UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

OLLNOVA TECHNOLOGIES LTD.,

Plaintiff,

v.

ECOBEE TECHNOLOGIES, ULC d/b/a ECOBEE,

Defendant.

Case No. 2:22-cv-00072-JRG

JURY TRIAL DEMANDED

OLLNOVA TECHNOLOGIES LTD.'S OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Plaintiff Ollnova Technologies Ltd. ("Ollnova") submits this opening claim construction brief concerning U.S. Patent Nos. 7,746,887 ("the '887 Patent"), 8,224,282 ("the '282 Patent"), 7,860,495 ("the '495 Patent"), and 8,264,371 ("the '371 Patent").

II. '887 PATENT DISPUTED TERMS

A. "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", '887 Patent Claim 1

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	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

ecobee's proposed construction impermissibly seeks to re-write the term "suspended." Specifically, ecobee seeks to construe the word "suspended" to include the requirement that 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. But the term is readily understood in the context of Claim 1, as informed by the '887 Patent specification. Further, there is no lexicography or disavowal by the patentee that supports ecobee's narrow construction re-writing the use of the word "suspended." *See Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012) ("Absent disclaimer or lexicography, the plain meaning of the claim controls."). Because the term "suspended" is easily understood in light of its plain and ordinary meaning, ecobee's construction should be rejected.

The '887 Patent teaches a variety of ways in which the transmission of information (such as the most recent reading of the indicator) is "suspended," which is the language that is used in

Claim 1 by the patentee—unlike the word "stopped," which is never used in the '887 Patent. Ex. 6, Madisetti Decl. ¶ 45. For example, the '887 Patent teaches:

- "Transmission of information during an interval may be **suspended** in response to an externally received control signal. The controller and/or sensor may enter a stand-by or sleep mode during times other than the variable periodic interval." [1] '887 Patent at 2:24-28.

- "Similarly, a transmission of information may be **suspended** for periods of a transmission interval for which no change in the indicator has been identified. The device may enter a sleep mode, or go into a standby mode, between periods of the transmission and/or polling interval. The transmission and polling intervals, the limits and ranges may be changed, varied, regulated, adjusted, extended and/or compressed according to the measured values and/or comparison to the limits." *Id.* at 3:36-40.

- "When the count reaches a maximum or a limit. The transceiver may be controlled to **suspend** the transmission of information transmission period, until the counter reaches a send limit. For example, the send limit may be set at five. During each polling period 336 in which a change in the sensed condition is determined, the indicator Vi is stored and the count incremented. The transmission of information is **suspended** during a transmission period 436 until the counter is increment to the send limit (i.e., 5). When the counter reaches the send limit, each of the five stored indicators Vi are communicated." *Id.* at 11:47 – 12:1.

These concepts are already captured in Claim 1's use of the word "suspended." Madisetti Decl. ¶¶ 45-46. Further, these disclosures make clear that there is no requirement that information "that would otherwise occur" be "stopped" from transmission, as required by ecobee's construction. *Id.* Rather, the '887 Patent contemplates a number of ways that the transceiver may "suspend" the transmission of information (whether the "most recent reading of the indicator" or otherwise)—for example, by suspending transmission of information in response to an "externally received control signal" or based on the use of a "counter." Indeed, these concepts are the subject of dependent claims 8, 16, and 17, which would improperly be rendered meaningless by ecobee's construction. *See* '887 Patent Claims 8 ("where the transceiver is configured to transmit the most

[1] All emphasis added unless stated otherwise.

recent reading of the indicator stored in the memory in response to an externally-received transmission control signal received over the wireless network."), Claim 16 ("The wireless automation device of claim 1 comprising a counter…."), and Claim 17 ("where the most recent reading of the indicator and the at least one prior reading of the indicator are transmitted in response the counter reaching a maximum count."); *see also Ortho-McNeil Pharm., Inc. v. Mylan Lab'ys, Inc.*, 520 F.3d 1358, 1362 (Fed. Cir. 2008) (noting "this court strives to reach a claim construction that does not render claim language in dependent claims meaningless."). Thus, because ecobee's proposed construction improperly reads a limitation into the claims (namely, that information "that would otherwise occur be stopped"), while also excluding other preferred embodiments (such as the use of an "externally received control signal" or use of a "counter" to determine when to suspend and transmit information), it should be rejected.

ecobee's arguments in favor of its narrowing construction are unpersuasive. For example, ecobee's expert maintains that a construction is necessary "to clarify that 'suspended' pertains to preventing transmission during a transmission period that would otherwise occur, as opposed to, for example the occurrence of periodic intervals in which no transmission is scheduled to be broadcast." Ex. 7, Martens Decl. ¶ 95. But the '887 Patent expressly contemplates that "a transmission of information may be suspended for periods of a transmission interval for which *no change in the indicator has been identified*." '887 Patent at 3:35-43. Indeed, Claim 1 teaches as much by reciting:

> 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 such, the '887 Patent contemplates instances where information is "suspended" from transmission in instances where "no change in the indicator has been identified" or otherwise falls

"within the predetermined range"—instances, ecobee and its expert seeks to exclude from the scope of the term "suspended." To that end, ecobee and its expert seek to impermissibly limit the scope of Claim 1 and its construction must be rejected.

