

2025-1045 & 2025-1046

**In The United States Court of Appeals
For The Federal Circuit**

OLLNOVA TECHNOLOGIES, LTD.,

Plaintiff / Appellant,

– v. –

ECOBEE TECHNOLOGIES ULC D/B/A ECOBEE,

Defendant / Appellee / Cross-Appellant.

*On Appeals from the United States District Court
For the Eastern District of Texas in No. 2:22-cv-00072-JRG,
Honorable Rodney Gilstrap, Judge*

**NON-CONFIDENTIAL PRINCIPAL BRIEF FOR DEFENDANT/APPELLEE/
CROSS-APPELLANT ECOBEE TECHNOLOGIES ULC D/B/A ECOBEE**

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February 4, 2025

EXEMPLARY PATENT CLAIMS AT ISSUE

Claim 1 of U.S. Patent No. 7,860,495

- [1.P] 1. A control system for wireless building automation control, the control system comprising:
- [1.1] a first wireless network in a building having first wireless communications protocol; and
 - [1.2] a second wireless network in the building having a second wireless communications protocol, the first wireless communications protocol different than the second wireless communications protocol;
 - [1.3] wherein the first wireless network is operable to control, free of communications with the second wireless network, building components in response to sensors operable within the first wireless network, and wherein the first wireless network is also operable to control the building components in response to data from the second wireless network.

Claim 1 of U.S. Patent No. 7,746,887

- [1.P] 1. A wireless automation device, comprising:
- [1.1] a transceiver operable to wirelessly communicate packets of information over a wireless network;
 - [1.2] a sensor operable to generate a indicator for a sensed condition;
 - [1.3] 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
 - [1.4] 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,
 - [1.5] 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 [*sic*] in the sensed condition within the predetermined range.

Claim 1 of U.S. Patent No. 8,264,371

- [1.P] 1. An automation component configured for wireless communication within a building automation system, the automation component comprising:
- [1.1] a wireless communications component;
 - [1.2] a processor in communication with the wireless communications component;
 - [1.3] a memory in communication with the processor, the memory configured to store computer readable instructions which are executable by the processor;
 - [1.4] wherein the computer readable instructions are programmed to: process a change-of-value request message received via the wireless communications component;
 - [1.5] 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
 - [1.6] 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.

Claim 13 of U.S. Patent No. 8,264,371

- [13.P] 13. An automation component configured for wireless communication within a building automation system, the automation component comprising:
- [13.1] a wireless communications component;
 - [13.2] a processor in communication with the wireless communications component;

- [13.3] a memory in communication with the processor, the memory configured to store computer readable instructions which are executable by the processor;
- [13.4] wherein the computer readable instructions are programmed to: receive at least one change-of-value update via the wireless communications component, wherein the change-of-value update includes a plurality of change-of-value messages received from a plurality of devices;
- [13.5] storing the at least one change-of-value update corresponding to at least one wireless device; and
- [13.6] communicate the at least one change-of-value update in response to a polling request and repeat the at least one change-of-value update at regular intervals according to a schedule or until a change-of value acknowledgment is received.

Claim 17 of U.S. Patent No. 8,264,371

- [17.P] 17. A method of communicating information between automation components operating within a building automation system, the method comprising:
 - [17.1] receiving a plurality of change-of-value messages from a plurality of wireless devices, each of the plurality of change-of-value messages representing a wireless device indication;
 - [17.2] storing the received change-of-value messages according to the corresponding wireless device of the plurality of wireless devices; and
 - [17.3] communicating a change-of-value update that includes the plurality of change-of-value messages, and repeating the change-of-value update at regular intervals according to a schedule or until a change-of-value acknowledgment is received.

CERTIFICATE OF INTEREST

1. Provide the full names of all entities represented by undersigned counsel in this case.

ecobee Technologies ULC d/b/a ecobee

2. Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

None/Not Applicable

3. Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

Generac Holdings Inc.
Generac Acquisition Corp.
Generac Power Systems, Inc.

4. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court.

Jennifer Ainsworth (Wilson, Robertson & VanDeventer, P.C.)
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Steven Lubezny (Venable LLP)
Eric Harmon (Venable LLP)
Timothy Carroll (formerly Venable LLP)
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Catherine Taylor (formerly Venable LLP)

5. Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case.

Ollnova Technologies Ltd. v. Copeland Comfort Control LP et al., No. 4:22-cv-1387-JAR (E.D. Mo.)

6. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees).

None/Not Applicable

February 4, 2025

/s/ Manny J. Caixeiro

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Counsel for Defendant/Appellee/Cross-Appellant ecobee Technologies ULC

CERTIFICATE OF CONFIDENTIAL MATERIAL

Pursuant to Federal Circuit Rule 25.1(e)(2), the exact number of unique words (including numbers) sought to be marked confidential in this brief is: 15.

The material marked confidential on pages 48-50 of this brief describes highly confidential design details and source code information concerning the accused ecobee products that was designated attorneys' eyes only under the applicable protective order. The material marked confidential on pages 18, 52-55 and 57-60 of this brief describes highly confidential terms of Ollnova's licensing agreements with a non-party and highly confidential ecobee financial information that was designated attorneys' eyes only under the applicable protective order.

The material marked confidential on Addendum pages Appx10, Appx12-14, and Appx18-30 describes highly confidential design details and source code information concerning the accused ecobee products that was designated attorneys' eyes only under the applicable protective order. The material marked confidential on Addendum pages Appx33-34, Appx36-41, and Appx43 describes highly confidential terms of ecobee and Ollnova licensing agreements with non-parties that was designated attorneys' eyes only under the applicable protective order.

February 4, 2025

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Abbreviation	Meaning
Appx#####	Joint Appendix Page #####
ecobee	Defendant-Appellant ecobee Technologies ULC d/b/a ecobee
Ollnova	Plaintiff-Appellee Ollnova Technologies Ltd.
District Court	U.S. District Court for the Eastern District of Texas
Siemens	Siemens Industry, Inc.
'495 patent	U.S. Patent No. 7,860,495
'371 patent	U.S. Patent No. 8,264,371
'887 patent	U.S. Patent No. 7,746,887
'282 patent	U.S. Patent No. 8,224,282
'495 patent Asserted Claims	Claims 1 and 2 of the '495 patent
'371 patent Asserted Claims	Claims 1, 5 and 17 of the '371 patent
'887 patent Asserted Claims	Claims 1, 11, 12 and 20 of the '887 patent
'282 patent Asserted Claims	Claims 1, 3, 6 and 21 of the '282 patent
Asserted Patents or Patents-in-Suit	'495 patent, '371 patent, '887 patent, and '282 patent, collectively
Asserted Claims	'495 patent Asserted Claims, '371 patent Asserted Claims, '887 patent Asserted Claims, and '282 patent Asserted Claims, collectively
X:Y-Z	Column X, Lines Y-Z
POSITA	Person of ordinary skill in the art
JMOL	Judgment as a matter of law
Section 101	35 U.S.C. § 101

STATEMENT OF RELATED CASES

ecobee identifies the following related or prior matters that may be affected by this appeal: *Ollnova Technologies Ltd. v. ecobee Technologies ULC*, No. 2:22-cv-00072-JRG (E.D. Tex.); *Copeland Comfort Control LP f/k/a Emerson Electric Co. v. Ollnova Technologies Ltd.*, No. IPR2023-00626 (P.T.A.B.); *ecobee Technologies ULC v. Ollnova Technologies Ltd.*, No. IPR2024-00131 (P.T.A.B.).

INTRODUCTION

This appeal follows a jury trial that never should have happened because the District Court erroneously refused to find the Asserted Patents ineligible. The Asserted Patents all were issued before the Supreme Court’s seminal *Alice* decision, and none can survive scrutiny when *Alice* is faithfully applied.

The patents claim abstract ideas of, *e.g.*, using wireless networks to “control” generic components or communicating data using admittedly conventional components. The patents never specify how the control or communication is performed in a way that remotely approaches an inventive concept. Nevertheless, the District Court found that the ’371 and ’887 patents were patent eligible because they were not directed to abstract ideas, and that the ’495 patent, while directed to an abstract idea, presented “factual disputes” that required a jury trial on *Alice* Step Two. The District Court was wrong and should have found all three patents ineligible prior to trial.

When the parties proceeded to trial on *Alice* Step Two, the District Court’s legal errors continued. The law is clear: Step Two requires something sufficiently inventive *beyond the abstract idea*. By necessity, a juror needs to know what the abstract idea is before they can analyze if the patent contains anything beyond that. But the District Court refused to inform the jury that it had found the ’495 patent claims to be directed to an abstract idea, refused to tell the jury what that abstract

idea was, and refused to instruct the jury on the black letter law that the abstract idea cannot supply the inventive concept. Thus, even if the '495 patent presented a triable issue on inventive concept, this Court should reverse and remand for a retrial on *Alice* Step Two under proper jury instructions.

The District Court's errors extend beyond the ineligibility analysis. The trial evidence did not support Ollnova's infringement theory for the '371 patent because Ollnova did not show that ecobee's system communicates the required "change-of-value update" "at regular intervals according to a schedule or until a change-of-value acknowledgment is received." The claims' plain language requires at least one "update" to be communicated more than once, something that never occurs in ecobee's system. The District Court nevertheless denied ecobee's JMOL, based on a finding that the claim's plain language could be satisfied when one *or more* change-of-value updates are sent, regardless of whether the system is designed to repeat the same update. That ruling vitiates the claim language and contradicts this Court's precedent in *In re Varma v. IBM Corp.*, 816 F.3d 1352 (Fed. Cir. 2016) and *Salazar v. AT&T Mobility LLC*, 64 F.4th 1311 (Fed. Cir. 2023).

The District Court also improperly allowed Ollnova to present damages testimony that did not meet the requirements of *Daubert* and Rule 702. Ollnova's expert advanced a damages calculation based on the royalty in a settlement agreement that Ollnova had previously entered into, in which the Asserted Patents

were only four among a large portfolio. However, the expert did not isolate the value of any patent in the licensed portfolio and instead baselessly assumed that each patent had equal value. This was an unreliable attempt at apportioning the Asserted Patents' respective values. Compounding the apportionment problem, Ollnova's expert was permitted to rely on a single, admittedly flawed document (that he acknowledged he could not tie to the facts of the case) as justification to opine that ecobee would have paid a thousand times more than the prior licensee. This testimony should not have been permitted. The District Court similarly allowed Ollnova's technical expert to present his unsupported and conclusory opinion that a product which was sold by the Asserted Patents' original owner and current licensee did not practice the patents, prejudicing ecobee's ability to present its marking defense. Allowing the jury to hear any, much less all, of these unsound damages-related theories was highly prejudicial error.

The District Court exacerbated its errors by rejecting the parties' proposed verdict form on infringement, and instead presenting (contrary to both sides' requests) a single question which merely asked if ecobee "infringed ANY of the Asserted Claims." This improperly conflated Ollnova's four separate causes of action—and ecobee's four separate counterclaims for declarations of non-infringement—resulting in a verdict that makes it impossible to determine which patent(s) the jury found infringed. Consequently, at minimum, ecobee is entitled to

a new trial on all issues decided against ecobee, with a proper verdict form that asks the infringement question separately for each patent.

If the Court agrees with ecobee on any of these issues, it need not reach Ollnova's appeal, which seeks to require ecobee to pay pre-judgment interest beginning in 2012—several years before the six-year statute of limitations and before one of Ollnova's patents had even issued. Ollnova cites no authority to overcome Section 286's limitation on recovery.

JURISDICTIONAL STATEMENT

The District Court had jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). The District Court entered Final Judgment on March 1, 2024, and denied ecobee's post-trial motions on September 5, 2024. Appx1-80. ecobee timely appealed on October 4, 2024. Appx6703-6706; 28 U.S.C. § 2107; Fed. R. App. P. 4(a). This Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

STATEMENT OF THE ISSUES

1. Whether ecobee is entitled to a new trial because the District Court's jury instruction and verdict form on the '495 patent's ineligibility under 35 U.S.C. § 101 erroneously failed to: (1) identify the abstract idea to which the subject claims were found directed, and (2) instruct the jury to look for something more than the abstract idea to satisfy *Alice* Step Two?

2. Whether any reasonable jury could find that claims 1 and 2 of the '495 patent are patent eligible where they merely recite conventional technology carrying out the abstract idea of controlling generic components using information from two separate networks?

3. Whether the District Court erred in denying ecobee's motion to dismiss because the claims of the '371 and '887 patents are ineligible under Section 101, where those claims merely recite conventional technology operating in expected ways to carry out abstract ideas involving wirelessly communicating data?

4. Whether the District Court erred in denying JMOL of no infringement of the '371 patent where the claims' plain language requires a device to repeatedly communicate at least one "change-of-value update," but the accused products do not repeat *the* relevant "update"?

5. Whether the District Court improperly admitted Ollnova's expert's damages opinions where he baselessly (1) assumed that the Asserted Patents were equal in value to other patents in Ollnova's allegedly comparable settlement with another party, and/or (2) determined that ecobee's sales were 1000x the prior licensee's sales based on admittedly flawed information? Relatedly, was the damages verdict supported by these unsubstantiated opinions?

6. Whether the District Court improperly admitted Ollnova's expert's conclusory opinions that the patents' licensee did not practice the patents, in support

of Ollnova's assertion that it complied with the marking statute and could obtain pre-Complaint damages?

7. Whether the District Court improperly refused to ask the jury to decide infringement separately for each of the four unrelated patents, and instead *sua sponte* combined all of the different infringement issues into one question: whether "ANY" claim of any patent had been infringed?

8. Whether the District Court correctly concluded that prejudgment interest cannot accrue before the damages period and outside of the statute of limitations window?

STATEMENT OF THE CASE

I. THE PARTIES

Ollnova is a patent assertion and licensing entity that acquired the Asserted Patents (among others) shortly before filing the lawsuit against ecobee. Appx592, 184:21-24; Appx613, 205:17-20; Appx624-627, 216:19-218:9, 219:10-18.

ecobee is a pioneer in the smart thermostat industry and introduced the world's first smart thermostat in 2008. Appx381, 157:19-25; Appx369, 145:14-19. ecobee designs and manufactures smart thermostats and remote sensors that can communicate with smart thermostats within a user's home. Appx667, 259:15-23; Appx1318-1319, 662:20-663:4.

II. THE ASSERTED PATENTS

Ollnova asserted four patents against ecobee, all of which originally were assigned to Siemens. The Asserted Patents—which issued well before the Supreme Court’s seminal decision in *Alice*—claim nothing more than the abstract ideas of using conventional wireless networks for generic control of components, or wirelessly communicating information about a change, carried out using admittedly generic and conventional components.

A. The ’495 Patent

U.S. Patent No. 7,860,495 describes a building automation system that includes two wireless networks having different associated protocols. *See* Appx157-158, 4:60-5:30. The patent describes two modes of operation: (1) a first mode where a first wireless network controls building components “free of communications with the second wireless network” and in response to sensors on the first wireless network, and (2) a second mode where the first wireless network controls building components in response to data from the second wireless network. Appx165, claim 1. The specification admits that the recited networks, protocols and building components were all well-known and conventional, and are used in a conventional manner (*e.g.*, to communicate non-specific “data” for purposes of non-specific “control” of generic “building components”). *See* Appx158, 5:8-30, 6:53-60;

Appx161, 12:56-61; *infra* at Argument, Section III.A. Ollnova asserted independent claim 1 and dependent claim 2 at trial.

B. The '371 Patent

U.S. Patent No. 8,264,371 describes a manner of communicating “change-of-value” (“COV”) information based on messages from multiple wireless devices, where COV information merely indicates if any values, parameters or measurements have changed beyond a non-specific reporting limit (*e.g.*, a temperature set point). *See* Appx186, 1:8-12; Appx188, 6:44-49; Appx116. The claims require generating a “change-of-value update” that includes a plurality of “change-of-value messages,” and communicating the update repeatedly—*i.e.*, “at regular intervals according to a schedule or until a change-of-value acknowledgment is received.” Appx189, 8:39-60; Appx190, 10:22-36. The specification admits that all recited components were conventional, and arranged and used in a conventional manner, where the purported “invention” is merely the repetitive communication of information that indicates if non-specific values or parameters have changed. *See, e.g.*, Appx186-188, 1:56-2:6, 3:26-4:21, 5:32-41, 6:10-17; *infra* at Argument, Section IV. Ollnova asserted independent claims 1 and 17, and dependent claim 5 at trial.

C. The '887 Patent

U.S. Patent No. 7,746,887 describes a wireless device for selective communication of sensor readings based on a threshold. *See* Appx143, 1:63-2:34. The claims are directed to a device that includes a transceiver configured to transmit data when a change in the sensed condition is outside a predetermined range (*e.g.*, a change in temperature beyond a setpoint), and suspend the transmission when a change in the sensed condition is within the predetermined range. Appx144, 3:28-38; Appx148-150, 12:51-63, 14:48-15:4. The specification admits that all recited components were conventional, and the purported “invention” is merely the selective transmission of non-specific information based on a condition (*i.e.*, a non-specific “predetermined range”). *See, e.g.*, Appx143, 1:9-26; Appx146, 7:30-47, 8:16-65; Appx149, 13:56-14:2; *infra* at Argument, Section IV. Ollnova asserted independent claim 1 and dependent claims 11, 12 and 20 against ecobee at trial.

D. The '282 Patent

U.S. Patent No. 8,224,282 is directed toward a wireless automation component that includes a “multi-sensor package,” and is programmed to communicate a “portion” of stored sensor data in response to a received communication. *See, e.g.*, Appx179, 9:4-35, 10:42-62. The jury found all asserted claims invalid at trial, and “Ollnova does not seek to overturn that finding.” Appx30.

III. THE ACCUSED PRODUCTS

Ollnova accused various combinations of ecobee smart thermostats and remote sensors of infringement. Appx667, 259:15-23. Ollnova did not assert each claim against the same accused product and configuration. Instead, Ollnova based its various infringement theories on different configurations of thermostats and sensors. *See infra* at Argument, Section VI.C.

IV. THE DISTRICT COURT PROCEEDINGS

A. ecobee's Motion to Dismiss

Ollnova filed its original Complaint against ecobee on March 8, 2022. Appx199. ecobee filed a motion to dismiss on the ground that each Asserted Patent claims ineligible subject matter under Section 101. Appx201.¹ On September 21, 2022, the District Court issued an Order denying ecobee's motion. Appx117-137. The District Court found the '495 patent's claims to be directed to the abstract idea of "controlling generic 'components' using information from two separate sources (*i.e.*, information from two separate networks)," but "factual disputes" existed concerning *Alice* Step Two. Appx129-134. The District Court found the remaining patents to be eligible because they satisfy *Alice* Step One. Appx120-129, Appx134-137.

¹ Ollnova amended its Complaint in response to ecobee's motion to dismiss; ecobee thereafter renewed its motion. Appx200-201.

