 5, 8-9. Patent Owner did not contend that "suspension must be notwithstanding that a flag is set identifying a transmission may be pending," at POR, 17-18 as Petitioner Contends. Paper 17, Reply, 8. Nevertheless, having the processor "control the transceiver to suspend the transmission of information, notwithstanding that a flag is set identifying a transmission may be pending" is consistent with the disclosure of the '887 Patent as acknowledged by the Petitioner. *Id.*, citing Ex. 1001, '887 Patent, 11:10-12.

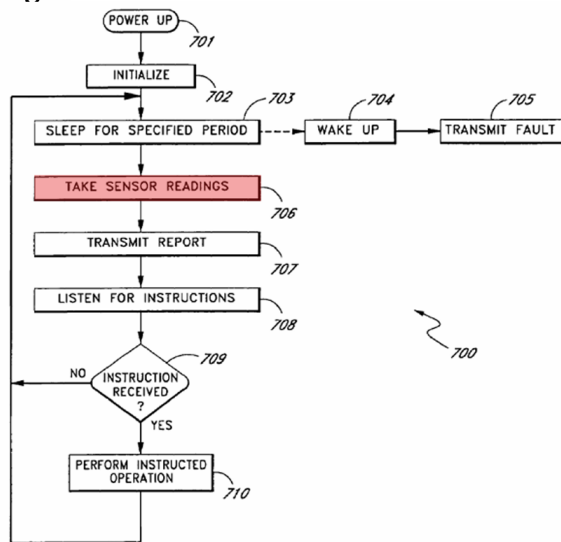
III. KATES-711 (GROUNDS 1-4) AND KATES-505 (GROUNDS 5-12) DO NOT DISCLOSE "TRANSMISSION INTERVALS"

The '887 patent separately describes and claims a "polling interval" and a "transmission interval" in limitations [1.c] and [1.e]. As discussed above, a "transmission interval" is not a "polling interval."

The Petition points to the "periodic monitoring" or "sensing" periods in Kates-711 and Kates-505 as satisfying the "polling interval" of limitation [1.c]. *See* Paper 2, Petition, 27-30. The Petition points to the same "periodic monitoring" or "sensing" periods in Kates-711 and Kates-505 as satisfying the "transmission interval" of limitation [1.e]. *See* Paper 2, Petition, 31-36.

Under the plain and ordinary meaning of “interval,” a “transmission interval” is the space of time between successive transmission periods in the transceiver. Neither Kates-711 nor Kates-505 describe a space of time between successive transmission periods. They only describe “periodic monitoring” or “sensing” periods, *i.e.*, “polling intervals,” and thus do not disclose the claimed “transmission interval” limitation. The Petitioner identifies block 706 in a flowchart showing operation of a sensor unit that provides periodic monitoring for the “polling interval” and block 707 in the same flowchart for the “transmission interval.”

• Fig. 7



• Fig. 7

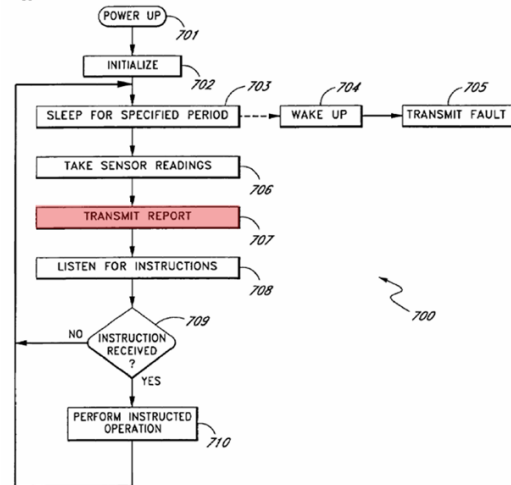


FIG. 7

See Paper 2, Petition, 29, 34.

In its Reply, the Petitioner essentially contends that the “periodic monitoring” in Kates-711 and Kates-505 discloses a “transmission interval” because it includes a “transmit report” step 707. Petitioner asserts that “[e]ach of the periodic intervals

of ‘periodic monitoring’ is a [1.e] ‘transmission interval,’ during which there is a [1.e] ‘transmission period’ that includes a ‘report block.’” Paper 17, Reply, 9. Basically, Petitioner argues that the disclosure of a single periodic monitoring loop with steps for taking a sensor reading and transmitting a report discloses the claimed “period of the polling interval” and the claimed “period of the transmission interval.”

Petitioner’s reliance on blocks within the “sensing” periods of Kates-711 and Kates-505 where the sensed data is transmitted if it falls outside of a predetermined range and not transmitted otherwise, is misplaced.⁴ Each block represents an event occurring in a loop without reference to whether that event occurs during a period of a transmission interval (or a polling interval).

Petitioner’s argument that the polling period and the transmission period are separate because block 706 (“take sensor readings”) and block 707 (“transmit report”) are separate blocks is conclusory and does not account for either a polling interval or a transmission interval. *See* Paper 16, Reply, 11. Petitioner’s argument that the polling intervals and transmission intervals start at different times because they start with the block 706 and block 707 respectively is equally conclusory and does not account for a transmission interval in which the transmission is suspended.