B. "information associated reading of the indicator", '887 Patent Claims 1, 21

Ollnova's Proposed Construction	ecobee's Proposed Construction
"information associated with the reading of the indicator"	Indefinite

On March 22, 2022, the USPTO issued a certificate of correction ("CoC") to correct the typographical error that omitted the words "with the" from this claim term. Ex. 5 (Mar. 22, 2022 CoC). Ollnova respectfully requests that the Court correct this minor typographical error as part of claim construction.

"A district court may correct obvious minor typographical and clerical errors in patents." *Pavo Sols. LLC v. Kingston Tech. Co.*, 35 F. 4th 1367, 1373 (Fed. Cir. 2022) (citation omitted). "Correction is appropriate only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." *Id*. (citation omitted).

The Court should correct the typographical error here because it is evident from the face of the patent, not subject to reasonable debate based on consideration of the claim language and the specification, and the prosecution history does not suggest a different interpretation. First, the typographical error is evident from the face of the patent—ecobee's expert admits that "the claim term 'information associated reading of the indicator' is grammatically flawed and does not make sense as it is written." Martens Decl. ¶ 101. Second, the correction is not subject to reasonable debate because the related discussion in the specification makes clear that the words "with the" were inadvertently omitted: "The controller also controls the transceiver to selectively

communicate information associated **with the** signal from the sensor." '887 Patent at 2:16-18. This description in the specification is directly related to the claim limitation at issue:

> 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;

A POSITA would understand that this description in the specification is directly related to the claim limitation and that it confirms that the omission of the words "with the" was a typographical error. Madisetti Decl. ¶ 49. Finally, the prosecution history does not suggest a different interpretation. *Id*. ¶ 50.

ecobee's expert is wrong to suggest that the correction is subject to reasonable debate in light of the specification. Martens Decl. ¶¶ 102-108. ecobee's expert argues that three interpretations of the claim language are possible: Ollnova's proposed correction and two alternative interpretations. But the purported alternatives to Ollnova's proposed correction are not supported by the specification and would not result in any meaningful difference of claim scope.

For the first alternative, ecobee's expert states that "another example correction is 'a controller configured … to selectively operate the transceiver to communicate information **[with the]** associated reading of the indicator;' which, unlike the correction discussed above, pertains to the transmission of information that must include at least the reading of the indicator." *Id*. ¶ 105. But no corresponding language can be found anywhere in the specification to support this supposed interpretation. *See Pavo*, 35 F. 4th at 1376 ("Any correction of a claim has to be consistent with the invention described in the specification and drawings of the original patent."). Moreover, this alternative interpretation would not result in any meaningful difference in claim scope compared to the CoC's correction (communicate "information associated with the reading of the indicator"). That is because Claim 1 separately recites that the "transceiver is configured to

transmit a most recent reading of the indicator." In other words, the transceiver must transmit the reading of the indicator even under Ollnova's proposed construction—meaning that merely transmitting "information associated with readings of the indicator" is insufficient to meet the requisite claim limitations. As such, ecobee's argument fails because the scope of the claim is the ***same*** under both constructions. *See CBT Flint Partners LLC v. ReturnPath, Inc.*, 654 F.3d 1353, 1358-59 (Fed. Cir. 2011) (holding that district court had authority to correct patent where three plausible corrections existed but all three resulted in the same claim scope); *Pavo*, 35 F. 4th at 1376-77 (same).

For the second alternative, ecobee's expert states that "another example correction which would pertain to transmission of the actual reading along with associated information is 'a controller configured … to selectively operate the transceiver to communicate **[an]** information[-]associated reading of the indicator.'" Martens Decl. ¶ 107. However, this alternative is also not supported by any corresponding language in the specification. Moreover, this alternative interpretation would not result in any meaningful difference in claim scope compared to the CoC's correction. As stated by ecobee's expert, the scope of the claim is the same under this alternative because it requires transmission of the actual reading along with associated information, just like the claim requirements under Ollnova's proposal. Martens Decl. ¶ 107.

Regardless, ecobee cannot prove by clear and convincing evidence that the claim without the words "with the" is indefinite. There is no requirement for the Court to correct or redraft the claim in order to reject ecobee's indefiniteness argument. *See, e.g.*, *R2 Sols. LLC v. Deezer S.A.*, No. 4:21-CV-90, 2022 WL 36240, at *20 (E.D. Tex. Jan. 4, 2022) (rejecting an indefiniteness argument and holding that "the unavailability of judicial correction does not foreclose claim construction as to this disputed term"); *Mobile Telcoms. Techs., LLC v. LG Elecs. Mobilecomm*

USA, Inc., No. 2:13-CV-947-JRG-RSP, 2015 WL 2250418, at *12-13 (E.D. Tex. May 12, 2015) (rejecting an indefiniteness argument and holding that no construction was necessary despite rejecting Plaintiff's request for judicial correction). Accordingly, even if the Court were to decide judicial correction was inappropriate, ecobee's indefiniteness argument should be rejected. Even without the correction, a POSITA would understand the scope of the claim with reasonable certainty in light of the corresponding description in the specification. Madisetti Decl. ¶ 49; *Nautilus, Inc. v. Biosig Instrus., Inc.*, 572 U.S. 898, 908 (2014) ("[I]n assessing definiteness, claims are to be read in light of the patent's specification and prosecution history."). In light of the specification's teachings ('887 Patent at 2:16-18), a POSITA would understand that the omission of the words "with the" was a typographical error and would not have any uncertainty about the scope of the claim. Madisetti Decl. ¶ 48. Thus, ecobee cannot meet its burden to prove that the claim is indefinite.