B. Summary Judgment and *Daubert*

ecobee moved for summary judgment on several issues, including partial summary judgment as to pre-notice damages and summary judgment of invalidity of the '495 patent. Appx207-208 (Dkts. 122, 123). ecobee also moved to exclude expert testimony under *Daubert*/Rule 702, including: (i) opinions of Ollnova's damages expert, Mr. Bergman, concerning a purportedly comparable agreement underlying his damages model, and (ii) opinions of Ollnova's technical expert, Dr. Madisetti, concerning whether the licensed Siemens APOGEE system practices certain Asserted Patents (for purposes of marking under 35 U.S.C. § 287). Appx208 (Dkts. 124, 125).

The District Court denied ecobee's motions. With respect to the '495 patent, the District Court confirmed its "prior ruling that claim 1 of the '495 Patent is directed to an abstract idea," but found there were "outstanding issues of material fact" that precluded summary judgment. Appx82. Regarding the damages testimony, the District Court found that ecobee's issues could be "adequately addressed through robust cross examination." *Id.* With respect to pre-notice damages and marking, the District Court found that "ecobee had not foreclosed all factual disputes as to the Siemens APOGEE system practicing the patents," and that ecobee's issues with Dr. Madisetti's opinions could be "adequately addressed through robust cross examination." *Id.*

C. Trial and Jury Instructions

The parties conducted a jury trial from September 29 to October 5, 2023. Following the close of evidence, ecobee presented motions under Fed. R. Civ. P. 50(a), which were summarily denied. Appx2059-2091, 1163:11-1195:19. The District Court thereafter conducted an informal charge conference on the parties' proposed verdict forms and jury instructions. *See* Appx8034-8084. The following morning—less than one hour before the formal charge conference—the District Court issued its own proposed verdict form and jury instructions, which included new language that neither party proposed. *See* Appx8085-8123. ecobee objected at the formal charge conference, including with respect to Section 101 and the infringement question.

1. ecobee's Objections Concerning Section 101

The District Court's question for Section 101 (Question 2) and related jury instructions did not inform the jury that the '495 patent's claims were directed to an abstract idea (much less identify what the abstract idea was) or instruct the jury that it cannot rely on the abstract idea when performing the inventive concept analysis under *Alice* Step Two. Instead, its Question 2 merely asked:

QUESTION NO. 2

Did ecobee prove by clear and convincing evidence that the Claims of the '495 Patent, when taken individually or when taken as an ordered combination, involve only technology which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional as of April 9, 2004?

Yes: _____ OR No: _____

Appx8119. Likewise, the District Court’s proposed jury instructions did not include any identification or instruction concerning the abstract idea, and instead noted only that Step One “is [an issue] for the Court to decide and not the jury. It is not something that you will decide.” Appx8099-8101.

ecobee objected to the jury instructions and verdict form Question 2 (Appx2103-2106, 1204:13-1207:17; Appx2111-2113, 1212:25-1214:12), and tendered alternative instructions to remedy this error (Appx2104-2106, 1205:6-1207:5). ecobee’s objections emphasized the problems described above—that the jury had not been instructed about the abstract idea and was being permitted to consider the abstract idea as supplying the inventive concept. *Id.*

The District Court overruled ecobee’s objections and rejected ecobee’s proposed instruction. Appx2106, 1207:6-17; Appx2112-2113, 1213:14-1214:12. The District Court thus withheld its identification of the abstract idea from the jury, thereby preventing the jury from analyzing whether there was any inventive concept

that was different from the abstract idea under *Alice* Step Two, as reflected in the final verdict form and jury instructions. Appx2127-2128, 1228:20-1229:4; Appx2139-2141, 1240:4-1242:1; Appx8389.

2. ecobee's Objections Concerning the Infringement Question

For infringement (Question 1), the parties jointly proposed a verdict form requiring a separate response for each of the four Asserted Patents (with disagreements concerning the wording of the question presented to the Court in colored text):

<p><u>QUESTION NO. 1:</u></p> <p>Did Ollnova prove by a preponderance of the evidence that ecobee infringed any of the Asserted Patents?</p> <p>Answer "Yes" or "No" for each Asserted Patent listed below:</p> <p>Please Answer "Yes" (for Ollnova) or "No" (for ecobee):</p> <p>'887 Patent _____</p> <p>'495 Patent _____</p> <p>'282 Patent _____</p> <p>'371 Patent _____</p>

Appx8079.

In its proposed verdict form circulated shortly before the formal charge conference, the District Court rejected both parties' request for infringement to be decided separately for each patent, and instead included a single question concerning the infringement of "ANY" claim:

QUESTION NO. 1

Did Ollnova, the Plaintiff, prove by a preponderance of the evidence that ecobee, the Defendant, infringed ANY of the Asserted Claims of the Asserted Patents?

Yes: _____ OR No: _____

Appx8118. ecobee objected at the formal charge conference, including specifically with respect to having a single question covering infringement for all patents. Appx2111, 1212:5-24. The District Court again overruled ecobee’s objections and included its single question on infringement in the final verdict form. Appx8388.²

D. Jury Verdict and Post-Judgment Proceedings

Following closing arguments, the jury reached a verdict that: (i) ecobee infringed at least one of the Asserted Patents (“Yes” on Question 1)—though it is impossible to know which patent(s) were found to be infringed, (ii) the ’282 patent’s Asserted Claims were invalid, (iii) the ’495 patent’s Asserted Claims were not directed only to “well-understood, routine, and conventional” technology, and (iv) awarded Ollnova lump sum damages of \$11.5 million covering the life of the patents. Appx8385-8393. Due to the verdict form’s structure, the jury did not reach the question concerning the damages start date (Question 4c). *Id.*

² ecobee also objected to the exclusion of a jury question concerning marking, which the District Court overruled in favor of its conditional “Question 4c.” Appx2113-2114, 1214:23-1215:15; Appx8391-8392.

The District Court entered Final Judgment for Ollnova on March 1, 2024. Appx1-3. ecobee thereafter filed motions seeking (1) JMOL that the '495 patent's Asserted Claims are invalid under § 101; (2) JMOL or a new trial concerning noninfringement due to a lack of substantial evidence supporting infringement of any claim; (3) JMOL or a new trial concerning damages due to Mr. Bergman's unsubstantiated damages theories; (4) a new trial due to the verdict form's inclusion of single question on infringement, and (5) amendment of the final judgment such that prejudgment interest accrues from no earlier than March 8, 2022 (the appropriate start date for damages). Appx218-219 (Dkts. 243, 244, 246, 247). Ollnova did not file any post-trial motions.

The District Court denied all of ecobee's post-trial motions, although it clarified that prejudgment interest accrues from no earlier than March 8, 2016 (the damages start date under Section 286), not the earlier date Ollnova had requested. *See* Appx4-80. Both sides timely appealed.

SUMMARY OF THE ARGUMENT

1. With respect to the '495 patent claims' ineligibility under *Alice* Step Two, the District Court erred by presenting jury instructions and a verdict form question (Question 2) that were incomplete, flawed and highly prejudicial because they failed to: inform the jury that the claims had been found to be directed to an abstract idea, identify what that abstract idea was, and instruct the jury that it must

disregard that abstract idea when considering whether the claims disclose an inventive concept. As a result, the jury was allowed to rely on the abstract idea itself when rendering its verdict, in violation of this Court’s precedent. *See, e.g., BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

2. The ’495 patent’s Asserted Claims are ineligible under Section 101 and no reasonable jury could have found otherwise. The District Court found that the claims are directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (*i.e.*, information from two separate networks).” Appx132. Ollnova failed to present any evidence demonstrating an inventive concept at trial—nor could it, as the claims merely implement the abstract idea using admittedly conventional networks arranged and operating in a routine manner. The District Court, therefore, erroneously denied JMOL.

3. The ’371 and ’887 patents’ Asserted Claims are ineligible under Section 101 because they merely claim abstract ideas concerning communicating information, carried out using admittedly generic and conventional components. The District Court erred by denying ecobee’s motion to dismiss and finding that those claims were not directed to abstract ideas based on concepts that this Court has previously found ineligible (*e.g.*, selectively communicating data), and components that the patents themselves confirm were well-known and conventional. While the District Court did not reach Step Two, the intrinsic record demonstrates that the ’371

and '887 patent claims do not contain an inventive concept and are, therefore, ineligible.

4. ecobee's Accused Products do not infringe the '371 patent's Asserted Claims. The plain claim language requires repeated communication of a "change-of-value update"—"at regular intervals according to a schedule or until a change-of-value acknowledgment is received"—which ecobee's products do not do. The District Court erroneously denied JMOL by reasoning that sending multiple *different* messages could qualify as repeating "*the*" message. The District Court's interpretation vitiates the claim language and contradicts this Court's *Varma* and *Salazar* holdings.

5. The damages award is based on expert theories and evidence that are inadmissible under *Daubert*. Ollnova's "market approach" theory relied on a litigation-based settlement agreement covering ■ patents, including the four Asserted Patents, but Ollnova's expert (Mr. Bergman) baselessly and unreliably assumed all licensed patents were equal in value. Mr. Bergman scaled up the value of that license by 1,000 to account for ecobee's purportedly greater market share than the licensee, but that multiplier was based on a single "report" that Mr. Bergman *admitted* was flawed and unverifiable. The District Court committed error by denying ecobee's *Daubert* motion seeking to exclude such unreliable and prejudicial opinions.

6. The District Court erred in denying ecobee’s *Daubert* motion and allowing Ollnova’s technical expert to present the unsupported and conclusory opinion that APOGEE—a product that was sold by Siemens, the Asserted Patent’s original owner and current licensee—did not practice the patents. This error formed the basis for the District Court’s denial of ecobee’s motion for summary judgment of no marking under 35 U.S.C. § 284, and severely prejudiced ecobee in its ability to present a no marking defense at trial.

7. The District Court erred by utilizing a verdict form question on infringement (Question 1) that improperly combined all claims and counterclaims concerning infringement of the four Asserted Patents into a single question that merely asked whether ecobee “infringed ANY of the Asserted Claims of the Asserted Patents.” The Court issued the verdict form *sua sponte*, even though each party had proposed a form wherein the jury would answer the infringement question separately for each patent, and over ecobee’s objections. The verdict form renders it impossible to determine which patent(s) were unanimously found to be infringed by the jury, and ecobee was further denied its fundamental right to have a jury decide each of its patent-specific counterclaims for a declaration of non-infringement. Consequently, reversal on virtually any ground raised in this appeal will require—at minimum—a new trial on all issues decided against ecobee.

8. To the extent the final judgment is not reversed or vacated, the Court should not disturb the District Court’s calculation of prejudgment interest as beginning at the start of the damages period under the appropriate statutes, rather than beginning at a hypothetical negotiation date that occurred four years before the earliest date damages could accrue under the statute of limitations. Ollnova’s contrary position has no support in the law and would require ecobee to start paying interest before any damages accrued, on amounts it did not owe at the time.

ARGUMENT³

I. STANDARDS OF REVIEW

A. Verdict Form / Jury Instructions

This Court “appl[ies] Federal Circuit law to review ‘the legal sufficiency of jury instructions on an issue of patent law without deference to the district court.’” *Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d 1367, 1378-79 (Fed. Cir. 2020) (citations omitted). “In general, a party challenging jury instructions must ‘prove the jury instructions read in their entirety were incorrect or incomplete as given.’” *Id.* at 1378 (citations omitted). To the extent jury instructions or the verdict form do not implicate an issue of patent law, their sufficiency is reviewed for an abuse of discretion under Fifth Circuit law. *See Matter of 3 Star Props., LLC*, 6

³ All bold-italics emphasis herein added unless otherwise indicated.

F.4th 595, 609-10 (5th Cir. 2021) (considering the verdict form as “part of the jury instruction”) (citations omitted).

B. Patent Eligibility

This Court “review[s] decisions of § 101 patent eligibility de novo.” *Broadband iTV, Inc. v. Amazon.com, Inc.*, 113 F.4th 1359, 1366 (Fed. Cir. 2024). Patent eligibility is a question of law that may be based on underlying factual findings. *Id.*

C. Daubert

This Court reviews a district court’s decision to admit or exclude expert testimony under the law of the regional circuit, here the Fifth Circuit. *Micro Chemical, Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1390-91 (Fed. Cir. 2003). “The Fifth Circuit reviews such evidentiary rulings for abuse of discretion.” *Id.* (citing *Snap-Drape, Inc. v. Comm’r*, 98 F.3d 194, 197 (5th Cir. 1996)). “The district court’s interpretation of the Federal Rules of Evidence is reviewed without deference.” *Id.* (citing *Bellaire Gen. Hosp. v. Blue Cross Blue Shield of Mich.*, 97 F.3d 822, 827 (5th Cir. 1996)).

D. JMOL and Motion for a New Trial

A District Court’s decision on a JMOL and/or a motion for new trial is reviewed under the law of the “applicable regional circuit,” here the Fifth Circuit. *Lighting Ballast Control, LLC v. Philips Elecs. N. Am. Corp.*, 790 F.3d 1329, 1342 (Fed. Cir. 2015) (addressing JMOL); *see also Uniloc USA, Inc. v. Microsoft Corp.*,

632 F.3d 1292, 1309 (Fed. Cir. 2011) (applying regional circuit law to review of motion for new trial).

In the Fifth Circuit, “[a] challenge to a JMOL ruling on an issue preserved in district court is reviewed *de novo*, applying the same standard applied by the district court.” *Montano v. Orange County, Tex.*, 842 F.3d 865, 873 (5th Cir. 2016) (citation omitted). “JMOL should be granted when ‘a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue.’” *Id.* (citations omitted).

The Fifth Circuit “review[s] the district court’s grant or denial of a new trial for abuse of discretion.” *Encompass Office Solutions, Inc. v. La. Health Serv. & Indem. Co.*, 919 F.3d 266, 273 (5th Cir. 2019) (citation omitted). “A new trial may be appropriate if the verdict is against the weight of the evidence, the amount awarded is excessive, or the trial was unfair or marred by prejudicial error.” *Scott v. Monsanto Co.*, 868 F.2d 786, 789 (5th Cir. 1989).

II. THE JURY INSTRUCTIONS AND VERDICT FORM ON PATENT ELIGIBILITY WERE ERRONEOUS, AND AT A MIMIMUM, THERE SHOULD BE A NEW TRIAL

Before trial, ecobee moved to dismiss Ollnova’s Complaint because each Asserted Patent is ineligible under Section 101. Appx201 (Dkt. 25). With respect to the ’495 patent, ecobee demonstrated that claim 1 was representative, and that claim

construction was not required to resolve eligibility; Ollnova did not dispute either point. Appx117-118.

At *Alice* Step One, the District Court “agree[d] with ecobee that claim 1 of the ’95 Patent is directed to the abstract idea of ‘*controlling generic “components” using information from two separate sources (i.e., information from two separate networks).*’” Appx132. At *Alice* Step Two, however, the District Court determined there were “factual disputes related to whether various elements of claim 1 of the ’95 Patent, alone or in combination, were conventional and well-understood at the time the patent was filed.” Appx133. Specifically, the District Court found that “ecobee d[id] not address Ollnova’s argument that the claimed ‘different wireless networks utilizing different wireless communications protocols’ was not conventional, a notion that the prosecution history appears to support.” Appx133-134. Thus, the District Court denied ecobee’s motion, leaving this purported fact issue concerning Step Two for the trial.

During trial, however, the District Court never instructed the jury that the claims were directed to an abstract idea and never told the jury what the abstract idea was. *See supra* at Statement of the Case, Section IV.C.1. Without this information,

it was impossible for the jury to determine whether the claims contained an inventive concept *beyond the abstract idea itself*, as required.⁴

A. The Abstract Idea Itself Cannot Supply an Inventive Concept

A court applying *Alice* must first determine whether challenged claims are directed to a patent-ineligible subject matter—such as an abstract idea. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). “If so,” then at Step Two the court must “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the *additional* elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (citation omitted). Step Two is “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to *significantly more* than a patent upon the [ineligible concept] itself.’” *Id.* at 217-18 (citation omitted). Thus, “[a]fter identifying an ineligible concept at step one, we ask at step two ‘*[w]hat else* is there in the claims before us?’” *BSG Tech*, 899 F.3d at 1290 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78 (2012)).

⁴ The District Court’s errors on the ’495 patent ineligibility issue were compounded by the verdict form’s single infringement inquiry (*see infra* at Argument, Section VII), which made it impossible to know whether the infringement verdict was based only the ’495 patent. If so, a properly instructed jury could have found that the ’495 patent lacked an inventive concept, resulting in a verdict of no liability. *See Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 644 (2015) (“an invalid patent cannot be infringed”).

This Court has made clear that “a claimed invention’s use of the ineligible concept to which it is directed *cannot supply the inventive concept* that renders the invention ‘significantly more’ than that ineligible concept.” *BSG Tech*, 899 F.3d at 1290; *see also Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019) (“The abstract idea itself cannot supply the inventive concept, ‘no matter how groundbreaking the advance.’” (quoting *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018))); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 775 (Fed. Cir. 2019) (finding the alleged technological solution “merely mirrors the abstract idea itself and thus cannot supply an inventive concept”). This precedent implements the Supreme Court’s characterization of Step Two as analyzing whether the claims “integrate the building blocks into *something more* ... thereby ‘transform[ing]’ them into a patent-eligible invention.” *Alice*, 573 U.S. at 217 (citation omitted).

For a juror to apply this law faithfully in the Step Two analysis, she *must be told* that the abstract idea cannot provide or contribute to the inventive concept and she *must know* what the abstract idea is. How else could one determine whether there is “something more” or “significantly more” in the claims beyond the abstract concept? *Alice*, 573 U.S. at 217-18. Without knowing the ineligible idea, a juror cannot perform the required comparison between that idea and the claim as a whole, as that uninformed juror lacks the information necessary to answer the questions,

“*[w]hat else* is there in the claims before us,” and whether the ineligible concept and the purported inventive concept are one and the same. *BSG Tech*, 899 F.3d at 1290.

B. The Jury Instructions and Verdict Form Were Legally Erroneous for Not Informing the Jury About the Abstract Idea

A party seeking to alter a judgment based on erroneous jury instructions or verdict form must establish that it timely objected and requested alternative instructions that would have remedied a prejudicial error in the instructions or verdict form. *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1281 (Fed. Cir. 2000). Whether a jury instruction or verdict form is legally erroneous is a question of law. *Id.* at 1282.