⁴ Petitioner does not rely on Mueller for disclosure of a “transmission interval.” Paper 17, Reply, 9 n.5.

Under Petitioner’s reasoning, each transmission interval would be limited to each repetition of block 707 in the loop without consideration of whether the transmission was suspended or not. However, as disclosed and claimed in the ’887 Patent, a single transmission interval may cover multiple polling intervals. Ex. 2006, Decl., ¶ 33.

Petitioner’s last argument, that the ’887 Patent discloses an embodiment similar to Kates-711 and Kates-505 is misplaced. *See* Paper 17, Reply, 12. The embodiment pointed to by Petitioner relates to interaction with a controller 508 of a building automation system that is in communication with a wireless automation device 507 but is **not** a controller processor of a wireless automation device as claimed. *See* Ex. 1001, ’887 Patent, 13:36-39 (“FIG. 5 illustrates an exemplary controller 508 of a building automation system in communication with a device 507. The device 507 is configured for dynamic value reporting as described above with respect to FIGS. 1-4.”).

IV. KATES-711 (GROUNDS 1-4) AND KATES-505 (GROUNDS 5-12) AND MUELLER (GROUNDS 9-12) DO NOT DISCLOSE “WHEREIN TRANSMISSION ... IS SUSPENDED”

Neither Kates-711, Kates-505 or Mueller disclose or teach “wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is suspended in response to detecting a change in the sensed condition within the predetermined range,” as recited in limitation [1.e].

Petitioner does not contend that Kates-711 and Kates-505 disclose “suspending” a transmission that would have otherwise been made during the period of the transmission interval. As an initial matter, neither Kates-711 or Kates-505 discloses a transmission interval. Additionally, Kates-711 and Kates-505 teach not transmitting data that falls within a normal range. Paper 14, Reply, 14. But, as discussed above, “suspended” is clearly something more than “not transmitted” and Kates-711 and Kates-505 teach not transmitting – which is to say would **not** otherwise occur – and is therefore not suspended. Under a proper construction of the clause and based on the plain and ordinary meaning of “suspended,” *i.e.*, to “cause to stop for a period,” “interrupt,” or to “halt a process temporarily,” Kates-711 and Kates-505 do not disclose a “suspension” of “transmission” “during the period of the transmission interval”—*i.e.*, stopping a transmission that would otherwise occur.

- A. Mueller does not disclose that “transmission is ... suspended” because Mueller’s discussion of not transmitting unless the new sensed temperature is different by a pre-defined amount does not disclose “wherein the transmission ... that would otherwise occur is stopped.”**

Petitioner’s argument that Mueller’s teaching of transmitting when temperature changes outside a specified range, and not transmitting when it does not, discloses suspending transmission “in response to detecting a change in the sensed condition within the predetermined range” fails because it does not address stopping

a transmission that would otherwise occur. *See* Paper 16, Reply, 17-18. As discussed above, “suspended” is more than “not transmitted,” but Mueller doesn’t teach or disclose anything more than not transmitted.

V. CONCLUSION

As set forth above, neither Kates-711, Kates-505 nor Mueller disclose a “transmission interval” or “wherein the transmission of the most recent reading of the indicator that would otherwise occur is stopped in response to detecting a change in the sensed condition within the predetermined range,” as required by limitation [1.e] of the claims of the ’887 patent. For all of the reasons above and as set forth in Patent Owner’s Response, Patent Owner respectfully requests that all challenged claims be found not unpatentable.

Date: May 7, 2024

Respectfully submitted,

/Brett Cooper/

Brett Cooper, Reg. No. 55,085
Lead counsel for Patent Owner

CERTIFICATE OF WORD COUNT (37 C.F.R. § 42.24(d))

The undersigned hereby certifies that the word count in this Patent Owner's Sur-Reply is 3,316 words, as counted by the word-processing program Microsoft Word that was used to generate this Patent Owner's Sur-reply, where such word count excludes the table of contents, table of authorities, mandatory notices, certificate of service, appendix of exhibits, claim listing, and this certificate of word count. This Patent Owner's Sur-reply is in compliance with the 5,600-word limit set forth in 37 C.F.R. § 42.24(c)(4).

Date: May 7, 2024

/Brett Cooper/

BC Law Group, P.C.
200 Madison Avenue, 24th Floor
New York, NY 10016
(212) 951-0100

Brett Cooper
Reg. No. 55,085
Attorney for Patent Owner

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e))

The undersigned hereby certifies that the above document was served on May 7, 2024 by filing this document through the Patent Trial and Appeal Case Tracking System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

James L. Davis, Jr. (Reg. No. 57,325)

james.l.davis@ropesgray.com

Daniel W. Richards (Reg. No. 69,652)

daniel.richards@ropesgray.com

ROPES & GRAY LLP

Copeland-Ollnova-Ropes-IPR-Service@ropesgray.com

1900 University Avenue, 6th Floor

East Palo Alto, CA 94303-2284

Phone: 650-617-4794

Fax: 617-235-9492

Date: May 7, 2024

/Brett Cooper/

BC Law Group, P.C.
200 Madison Avenue, 24th Floor
New York, NY 10016
(212) 951-0100

Brett Cooper
Reg. No. 55,085
Attorney for Patent Owner