III. '282 PATENT DISPUTED TERMS

A. "receive sensor control information related to sensor data in control at a second automation component in communication with the building automation system", '282 Patent Claim 1

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	receive information that relates to or identifies the sensor values and routines that are controlling and driving a second automation component in communication with the building automation system

ecobee seeks to re-write the term "sensor control information" based on language cherry-picked from the '282 Patent specification. Specifically, ecobee seeks to construe the term "sensor control information" to mean "information that relates to or identifies the sensor values and routines that are controlling and driving a second automation component …." But ecobee cannot identify any lexicography or disclaimer that justifies departing from the plain and ordinary

meaning of the term "sensor control information," as that term is understood in the context of the '282 Patent claims and specification. *See Thorner v. Sony Comp. Ent. Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012) ("The patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope.").

ecobee's proposed construction is based on a single disclosure from the '282 Patent: "[t]he sensor usage or control information relates to or identifies the sensor values and routines that are controlling and driving the receiving device." '282 Patent at 9:13-16. This disclosure is made in connection with the embodiment disclosed in connection with Figure 6 of the '282 Patent. Madisetti Decl. ¶ 56. As such, ecobee commits the "cardinal sin" of importing limitations from the exemplary embodiments into the claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005) (describing "reading a limitation from the written description into the claims" as "one of the cardinal sins of patent law") (internal quotation marks omitted). Indeed, even if ecobee were to argue that the only discussion of sensor control information is in the context of the embodiment described in Figure 6 (*see* Martens Decl. ¶ 48), the Federal Circuit "has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (citation omitted).

ecobee's proposed construction also conflicts with other disclosures in the '282 Patent. Madisetti Decl. ¶ 57. For example, even within the broader discussion of the embodiment of Figure 6, the '282 Patent explains:

> The sensor usage or control information relates to or identifies the sensor values and routines that are controlling and driving the receiving device. In other words, during any given scan cycle, one of the sensor values and/or a corresponding sensor control routine is executed by the receiving device (e.g., the field panel 120). The

> communicated sensor control information provided by the receiving device identifies for the automation component 200 *which sensor and/or sensor value* is *driving or controlling* the receiving device during the scan cycle.

'282 Patent at 9:13-22. From this disclosure, it is clear that the '282 Patent does not restrict the term "sensor control information" to contain both "sensor values *and* routines," which is required by ecobee's construction. *Id.* The '282 Patent also does not restrict the term to information that both "control[s] and driv[es] the receiving device," which is also required by ecobee's construction. *Id.* Accordingly, ecobee's construction is contradicted by other teachings in the '282 Patent and should be rejected. *See Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) ("The patentee is entitled to the full scope of his claims, and [the Court] will not limit him to his preferred embodiment or import a limitation from the specification into the claims.").

B. "receive status data related to sensor data in control at a second automation component in communication with the building automation system", '282 Patent Claim 7

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	receive information that provides the complete status for each of the control routines or algorithms running at a second automation component in connection with each sensor element in the sensor package, the second automation component in communication with the building automation system

ecobee seeks to improperly limit the scope of Claim 7 by adding extraneous limitations to the term "status data related to sensor data in control at a second automation component." Specifically, ecobee introduces the extraneous limitations that the "status data" comprise only and specifically of information that provides the "complete status for each of the control routines or algorithms running at a second automation component in connection with each sensor element in the sensor package." ecobee cannot identify any lexicography or disclaimer that justifies its unduly

narrow construction. *See Toshiba Corp.*, 681 F.3d at 1369. Because the term "status data" is readily understood in light of its plain and ordinary meaning as informed by the '282 Patent, ecobee's construction should be rejected. Madisetti Decl. ¶ 59.

ecobee's proposed construction is largely based on a single disclosure from the '282 Patent specification: "[t]he received status information provides the complete status for each of the control routines or algorithm running in connection with each of the sensor elements in the sensor package 220." '282 Patent at 9:57-60. This disclosure is described in connection with the embodiment disclosed in Figure 7 of the '282 Patent. Madisetti Decl. ¶ 60. The Federal Circuit has cautioned courts to "not read limitations from the embodiments in the specification into the claims." *Hill-Rom*, 755 F.3d at 1371 (citation omitted). As such, ecobee's proposed construction should be rejected.

Additionally, other disclosures in the '282 Patent do not restrict the term "status data" to ecobee's unduly narrow construction. Madisetti Decl. ¶¶ 61-62. For example, the '282 Patent teaches:

- "[A] receiving device such as, for example, the field panel 120 may communicate sensor usage or control information to the automation component that identifies which sensor and sensor data is currently being analyzed and/or is primary or controlling the field panel 120. The sensor usage or control information relates to or identifies the sensor values and routines that are controlling and driving the receiving device." '282 Patent at 9:9-16.

- "[T]he automation component 200 may communicate the flagged sensor data corresponding to the primary sensor and/or sensor value in control of, and provided by, the field panel 120." *Id.* at 9:23-26.

- "The automation component 200, and more particularly, the processor 202, may analyze or process to all of the received status information to determine which sensor and sensor data is currently being analyzed and/or is primary or controlling the field panel 120." *Id.* at 9:59-63.

These disclosures of sensor data or status information are not tied to "control routines or algorithms" nor do these disclosures require the "complete status for each of the control routines or algorithms … with each sensor element in the sensor package." Madisetti Decl. ¶ 62. And, in any event, the '282 Patent expressly contemplates that the exemplary teachings in the specification are not limiting. *See* '282 Patent at 10:30-40 ("It should be understood that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art.").