Here, the District Court’s jury instructions and verdict form improperly asked the jury whether the asserted ’495 patent claims recite an inventive concept *without ever identifying the abstract idea* to which the claims were directed. *See* Appx2138-2141, 1239:15-1242:12; Appx8389; *supra* at Statement of the Case, Section IV.C.1. The District Court’s “Question 2” simply tasked the jury with determining whether ecobee had proved that the claims’ limitations “involve only technology which a [POSA] would have considered to be well-understood, routine, and conventional.” Appx8389. However, neither the verdict form nor jury instructions: (1) informed the jury that the claims were directed to an abstract idea, (2) identified what the abstract idea was, or (3) instructed the jury that it must exclude that abstract idea when performing the analysis. These failures prevented the jury from analyzing whether

there was any inventive concept that was “significantly more” than the abstract idea under Step Two. *Alice*, 573 U.S. at 217. Doing so was prejudicial and constituted legal error. *See, e.g., id.*; *BSG Tech.*, 899 F.3d at 1290 (the ineligible concept cannot supply the inventive concept); *Trading Techs.*, 921 F.3d at 1385; *ChargePoint*, 920 F.3d at 775.⁵

The District Court’s error is akin to asking a jury to determine whether a product infringes a claim without providing the jury the proper construction of that claim. Both infringement and ineligibility involve a two-step inquiry, where a court first makes a legal ruling and then a factfinder analyzes the second step in accordance with the prior legal ruling. A district court’s failure to construe claims before submitting the infringement issue to the jury constitutes reversible error. *See, e.g., Rivera-Davila v. Asset Conservation, Inc.*, No. 98-1075, 2000 WL 27891, at *4 (Fed. Cir. Jan. 12, 2000). In such circumstances, a remand is “necessary” because this Court has “no way of knowing whether the jury’s finding was supported by substantial evidence because we have no way of knowing what interpretation the jury applied to [the] claim [] on their way to concluding that every limitation was met by the accused devices.” *Id.*; *see also Graco, Inc. v. Binks Mfg. Co.*, 60 F.3d 785, 791 (Fed. Cir. 1995) (vacating and remanding infringement determination

⁵ Ollnova leaned into the District Court’s error by having its expert testify in a manner that improperly encouraged the jury to look to the abstract idea in evaluating the inventive concept question. *See infra* at Argument, Section III.

because “[w]e simply do not know what claim construction the trial judge gave the terms in the claims”). The same rationale applies in the context of *Alice* Step Two. In fact, this case presents the *a fortiori* situation where this Court knows the jury could not have looked for “something more” than the abstract idea (*Alice*, 573 U.S. at 217), because the jury was never told that an abstract idea exists or what it was.

C. The District Court Erred in Denying a New Trial Based on Its Erroneous Jury Instructions and Verdict Form

Following trial, ecobee moved, *inter alia*, for a new trial because neither the jury instructions nor the verdict form identified the abstract idea or excluded it from the Step Two inquiry. Appx218 (Dkt. 243).

The District Court denied ecobee’s motion, stating that its Step One ruling found that “the invention, *as a whole*, was directed to an abstract idea, not that some elements were abstract and others were not.” Appx62 (emphasis in original). According to the District Court, ecobee demanded an instruction “that would have prevented Ollnova from arguing that the inventive concept was found in the third limitation,” which requires selective use of two generic wireless networks to “control” building components. *Id.*; Appx165, claim 1. The District Court instead found that Step Two requires the jury to consider “all elements of the claim, individually and as an ordered combination,” regardless of the abstract idea and how it relates to the claim’s elements. *See* Appx62.

The District Court’s analysis was erroneous for several reasons. First, *ecobee* never advanced an instruction that would have prevented the jury from considering any claim limitation. To the contrary, *ecobee*’s instruction simply identified the abstract idea using the District Court’s own language and cautioned the jury not to rely on that abstract idea when considering the inventive concept question. *See* Appx2104-2106, 1205:6-1207:3. This approach is entirely consistent with, and indeed required by, the law discussed above.

Second, the District Court misconstrued *ecobee*’s use of the words “non-abstract elements” as suggesting a need to “tak[e] a knife to the claims” before submitting them to the jury. *See* Appx62. *ecobee*’s focus was that without knowing about the abstract idea, the jury lacked the requisite guiderails and was instead free to rely on the abstract idea itself as the inventive concept. The District Court need not separate claim limitations when submitting the case to the jury; but it does need to disclose to the jury the already-identified abstract idea—along with proper instructions that the jury must exclude that idea when analyzing ineligibility under Step Two.

The District Court similarly misunderstood *ecobee* as relying on *BSG Tech.* to ask the District Court to “dissect[]” the claims prior to Step Two. *See* Appx62-63. Rather, *ecobee* properly cited *BSG Tech* for the proposition that Step Two requires a comparison between the abstract idea and the claim as a whole when determining

whether there is an inventive concept beyond the abstract idea. *See* 899 F.3d at 1290-91; *see also Elec. Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2018) (describing its analysis at Step Two as “scrutiniz[ing] the claim elements **more microscopically** [looking for something] sufficient to remove the claims from the class of subject matter ineligible for patenting”). *ecobee*’s position is consistent with this Court’s further explanation that “the relevant inquiry is **not** whether the claimed invention as a whole is unconventional or non-routine,” but rather whether there are “limitations **other than the invention’s use of the ineligible concept** to which it was directed” that are not “well-understood, routine and conventional.” *BSG Tech*, 899 F.3d at 1290 (citation omitted). Thus, *ecobee* did not seek an impermissible “dissection” of claims; it merely sought to ensure the jury was provided the necessary information to perform the proper analysis this Court requires.

Finally, the District Court erred in determining that its lack of instruction was harmless, based on the logic that it is “unclear how the jury would have found the inventive concept to be the abstract idea itself when such was never presented to the jury.” Appx63. This statement confirms the problem—because the jury did not know what the abstract idea was it could not exclude it from its analysis, and the Court cannot know the jury did not rely on the abstract idea when rendering its verdict. At minimum, the instructional error warrants a new trial with appropriate jury instructions. *See Inline Plastics Corp. v. Lacerta Group, LLC*, 97 F.4th 889, 898-99

(Fed. Cir. 2024) (vacating judgment and remanding for a new trial based on prejudicial invalidity jury instructions).⁶

III. ECOBEE IS ENTITLED TO JMOL THAT THE '495 PATENT ASSERTED CLAIMS ARE NOT PATENT ELIGIBLE

No reasonable jury could have found that the '495 patent's Asserted Claims recite an inventive concept beyond the claimed abstract idea itself.

A. The '495 Patent Claims Lack an “Inventive Concept”

As explained above, the District Court properly found that the '495 patent Asserted Claims are directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (*i.e.*, information from two separate networks).” Appx132; *supra* at Statement of the Case, Section IV.A. The only question remaining for the jury was whether the “additional” claim elements—*i.e.*, other than the abstract idea itself—when taken individually and “as an ordered combination” “transform the nature of the claim into a patent-eligible application.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1366 (Fed. Cir. 2018) (internal quotations and citation omitted).

Both prior to and during trial, Ollnova relied solely on the limitations of claim 1 as allegedly disclosing an “inventive concept.” *See* Appx48-60. The '495 patent

⁶ Should this Court reverse the District Court's denial ecobee's motion for JMOL that the '495 patent Asserted Claims are ineligible, for which ecobee argues in Section III below, then no new trial on the '495 patent would be necessary.

describes the networks and components recited in claim 1 as well-known and conventional. For example, the '495 patent concedes that the claimed "sensors" can be any "now known" sensor, providing several conventional examples. Appx158, 6:53-60. The generic "building components" are also described as those in conventional building automation systems. Appx156, 1:10-2:10; Appx161, 12:56-61; *see also* Appx159, 8:16-18; Appx161, 12:42-44; Appx164, 18:30-37 (referring to "building components" generically). The patent also admits that different wireless networks utilizing different wireless communications protocols, such as "Bluetooth" and "wifi," were "known" and even "standard," including when used in "wireless integrated building automation systems." Appx158, 5:8-30; Appx156, 2:3-6.

At trial, ecobee's expert (Dr. Martens) demonstrated that the additional elements in the claims (those beyond the abstract idea) were well-known and conventional. **First**, Dr. Martens described how the above-referenced admissions of the '495 patent demonstrate that the non-abstract components were conventional. Appx1815-1817, 919:5-921:20. **Second**, Dr. Martens identified well-known examples of two networks utilizing different communications protocols within a building that predated the patent, including an in-house WiFi network connected to a modem, and the modem's connection to the internet. Appx1817-1818, 921:25-922:16. **Third**, Dr. Martens testified that prior art (specifically, "Mesarina" and "Herrmann") discloses at least two networks selectively utilizing different

communications protocols for control within a building system. Appx1818-1819, 922:19-923:18; Appx1821-1829, 925:21-932:19, 933:17-939:8; *see also* Appx7734-7735; Appx7742, 2:18-62; Appx7750; Appx7752-7753, [0007]-[0010]; Appx7754-7755, [0026], [0041]-[0042]. Thus, Dr. Martens demonstrated that the non-abstract elements of the claims, individually and as an ordered combination, recite solely conventional technologies.

In rebuttal, Ollnova's expert (Dr. Madisetti) testified that the patent's allegedly unconventional feature was the use of two conventional networks to "control" building components. *See* Appx1969-1970, 1073:23-1074:15. Specifically, Dr. Madisetti relied on the "two modes" of control recited in claim 1—"one where both networks work together to control and one where the first wireless network is operable to control free of communications [with the second network]." *Id.*

This allegedly unconventional feature, however, is indistinguishable from the abstract idea of "controlling generic 'components' using information from two separate [networks]." According to claim 1, the "two modes" of control are distinguished simply by whether the controlling input is a (conventional) sensor output on the (conventional) first network or (unspecified) "data" from the (conventional) second network. Appx165, claim 1. "But merely selecting information, by content or source ... does nothing significant to differentiate a

process from ... the information-based category of abstract ideas.” *Elec. Power*, 830 F.3d at 1353-55; *see also BSG Tech*, 899 F.3d at 1290-91 (incorporating “historical usage information” failed Step Two because it did not improve underlying database structures, even if conventional approaches did not use that information). Although this information is used for “control” in building “automation,” this Court has routinely rejected under Section 101 claims that set forth improvements in “automation.” *See Repifi Vendor Log. v. IntelliCentrics, Inc.*, No. 21-1906, 2022 WL 794981, at *3 (Fed. Cir. Mar. 15, 2022) (“[A]utomation ... cannot be the inventive concept because such automation is itself an abstract idea.”) (citing *ChargePoint*, 920 F.3d at 774). This Court’s rationale applies with even stronger force here, because the ’495 patent itself describes wireless control of building automation systems as “standard.” Appx156, 1:53-2:10. Thus, Dr. Madisetti’s testimony provided no legally sufficient evidentiary basis for a reasonable jury to find that the ’495 patent Asserted Claims disclose an inventive concept.

Nor was there evidence concerning the “ordered combination” of elements that was sufficient for a jury to find that Step Two was satisfied. Indeed, Dr. Madisetti did not testify that the ordered combination of claim elements provides an inventive concept. *See Appx1971*, 1075:17-23 (relying on just the “third limitation”). That should end this inquiry.

Even if Dr. Madisetti had testified to such an opinion, combinations of well-

known components cannot confer eligibility where, as here, the patent confirms all components are operating according to their “expected” capabilities. *See Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1353, 1355 (Fed. Cir. 2021) (claims ineligible where no evidence that “claimed combination of these conventional authentication techniques achieves more than the expected sum of the security provided by each technique”); *Hawk Tech. Sys., LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1358 (Fed. Cir. 2023) (claims ineligible because they “require nothing ‘other than conventional computer and network components operating according to their ordinary functions’”) (citation omitted).

Indeed, the ’495 patent itself explains that the recited networks and components are conventional and operate according to their expected capabilities. The patent does not purport to invent any new or different network, new programming to control how networks operate, or a new way to overcome any “technical difficulty” with combining known wireless networks. *See ChargePoint*, 920 F.3d at 768. Nor did Ollnova present evidence to that effect. At most, the claims apply conventional network technology “to a particular technological environment,” which renders them ineligible. *Id.* (citation omitted); *Elec. Power*, 830 F.3d at 1354 (“[L]imiting the claims to the particular technological environment ... is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.”).

B. The District Court Erred in Denying JMOL Because the Claims Lack an Inventive Concept as a Matter of Law

Following trial, the District Court denied ecobee’s motion requesting JMOL that the ’495 Patent is ineligible under Section 101. *See* Appx48-64. In doing so, the District Court found that the jury may have relied on Dr. Madisetti’s testimony that “the inventive concept ... was implementing two wireless networks in a building’s automation system, wherein the first network was ‘free of communication’ from the second network, so that if one system failed, control was not lost over the building’s systems.” Appx53 (citing Appx676, 268:18-24). However, the purported capability to maintain control if “one system failed” is not mentioned anywhere in the claim limitations, and thus cannot serve to confer eligibility. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016) (alleged benefits irrelevant where “[t]he Asserted Claims do not contain any limitations that address” the same).

While the concept of network failure is mentioned in the specification, that cannot confer eligibility because “the *claim*—as opposed to something purportedly described in the specification” must contain the inventive concept. *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1338-39 (Fed. Cir. 2017) (finding no inventive concept where the specification described a “scalable architecture” but the claim “does not”).

The District Court referenced Dr. Madisetti’s testimony that conventional systems allegedly “utilized a single wireless network,” whereas “the patent’s inventive concept was the application of multiple wireless networks that were free of communication from each other ... for more reliant control.” Appx59 (citing Appx675-678, 267:2-270:3; Appx1970, 1074:3-15). This, again, merely describes the abstract idea of using two conventional networks within a building for implementing generic “control.” Indeed, the mere use of multiple conventional networks and selective “communications” from the same is an ineligible, abstract concept—as the District Court appropriately found at Step One. The ’495 patent Asserted Claims do not contain an improvement to the “networks” or any of the other claim components. The concept of “control” in this context is abstract and undefined, as the claims do not specify the type or manner of control, much less how any control is allegedly improved. Instead, the claims merely describe “control” as a generic result, which fails to contain an inventive concept. *See Two-Way Media*, 874 F.3d at 1337 (holding the claim’s “result-based functional language,” including “controlling,” “does not sufficiently describe how to achieve these results in a non-abstract way”); *Elec. Power*, 830 F.3d at 1355 (“merely selecting information, by content or source, for collection, analysis, and display” does not confer eligibility); *Braemer Manuf., LLC v. ScottCare Corp.*, 816 F. App’x 465, 470 (Fed. Cir. 2020)

(“Claims that ‘merely collect, classify, or otherwise filter data’ are ineligible for patent under § 101.”) (citation omitted).

Accordingly, this Court should enter judgment that the ’495 patent Asserted Claims are ineligible.

IV. THE DISTRICT COURT ERRED IN FINDING AS A MATTER OF LAW THAT THE ’371 AND ’887 PATENT ASSERTED CLAIMS ARE PATENT ELIGIBLE

ecobee moved pursuant to Rule 12(b)(6) to dismiss Ollnova’s infringement claims concerning the ’371 and ’887 patents because those patents are ineligible under § 101. Appx201 (Dkt. 25). The District Court denied ecobee’s motion, finding that the patents’ claims were not directed to abstract ideas as a matter of law. Appx126-129; Appx134-137.⁷ The District Court erred because both the ’371 and ’887 patents claim nothing more than abstract ideas, carried out using admittedly well-known and conventional components arranged in a conventional manner. Although the District Court did not reach *Alice* Step Two, the intrinsic records demonstrate that the ’371 and ’887 patents lack an inventive concept and are, therefore, ineligible. *See, e.g., Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d

⁷ The District Court’s ruling was a final “judgment of eligibility” which was “sufficient to preserve the issue for appeal.” *See Ericsson Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1321 (Fed. Cir. 2020) (citing *Lighting Ballast Control*, 790 F.3d at 1338).

1355, 1365-66 (Fed. Cir. 2021) (holding claims ineligible on appeal despite district court not reaching Step Two).

A. *Alice* Step One

Both the '371 and '887 patents are directed to the abstract idea of communicating change information using well-known and conventional components.

Claim 13 is representative of the '371 patent claims⁸ and describes the abstract idea of receiving and storing information about a change (e.g., in temperature) (“change-of-value”), and then repeatedly communicating that information upon request at regular intervals or until the communication has been acknowledged. *See* Appx190, claim 13. Thus, the claim focuses on the generic steps of collecting, storing and communicating data. Likewise, claim 1 is representative of the '887 patent claims (Appx117-118), and describes the abstract idea of selective transmission of data (*i.e.*, communicating information if a detected change is outside of a “predetermined range,” and not communicating information if a detected change is within that range). *See* Appx149-150, claim 1. That is, the claim discloses the basic function of collecting data and sending it only when an unspecified condition is met.

⁸ Claim 13 was withdrawn by Ollnova before trial, but Ollnova did not dispute that it is representative and the District Court agreed. *See* Appx117-118.

Like the '371 patent, the '887 patent focuses on the abstract steps required to collect, analyze and selectively communicate data, which are not patent eligible. *See, e.g., Electric Power*, 830 F.3d at 1354 (“gathering and analyzing information of a specified content, then displaying the results” is abstract); *Chamberlain Group, Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1346-47 (Fed. Cir. 2019) (“Wirelessly communicating status information about a system is similar to abstract ideas we have found in our previous cases.”); *Data Scape Ltd. v. Western Digital Corp.*, 816 F. App'x 461, 463-64 (Fed. Cir. 2020) (claims “directed to the abstract idea of selective data storage, transfer, and processing” ineligible); *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (“wirelessly communicating regional broadcast content to an out-of-region recipient” is abstract). This is true even if the steps are performed only when the data meets selected conditions. *See Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1365 (Fed. Cir. 2023) (use of a “predetermined threshold” “merely reflects the kind of data analysis that the abstract idea of matching necessarily includes”).

Here, the claimed abstract ideas “can be performed in the human mind” or “using a pencil and paper,” without requiring any hardware components. *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1316 (Fed. Cir. 2021). For example, with respect to the '371 patent, different people (“devices”) within an apartment may notice temperature changes in their bedrooms and ask someone to

call the landlord to report the changes (“receive at least one change-of-value update [that] includes a plurality of change-of-value messages received from a plurality of devices”). That landlord may write down the temperature change information (“storing the at least one change-of-value update”), and when building management later asks for a building status update (“polling request”), the landlord may send the temperature change information to building management multiple times to ensure they are aware of the issue (“communicate the at least one change-of-value update ... at regular intervals ... until a ... acknowledgment is received”).

Similarly, with respect to the ’887 patent, a person may ask their friend to call them if the outdoor temperature drops below 70°, so they know if a coat is needed. If the friend sees that the temperature dropped below 70°, the friend will call the person and let them know (“transmit a most recent reading of the indicator ... in response to detecting a change in the sensed condition outside a predetermined range”). If the friend starts to call the person but then sees that the temperature is above 70°, the friend can hang up the phone without providing any update (“transmission of the most recent reading ... is suspended in response to detecting a change in the sensed condition within the predetermined range”).

Neither patent purports to have invented any new components or software to carry out the claimed ideas. Instead, the claims merely apply their abstract ideas to an admittedly existing and conventional computerized environment. *Electric Power*,

830 F.3d at 1353 (claims abstract where “the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools”).

With respect to the '371 patent, claim 13 simply recites a “wireless communications component,” “a processor” and “a memory,” all of which the patent describes as generic, conventional and used in a well-known manner. *See* Appx187, 3:26-4:21 (describing generic wireless communication components); Appx188, 5:32-41 (describing conventional “processor” and “memory” components). The patent also explains that it was well-known to use “[w]ireless devices” in building automation systems to communicate with each other and perform specific tasks. *See* Appx186, 1:56-2:10. With respect to “change-of-value” messages, the patent does not purport to have invented this type of information, but rather, explains that this term simply refers to any message that “indicate[s] whether any ... detected values, received values, parameters, or measurements have changed or altered beyond a pre-defined reporting limit.” Appx188, 6:10-17, 6:44-49; Appx116.