Additionally, ecobee's construction further requires that the recited "second automation component" also comprise of a "multi-sensor package," when there is no such requirement in the '282 Patent claims and specification. Madisetti Decl. ¶ 63. For example, Claim 7 reads as follows:

> 7. An automation component configured for wireless communication within a building automation system, the automation component comprising:
>
> a multi-sensor package configured to generate a plurality of sensor data for each sensor within the multi-sensor package; ….
>
> a memory in communication with the processor, the memory configured to store sensor data provided by the sensor package and computer readable instructions which are executable by the processor; wherein the computer readable instructions are programmed to:
>
> receive status data related to sensor data in control at *a second automation component* in communication with the building automation system;

In other words, Claim 7 requires that the claimed "automation component" comprise "a multi-sensor package configured to generate a plurality of sensor data for each sensor within the multi-sensor package." However, Claim 7 is otherwise agnostic as to whether the recited "second automation component" also comprises a "multi-sensor package." To the contrary, the '282 Patent contemplates that an automation component (such as the recited "second automation component")

can comprise of something other than a device with a "multi-sensor package," such as a field panel or "a reduced function device (RFD) implemented as a wireless room temperature sensor." *See, e.g.*, '282 Patent at 3:51 – 4:4; Madisetti Decl. ¶ 63. As such, ecobee's construction is improper because it seeks to require that the "status data related to sensor data in control at a second automation component" include information regarding "control routines or algorithms running at a second automation component *in connection with each sensor element in the sensor package*." But, as noted above, the "second automation component" is not required to have more than one "sensor element" such that it contains a "sensor package." Accordingly, ecobee's construction imposes extraneous limitations to the recited "second automation component" and should be rejected.

C. "receive a wake-up command", '282 Patent Claim 13

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	receive a command that turns on a device or changes it from a low-power to a high-power state

In connection with the Court's Order Focusing Patent Claims and Prior Art to Reduce Costs (Dkt. No. 78), Ollnova has elected to no longer pursue Claim 13 of the '282 Patent in this action. Dkt. No. 87. Accordingly, this term is not at issue for construction.

D. "receive a power-down command", '282 Patent Claim 13

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	receive a command that turns off a device or returns it to a low-power state

In connection with the Court's Order Focusing Patent Claims and Prior Art to Reduce Costs (Dkt. No. 78), Ollnova has elected to no longer pursue Claim 13 of the '282 Patent in this action. Dkt. No. 87. Accordingly, this term is not at issue for construction.

E. "[first/second] automation component", '282 Patent Claims 1, 5, 7, 11, 13, 19, and 20

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	[first/second] component designed to operate without human interaction in an automation system

ecobee's construction improperly limits the term "[first/second] automation component" to require that the components be "designed to operate *without* human interaction." But courts "depart from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal." *Hill-Rom*, 755 F.3d at 1371. ecobee does not identify any lexicography or disavowal that warrants limiting the plain and ordinary meaning of the term "[first/second] automation component." Because the term is readily understood in light of its plain and ordinary meaning as informed by the '282 Patent claims and specification, ecobee's construction should be rejected. *See Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) ("There is a heavy presumption that claim terms are to be given their ordinary and customary meaning.").

The '282 Patent teaches that the term "automation component" refers to a well-known class of devices in the context of building automation systems—devices which may or may not require human interaction. *See* '282 Patent at 1:15 – 2:19, 3:51 – 4:4, 4:26-46, 5:8-12, 5:52 – 6:7, 6:53-67; Madisetti Decl. ¶ 76. Notably, the '282 Patent teaches several examples of "automation components" that may *require* human interaction:

- "These exemplary wired, wireless devices may further include a man-machine interface (MMI) such as a web-based interface screen that provide access to configurable properties of the device and allow the user to establish or troubleshoot communications between other devices and elements of the BAS." '282 Patent at 4:41-46.

- "The automation component 126 may be a field panel, FPX [field panel transceiver] or another full function device…." *Id.* at 5:8-12.

As these disclosures indicate, the '282 Patent contemplates that the recited "automation components" may be implemented as a "field panel," "full function device," or otherwise include a "man-machine interface," which may require human interaction in order to operate. Madisetti Decl. ¶ 76. Because ecobee's proposed construction would exclude these embodiments, it must be rejected. *See Epos Techs Ltd. v. Pegasus Techs.*, 766 F.3d 1338, 1347 (Fed. Cir. 2014) ("A claim construction that excludes a preferred embodiment is rarely, if ever correct and would require highly persuasive evidentiary support.") (citation omitted).

ecobee's arguments in support of its proposed construction are unpersuasive. For example, ecobee's expert, Dr. Martens, opines that a construction is needed because "the plain and ordinary meaning for an 'automation component' would be understood by a POSITA to encompass *any component that performs an autonomous function or is involved in automation*…." Martens Decl. ¶ 71. Not so. Madisetti Decl. ¶¶ 76-77. "Claim language generally carries the ordinary meaning of the words in their normal usage in the field of invention." *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1367 (Fed. Cir. 2003). Here, it is clear from the '282 Patent specification that the recited "automation component" refers specifically to a class of devices that "operat[e] within a building automation system (BAS)," such as "heating, ventilation and air conditioning (HVAC) system, security services, fire systems." '282 Patent at 1:20-23; 2:23-26. The '282 Patent provides further detail concerning the types of devices that may constitute the recited "automation component":

> The embodiments discussed herein include automation components, wireless devices and transceivers. The devices may be IEEE 802.15.4/ZigBee-compliant automation components such as: a personal area network (PAN) coordinator which may be implemented as a field panel transceiver (FPX); a full function device

> (FFD) implemented as a floor level device transceiver (FLNX); and a reduced function device (RFD) implemented as a wireless room temperature sensor (WRTS) that may be utilized in a building automation system (BAS).

'282 Patent at 3:51 – 4:4. To that end, the '282 Patent specification provides the technological backdrop against which the term "automation component" is to be understood, and ecobee's contention that the term can encompass any conceivable component that performs an automated function is unpersuasive.

Additionally, there is no basis for ecobee or its expert to argue that the '282 Patent only encompasses "components within a building automation system that autonomously enable building control *without* human interaction or human decision making." Martens Decl. ¶ 72. While ecobee appears to recognize that the '282 Patent contemplates that the automation component may be, for example, a "field panel" or "full function device," ecobee does not (as it cannot) explain *why* these exemplary embodiments do not contemplate the use of human interaction. *Id.* For example, the '282 Patent's description of "full function device(s)" does not foreclose human interaction. *See, e.g.*, '282 Patent at 1:66 – 2:13 ("For example, full function devices are designed with the processing power necessary to establish peer-to-peer connections with other full function devices and/or execute control routines specific to a floor or region of a floor level network."). Further, ecobee's expert acknowledges that the '282 Patent teaches the use of a "man-machine interface," but simply dismisses this disclosure as "merely pertain[ing] to configuring the devices which *then* operate autonomously without human intervention" without any support—the portion of the specification cited by Dr. Martens says nothing to that effect. Martens Decl. ¶ 73 (citing '282 Patent at 4:26-46); *see also Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1328 (Fed. Cir. 2008) ("expert testimony cannot overcome more persuasive intrinsic evidence"). Finally, ecobee does not explain what it means for a component to be

"designed" to "operate without human interaction" (as required by its construction) as opposed to a component that is not (in fact) operated without human interaction—an extraneous limitation that is confusing and not helpful to the jury. ecobee's construction should be rejected.

F. "identification flag for each identified sensor value", '282 Patent Claim 4[2]

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning Preamble: "The automation component of claim [3]"	Indefinite

The term "identification flag for each identified sensor value" should be interpreted in light of its plain and ordinary meaning. The preamble, however, contains a typographical error that the Court should correct. Specifically, dependent claim 4 recites its dependency on independent claim 1. However, the lack of antecedent basis for the term "each identified sensor value" confirms that claim 4 was intended to refer back to the preceding dependent claim 3. The Court should correct the typographical error because it is evident from the face of the patent, not subject to reasonable debate based on consideration of the claim language and the specification, and the prosecution history does not suggest a different interpretation. *See Pavo*, 35 F. 4th at 1373.

Specifically, dependent claims 3 and 4 recite (including Ollnova's proposed correction):

> 3. The automation component of claim 1, wherein the computer readable instructions are further programmed to:
> **identify sensor values** within the sensor data that exceed a corresponding change-of-value threshold.
> 4. The automation component of **claim ~~1~~ [3]**, wherein the computer readable instructions are further programmed to:
> set an identification flag for **each identified sensor value**.

[2] In connection with the Court's Order Focusing Patent Claims and Prior Art to Reduce Costs (Dkt. No. 78), Ollnova has elected to no longer pursue Claims 10 and 16 of the '282 Patent in this action. Dkt. No. 87. Accordingly, this term is only at issue in Claim 4.

There is no antecedent basis for the term "each identified sensor value" in independent claim 1. Madisetti Decl. ¶¶ 80-83. Rather, the antecedent basis is clearly found in claim 3 (as shown above). As such, the Court should correct the claims to refer back to the appropriate dependent claim (*i.e.*, change "claim 1" to "claim 3" as shown in claim 4 above).

The error in the claim dependency is evident from the face of the patent based on the lack of antecedent basis. Moreover, the correction is not subject to reasonable debate because there is no other antecedent basis for the term "each identified sensor value" (other than in dependent claim 3). The term "sensor value" does not appear in independent claim 1. The proper antecedent basis is further confirmed by the relevant discussion in the specification:

> At block 604, the sensor data identified during the sensor and memory scan may be compared to a **COV [change-of-value] threshold** value corresponding to each individual sensor and/or sensor value. **Sensor data found to exceed the COV [change-of-value] threshold may be flagged** for later transmission.

'282 Patent at 9:4-8. The specification explains that identified sensor data that is found to exceed the threshold may be flagged. A POSITA would understand that this discussion is directly tied to dependent claims 3 and 4, and that it confirms claim 4 was intended to depend on claim 3. Madisetti Decl. ¶¶ 84-85; *see also Pavo*, 35 F. 4th at 1376 ("Any correction of a claim has to be consistent with the invention described in the specification and drawings of the original patent.").