The District Court found that claim 13 was not directed to an abstract idea because “the '371 Patent describes certain issues in building automation systems, such as communication failures,” which may be addressed by claim limitations such as “‘repeating communication attempts a predetermined number of times’ and ‘the COV-related messages may still be aggregated and stored pending the

reestablishment of communications.” Appx136 (citing Appx189, 8:15-25). Communicating information in a routine way, however, even if repeatedly, is an abstract process that could readily be carried out without using any particular technology. *See, e.g., Chamberlain Group*, 935 F.3d at 1346-47; *Data Scape*, 816 F. App’x at 463-64; *Affinity Labs*, 838 F.3d at 1258.

The same is true for the ’887 patent. While the District Court relied on the transceiver and controller as “key elements” (Appx129), the patent explains that the recited “transceiver” can generally be any “RF transceiver ... *or other device* that wirelessly communicates packets of information over a wireless network.” Appx143, 2:8-11; Appx146, 8:16-45. The “controller” is generically described as any device that receives information and generates control signals, and the “memory” is generically described as any medium for storing information. *See* Appx143-144, 1:23-26, 4:33-36; Appx146, 7:30-41; Appx149, 13:36-14:2. The ’887 patent further describes known “[a]utomation systems” that “include controllers, sensors” and other conventional components, including “devices [that] communicate information ... by wirelessly broadcasting information between and among the components.” Appx143, 1:9-19. The patent also explains that the component arrangement of the claimed “wireless automation device” was well-known, including a sensor that detects an “event” (including “change in conditions”) and communicates “related information to a controller,” where the “controller” then

determines what action to take, including “communicat[ing]” information to a “remote computer.” *Id.*, 1:20-33.

Notably, the ’887 patent does **not** describe any new or improved hardware components, or any improvement to existing technology. Instead, it purports to “reduc[e] an amount of communication” within a system (*id.*, 1:34-49) by implementing the (abstract) idea of selective communication using generic components arranged in a conventional manner. At most, the claims describe a particular **reason** to selectively communicate (*i.e.*, based on a “predetermined range”), but that is just the abstract idea of sending information when desired, not a tangible improvement on the technology itself.

B. *Alice* Step Two

As demonstrated above, the ’371 and ’887 patents confirm that all of the hardware components and technology recited in the claims are well-known and conventional. *See supra* at Argument, Section IV.A. The intrinsic evidence thus proves that no new or specially-programmed hardware is needed. *See Elec. Comm’n Techs., LLC v. Shopperschoice.com, LLC*, 958 F.3d 1178, 1183 (Fed. Cir. 2020) (“Because claim 11 ... merely invokes well-understood, routine, conventional components and activity to apply the abstract idea ... claim 11 fails at step two.”); *Elec. Power Grp.*, 830 F.3d at 1355 (concluding patent claims were ineligible under § 101 in part because “[n]othing in the claims, understood in light of the

specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information”); *Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1357-58 (Fed. Cir. 2024) (“Where, as here, the specification ‘describes the components and features listed in the claims generically,’ it ‘support[s] the conclusion that these components and features are conventional.’” (citation omitted)). The specifications do not describe, *e.g.*, any new wireless devices, or new controllers for use in wireless devices, and “instead predominately describes the [technology] in purely functional terms.” *In re TLI Commc 'ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016).

Similarly, for both patents, the idea of communicating information “wirelessly” cannot supply the inventive concept. *See, e.g., Affinity*, 838 F.3d at 1258-60. Nor can the recited “ordered combination” of conventional components used in a conventional manner serve to confer eligibility. *See Universal Secure Registry*, 10 F.4th at 1355 (finding the claimed “combination of [] long-standing conventional methods of authentication yielded expected results,” and nothing in the record suggested an additional technological improvement). Likewise, the basic concepts of polling and selectively communicating information using the conventional components merely describe “generic data manipulation” that cannot serve as an inventive concept. *See Braemar Manuf.*, 816 F. App'x at 467-68, 470 (finding steps requiring comparison of received data to lookup table and discarding

data that “fail[s] to meet” criteria ineligible). And the abstract steps of receiving, communicating, transmitting, controlling and storing information cannot themselves supply an inventive concept sufficient to salvage the claim. *See BSG Tech*, 899 F.3d at 1290 (“[A] claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept”). The claims merely recite the use of conventional abilities of conventional components, which cannot confer eligibility. *See Elec. Comm’n Techs.*, 958 F.3d at 1183; *Elec. Power Grp.*, 830 F.3d at 1355.

Although the patents refer to perceived problems with prior art systems, such as limited battery charge or bandwidth, nothing in the claims provides a technological solution to these issues that changes the conventional nature of the recited components and their arrangement in the claims. The ’371 and ’887 patents recite nothing more than abstract ideas about communicating change information, and then direct the reader to “apply” those ideas using existing conventional technology—which is “not enough.” *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (citation omitted).

V. THE DISTRICT COURT ERRED IN DENYING JMOL OF NO INFRINGEMENT OF THE ’371 PATENT

A. The Claims’ Plain Meaning Requires That a “Change-of-Value Update” Be Communicated Repeatedly

Claim 1 is directed to an “automation component” that is “programmed to,” *inter alia*, “generate *a* change-of-value update,” and “communicate *the* change-of-

value update ... at regular intervals according to a schedule or *until* a change-of-value acknowledgment is received.” Appx189, claim 1. Because the claim requires that “the” singular change-of-value update be communicated “at regular intervals,” it necessarily requires that the claimed apparatus be programmed to communicate the update repeatedly. This is confirmed by claim 17, which expressly recites “communicating *a* change-of-value update” and “*repeating the* change-of-value update at regular intervals according to a schedule or until a change-of-value acknowledgment is received.” Appx190, claim 17.⁹

Thus, the plain language of both independent claims requires sending (or programming for sending) a change-of-value update more than once (*i.e.*, repeatedly). This repeated communication requirement is consistent with the specification. As Ollnova’s expert conceded, the patent describes “*repeating* communication attempts” to address “communications difficulties or errors between, for example, the automation components.” Appx189, 8:10-25; Appx835-836, 427:16-428:18. The patent further describes repeating communication attempts “a predetermined number of times” or “after a predetermined delay” (*i.e.*, “according

⁹ Ollnova’s expert treated the relevant limitations of claims 1 and 17 identically when assessing infringement. *See* Appx756, 348:7-23 (“[Element 17c] is the same as claim element 1b.3, so for the same reasons ... they are communicated at regular intervals”).

to a schedule”), or doing so because prior attempts “are not acknowledged” (*i.e.*, “until a change-of-value acknowledgement is received”). Appx189, 8:13-22.

The prosecution history confirms that the claims plainly require “repeating” the communication of the same message. In a January 9, 2012 Office Action Response, the Applicants amended the claims specifically to include the repetitive communication requirement. *See* Appx7625-7640. The Applicants explained that “independent claim 1” was amended to require “communication ... at regular intervals according to a schedule or until a change-of-value acknowledgment is received,” and the remaining independent claims “*recite similar limitations directed to repeating communication* of a change-of-value update.” Appx7627.¹⁰ The Applicants thus equated communication at regular intervals with repeating, and thereafter distinguished a prior art reference (“Enrich”) by arguing that it was “expressly designed to prevent *continuous or repeated communication* of a change-of-value message in order to save energy.” Appx7627-7628.

B. The Unrefuted Evidence Demonstrates That the Accused Products Do Not Repeatedly Communicate Any Message

Ollonva’s expert (Dr. Madisetti) testified that both Claims 1 and 17 were met when ecobee thermostats send [REDACTED] messages ([REDACTED] s) every [REDACTED] minutes and [REDACTED] messages ([REDACTED] s) when [REDACTED] s are detected. Appx751-752,

¹⁰ Amended claim 20 later issued as asserted independent claim 17. *See* Appx7639; Appx7695-7702.

343:7-344:19; Appx756-757, 348:10-349:13; *see also* Appx4154-4155. However, Ollnova did not present any evidence demonstrating that ecobee thermostats are programmed to send *the same* [REDACTED] or [REDACTED] repeatedly under any condition. Instead, Ollnova contended at trial that the patent does not require repeating the same message because it “does not include the word ‘same’ in the claim language.” Appx1494, 838:20-25; Appx2004, 1108:8-13. Moreover, Dr. Madisetti opined that “repeating information can be sending that information just once.” Appx836-837. He also testified that, “[i]f you look at the claim and then look at the antecedent basis, it can mean one or more messages,” implying that sending different, unique messages qualifies as repeating “*the*” change-of-value update. Appx2004, 1108:12-15.

Conversely, both ecobee’s expert (Dr. Sourì) and fact witness (engineer Mr. Hietala) provided unrefuted testimony that ecobee thermostats do not repeat *the same* message. Rather, it was undisputed that each [REDACTED] is a “brand new message” with different information. Appx1273, 617:8-24; Appx1277-1278, 621:16-622:12. The thermostat “doesn’t attempt to resend the same message from before.” Appx1387-1388, 731:21-732:16; Appx1436-1439, 780:25-783:20. Likewise, an [REDACTED] provides an “[REDACTED]” of “what is happening [REDACTED]” at the thermostat, and therefore is a “completely different message” sent each time. Appx1278-1279, 622:18-623:7; Appx1281-1283, 625:21-627:2; Appx1392-1393, 736:23-737:18.

The evidence thus irrefutably demonstrated that ecobee's [REDACTED]s and [REDACTED]s never repeat the same message, such that Ollnova did not establish infringement of claims 1 and 17 of the '371 patent.

C. ecobee is Entitled to JMOL Because Communication of Different Messages Cannot Satisfy the Claims as a Matter of Law

The District Court denied ecobee's motion for JMOL of no infringement, finding that Dr. Madisetti's apparent plain-meaning interpretation of the claims was not erroneous. Appx17-21. The District Court first found that ecobee "waived" its argument by not seeking a claim construction for the disputed language prior to trial. Appx21. But, as discussed above, ecobee's argument is *not* based on a claim construction; rather, ecobee relies on the claim language's plain meaning. If any party began advancing a claim construction at trial it was Ollnova, who also did not seek construction and whose expert took the illogical position that "repeating" communication of "the change-of-value update" in the context of this patent can mean sending it just "once." *See* Appx836-837, 428:19-429:3.

Dr. Madisetti opined, and the District Court held, that sending new (and different) change-of-value update messages over time could satisfy the claim language, "even if the messages are not identical," because "a" message "could mean 'one or more'" messages. Appx21. But that analysis is legally erroneous because the

claims require the repeated communication of “*the* change-of-value update.”¹¹ Although the system may communicate multiple change-of-value updates, it must communicate at least one update at regular intervals according to a schedule or until a change-of-value acknowledgment is received. *Varma*, 816 F.3d at 1362-63; *Salazar*, 64 F.4th at 1317.

The claims in *Varma*, for example, required “a statistical analysis request corresponding to two or more selected investments.” 816 F.3d at 1362. The Court found that “there can be more than one request in a claim-covered system,” but each request must “correspond[] to two or more selected investments.” *Id.* at 1362-63. The Court explained that use of the indefinite article “‘a’ can[not] serve to negate what is required by the language following ‘a’: a ‘request’ (a singular term) that ‘correspond[s]’ to ‘two or more selected investments.’” *Id.* at 1363 (noting that “for a dog owner to have ‘a dog that rolls over and fetches sticks,’ it does not suffice that he have two dogs, each able to perform just one of the tasks”). This Court made a similar ruling in *Salazar*, explaining that “while the claim term ‘a microprocessor’

¹¹ The claims require repeated communication “according to a schedule” or “until a change-of-value acknowledgment is received.” The District Court found this “second part of the claim” “satisfied because an acknowledgment ... message is received” for each message. Appx21. But Dr. Madisetti did not opine, nor did the Court find, that the same “change-of-value update” is communicated (or programmed to be communicated) repeatedly until an acknowledgment is received, due to the above-referenced legal error concerning the plain meaning of “the first part of the claim.” *Id.*

does not require there be only one microprocessor, ... at least one microprocessor [must] be capable of performing each of the claimed functions.” 64 F.4th at 1317.

Applying those binding principles here, the claims require generating “*a* change-of-value update” and then communicating “*the* change-of-value update” repeatedly (specifically, “at regular intervals according to a schedule or until a change-of-value acknowledgment is received”). Thus, although the claims may encompass a device that can communicate “one or more” different change-of-value updates, that does not negate the claims’ requirement that the device communicate “*at least one*” of those change-of-value updates repeatedly—in other words, the *same* update must be repeated for at least one update. Ollnova failed to present any evidence that this occurs, therefore the judgment of infringement should be reversed.

VI. THE DISTRICT COURT ERRED IN ADMITTING UNRELIABLE DAMAGES OPINIONS AND IN FINDING SUCH OPINIONS PROVIDED SUFFICIENT EVIDENCE TO SUPPORT THE JURY’S AWARD

A. Mr. Bergman’s Assumption That Every Patent in Ollnova’s Portfolio Is of Equal Value Makes His Market Approach Unreliable and Unsupported by the Facts.

The District Court erred in admitting Mr. Bergman’s “market approach” opinion that past damages were \$47.6 million because it was based on an unreliable methodology for determining a royalty rate. Mr. Bergman relied on an a supposedly comparable settlement agreement between Ollnova and [REDACTED], pursuant to which [REDACTED] agreed to pay [REDACTED] and received, among other things, a license to [REDACTED]

patent assets, including the four Asserted Patents. Mr. Bergman assumed all licensed patents had equal value, such that the value of the four Asserted Patents could be determined by simply dividing 4 by [REDACTED] (*i.e.*, $[4 \div \text{[REDACTED]}] \times \text{[REDACTED]}$). He then scaled that amount up to \$47.6 million based on alleged market share differentials, among other adjustments.¹² Appx911-913, 503:23-505:5; Appx916-917, 508:4-509:4. Tellingly, Mr. Bergman’s market approach did not purport to place a value on *any* individual patent in the portfolio—including any of the four Asserted Patents.¹³

This speculative and unreliable opinion should not have been admitted because it violates apportionment principles to assume that all patents in a portfolio have equal value. A proper apportionment analysis must separate the value of the patented invention based on evidence in the case, and “such evidence must be reliable and tangible, and not conjectural or speculative.” *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014) (*citing Garretson v. Clark*, 11 U.S. 120 (1884)). Mr. Bergman’s assumption that all patents in the [REDACTED] agreement have

¹² Mr. Bergman purported to account for the fact that the [REDACTED] agreement’s duration was longer than that of the hypothetically negotiated license. But he did not show his math to the jury, leaving it to speculate as to how his “adjustments” resulted in the \$47.5 million calculation.

¹³ The District Court suggested that Mr. Bergman did not need to consider technical differences among the licensed patents, and the resulting differentials in their respective economic values, because he is just a “damages expert.” Appx40. But damages experts routinely consult with technical experts where necessary to satisfy *Daubert* and Rule 702.

equal value lacks *any* evidentiary support and, therefore, is inadmissible. *Cf. Uniloc*, 632 F.3d at 1315 (holding “the 25 percent rule of thumb is thus inadmissible under Daubert and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case at issue”)¹⁴ In a similar case, this Court found the patentee’s expert’s assumption that “no patent [in an agreement] was any more valuable than the others,” to be “generic testimony [that] simply does not ‘account[] for the technological and economic differences between th[e] licenses’ and a hypothetical negotiation over a single, specific patent.” *Omega Patents, LLC v. CalAmp Corp.*, 13 F.4th 1361, 1378-81 (Fed. Cir. 2021). Here, Mr. Bergman similarly failed to account for the differences between the Asserted Patents and other patents in the █████ agreement.

The District Court denied ecobee’s *Daubert* Motion without written analysis. Appx82. After trial, ecobee again challenged Mr. Bergman’s approach as prejudicial and insufficient to support the jury’s damages verdict. The District Court denied these challenges, rationalizing Mr. Bergman’s flawed approach as “conservative,”

¹⁴ District courts have rejected, as unreliable and lacking in sound scientific support, opinions based on the assumption that various patents have equal value. *See, e.g., Personalized Media Commc’ns, LLC v. Apple, Inc.*, No. 2:15-CV-01366-JRG-RSP, 2021 WL 662237, at *6-7 (E.D. Tex. Feb. 20, 2021) (finding it improper to calculate the “percentage of value added by the patents-in-suit by ‘[a]ssuming equal value of the [portfolio] patents and ... divid[ing] the three patents-in-suit by’” the total number of patents) (citation omitted); *Golden Bridge Tech. v. Apple Inc.*, No. 5:12-CV-04882-PSG, 2014 WL 2194501, at *6 (N.D. Cal. May 18, 2014) (“[T]he case law is clear that mere patent counting and dividing is not enough.”).

and speculating that three Asserted Patents (the '282, '371, and '887 patents) may have been particularly valuable because they were “pointed out” during Ollnova’s negotiations with [REDACTED]. Appx37; Appx40; Appx4592. But there is no evidentiary support for the notion that those three patents are more valuable than the others that were licensed to [REDACTED]. Nor was there evidence about the nature of the other patents that [REDACTED] licensed.

In any event, this Court has explicitly rejected the view that apportionment requirements are satisfied by a patent being called out during licensing negotiations. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 973-74 (Fed. Cir. 2022). In *Apple*, a patent asserted in the subject litigation was discussed during negotiations for the comparable agreement and listed as an “Asserted Patent[.]” in that agreement. The Court still rejected the expert’s application of that agreement because he “failed to address the extent to which the[.] other patents contributed to the royalty rate in the [agreement.]” *Id.* Mr. Bergman made the same fatal error here.

The District Court’s reasoning also contradicts the factual record. The '495 patent was *not* called out in the [REDACTED] agreement’s negotiation, implying under the District Court’s logic it is *less* valuable than other patents—but Mr. Bergman gave it the same value as the other patents. Appx37; Appx40; Appx4592. Moreover, unlike the other Asserted Patents, Ollnova alleged only indirect infringement for the '495 patent, and consequently did not seek pre-Complaint damages for that patent.

See Appx77; Appx681, 273:7-18; Appx819-820, 411:23-412:6. Mr. Bergman’s equal value assumption failed to account for these facts, which suggest a relatively lower value of the ’495 patent. This failure is particularly concerning given the verdict form’s single infringement question; indeed, the ’495 patent may be the only patent the jury found infringed, yet Mr. Bergman did not account for its lower value.¹⁵

The fact that the jury found the ’282 patent invalid confirms Mr. Bergman’s error in treating all patents as equal. He never adjusted his market approach calculation to account for the potential that one of the patents contributing to his rate was invalid (or not infringed).