Finally, nothing in the prosecution history suggests a different interpretation. Madisetti Decl. ¶ 86. The prosecution history merely confirms that this was a typographical error introduced in the original claim set. Thus, it is proper for the Court to correct the typographical error in claim 4. *See, e.g.*, *Image Processing Techs., LLC v. Samsung Elecs. Co. Ltd.*, No. 2:16-CV-505, 2017 WL 2672616, at *31 (E.D. Tex. Jun. 21, 2017) ("A finding by this Court that claims 26 and 27 should have recited their dependency on claim 25 instead of claim 24, similar to claims 4-6, does not require guesswork and is not a substantive correction to the claims."); *SourceProse Corp. v.*

AT & T Mobility, LLC, No. A-11-CV-117-LY, 2014 WL 2879694, at *13 (W.D. Tex. June 24, 2014) ("The court believes that a person skilled in the art would almost certainly have read the patent claims in context of the entire patent and realized that Claim 12 was intended to be dependent upon Claim 11 of the '604 patent.").

IV. '495 PATENT DISPUTED TERMS

A. "free of communications with the second wireless network", '495 Patent Claim 1

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	free of communications with any component on the second wireless network

ecobee seeks to impermissibly limit the plain and ordinary meaning of the term "free of communications with the second wireless network." Specifically, ecobee seeks to import the extraneous limitation that precludes communications "with any component on the second wireless network." That is, ecobee's construction precludes a single building component from operating on both the claimed "first wireless network" and "second wireless network." However, ecobee does not identify any lexicography or disclaimer that justifies its unduly narrow construction. *See Toshiba Corp.*, 681 F.3d at 1369. To the contrary, the disputed term is readily understood in light of its plain and ordinary meaning as informed by the '495 Patent claims and specification, and no construction is necessary. Madisetti Decl. ¶ 103.

The '495 Patent claims and specification directly contradict ecobee's construction. For example, dependent Claim 6 expressly recites that a processor of the second wireless network can communicate with the first wireless network:

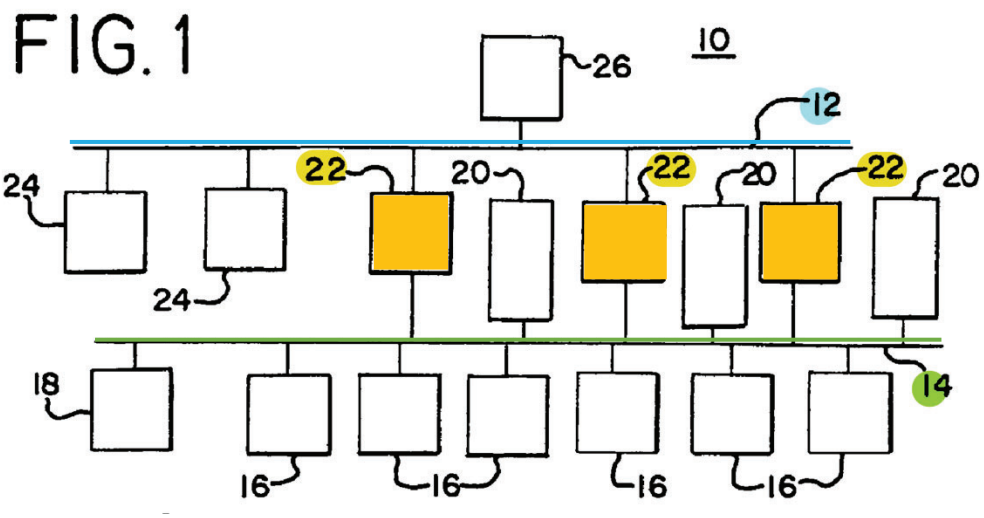
> 6. The control system of claim 1 wherein **at least one processor of the second wireless network wirelessly communicates with the first wireless network**, processors of the first wireless network only capable of communication pursuant to the first communications protocol.

Additionally, ecobee's construction is contradicted by dependent Claim 11, which indicates that a building component may communicate with both wireless networks in the absence of a communications failure:

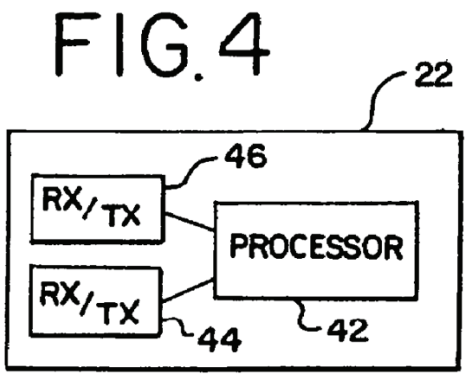
> 11. The control system of claim 10 wherein the first network controls the building components in response to the sensors in response to a communications failure with the second wireless network.

Because dependent claims 6 and 11 expressly contemplate the use of components that can operate on both the first and second wireless networks, ecobee's proposed construction would render these dependent claims meaningless, which is improper. *See, e.g.*, *Rambus Inc. v. Infineon Techs. Ag*, 318 F.3d 1081, 1093 (Fed. Cir. 2003) ("The district court's construction would render claim language in dependent claims 27 and 28 meaningless. This court disfavors such a construction."); Madisetti Decl. ¶¶ 104-105.

ecobee's construction is also belied by the teachings in the '495 Patent specification, which expressly teaches the use of components that can operate on the first and second wireless networks. Madisetti Decl. ¶ 106. For example, Figure 1 depicts various building automation components, such as controllers (22), that interact with both the low- and high-level wireless networks (12, 14):



See, e.g., '495 Patent at 4:65 – 5:4, 7:45-47, 10:36-45, 11:56 – 12:5. Notably, Figure 4 depicts a controller (22) with two transceivers (44, 46) that operate to communicate with one or two different communications protocols:



'495 Patent at 10:58 – 11:14 (noting that "[a]dditional, different or fewer devices may be provided, such as providing a single transceiver operable to transmit and receive pursuant to *one or two different communications protocols*."). Further, the '495 Patent explains that processor (42) "routes data from the devices 16, 18, 20 *of the lower level network* 14 to devices 22, 24 or 26 *of the higher level network*." *Id.* at 11:33-35.

ecobee's attempts to explain away the ability for intervening controller (22) to operate on both wireless networks fail. As an initial matter, ecobee's expert expressly acknowledges that "[c]omponents 22 are described as 'controllers' and are used to enable communication between devices of the lower level network and the higher level network …." Martens Decl. ¶¶ 114, 116 ("controllers 22 are capable of communicating with both the first and second network"). To that end, ecobee implicitly admits that there are components (such as controller (22)) that are capable of operating on and/or communicating with either network.[3]

[3] Dr. Martens provides no support for his contradictory conclusion that "components such as controller 22 in Fig. 1 of the '495 Patent do not communicate with the 'first network' for purposes of th[e] first network operating free from the 'second network." Martens Decl. ¶ 116. Dr. Martens

Additionally, ecobee's reliance on one of the exemplary embodiments concerning the operation of the claimed control system that can operate "without an intervening controller" is unpersuasive. Martens Decl. ¶ 116. As ecobee acknowledges, other embodiments expressly contemplate operating "with an intervening controller" such that "building actuator outputs operate free of the intervening controller in one time period and operate in response in the intervening controller in a different time period." *Id.* (citing '495 Patent at 2:65 – 3:7). Simply because building components can operate without an intervening controller in some instances hardly justifies requiring that the recited building components *must* operate free of an intervening component, such as a controller, in *all instances*. At bottom, ecobee cannot point to any lexicography or disclaimer that justifies its unduly narrow construction and it must be rejected.

B. "the second processors having a greater processing power and storage capacity than the first processors", '495 Patent Claim 3

Ollnova's Proposed Construction	ecobee's Proposed Construction
No construction necessary Plain and ordinary meaning	Indefinite

ecobee cannot meet its burden to prove indefiniteness by clear and convincing evidence. *See Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) ("Indefiniteness must be proven by clear and convincing evidence."). The '495 Patent teaches the meaning of the term "the second processors having a greater processing power and storage capacity than the first processors" with reasonable certainty as used in Claim 3 and through the disclosures in the '495 Patent specification.

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acknowledges that "controllers 22 are capable of communicating with *both* the first and second network" and provides no support for his conclusion that "the role of controllers 22 in the first network is exclusively to enable non-local control via the second network."

A POSITA would understand what Claim 3 means that the "second processors" "hav[e] a greater processing power and storage capacity than the first processors" with reasonable certainty. Madisetti Decl. ¶¶ 109-113. For example, the '495 Patent teaches the following:

> The processor 32 is a general processor, digital signal processor, control processor, application specific integrated circuit, field programmable gate array, analog circuit, digital circuit, combinations thereof or other now known or later developed device for implementing a control process on a signal measured by the sensor 30. The processor 32 has a processing power or capability and associated memory corresponding to the specific sensor 30 or corresponding to the needs of one of a plurality of different types of sensors 30 with a maximum desired processing power, such as an 8 or 16 bit processor. By minimizing the processor requirements and associated memory, the cost of the sensor arrangement 16 may be reduced.

'495 Patent at 6:61 – 7:10. The '495 Patent further teaches:

> The processor 42 has a greater processing power and storage capacity than processors of the devices 16, 18 and 20 of the lower level network. For example, the processor 42 is a 16, 32 or 64 bit processor. In alternative embodiments, the processor 42 is of a same or smaller size than one or more of the devices 16, 18, 20 of the lower level wireless network 14. While individual packets of data from the lower level wireless network 14 may be routed or processed by the processor 42, the processor 42 is also operable to route or perform aggregate processing on multiple packets or a packet from multiple data sources.

Id. at 11:15-32. It is clear from these disclosures that the '495 Patent expressly teaches that it is known in the art that processors have differences in processing power and storage capacity. Those concepts are embraced in Claim 3. Madisetti Decl. ¶¶ 112-13. Because a POSITA would understand that the claims use the phrase under its plain and ordinary meaning, as informed by the '495 Patent specification, the phrase is taught with reasonable certainty and ecobee's indefiniteness challenge fails. *Id.*

ecobee's arguments to the contrary are unpersuasive. For example, ecobee's expert complains that it is unclear whether Claim 3:

> [R]equires each individual second processor to have greater processing power and storage capacity than each individual first processor, or whether claim 3 is satisfied merely by the collective total processing power and storage capacity of the

> processors within the second network being larger than that of the processors within the first network.

Martens Decl. ¶ 122. But Dr. Martens then acknowledges that the '495 Patent teaches that one infringing embodiment includes when "processor 42 [] ha[s] greater processing power and storage capacity than the total of the processors in devices 16, 18, and 20"—covering Dr. Martens' scenario where a single processor has greater processing power and storage capacity than the totality of the processors on the other network. *Id.* ¶ 123. The very next sentence of the '495 Patent specification addresses Dr. Martens' second alternative: "[i]n alternative embodiments, the processor 42 is of a same or *smaller* size than one or more of the devices 16, 18, 20 of the lower level wireless network 14"—meaning the totality of the processors 42 on one network can be greater than the totality of processors on the other network. *Id.*; *see also* '495 Patent at 11:26-28. Accordingly, the '282 Patent teaches the disputed phrase with reasonable certainty and ecobee's indefiniteness challenge should be denied.