JMOL of no damages or a new trial on damages therefore should have been granted based on Mr. Bergman’s errors. *See Omega*, 13 F.4th at 1376-82 (granting new trial on damages where patentee failed to properly apportion); *Apple*, 25 F.4th at 973-74 (granting new trial on damages where “opinion untethered to the facts of this case” “should have been excluded”); *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1291-92 (Fed. Cir. 2020) (affirming “reduction of the jury’s damages award to zero” where patentee had not “adequately tie[d] a dollar amount to the infringing acts”).

¹⁵ As discussed below, Mr. Bergman’s cost approach expressly attributed different values to different Asserted Patents.

B. Mr. Bergman’s Market Approach Unreliably Adjusted the [REDACTED] Agreement’s Payment to Account for Differences in [REDACTED]’s and ecobee’s Respective Sales.

After unreliably opining that the four Asserted Patents were worth equal portions of the value of the amount that [REDACTED] had agreed to pay, Mr. Bergman improperly scaled his damages calculation to adjust for purported differentials in [REDACTED]’s and ecobee’s respective sales—leading him to present the jury with an inflated damages valuation of \$47.6 million. The District Court erred in admitting this scaling testimony, which was not based on sufficient or reliable facts.

Specifically, Mr. Bergman multiplied the purported value of the [REDACTED] agreement by approximately 1,000 based on the notion that ecobee had a market share 1,000 times higher than [REDACTED]’s. That conclusion was drawn from incomplete and unreliable information that Mr. Bergman found in one document (i.e., the “Jungle Scout Report”). This document apparently reported ecobee’s and [REDACTED]’s alleged sales between 2019-2022 of only one aspect of the accused configurations (thermostats), in only one sales channel (amazon.com). Appx911-913, 503:23-505:5. However, before trial, Mr. Bergman admitted that “*there’s flaws* associated with [the Jungle Scout Report],” given that he did not “have *any evidence whatsoever* to suggest that the relative amounts that the parties have on Amazon is consistent [with the relative sales on] any other sales channel.” Appx4570-4574, 275:17-279:20. To the contrary, he conceded: “Could those numbers be different?

Absolutely. But I don't know what they are." Appx4574, 279:17-20. Nevertheless, Mr. Bergman utilized the Amazon-only thermostat sales as the overall sales differential between the companies when scaling the █████ Agreement. These acknowledged "flaws" in Mr. Bergman's facts or data render his approach inadmissible. Fed. R. Evid. 702(b).

At trial, the flaws were confirmed as Mr. Bergman conceded: (1) the Asserted Claims are not limited to thermostats, and instead relate to controlling building components (including, potentially, non-thermostat products sold by █████); and (2) █████'s sales were not limited to Amazon or thermostats, as it "[p]rimarily" sells HVAC equipment through other channels.¹⁶ Appx946-948, 538:2-540:7. But he did not account for the fact that ecobee's business model focuses on retail sales through channels like amazon.com, whereas █████ primarily sells large-scale HVAC equipment that is infrequently sold on retail websites like amazon.com. *Id.*; Appx1520-1522, 864:5-866:14. This testimony thus confirmed that Mr. Bergman's unsupported logical leaps improperly raised the royalty supposedly implied by the █████ agreement. *See Wordtech Sys., Inc v. Integrated Networks Sol'ns, Inc.*, 609 F.3d 1308, 1320 (Fed. Cir. 2010) (rejecting reliance on "lump-sum licenses [that] provide no basis for comparison with [defendant's] infringing sales" where the

¹⁶ The patents-in-suit describe HVAC systems as a building component that may be controlled with the claimed inventions. *See, e.g.*, Appx156, 1:10-15; Appx160, 9:34-51.

licenses did not describe “the licensees’ intended products[] or how many products each licensee expected to produce”).

Mr. Bergman’s unreliable 1000-fold increase in the value of the [REDACTED] agreement did not provide sufficient evidence to support any damages. Consequently, he left the jury with only “speculation or guesswork” to compare the values of the [REDACTED] and hypothetical license.

C. Mr. Bergman’s Cost Approach Damages Calculation Cannot Support the Verdict Because It Contradicted the Jury’s Invalidity Finding

Mr. Bergman purported to corroborate his \$46.7 million market approach past damages calculation with a “cost approach” calculation which totaled \$46.6 million in past damages for the ’282, ’371 and ’495 patents.¹⁷ The problem with this methodology—particularly as applied to the ’371 and ’495 patents—was that it assumed the ’282 patent was valid and infringed. *See* Appx8390. But, in the scenario that came to pass, where the ’282 was found invalid, Mr. Bergman’s cost approach had no application and improperly inflated the jury’s view of damages for infringement of the ’371 and ’495 patents.

Mr. Bergman’s cost approach methodology was based on his estimation of

¹⁷ After finding that the market approach supported the jury’s award, the District Court did not address ecobee’s JMOL directed at this cost approach calculation. Appx42 (“[T]he Court need not address whether his income approach likewise supports the verdict.”). ecobee addresses it here to show that no reliable evidence supports the damages award.

the cost ecobee would incur to design around the Asserted Patents. Critically, Mr. Bergman theorized that, to avoid infringing the '282 patent, ecobee would have redesigned its sensors to split the temperature sensing function from the occupancy sensing function and locate each respectively in different sensors. Consequently, whereas ecobee sold ██████████ sensors during the relevant period, Mr. Bergman assumed that a design-around would have led ecobee to sell almost twice as many sensors (i.e., ██████████ sensors, ██████████ of which would be temperature-only sensors and ██████████ would be occupancy-only sensors). Appx901-902, 493:23-494:7. None of Mr. Bergman's redesign concepts for the other patents required the sensors to be sold separately in this manner.

Mr. Bergman then presented to the jury a \$46.6 million calculation based on the amount of additional cost ecobee would have incurred to sell these ██████████ hypothetical single-function sensors, which had relevance only if ecobee needed to design around the '282 patent. Appx901-902, 493:23-494:7. But he did not calculate damages under a cost approach for the '495 and/or '371 patents in the event ecobee did not need to sell ██████████ additional occupancy sensors in order to design around the '282 patent. The cost approach calculation, therefore (i) was untethered to the jury's findings of infringement for one or more of the '495, '371 or '887 patents, (ii) cannot be squared with the jury's invalidity verdict for the '282 patent, and (iii) prejudicially inflated the jury's view of the appropriate measure of damages. *See*

Nachtman v. Jones & Laughlin Steel Corp., 134 F. Supp. 392, 407 (W.D. Pa. 1955) (finding “Plaintiff chose to stand or fall on the proposition that all of his patents are valid and that all are infringed,” and its expert’s “failure to segregate his damages rendered plaintiff’s position untenable in the event that but one or less than all of plaintiff’s patents were found valid and infringed”), *aff’d*, 235 F.2d 211 (3d Cir. 1956).

D. Dr. Madisetti’s Testimony Concerning the Marking Requirement Should Have Been Excluded, Warranting JMOL of No Damages or a New Trial

The District Court erred in admitting conclusory testimony by Dr. Madisetti that Ollnova complied with the marking requirement and in finding that testimony provided sufficient evidence for Ollnova to recover damages for pre-Complaint sales. This Court should reverse both decisions and find that Ollnova is not entitled to pre-Complaint damages.

Patentees selling a patented article may give notice to the public by marking the product. 35 U.S.C. § 287(a). This “marking” requirement applies equally to licensees. *Id.* In the event of a failure to mark, damages may be recovered only for infringement occurring after notice is provided. *Id.* After an accused infringer clears the “low bar” of identifying a product that it believes should have been marked, the burden shifts to the patent owner to demonstrate that the product either has been marked or does not practice the asserted patents. *Arctic Cat Inc. v. Bombardier Rec.*

Prods. Inc., 876 F.3d 1350, 1369 (Fed. Cir. 2017) (“[P]atentee ... bears the burden of proving that it satisfied the marking requirements and thus the patentee ... ha[s] to prove that the unmarked products identified by the infringer do not fall within the patent claims.”).

Ollnova did not provide pre-suit notice of infringement to ecobee. Pursuant to *Arctic Cat*, ecobee identified the APOGEE system sold by Siemens (the asserted patents’ original assignee and current licensee)—which the ’887, ’282, and ’371 patents each describe as an exemplary embodiment. Appx4796; Appx4797-4798; *see* Appx144, 3:45-58; Appx176, 4:5-25; Appx187, 3:47-67. Ollnova was thus required to present evidence that APOGEE was marked with the Asserted Patents or that APOGEE does not practice the patents.

Ollnova failed to carry that burden, offering only conclusory opinions from Dr. Madisetti that APOGEE did not practice the patents. But, Dr. Madisetti did not compare features of APOGEE with the Asserted Claims’ limitations, nor did he analyze or even describe any aspects of APOGEE. Rather, he merely opined that, “having looked through all these [APOGEE] documents,” “these components and their combinations do not practice the asserted claims of the patents at issue.” Appx764, 356:5-7; *see also* Appx4781-4784.¹⁸ Based on the limited and conclusory

¹⁸ Dr. Madisetti purported to possess sufficient clarity about APOGEE to issue his opinions. This contrasts with the District Court subsequent finding that ecobee had inadequately identified APOGEE. *See* Appx46.

opinions in his report, Dr. Madisetti was unable to testify that anything in the claim limitations was missing from APOGEE; rather, he could only say that he was not “aware of any APOGEE component” that practiced certain limitations. Appx771-772, 363:5-364:3.

This Court has found comparable testimony insufficient under § 287(a). For example, in *Packet Intelligence LLC v. NetScout Systems, Inc.*, 965 F.3d 1299, 1313-14 (Fed. Cir. 2020), the Court rejected patentee’s “conclusory testimony” that a product “does not practice” the asserted patent because the testimony did not “match[] the limitations in any claim ... to the *features* of the” product. 965 F.3d at 1313-14. Indeed, the failure to satisfy the marking requirements is even more apparent here than in *Packet Intelligence* because the ’887, ’282, and ’371 patents, as issued, identify the product as an embodiment. Ollnova cannot avoid carrying its burden by feigning ignorance as to the components of a system that its own patents describe as practicing the claimed inventions.

The District Court excused Ollnova’s failure to carry its burden by echoing Ollnova’s counsel’s contention that APOGEE was a “system,” and ecobee had not identified specific components within the system that practice the patents—even while simultaneously allowing Dr. Madisetti’s testimony to the effect that APOGEE (whether a system or its individual components) did not practice the patents. Appx46. Thus, the District Court added requirements to the *Arctic Cat* framework,

whereby a defendant must identify specific functionality and components within a patent practicing system before the burden shifts to the patent holder. That is not the law—and these additional requirements are especially misplaced where, as here, the patents expressly reference the relevant product as an embodiment. ecobee identified APOGEE in the manner the patents themselves refer to APOGEE. Under *Arctic Cat*, nothing more was required of ecobee. Ollnova had the burden to identify why APOGEE was outside the scope of the claims. Ollnova's failure to do so forecloses pre-Complaint damages due to noncompliance with the marking requirements.

This failure alone warrants JMOL of no damages or a new trial, as Mr. Bergman did not present evidence of damages based only on post-Complaint sales. While Mr. Bergman referenced a \$11.8 million award if damages were limited to post-Complaint sales, he neither explained his rationale or methodology for this proposal, nor apportioned it among the four Asserted Patents. Appx868-869, 460:24-461:3; Appx873, 465:7-10. To the contrary, Mr. Bergman predicated his \$11.8 million figure on the assumption that *all four* Asserted Patents were valid and infringed (*id.*), leaving the jury with no basis to award damages based on post-Complaint sales if fewer than four patents were found valid and infringed—including where, as the jury found, the asserted claims of the '282 patent were invalid.

VII. THE DISTRICT COURT ERRED BY *SUA SPONTE* MERGING THE INFRINGEMENT QUESTIONS FOR FOUR PATENTS INTO A SINGLE INFRINGEMENT QUESTION ON THE VERDICT FORM

A. The Verdict Form Failed to Meet the Minimum Legal Requirements for a General Verdict

Despite both parties requesting that the verdict form present separate infringement questions for each Asserted Patent, the District Court *sua sponte* merged the issues of infringement for four unrelated patents into a single question that merely asked whether ecobee “infringed ANY of the Asserted Claims.” Appx8388 (emphasis in original). This fell short of the requirements for even a general verdict, which must, at a minimum, “announce[] the ultimate legal result of *each claim*,” *i.e.*, cause of action. *Zhang v. Am. Gem Seafoods, Inc.*, 339 F.3d 1020, 1031 (9th Cir. 2003); *see Johnson v. ABLT Trucking Co.*, 412 F.3d 1138, 1142 (10th Cir. 2005) (“[T]he hallmark of a general verdict is that it requires the jury to announce the ‘ultimate legal result of each claim.’”) (citation omitted). In *Hager v. Gordon*, for example, the Court held that a verdict form erroneously “interwove the two causes of action as to virtually preclude the jury from separating the two causes of action and presenting a finding as to the merit or lack of merit they may have found in each.” 171 F.2d 90, 93 (9th Cir. 1948).

“By statutory and common law, each patent establishes an independent and distinct property right.” *Kearns v. General Motors Corp.*, 94 F.3d 1553, 1555 (Fed. Cir. 1996). Consequently, “[e]ach patent asserted raises an independent and distinct

cause of action.” *Id.* at 1555-56. Here, Ollnova alleged four separate causes of action (I-IV in the complaint), each alleging the infringement of a different Asserted Patent. Relatedly, ecobee’s counterclaims included four separate causes of action, each seeking a declaration of non-infringement of a different Asserted Patent. Appx6674-6682; Appx6689-6690. To announce the legal result of each cause of action—the bare minimum required by law, even for a general verdict—the verdict form needed to include separate infringement question(s) for each patent. *Zhang*, 339 F.3d at 1031. The District Court’s verdict form failed to meet this requirement.

None of the Federal Circuit cases cited by the District Court support its approach. Indeed, this Court has never endorsed a verdict form that merged causes of action in this manner. For example, in *Railroad Dyn., Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1515, 1521 (Fed. Cir. 1984), the verdict form contained ten questions concerning infringement and invalidity for the single asserted patent. The form in *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 848 (Fed. Cir. 2010) “instructed the jury to answer ‘yes’ or ‘no’ for each claim” of the one patent at-issue. The form in *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 709 (Fed. Cir. 1984) contained “specific questions” for each asserted patent. And in *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1577-78 (Fed. Cir. 1996), the form specified the infringed patent. Here, in contrast, the single infringement question

“interwove the [four] causes of action” and failed to announce the results on each of Ollnova’s four distinct counts. *Hager*, 171 F.2d at 93.

The verdict form similarly deprived ecobee of its right to have each counterclaim adjudicated by the jury and, consequently, a judgment identifying which patents it was and was not infringing. *See* Appx6674-6682; Appx6689-6690. Indeed, if the District Court’s judgment is permitted to stand, ecobee will be required to pay an eight-figure sum without knowing what conduct the jury deemed wrongful.

The verdict form further violated the requirement that “the verdict must be unanimous.” Fed. R. Civ. P. 48(b). The infringement question erroneously required an affirmative answer even where all jurors did not agree the *same* patent was being infringed. The jury would have been required to answer “Yes” even if various jurors believed that ecobee was infringing a different asserted patent.¹⁹

Lastly, the verdict form contravened the policy considerations identified by the very authority on which the District Court relied. In *Structural Rubber*, this Court acknowledged “[c]oncerns ... that a jury trial creates a black box into which patents

¹⁹ The District Court found that ecobee waived this objection by failing to expressly say the word “unanimity” when objecting to the verdict form. Appx70-72. But ecobee’s objection specifically argued that the form would confuse the jury by grouping all four Asserted Patents into a single question. Appx2111, 1212:11-23. ecobee had no obligation to detail all the ways the instruction would potentially confuse the jury, including the potential lack of unanimity. *See Curko v. William Spencer & Son, Corp.*, 294 F.2d 410, 412-13 (2d Cir. 1961) (“When the reason for an objection is obvious on its face, little, if anything, need be said.”).

are thrown and emerge intact or invalid by an unknown and unknowable process.” 749 F.2d at 718. The Court explained that a “record that clearly delineates the basis for the decision, not only would allay these concerns, but is also the right of litigants.” *Id.* The verdict form here deprived ecobee of this right by obfuscating the grounds of liability and scope of wrongdoing.

B. The Flaws in the Infringement Question Impact Multiple Issues

The verdict form’s error has many repercussions. For example, when hearing ecobee’s challenges to the \$11.5 million damages calculation, the District Court found that the record would have supported “a maximum royalty of \$35.67 million”—but, even under Ollnova’s theories, that calculation only applied if all three valid patents were infringed. Appx42; Appx47. Yet, there is no reason to believe the jury found multiple patents infringed, which contradicts the District Court’s justification for the sufficiency of the damages calculation.²⁰

Moreover, because of the improper form, a reversal on virtually any ground raised in this appeal will require—at minimum—a new trial on all issues decided against ecobee. For example, if the Court reverses or remands on an issue for even one patent, there is no way to know if that patent underlay (or, indeed, was the only

²⁰ Indeed, claim 1 of the ’887 patent may be the sole infringed claim, but a later IPR final written decision found that claim unpatentable. *Copeland Comfort Control LP v Ollnova Techs. Ltd.*, No. IPR2023-00626, 2024 WL 4362279, at *21 (P.T.A.B. Oct. 1, 2024).

patent underlying) the infringement verdict. Similarly, if the Court reverses based on Ollnova's damages failures, there is no way to retry only damages because it is impossible to know which patent(s) were infringed and, therefore, informed the damages. Either way, a new trial on all remaining issues is required.²¹ *See SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1374 (Fed. Cir. 2010); *Verizon Services Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1298, 1308-10 (Fed. Cir. 2007) (vacating damages encompassing multiple patents due to erroneous claim construction for one patent); *Accentra, Inc. v. Staples, Inc.*, 500 F. App'x 922, 931 (Fed. Cir. 2013) (vacating judgment with respect to two of three asserted patents; "proper course" required vacating entire damages award).

VIII. THE DISTRICT COURT CORRECTLY CONCLUDED THAT PREJUDGMENT INTEREST CANNOT ACCRUE BEFORE DAMAGES ACCRUE

This Court should reject Ollnova's appeal of the District Court's calculation of prejudgment interest during the damages period, rather than beginning at the hypothetical negotiation date. Appx77-80. Pursuant to the statute of limitations, "no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint." 35 U.S.C. § 286. Nevertheless, Ollnova seeks to recover prejudgment interest accruing from the date of a 2012 hypothetical negotiation—

²¹ Non-remaining issues would include issues related to the invalidated '282 patent, and issues related to patent(s) found by this Court to be invalid, ineligible and/or not infringed.

around 10 years before Ollnova filed its complaint on March 8, 2022, and four years before the statute of limitations cut-off (in 2016). *Id.* If this Court agrees with ecobee that Ollnova failed to prove marking, the earliest start date of damages is March 8, 2022; otherwise, it should be March 8, 2016.

Ollnova cites cases (*e.g.*, *Lucent*, *LaserDynamics*, and *Comcast*) for the generic proposition that damages are often based on a hypothetical negotiation that takes place when infringement began. *See* Ollnova's Opening Brief ("O.Br."), Dkt. 13, at 11-19. But none of those cases addresses the start date for prejudgment interest where the hypothetical negotiation occurred prior to the damages' accrual or outside of the limitations period. Every case to consider these issues correctly confined interest accrual to the damages that were incurred during the statute of limitations period, contrary to Ollnova's proposal. *See, e.g.*, *Ericsson Inc. v. TCL Commc'n Tech. Hld., Ltd.*, No. 2:15-CV-00011-RSP, 2018 WL 2149736, at *14 (E.D. Tex. May 10, 2018) (awarding prejudgment interest from the start of the damages period, and not the hypothetical negotiation date), *vacated on other grounds*, 955 F.3d 1317 (Fed. Cir. 2020); *Imperium IP Hld. (Cayman), Ltd. v. Samsung Elecs. Co.*, No. 4:14-CV-00371, 2017 WL 1716589, at *4 (E.D. Tex. Apr. 27, 2017) (setting prejudgment interest start date based upon damages start date); *Trs. of Bos. Univ. v. Everlight Elecs. Co.*, 187 F. Supp. 3d 306, 321-23 (D. Mass. 2016) (same); *Opticurrent, LLC*

v. Power Int., Inc., No. 17-cv-03597-EMC, 2019 U.S. Dist. LEXIS 94615, at *63-64 (N.D. Cal. June 5, 2019), *aff'd*, 815 F. App'x 547 (Fed. Cir. 2020) (same).

Second, Ollnova incorrectly argues that the damages statute “separate[s]” interest from damages. O.Br. at 17. But 35 U.S.C. § 284 does not address the relevant question of “[w]hen interest beings or ends.” *Transmatic, Inc. v. Gulton Indus., Inc.*, 180 F.3d 1343, 1347 (Fed. Cir. 1999). In fact, the natural reading of the statute links interest to damages, providing for “a reasonable royalty for the use made of the invention by the infringer, *together* with interest.” 35 U.S.C. § 284. Thus, the amount of prejudgment interest is tied to the scope and amount of the reasonable royalty. Ollnova’s contrary argument ignores that interest cannot accrue on principal amounts that are not owed. *See Sphere Drake Insur. PLC v. Trisko*, 226 F.3d 951, 957 (8th Cir. 2000) (citing Black’s Law Dictionary 817 (7th ed. 1999)) (defining “simple interest” as an amount “paid *on the principal*”). It is illogical to contend that a defendant must pay pre-judgment interest for sales that are, as a matter of law, outside the scope of the judgment.²²

Third, Ollnova’s argument defies the statute of limitations, which states that “*no recovery* shall be had for any infringement committed more than six years prior to the filing of the complaint” 35 U.S.C. § 286. The statute has no exception for

²² Ollnova’s proposed start date for interest is months before the ’371 patent issued. Appx181. Given the verdict form error, this may have been the only patent that the jury found infringed.

recovery in the form of pre-judgment interest accruing before the six-year cut-off. Appx79, n.3; *see* 35 U.S.C. § 286. Contrary to Ollnova’s arguments, it is irrelevant that the jury measured damages as lump sum rather than a running royalty—as damages could not have covered activity or sales that predate the limitations cut-off. *See VLSI Tech. LLC v. Intel Corp.*, No. 6:21-CV-57-ADA, 2022 WL 1477728, at *1, 3 & n.2 (W.D. Tex. May 10, 2022) (awarding interest from the start of the damages period, even though infringement began earlier, where jury awarded “lump sum”), *vacated on other grounds*, 87 F.4th 1332 (Fed. Cir. 2023).

CONCLUSION

For the reasons stated above, this Court should reverse or vacate the final judgment, and find that the ’495, ’371 and ’887 Patents are ineligible under 35 U.S.C. § 101, and that Ollnova failed to demonstrate infringement of the ’371 Patent.

Date: February 4, 2025

Respectfully submitted,

VENABLE LLP

/s/ Manny J. Caixeiro

Manny J. Caixeiro

Counsel for Defendant/Appellee/Cross-Appellant ecobee Technologies ULC

CERTIFICATE OF FILING AND SERVICE

I hereby certify that on this 4th day of February, 2025, I caused this Brief to be filed electronically with the Clerk of the Court using the CM/ECF System, and caused copies of the Confidential version of this Brief to be served via e-mail on the following counsel of record for Plaintiff-Appellant Ollnova Technologies Ltd.:

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/s/ Manny J. Caixeiro

Manny J. Caixeiro

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CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of Federal Circuit Rules 28.1(b)(2) and 32(b)(1), because this brief contains 16,102 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b)(2).

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14-point font.

Date: February 4, 2025

/s/ Manny J. Caixeiro

Manny J. Caixeiro

Counsel for Defendant/Appellee/Cross-Appellant ecobee Technologies ULC

ADDENDUM

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

OLLNOVA TECHNOLOGIES LIMITED,

Plaintiff,

v.

ECOBEE TECHNOLOGIES ULC d/b/a
ECOBEE,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00072-JRG

FINAL JUDGMENT

A jury trial commenced in the above-captioned case on September 29, 2023, and on October 5, 2023 the jury reached and returned its unanimous verdict finding that Defendant ecobee Technologies ULC d/b/a ecobee (“Defendant”) infringed one or more of: Claims 1, 11, 12, and 20 of U.S. Patent No. 7,746,887, Claims 1 and 2 of U.S. Patent No. 7,860,495, Claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282, and Claims 1, 5, and 17 of U.S. Patent No. 8,264, 371 (collectively, the “Asserted Claims”), that Claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282 were invalid as either being anticipated or obvious in light of the prior art, and that Plaintiff Ollnova Technologies Limited (“Plaintiff”) is owed \$11,500,00.00 for Defendant’s infringement in the form of a one-time lump sum reasonable royalty. (Dkt. No. 225.)

Pursuant to Rule 58 of the Federal Rules of Civil Procedure, and in accordance with the jury’s unanimous verdict and the entirety of the record, the Court hereby **ORDERS** and **ENTERS JUDGMENT** as follows:


1. Defendants have infringed one or more of the Asserted Claims;
2. Claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282 are invalid;

3. Plaintiff is hereby awarded compensatory damages from Defendant and shall accordingly have and recover from Defendant \$11,500,00.00 US Dollars for Defendant's infringement, all of which is a reasonable royalty in the form of a one-time lump sum payment;
4. Pursuant to 35 U.S.C. § 284 and Supreme Court guidance that "prejudgment interest shall ordinarily be awarded absent some justification for withholding such an award,"¹ the Court awards pre-judgment interest to Plaintiff to be recovered by Plaintiff from Defendant and applicable to all sums awarded herein, calculated at the five-year U.S. Treasury Bill rate, compounded monthly, adjusting the effective rate with each and every change in said five-year U.S. Treasury Bill rate from the date of the infringement began;
5. Pursuant to 28 U.S.C. § 1961, the Court awards to Plaintiff from Defendant post-judgment interest applicable to all sums awarded herein, at the statutory rate, from the date of entry of this Judgment until paid; and
6. Pursuant to Federal Rule of Civil Procedure 54(d), Local Rule CV-54, and 28 U.S.C. § 1920, Plaintiff is the prevailing party in this case and shall recover its costs from Defendant. Plaintiff is directed to file its proposed Bill of Costs.

All other requests for relief now pending and requested by either party but not specifically addressed herein are **DENIED**.

¹ *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983).

So ORDERED and SIGNED this 1st day of March, 2024.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE

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

OLLNOVA TECHNOLOGIES LIMITED,

Plaintiff,

v.

ECOBEE TECHNOLOGIES ULC d/b/a
ECOBEE,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00072-JRG

FILED UNDER SEAL

MEMORANDUM OPINION AND ORDER

Before the Court is the Motion for Judgment as a Matter of Law or, in the Alternative, a New Trial, Regarding Noninfringement (the “Motion”) filed by Defendant ecobee Technologies ULC d/b/a/ ecobee (“ecobee”). In the Motion, ecobee moves for judgment as a matter of law (“JMOL”) on the grounds that no reasonable juror could have found that ecobee infringed the Asserted Patents. Alternatively, ecobee moves for a new trial. For the following reasons, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

Plaintiff Ollnova Technologies Limited (“Ollnova”) alleged that ecobee infringes claims 1, 11, 12, and 20 of U.S. Patent No. 7,746,887 (the “’887 Patent”); claims 1 and 2 of U.S. Patent No. 7,860,495 (the “’495 Patent”); claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282 (the “’282 Patent”); and claims 1, 5, and 17 of U.S. Patent No. 8,264,371 (the “’371 Patent”) (collectively, the “Asserted Patents”). After a jury trial, the jury returned a unanimous verdict finding that ecobee infringed one or more of the asserted claims of the Asserted Patents, that all asserted claims of the ’282 Patent are invalid, and that Ollnova was entitled to \$11,500,000.00 as a lump sum reasonable royalty.

II. LEGAL STANDARD

A. Judgment as a Matter of Law

“Judgment as a matter of law is proper when ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify “substantial evidence” to support its positions. *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). “Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

“The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury’s verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must “resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations.” *Gomez v. St. Jude Med. Daig. Div. Inc.*, 442 F.3d 919, 937–38 (5th Cir. 2006).

B. New Trial

Rule 59 provides that a new trial may be granted on all or part of the issues on which there has been a trial by jury for “any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). Notwithstanding the broad sweep of Rule 59, “courts do not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.” *Metaswitch Networks Ltd. v. Genband US LLC*, 2017 WL 3704760, at *2 (E.D. Tex. Aug. 28, 2017); *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*,

276 F. Supp. 3d 629, 643 (E.D. Tex. 2017). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985); *see also Laxton v. Gap Inc.*, 333 F.3d 572, 586 (5th Cir. 2003) (“A new trial is warranted if the evidence is against the great, and not merely the greater, weight of the evidence.”). Furthermore “[u]nless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new trial . . . the court must disregard all errors and defects that do not affect any party’s substantial rights.” Fed. R. Civ. P. 61.

III. DISCUSSION

A. Indirect Infringement

ecobee argues that it is entitled to JMOL of no indirect infringement. (Dkt. No. 244 at 3.) Specifically, ecobee argues that Ollnova failed to adduce any evidence at trial upon which a reasonable juror could have found that ecobee took “affirmative acts to bring about the commission by others of acts of infringement *and had knowledge that the induced acts constitute patent infringement.*” (*Id.* at 4 (citing *Roche Diagnostics Corp. v. Meso Scale Diagnostics, LLC*, 30 F.4th 1109, 1117-18 (Fed. Cir. 2022) (quotations omitted))).

As a preliminary matter, ecobee contends that it is undisputed that ecobee had no knowledge of the Asserted Patents prior to Ollnova’s complaint on March 8, 2022. (*Id.* (citing Trial Tr. at 409:2-20, 599:10-23, 660:16-661:2.)) Accordingly, ecobee argues that there is plainly no pre-complaint induced infringement.

ecobee further contends that there is no evidence of induced infringement post-complaint. Specifically, ecobee argues that its products were independently designed, and all of ecobee’s technical witnesses provided testimony supporting ecobee’s non-infringement positions,

undercutting any notion that it intended to infringe. (*Id.*) According to ecobee, “there is not a single document or line of testimony (live or via deposition) that remotely suggests ecobee intended to infringe any of Ollnova’s patents.” (*Id.* at 4-5.)

ecobee acknowledges that Dr. Madisetti testified that there “could be, for example, encourage[ing] use” of its products through user guides and other forms of product support. (*Id.* at 5 (citing Trial Tr. at 350:14-351:7)). However, ecobee contends that describing potential product uses is not the same as knowing that those acts infringe, the latter of which, ecobee argues, is a separate and distinct requirement of proving inducement. (*Id.*) According to ecobee, Dr. Madisetti speculated about what customers “could be” doing, but “did not point to any specific instructions in any documents that encourage infringing uses of the accused products.” (*Id.*) ecobee also notes that Dr. Madisetti admitted that he was unaware of when ecobee’s documents were published, including whether such publication was before or after ecobee knew of the Ollnova patents.

Finally, ecobee argues that the record cannot support a verdict of contributory infringement because the accused products have substantial non-infringing uses. (*Id.* at 6.) For example, ecobee contends that it is unrefuted that its thermostats are designed to operate without an internet connection. (*Id.* at 7 (citing Trial Tr. at 400:1-14; 758:9-759:3; 665:23-666:8)). Further, ecobee contends that it is unrefuted that the accused thermostats are designed to control HVAC systems even if they are never connected to any remote sensors (*Id.* (citing Trial Tr. at 400:15-18; 401:15-402:5; 759:4-11)). ecobee argues that Ollnova had the burden to prove the lack of substantial non-infringing uses, but put forth no evidence showing that the use of the accused products and the accused features in the non-infringing manners described above were “unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental.” (*Id.* (quoting *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1362-63 (Fed. Cir. 2012))).

In response, Ollnova argues that knowledge under an indirect infringement inquiry can be satisfied by the filing of the complaint, and Ollnova only sought damages for indirect infringement based on post-filing acts of infringement. (Dkt. No. 258 at 2.) According to Ollnova, Dr. Madisetti testified that ecobee had knowledge of the patents and the asserted infringement as of the date the complaint was filed, and thus there is no dispute regarding ecobee's knowledge of the Asserted Patents. (*Id.* (citing Trial Tr. at 351:12-15.))

While ecobee argues that there is a lack of *direct* evidence of ecobee's intent to infringe any of the patents, Ollnova argues that *direct* evidence is not required. (*Id.* at 3 (citing *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 668 (Fed. Cir. 1988))). Ollnova contends that reasonable jurors could have concluded that ecobee possessed the requisite intent based on the circumstantial evidence presented at trial. (*Id.*) Specifically, Ollnova presented evidence that (1) ecobee did not cease its activity after being notified of its infringement through the complaint, (2) ecobee instructed its customers to use the accused products in an infringing manner, and (3) ecobee's engineers did not read the patents, showing that ecobee was willfully blind to its infringing acts. (*Id.* at 3-4 (citing Trial Tr. 273:7-18; 288:4-12; 333:21-334:4; 345:24-346:10; 350:14-353:4; 447:25-448:4; 640:10-21; 1114:18-24; JTX-9; JTX-16; PX-106; PX-125; PX-127; PX-105; PX-116; PX-108; PX-109; PX-110; PX-121; PX-122; PX-99; and PX-112.)) Ollnova argues that ecobee's non-infringement testimony does not preclude the jury from finding indirect infringement, and the focus of the analysis is on the subjective knowledge of the accused infringer. (*Id.*)

Concerning contributory infringement, Ollnova argues that it presented substantial evidence showing that ecobee contributorily infringed by selling components specially made or specially adapted for infringing use. (*Id.* at 5 (citing Trial Tr. at 273:7-18; 288:4-12; 333:21-334:4;

345:24-346:10; 352:23-353:12; 1113:16-1114:11.)) Further, Ollnova notes that Dr. Madisetti testified that ecobee provides automatic over-the-air updates of its software that is a material part of the inventions and does not have any substantial non-infringing use. (*Id.* (citing Trial Tr. at 353:13-354:6.)) Thus, Ollnova argues reasonable jurors could find that ecobee contributorily infringed.

Concerning non-infringing use of the products, Dr. Madisetti testified that the relevant inquiry was not whether the entire thermostat or some feature thereof had any substantial non-infringing uses, but rather whether the *accused functionality* within the Accused Products or features therein have substantial non-infringing uses. (*Id.* at 5-6 (citing Trial Tr. at 1113:19-1114:11.)) Ollnova argues that Dr. Madisetti presented substantial evidence that the specific accused functionality in the accused products is not suitable for non-infringing use, and “[w]hether a feature is sometimes ‘turned off’ or the presence of other noninfringing features goes to the extent of infringement and damages, not the creation of a substantial noninfringing use to escape liability.” (*Id.* (citing *Realtime Data LLC v. EchoStar Corp.*, No. 6:17-CV-00084-JDL, 2018 WL 11335572, at *6 (E.D. Tex. Oct. 26, 2018))). Ollnova contends that the fact that the accused thermostats are capable of operation without WiFi or remote sensors does not preclude a finding of contributory infringement, and that there was sufficient evidence presented to the jury upon which the jury could have found contributory infringement.

In reply, ecobee argues that JMOL with respect to pre-complaint indirect infringement should be granted. Further, ecobee argues that ecobee’s user manuals and guides are “not enough” to infer an intent to infringe any patent. (Dkt. No. 268 at 1.) Concerning contributory infringement, ecobee argues that there is “no dispute the accused features of the ecobee thermostats can be used in non-infringing manners.” (*Id.* at 2.) For example, ecobee argues the Smart Home, Away, and

Follow Me features can function without any connection to the internet, when a user programs them directly on the thermostat. (*Id.*) Further, ecobee argues the sending and receiving of [REDACTED] operates irrespective of whether the thermostats are connected to remote sensors. (*Id.*) According to ecobee, Ollnova's infringement theory requires the features to operate in specific environments and configurations to infringe, but ecobee contends that there are alternate, non-infringing configurations. (*Id.*)

In sur-reply, Ollnova argues that “[s]oftware may constitute the relevant component for purposes of contributory infringement.” (Dkt. No 273 at 1 (quoting *Motiva Pats., LLC v. Sony Corp.*, 408 F. Supp. 3d 819, 829 (E.D. Tex. 2019)). According to Ollnova, Dr. Madisetti identified the source code for the infringing features and explained that such had no substantial non-infringing use. (*Id.* at 2 (citing Trial Tr. at 1113:19-1114:11.))

The Court agrees with Ollnova. First, although ecobee argues that JMOL with respect to pre-complaint indirect infringement should be granted, ecobee does not articulate how such a finding would disturb the jury's verdict. Ollnova only sought damages for post-complaint acts of indirect infringement, which ecobee does not dispute. Neither party disputes that no evidence as to pre-complaint indirect infringement was presented to the jury. Accordingly, the Court is not persuaded that JMOL is appropriate with respect to pre-complaint indirect infringement.

Second, with respect to induced infringement, the Court agrees that direct evidence is not required to prove ecobee's intent. Ollnova presented circumstantial evidence of ecobee's intent through the testimony of its expert, Dr. Madisetti, through documentary evidence such as ecobee's user manuals and instructions, and through the testimony of ecobee's own witnesses concerning ecobee's actions (or failure to take action) post-complaint. Although ecobee disagrees with the merits of this evidence, it does not provide a compelling reason why the jury could not have

considered this evidence. In short, ecobee fails to articulate why a reasonable juror could not find that Ollnova had sufficiently established ecobee's intent through this circumstantial evidence.

Third, concerning contributory infringement, Dr. Madisetti identified ecobee's source code as the infringing feature of the accused products.¹ ecobee argues that the thermostats themselves have substantial non-infringing use, but ecobee fails to rebut Ollnova's argument that there is no substantial non-infringing use of the *accused features* identified by Dr. Madisetti. The jury was entitled to consider and accept Dr. Madisetti's opinions, and ecobee does not provide a compelling reason why the jury should have disregarded Dr. Madisetti's opinions. Accordingly, ecobee fails to show that a reasonable juror could not have found contributory infringement.