V. '371 PATENT DISPUTED TERMS

A. "change-of-value" terms

Disputed Term	Ollnova's Proposed Construction	ecobee's Proposed Construction
"change-of-value request message" '371 Patent Claims 1, 2, 6	No construction necessary Plain and ordinary meaning	a message that requests or directs an automation component to indicate if detected values, received values, parameters, or measurements have changed or altered beyond a pre-defined reporting limit
"change-of-value messages" '371 Patent Claims 1, 8, 10, 13, 17, 19	No construction necessary Plain and ordinary meaning	messages denoting that information, settings, signals and/or indications have been altered, updated or otherwise changed

Although it is not readily apparent from ecobee's proposed constructions, ecobee's expert makes clear that ecobee seeks to construe the two change-of-value terms such that "these messages **do not contain the actual values, or changes in values**, that have been detected." Martens Decl. ¶ 143. Specifically, ecobee's expert alleges that "the request message requests a logical 'yes or no'—e.g., 'true' or 'false' corresponding to whether such a change has in fact occurred, **but importantly, not the values (or changes to the values) themselves**." *Id*. ¶ 133. However, there is no basis in the intrinsic record for such a construction. ecobee's expert admits that the plain and ordinary meaning of the terms may include the actual values (or changes to the values) themselves, yet does not identify any definition or disavowal that would support disclaiming the scope of the ordinary meaning. The Court should reject ecobee's improper constructions.

Critically, ecobee cannot identify any definition, disclaimer, or disavowal that would support its constructions. Accordingly, no construction is necessary for these terms, which are readily understood based on their plain and ordinary meaning. *See Thorner*, 669 F.3d at 1365-67. In fact, ecobee's expert concedes that the ordinary meaning of the claim language does not require his limitation. Martens Decl. ¶ 130 (explaining that the claim language could be reasonably interpreted in more than one way, including the interpretation that "the request message may seek one or more **values** corresponding to those detected, received or measured values that have changed beyond a pre-defined limit"); ¶ 138. Because there is no definition or disavowal to overcome the admitted plain and ordinary meaning of the terms, ecobee's constructions must be rejected. *ee Hill-Rom*, 755 F.3d at 1371 ("We depart from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal.")

A POSITA would understand these terms in the context of the claim language itself which provides context and the relationship between the different terms. *See Phillips*, 415 F.3d at 1314

("The claims themselves provide substantial guidance as to the meaning of particular claim terms."). For example, claim 1 recites:

> process a **change-of-value request message** received via the wireless communications component;
>
> generate a change-of-value update in response to the **change-of-value request message**, wherein the change-of-value update includes a plurality of **change-of-value messages** received from a plurality of devices; and
>
> communicate the change-of-value update via the wireless communication component at regular intervals according to a schedule or until a change-of-value acknowledgment is received.

Nothing in the claim language supports ecobee's unduly narrow constructions, and no further construction is necessary to understand the terms in the context of the claim.

ecobee's proposed constructions are improper because they seek to import a limitation based on ecobee's interpretation of the following sentence in the specification:

> The COV request message may request or direct the automation component **200** b to indicate whether any of the local detected values, received values, parameters, or measurements have changed or altered beyond a pre-defined reporting limit, e.g. COV limit.

'371 Patent at 6:44-49. Citing this sentence, ecobee's expert alleges that "the specification discloses that the request message requests a logical 'yes or no'—e.g., 'true' or 'false' corresponding to whether such a change has in fact occurred, **but importantly, <u>not</u> the values (or changes to the values) themselves**." Martens Decl. ¶ 133. But there is no definition or disclaimer here that supports importing ecobee's limitation into the constructions. *See Apple Inc. v. Wi-LAN Inc.*, 25 F. 4th 960, 967 (Fed. Cir. 2022) ("Embodiments in the specification—even if there is only one embodiment—cannot limit the scope of the claims absent the patentee's words or expressions of manifest exclusion or restriction."). Nothing in the specification or prosecution history states

that the "change-of-value messages" cannot include the values or changes to the values themselves. The specification simply does not support ecobee's interpretation.

Moreover, ecobee's interpretation is based solely on the "Polled" embodiment described with respect to Figure 4 and would improperly exclude the "Push" embodiment described with respect to Figure 5. *See Epos*, 766 F.3d at 1347 ("A claim construction that excludes a preferred embodiment is rarely, if ever correct and would require highly persuasive evidentiary support."). With respect to the "Push" embodiment, the specification explains that the "change-of-value message" may contain the actual values: "the automation component 200 b will create a Push **COV [change-of-value] message containing** all queued COV **values** and send them to automation component 200 a." '371 Patent at 7:27-30. As such, the specification directly contradicts ecobee's argument that the "change-of-value message" cannot include the values themselves. This embodiment is further claimed by dependent Claim 15: "wherein the change-of-value update is a **pushed** communication."

Therefore, the Court should reject ecobee's improper constructions because there is no definition or disavowal, and ecobee's constructions would improperly exclude preferred embodiments that directly contradict ecobee's interpretation of the specification.

VI. CONCLUSION

For the forgoing reasons, Ollnova respectfully requests that the Court adopt its proposed construction for each of the disputed claim terms.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the counsel of record who are deemed to have consented to electronic service are being served on January 31, 2023 with a copy of this document via the Court's ECF system.

/s/ Drew Hollander
Drew Hollander