Consequently, the Court does not find that ecobee is entitled to JMOL on these grounds. For the same reasons, the Court finds that the jury's findings were not against the great weight of the evidence. Accordingly, the Court also finds that a new trial should not be granted on these grounds.

B. The '495 Patent

ecobee argues that Ollnova failed to introduce evidence upon which a reasonable juror could find that ecobee infringed claim 1 or 2 of the '495 Patent. Both claims require a system that includes a "first" and "second" wireless networks in the building, where the first network is operable to control building components: (1) "free of communications with the second wireless network," and (2) "in response to data from the second wireless network." '495 Patent, Claim 1.

¹ This fact distinguishes this case from *Bill of Lading*, 681 F.3d at 1338. *Bill of Lading* involved an accused system as a whole—*i.e.*, the allegations said "nothing more than 'if you use this device to perform the patented method, the device will infringe and has no noninfringing uses.'" *Id.* Such is not the case here. Dr. Madisetti identified specific features of the accused product for purposes of contributory infringement. *Cellular Commc'ns Equip. LLC v. HTC Corp.*, No. 6:13-CV-507, 2015 WL 10936121 at *5 (E.D. Tex. Oct. 30, 2015) ("A component part may satisfy the 'no substantial noninfringing use' requirement for pleading contributory infringement."); *Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325, 1336-40 (Fed. Cir. 2008). The Court agrees that ecobee has not shown non-infringing use merely by showing that the product as a whole can operate without WiFi or remote sensors without showing that the specific feature identified by Dr. Madisetti has a non-infringing use.

According to Ollnova's infringement theory, the "first wireless network" in ecobee's system is a "900 megahertz proprietary network" connecting thermostats to remote sensors, and the "second wireless network" is a "typical Wi-Fi network" connecting the thermostat to "cloud" servers. Trial Tr. at 261:6-25, 277:4-7, 278:8-11.

ecobee contends that Ollnova's infringement theory lacks any evidentiary support because all of the record evidence confirms that when the ecobee thermostats are connected to the second (WiFi) network, [REDACTED] control building automation components "free of communications with the second network [WiFi]," as the claims require. (Dkt. No. 244 at 8.) Specifically, ecobee's expert, Dr. Souris, testified that when an ecobee thermostat is connected to Wi-Fi, [REDACTED] [REDACTED] for purposes of controlling building components. (*Id.* (citing Trial Tr. at 796:13-797:14.)).

ecobee concedes that Dr. Madisetti testified that the system is able to control those building components free of communications with the second wireless network:

So the first evidence is that JTX 12, which is ecobee's website, provides this information in response to the question can *I set up my ecobee without Wi-Fi*, the answer is yes. Even *without a WiFi connection*, your ecobee will still function as a traditional thermostat. It will engage your equipment as needed and maintain your comfort set points. So that confirms that your sensors and your thermostat work together using the first wireless network independent and *even without a Wi-Fi connection*. So if you go to the next slide, this additionally confirms in Exhibit 119, PX 119 that in response to the question how does the remote sensor communicate with the thermostat, the remote sensor uses the 915 megahertz frequency band to communicate with the thermostat. *You don't need a WiFi for connection* between the remote sensors and the thermostat. So therefore, *you are essentially [] operable to control free of communications with the WiFi network* just using the green network, which is the 900 megahertz network.

Trial Tr. at 280:11-281:4. However, according to ecobee, this testimony falls short from showing a second network that is free of communications with a first network because this testimony describes a scenario where there is no second network at all, compelling a finding of no

infringement. (Dkt. No. 244 at 9.) According to ecobee, only two scenarios are possible: either (1) there is no “second wireless network,” (*i.e.*, the thermostat is not connected to WiFi) or (2) the two networks cannot operate “free of communication” (*i.e.*, the thermostat is connected to WiFi and [REDACTED]). (*Id.* at 9-10.) In either circumstance, ecobee argues that a claim limitation is not met, and the thermostats cannot infringe.

Further, ecobee argues that Ollnova did not provide any evidence of any act of direct infringement. Ollnova only asserts that ecobee indirectly infringes this patent, and under Ollnova’s theory of infringement, the end users in the United States are the direct infringers. (*Id.* at 10.) However, ecobee argues that Ollnova did not provide any evidence that any specific end user actually operated an ecobee thermostat in both configurations (*i.e.*, by connecting and then disconnecting the same thermostat from a Wi-Fi connection). (*Id.*) Without any evidence of an act of direct infringement, ecobee argues that the record cannot support a verdict of infringement of the ’495 Patent.

In response, Ollnova argues that Dr. Madisetti provided substantial evidence that the ecobee accused products practice limitation “1c,” showing that the “first wireless network is operable to control, free of communications with the second wireless network, building components in response to sensors operable within the first wireless network.” (Dkt. No. 258 at 7.) Specifically, Dr. Madisetti explained that the ecobee sensors and thermostat “work together using the first wireless network independent and even without a WiFi connection.” (*Id.* (quoting Trial Tr. 280:17-19.)) Accordingly, Ollnova argues that there was substantial evidence for the jury to find that the 900 megahertz network is operable to control building components (e.g., the HVAC), free of communications with the WiFi network.

Ollnova disagrees that there must be no wireless network if the thermostat is not connected to WiFi. Specifically, Dr. Madisetti addressed this argument at trial:

Q. With respect to claim element 1b, did you hear Doctor Souri say there is no second wireless network?

A. Yes. He said that there was no second wireless network in the '495 accused products analysis.

Q. Do you agree with him?

A. I do not.

Q. Why not?

A. Because there is a second wireless network. The second wireless network is between the thermostat and the router. Whether or not the internet is present there is always a network.

Trial Tr. at 1086:6-16. Ollnova argues that this testimony the second wireless network is present when the thermostat has been connected but there has been “a loss of internet connection with ecobee servers.” (*Id.* at 7.) According to Ollnova, Dr. Madisetti presented substantial evidence that the 900 megahertz network was able to operate the building components free of communications with the ecobee server.

Ollnova argues that its infringement read is supported by the fact that the novel feature of the '495 Patent is having the networks be “free of communication” so that the first network can take over control when the second network fails. (*Id.* at 8 (citing Trial Tr. at 1093:23-1094:2)); JTX-02 ('495 Patent) at 10:36-39 (“As another example, the devices 16, 18, 20 of the lower level network 14 implement local control only after communications failure with the higher level network 12.”). Ollnova argues that the specification supports the notion that the second wireless network is present in the event of a “communications failure,” such as a loss of internet connection. According to Ollnova, the fact that the thermostats are “[REDACTED] in communication with ecobee

remote servers” when connected to the internet is irrelevant because the claim does not preclude control based on communications with the second network. (Dkt. No. 258 at 9.) Ollnova notes that the claim, in fact, requires this control: “and wherein the first wireless network is also operable to control the building components in response to data from the second wireless network.” Thus, Ollnova contends that infringement is possible because the thermostat is capable of operating on the 900 megahertz network “free of communication” with the WiFi network in the case of a WiFi outage or failure to connect to the internet.

In reply, ecobee argues that Dr. Madisetti’s original testimony was that the “second wireless network” is a “typical Wi-Fi network” connecting the thermostat to the “cloud” servers. (Dkt. No. 268 at 2 (quoting Trial Tr. at 261:6-25, 277:4-7, 278:8-11.)) According to ecobee, Ollnova now abandons that theory and relies on Dr. Madisetti’s rebuttal testimony that “[t]he second wireless network is between the thermostat and the router” so that “[w]hether or not the internet is present there is always a network.” (*Id.* at 2-3 (quoting Trial Tr. at 1086:6-16.)) ecobee argues that there is no evidence to support this theory because nothing establishes how ecobee’s thermostats operate when they are connected to a router but then later disconnect from the internet and ecobee’s cloud servers. (*Id.* at 3.) ecobee contends that all of the questions asked to Dr. Madisetti were asked in the context of how ecobee’s products operate “without WiFi,” but ecobee still maintains that there is no second wireless network “without WiFi.” (*Id.*)

In sur-reply, Ollnova argues that ecobee merely repeats its argument that “there is no ‘second wireless network.’” (Dkt. No. 273 at 2.) Ollnova maintains that Dr. Madisetti addressed this argument in his rebuttal testimony. (*Id.*)

The Court agrees with Ollnova. ecobee argues that that “either (1) there is no ‘second wireless network,’ or (2) there is a ‘second wireless network’ but the first wireless network is not

operable to control building components ‘free of communications’ with that second wireless network.” (Dkt. No. 244 at 9-10.) The Court disagrees.

Dr. Madisetti testified that there are two networks: the “900 megahertz network” and the “WiFi Network.” Trial Tr. at 262:8-16. Dr. Madisetti first described the second “WiFi Network” as the network between the “thermostat” and “servers in the cloud” in his direct testimony, and later in his rebuttal testimony also characterized this network as being between the “thermostat” and the “router.” *Id.*; Trial Tr. at 1086:6-16. ecobee attempts to characterize these as two separate theories and says that Dr. Madisetti abandoned his first theory in rebuttal. The Court finds no inconsistency in this testimony. If the second wireless network is the connection between the thermostat and cloud servers via the internet, then it follows that this network includes the router. The Court also finds no issue with Dr. Madisetti testifying that it may be possible for the second network to still be present in the form of a wireless network connection between the thermostat and the router, even when the router is not connected to the cloud servers via the internet. According to Dr. Madisetti, in such a case, there would be two networks present, and the first network would continue to operate free of communications with the second.

The Court is also not persuaded that infringement was impossible merely because most—but not all—of Dr. Madisetti’s testimony concerned the operation of the ecobee thermostats that had never connected to a WiFi router. Trial Tr. at 280:11-281:4. Dr. Madisetti repeatedly explained that the ecobee thermostats could operate on the 900 megahertz network “without WiFi,” and he did not limit these opinions only to cases where the thermostat had never been connected to the WiFi router. Rather, Dr. Madisetti testified that “[w]here or not the *internet* is present there is always a network” as long as there is a connection “between the thermostat and the router.” Trial Tr. at 1086:13-16. Further, a reasonable juror could infer from Dr. Madisetti’s testimony that the

thermostat would operate in the same way in the case where the thermostat connects to the router but loses its connection to the internet and the case where the thermostat is never connected to the router at all. Specifically, Dr. Madisetti confirmed that a user may indeed “set up” their ecobee thermostat without WiFi, but also that the thermostat “is capable of operating . . . if it is not connected to the internet.” Trial Tr. at 400:1-14; *see also* Trial Tr. at 1086:6-1087; Trial Tr. at 280:11-281:4 (“Even without a WiFi connection, your ecobee will still function as a traditional thermostat. It will engage your equipment as needed and maintain your comfort set points. So that confirms that your sensors and your thermostat work together using the first wireless network independent and even without a Wi-Fi connection.”) A reasonable juror could find that direct infringement occurs whenever an ecobee customer sets up their ecobee thermostat with WiFi and then experiences a WiFi outage, whereby there is still a connection between the thermostat and the router, but the building components are being controlled exclusively by the first network, *i.e.*, “free of communications” with the second network.

The Court disagrees that no reasonable juror could have found the '495 Patent to be infringed, and the Court disagrees that the jury's verdict is against the great weight of the evidence. Accordingly, the Court finds that neither JMOL nor a new trial are appropriate.

C. The '371 Patent

ecobee next argues that Ollnova failed to introduce evidence upon which a reasonable juror could find that ecobee infringed claim 1, 5, and 17 of the '495 Patent. ecobee contends that JMOL is appropriate for two reasons: (1) the accused products do not communicate “the change-of-value update” repeatedly at “regular intervals” either “according to a schedule or until a [COV] acknowledgement is received” and (2) Ollnova presented no evidence of “change-of-value messages” or, in turn, a “change-of-value update.” The Court addresses each in turn.

1. Communication of Change-of-Value Updates at Regular Intervals

The '371 patent generally describes a manner of communicating indications of change (called “change of value” information) in a monitored environment based on messages from multiple wireless devices. All three asserted claims (1, 5, 17) require generating a “change-of-value update” that includes a plurality of “change-of-value messages,” and communicating the update “at regular intervals” according to a schedule or “until a change-of-value acknowledgment is received.” Specifically, claim 1 requires:

Generat[ing] 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

Communicat[ing] the change-of-value update via the wireless communication component at regular intervals according to a schedule or until a change-of-value acknowledgement is received.

'371 Patent, claim 1.

Claim 17 includes a similar limitation:

Communicating a change-of-value update that includes the plurality of change-of-value messages, and repeating the change-of-value update at regular intervals according to a schedule or until a change-of-value acknowledgement is received.

'371 Patent, claim 17.

ecobee argues that the accused products do not communicate “the change-of-value update” repeatedly at “regular intervals” either “according to a schedule or until a [COV] acknowledgement is received.” (Dkt. No. 244 at 11.) According to ecobee, Dr. Madisetti pointed to ecobee thermostats [REDACTED]

[REDACTED]

(*Id.* at 11-12 (citing Trial Tr. at 343:7-344:19, 348:10-349:13.)) However, ecobee argues that the unrefuted evidence demonstrates that (1) [REDACTED]

[REDACTED] and (2)

[REDACTED]

[REDACTED] (*Id.* at 12.) ecobee’s witnesses, Dr. Souri and Mr.

Hietala, testified that ecobee thermostats [REDACTED]

[REDACTED] (*Id.* (quoting Trial

Tr. at 617:8-24, 621:16-622:12.)) Similarly, ecobee argues that [REDACTED]

[REDACTED]

[REDACTED] (*Id.*)

ecobee contends that Ollnova’s witnesses could not refute the testimony of ecobee’s witnesses, and as a result, Ollnova resorted to a theory that the patent does not require sending or repeating the same message at regular intervals because it “does not include the word ‘same’ in the claim language.” (*Id.* (quoting Trial Tr. at 838:20-25.)) However, ecobee argues that this is exactly what the claim requires when it says “generat[ing] *a* change-of-value update . . . and communicat[ing] *the* change-of-value update . . . at regular intervals.” ’371 Patent, claim 1. Finally, ecobee contends that Ollnova retreated to a far-fetched position that “repeating information can be sending that information just once,” which ignores the plain meaning of “repeat” and cannot satisfy the claim language. (*Id.* at 13 (quoting Trial Tr. at 428:19-429:3.))

In response, Ollnova argues that [REDACTED] satisfy the “change-of-value update” limitation as expressly opined by Dr. Madisetti at trial. (Dkt. No. 258 at 11 (citing Trial Tr. at 333:6-349:21.)) Ollnova disagrees with ecobee that the claims require sending or repeating the “same” message at regular intervals. First, Ollnova argues that ecobee waived any such arguments by failing to seek a claim construction during trial. (*Id.* at 12 (citing *Solvay S.A. v. Honeywell Int’l Inc.*, 742 F.3d 998, 1004 (Fed. Cir. 2014)). Second, Ollnova contends that ecobee’s construction

is wrong on the merits because the claim recites “generating **a** change-of-value update,” where “a” means “one or more.” (*Id.* (citing *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed. Cir. 2008))). Third, Ollnova argues that Dr. Madisetti directly refuted ecobee’s argument at trial (*Id.* (citing Trial Tr. at 1107:21-1110:9.))

In reply, ecobee first notes that claim 17 requires “**repeating** the change-of-value update at regular intervals according to a schedule or until a change-of-value acknowledgement is received,” and claim 1 requires “generat[ing] **a** change-of-value update . . . and communicat[ing] **the** change-of-value update . . . at regular intervals.” (Dkt. No. 268 at 3.) According to ecobee, this means that the exact same update must be sent more than once. ecobee further notes that Dr. Madisetti treated both of these limitations identically. (*Id.* (citing Trial Tr. at 348:7-23.)) ecobee argues that Dr. Souri never varied from his position that both claims require “repeating” an update, and that “repeating” means sending the **same** update more than once. (*Id.*)

In sur-reply, Ollnova argues that there is no basis to import the “repeating” language into claim 1, and that “[i]f ecobee wanted to read such a limitation into the claims, it was required to seek a limiting claim construction during trial.” (Dkt. No. 273 at 3.) Further, according to Ollnova, Dr. Madisetti consistently explained that if the thermostat [REDACTED], the expected operation is that [REDACTED]. (*Id.* at 3-4, n.2 (citing Trial Tr. at 1122:9-1123:9.))

The Court agrees with Ollnova. Dr. Madisetti testified that “generat[ing] a change-of-value update” could mean generating one or more updates. Trial Tr. at 1108:12-15. Dr. Madisetti further explained that there are two options according to the claim: (1) sending the update at regular intervals, or (2) sending the update until an acknowledgment is received. Trial Tr. at 1108:16-24.

According to Dr. Madisetti, the first part of the claim is satisfied because [REDACTED] and the second part of the claim is satisfied because [REDACTED]. Trial Tr. at 1108:25-1109:11.

The Court is not persuaded that Dr. Madisetti's interpretation of the claims was erroneous. As a preliminary matter, while ecobee contends that "repeated" [REDACTED] must necessarily mean sending the "same" messages, it never sought such a construction at any time prior to, or during, the trial. Accordingly, such arguments are waived. However, on the merits, the Court is still not persuaded that ecobee is entitled to JMOL. Dr. Madisetti applied the plain and ordinary meaning of the claim terms that were not construed. According to Dr. Madisetti, the absence of the word "same" from the claims meant that there was no such requirement in the claims. Trial Tr. at 1108:12-1109:11. Rather, according to Dr. Madisetti, [REDACTED] qualifies as repeating [REDACTED] at regular intervals. *Id.* Dr. Madisetti confirmed that the claim could be interpreted this way by explaining that "a" message is not limited to "one message," but could mean "one or more." *Id.* In other words, [REDACTED] "repeated" int hat [REDACTED]. Ecobee provides no compelling reason to discount this interpretation other than the fact that its own expert, Dr. Souri, disagreed. *Id.* The jury was entitled to consider the testimony of both competing experts and choose one over the other. Accordingly, the Court does not find that ecobee is entitled to JMOL on these grounds.

2. "Change-of-Value Messages" or a "Change-of-Value Update"

The Court construed the term "change-of-value messages" to mean "messages indicating if detected values, received values, parameters, or measurements have changed or altered beyond a predetermined reporting limit." At trial, Ollnova relied on messages sent from ecobee's remote

sensors as the “change-of-value messages.” According to ecobee, “there is no evidence to show that these messages indicated ‘if detected values, received values, parameters, or measurements have changed or altered beyond a predetermined reporting limit,’ as required.” (Dkt. No. 244 at 13-14.)

ecobee contends that the remote sensors do not indicate if any data has changed. (*Id.* at 14.) Rather, according to ecobee, [REDACTED] “with no indication of change.” (*Id.* (quoting Trial Tr. at 786:25-787:12.)) ecobee argues that the transmission of this data, alone, does not indicate that a change has occurred, and these messages [REDACTED]. (*Id.*) Additionally, ecobee argues that since the remote sensor messages do not represent the claimed “change-of-value messages,” [REDACTED] [REDACTED] can satisfy the claimed “change-of-value update.” (*Id.*)

In response, Ollnova contends that ecobee’s non-infringement argument presented in its JMOL Motion directly contradicts the Court’s claim construction order. (Dkt. No. 258 at 13.) Specifically, Ollnova argues that the Court rejected ecobee’s proposed construction that “change-of-value messages” require more than the values themselves. (*Id.*) Ollnova notes that in the Court’s Claim Construction Order (Dkt. No. 105), the Court held that “transmission of the detected values, received values, parameters, or measurements themselves can serve as that indication of change.” (Dkt. No. 105 at 28.) Further, Ollnova contends that Dr. Madisetti directly refuted ecobee’s argument at trial and explained why the accused products satisfy the Court’s claim construction. (*Id.*)

In reply, ecobee argues that Ollnova misses the point. Specifically, ecobee contends that because remote sensor messages [REDACTED]

██████████, they do not “indicat[e]” if the detected values or measurements have changed. (Dkt. No. 268 at 4.) Thus, ecobee argues, they do not qualify as “change-of-value messages.”

In sur-reply, Ollnova contends that ecobee “concedes that ██████████ can constitute ‘change-of-value messages’” but that ecobee “pivots its argument to focus on the separate functionality where remote sensor messages ██████████.” (Dkt. No. 273 at 3.) However, Ollnova argues that Dr. Madisetti directly rebutted this argument and explained why ██████████ the transmission of the messages did not support noninfringement. (*Id.* (citing Trial Tr. at 1111:17-1112:4)). Further, Ollnova notes that Dr. Madisetti testified that ██████████ was “also a parameter in the Court’s claim construction,” meaning that the transmission ██████████ also satisfies the Court’s construction.

The Court agrees with Ollnova. At claim construction, ecobee sought to limit the term “change-of-value messages” to “messages denoting that information, settings, signals and/or indications have been altered, updated or otherwise changed.” (Dkt. No. 105 at 24.) Put another way, ecobee argued that a skilled artisan “would have understood ‘change-of-value’ . . . to describe reports or updates indicating *whether* certain values have changed,” but not the values themselves. (Dkt. No. 92 at 27.) This is the same argument ecobee makes here. It contends that that the sensor messages are not “change-of-value messages” because they do not indicate “*whether* change has been detected.” (Dkt. No. 268 at 4.) The Court expressly rejected such a construction in its Claim Construction Order. Specifically, the Court found that ecobee’s construction would read out embodiments in the specification describing reporting of the “values” themselves rather than an “indication of change.” (Dkt. No. 105 at 26.) Accordingly, the Court “reject[ed] ecobee’s construction for ‘change-of-value message,’ and it held that “transmission of the detected values . . . or measurements themselves can serve as that indication of change.” (*Id.* at 28.)

Dr. Madisetti applied that construction. He explained that the messages from ecobee's remote sensors constituted "change-of-value messages" because they transmit [REDACTED] [REDACTED] which according to the Court's construction, "can serve as that indication of change." Trial Tr. at 1110:16-1111:16; (*see* Dkt. No. 105 at 28.) The Court is persuaded that ecobee, not Ollnova, runs afoul of the Court's Claim Construction Order. Accordingly, the Court finds that JMOL is not appropriate.

D. The '887 Patent

Ollnova asserted independent claim 1 and dependent claims 11, 12 and 20 of the '887 patent, which generally describe a device for wirelessly reporting building conditions that minimizes traffic on the wireless network by reducing the amount of reported information. Independent claim 1 requires that "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." ecobee contends that JMOL of noninfringement is appropriate for two reasons: (1) the accused products do not "stop" any transmission "that would otherwise occur" and (2) Ollnova failed to identify any "transmission interval." The Court addresses each in turn.

1. "Transmission Interval is Suspended"

The Court construed "is suspended" phrase to mean "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." (Dkt. No. 105 at 28.) The Court further commented that "suspended" means "something more than 'not transmitted.'" (*Id.* at 8.) Accordingly, ecobee contends that Ollnova was required to prove that the ecobee thermostat is programmed to stop a transmission "that would otherwise occur." (Dkt. No. 244 at 15.)

According to ecobee, Ollnova's evidence on the "suspended" limitation focused on [REDACTED] that is sent from ecobee thermostats over WiFi to the ecobee servers. (*Id.*) Specifically, Dr. Madisetti referenced [REDACTED] source code, referred to by its file name [REDACTED]. However, according to ecobee, it was Dr. Souri who actually explained how this file worked. (*Id.* at 16.) Dr. Souri testified that the relevant function [REDACTED] [REDACTED] [REDACTED]. (*Id.* at 16-17.) According to ecobee, [REDACTED] [REDACTED].

According to ecobee, Ollnova advanced an infringement theory that the claim limitation was satisfied by code [REDACTED] [REDACTED]. (*Id.* at 17.) In other words, [REDACTED] [REDACTED]. (*Id.*) ecobee contends that this is not the system "suspend[ing]" a message that would otherwise occur. At most, ecobee argues, this is a scenario where [REDACTED]. ecobee contends that such does not practice the claims since the Court indicated that suspension must be something more than simply not transmitting. (*Id.*)

ecobee also contends that Dr. Souri went a step further and proved that the ecobee thermostats cannot infringe because he testified that [REDACTED] [REDACTED]. Ollnova argues that Dr. Madisetti failed to rebut this testimony. Instead, Dr. Madisetti provided an analogy:

And so as a simple example, if I go to the post office and have a letter with me and I put a stamp on it, and I put the letter inside the envelope, and then instead of

putting it in the mailbox I put it in my pocket, that's an example of suspending the mailing. And if I drop it in the mailbox it means that I've completed the process of mailing the letter. But if I put it in my pocket and do it next day, or I keep it in my pocket, that's suspending it. [REDACTED].

Trial Tr. at 1100:17-1101:10. According to ecobee, this “post office” analogy actually supports the lack of infringement because transmission of the letter does not begin if the post office never receives the letter. Similarly, ecobee argues, its thermostats do not create a letter [REDACTED]—let alone begin a transmission—until [REDACTED]. Further, ecobee argues that [REDACTED].

In response, Ollnova contends that its infringement theory did not run afoul of the Court's claim construction. (Dkt. No. 258 at 13.) Ollnova notes that Dr. Madisetti acknowledged the Court's construction and explained to the jury how the Accused Products satisfied that construction by pointing to the ecobee source code and deposition testimony. (*Id.* (citing Trial Tr. at 297:11-301:6.)) According to Ollnova, ecobee's argument that “[a]t most, Dr. Madisetti described a scenario where data [REDACTED],” is contradicted by deposition testimony of one of ecobee's witnesses, Mr. Curtin, that was played at trial and that Dr. Madisetti considered and discussed. (*Id.*) Specifically, Dr. Madisetti testified that based on Mr. Curtin's testimony, it was his opinion that [REDACTED].

The Court agrees with Ollnova. ecobee spends a majority of its argument articulating its interpretation (*i.e.*, Dr. Souri's interpretation) of the ecobee source code. Its argument hinges on this interpretation being correct. Essentially, ecobee asks the Court to agree with Dr. Souri's interpretation of the source code because such an interpretation would mean that Dr. Madisetti's theory runs afoul of the Court's construction of the term “suspended.” However, the Court is not persuaded that Dr. Madisetti contradicted the Court's construction. Dr. Madisetti provided a

different interpretation of the source code, one where his theories do not run afoul of the Court's construction. The parties' dispute has much less to do with the construction of the patent term "is suspended," and much more to do with interpretation of the source code and when a "transmission" begins. ecobee contends that [REDACTED], but it and its expert are not using the same starting point for the "transmission" as Ollnova and Dr. Madisetti. Dr. Madisetti acknowledged the Court's construction and purported to follow it. Trial Tr. at 297:11-301:6. He opined to the jury that the ecobee thermostats suspend a transmission that would otherwise occur. Trial Tr. at 286:18-301:6. Although ecobee's motion presents itself as an argument that Dr. Madisetti declined to follow the Court's construction, the Court is persuaded that the real issue boils down to whether Dr. Madisetti or Dr. Souris is correct as to when the ecobee thermostat begins the process for a transmission that would otherwise occur. That is precisely the type of factual determination that should be decided by the jury.

Since the Court is not persuaded that Dr. Madisetti contradicted the Court's claim construction of this term, the Court does not find that JMOL is appropriate on these grounds.

2. "Transmission Interval"

ecobee argues that Ollnova failed to present substantial evidence demonstrating that the accused thermostats transmit [REDACTED] according to a "transmission interval," as the claims require. (Dkt. No. 244 at 19.) ecobee notes that the term "transmission interval" is included in the Court's construction of the "suspended" limitation: "the transmission . . . that would otherwise occur is stopped for the remainder of the transmission interval." (Dkt. No. 105 at 28.) According to ecobee, Dr. Madisetti failed to identify any "transmission interval" associated with [REDACTED] because [REDACTED] [REDACTED] (Dkt. No. 244 at 19.) ecobee contends that Dr. Madisetti attempted to "sidestep" this limitation by pointing to [REDACTED] of the thermostat processor—*i.e.*, [REDACTED]

████████████████████—for both the polling and transmission intervals. (*Id.*) However, ecobee argues that ██████████ is not specific—*i.e.*, ██████████ ██████████—and it is not related to transmission. Further, according to ecobee, Dr. Souri explained that this cannot be the transmission interval because ██████████ ██████████ (*Id.* at 20 (quoting Trial Tr. at 772:12-773:10)).

In response, Ollnova argues that Dr. Madisetti specifically identified the transmission interval as “████████████████████ ██████████.” (Dkt. No. 258 at 15 (quoting Trial Tr. at 298:2-4.)) Ollnova contends that ecobee is incorrect that ██████████ is not related to “transmission.” (*Id.*) Specifically, Dr. Madisetti testified that transmission is completed at the end of the transmission interval, and that ██████████ provides said transmission interval for processing ██████████. (*Id.*) According to Ollnova, ecobee’s argument that the interval is not ██████████ period is irrelevant since dependent claim 11 recites the “transmission interval is variable,” and thus the claims do not require the interval to be a fixed time. (*Id.*) Further, Ollnova argues that the fact that ██████████ ██████████ is irrelevant because claim 1 contemplates that transmissions are suspended when there is no change. (*Id.*)

In reply, ecobee contends that “even if transmission occurs at the end of ██████████ ██████████ not a transmission interval.” (Dkt. No. 268 at 6.) According to ecobee, dependent claim 11 requires a “variable,” period, but it does not negate that a defined period must still exist. (*Id.*)

In sur-reply, Ollnova argues that ecobee’s position amounts to an untimely claim construction. (Dkt. No. 273.) Further, Ollnova argues that ecobee fails to explain what exactly

would be required by its limiting construction or why [REDACTED]
[REDACTED] is not a sufficiently defined transmission period.

The Court agrees with Ollnova. ecobee initially argues that Ollnova failed to “identify” a transmission interval. (See Dkt. No. 244 at 19)(“Ollnova Failed to *Identify* Any ‘Transmission Interval.’”) However, ecobee quickly and easily concedes that Dr. Madisetti identified [REDACTED] [REDACTED] as the “transmission interval.” Trial Tr. at 298:2-4. While ecobee argues that this identification was not sufficient, this at best is an argument concerning the difference in the expert’s interpretation of the term, not a failure on the part of Ollnova to *identify* a transmission interval.

ecobee’s argument is based on its assertion that “[w]ithout a defined period, there can be no ‘transmission interval’” (Dkt. No. 268 at 6), but the Court never construed this term to include any such requirement. While Dr. Souri was entitled to hold such an opinion, but ecobee provides no basis for limiting Dr. Madisetti to such a construction. Thus, Dr. Madisetti did not “sidestep” a “flaw” by pointing to [REDACTED]. He simply provided an opinion that differed from Dr. Souri’s. ecobee does not provide any compelling reason why the jury was not entitled to consider and agree with Dr. Madisetti’s opinion of how a POSITA would interpret the term “transmission interval,” and ecobee fails to demonstrate how Ollnova failed to identify a “transmission interval” at trial. Accordingly, neither JMOL nor a new trial are appropriate on these grounds.

E. The ’282 Patent

The jury found all four asserted claims of the ’282 Patent to be invalid. ecobee contends that although it is unclear whether the jury also found the patent to be infringed, no substantial evidence could have supported such a finding. (Dkt. No. 244 at 20.) Specifically, ecobee contends

that Ollnova failed to prove that ecobee thermostats ever send only a “portion” of stored sensor data to the servers. (*Id.*)

According to ecobee, Ollnova’s infringement theory effectively ignored the “portion” limitation because Dr. Souri and Mr. Hietala (ecobee’s Engineering Manager) “proved that ecobee thermostats [REDACTED] [REDACTED].” (*Id.* at 21 (citing Trial Tr. at 749:8-750:3)). ecobee notes that Ollnova focused on the thermostat’s comfort settings which allow users to select which sensors are used to calculate the average temperature. However, according to ecobee, Dr. Madisetti was not able to contradict Dr. Souri’s explanation that the thermostats [REDACTED]. Further, ecobee argues that Dr. Madisetti conceded that the ecobee thermostats are programmed to transmit [REDACTED]. (*Id.* at 22 (quoting Trial Tr. at 1120:3-11)). Finally, ecobee argues that Dr. Madisetti, faced with these facts, opined that “a portion” could mean “all.” (*Id.* (quoting Trial Tr. at 1104:21-1105:8)). ecobee contends that this is both contrary to the plain and ordinary meaning of the words “all” and “portion” and that it is contrary to the specification, which teaches that the “power saving communication algorithm” is achieved by “only communicating a subset of the total sensor data.” (*Id.*); ’282 Patent at 8:57-9:36.

In response, Ollnova argues that ecobee’s motion with respect to the ’282 Patent is moot because the jury found the asserted claims of the ’282 Patent invalid and Ollnova does not seek to overturn that finding.

In reply, ecobee argues that Ollnova does not dispute that there was no substantial evidence to support a finding that ecobee infringed any of the asserted claims of the ’282 Patent and thus JMOL should be granted.


It is well-established that only valid patents can be infringed. The jury found the Asserted Claims of the '282 Patent to be invalid and Ollnova does not seek to overturn that finding. That fact settles the issue. Further, whether the jury found the '282 Patent to be both infringed and invalid or not infringed and invalid is moot. Neither case would give the Court reason to overturn the jury's verdict in this case, which found that Ollnova proved by a preponderance of the evidence that ecobee infringed one or more of the Asserted Patents. Accordingly, JMOL or a new trial are not appropriate on these grounds.

IV. CONCLUSION

For the reasons stated herein, the Court finds that ecobee's Motion should be and hereby is **DENIED**.

The parties are directed to jointly prepare a redacted version of this Order for public viewing and to file the same on the Court's docket as an attachment to a Notice of Redaction within five (5) business days of this Order.

So ORDERED and SIGNED this 5th day of September, 2024.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE

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

OLLNOVA TECHNOLOGIES LIMITED,

Plaintiff,

v.

ECOBEE TECHNOLOGIES ULC d/b/a
ECOBEE,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00072-JRG

FILED UNDER SEAL

MEMORANDUM OPINION AND ORDER

Before the Court is the Motion for Judgment as a Matter of Law of No Damages or, in the Alternative, for a New Trial Regarding Damages (the “Motion”) filed by Defendant ecobee Technologies ULC d/b/a/ ecobee (“ecobee”). (Dkt. No. 246.) In the Motion, ecobee moves for judgment as a matter of law (“JMOL”) of no damages. Alternatively, ecobee moves for a new trial. For the following reasons, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

Plaintiff Ollnova Technologies Limited (“Ollnova”) alleged that ecobee infringes claims 1, 11, 12, and 20 of U.S. Patent No. 7,746,887 (the “887 Patent”); claims 1 and 2 of U.S. Patent No. 7,860,495 (the “495 Patent”); claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282 (the “282 Patent”); and claims 1, 5, and 17 of U.S. Patent No. 8,264,371 (the “371 Patent”) (collectively, the “Asserted Patents”).

At trial, Mr. Bergman, Ollnova’s damages expert, presented two methods for calculating a reasonable royalty for ecobee’s infringement: a “market approach” and an “income approach.” Mr. Bergman’s market approach began with an analysis of a comparable license under *Georgia-Pacific* factor 1—the royalties received by the patentee for the licensing of the patent in suit, proving or

tending to prove an established royalty. Trial Tr. at 497:5-13. Mr. Bergman testified that he analyzed twelve license agreements that had been produced by the parties and found that the most informative agreement was a license between third-party [REDACTED] and Ollnova (the “[REDACTED] Agreement”). *Id.* at 498:14-20. This agreement conveyed a license to [REDACTED]. *Id.* at 500:21-23.

After opining that the [REDACTED] Agreement was the most comparable license, Mr. Bergman adjusted the royalty of the [REDACTED] Agreement to determine what ecobee would have paid at the hypothetical negotiation. First, Mr. Bergman analyzed the differences in the market shares between [REDACTED] and ecobee. Based on sales data generated on Amazon.com, Mr. Bergman determined that [REDACTED] market share for smart thermostats was roughly [REDACTED] while ecobee’s market share was roughly [REDACTED]. *Id.* at 504:2-12; PX-75. Accordingly, Mr. Bergman determined that there was “about a [REDACTED] difference between ecobee and [REDACTED]” and adjusted the royalty by a factor of [REDACTED]. Trial Tr. at 505:1-13. Mr. Bergman also testified that, since he was calculating damages for a running royalty and since the license for the [REDACTED] Agreement extended through the life of the patents, he adjusted the damages downward to account for the shorter license period for the hypothetical negotiation. *Id.* at 505:14-22. Next, Mr. Bergman considered the fact that the [REDACTED] Agreement was a license to [REDACTED], while the hypothetical negotiation would only be for the four Asserted Patents. *Id.* at 505:23-506:12. Mr. Bergman assumed that all patents in the [REDACTED] Agreement were of equal value, though he testified that it would be reasonable to conclude that the Asserted Patents were more valuable than the others given that [REDACTED]. *Id.* at 508:18-4. Finally, Mr. Bergman noted that at the hypothetical negotiation, it would be assumed that all patents were infringed and valid and that the parties would have full access to relevant information. *Id.* at 507:1-

8. Adjusting for all these factors, Mr. Bergman testified that the [REDACTED] payment for the [REDACTED] Agreement could be adjusted to \$47.57 million for a license to the Asserted Patents at the hypothetical negotiation. *Id.* at 508:8-17.

Mr. Bergman adjusted this number further based on his analysis of *Georgia-Pacific* factor 2—the rates paid by the licensee for the use of other patents comparable to the patent in suit. *Id.* at 497:14-18. For this factor, Mr. Bergman analyzed an agreement between ecobee and [REDACTED]. Under that license, [REDACTED]. *Id.* at 509:15-18. Mr. Bergman also analyzed a [REDACTED]. *Id.* Given the adjusted value of the [REDACTED] Agreement and ecobee’s prior licensing history, Mr. Bergman opined that if ecobee and Siemens had negotiated for a license in 2012 it would have been for \$46.5 million based on a running royalty of [REDACTED] per unit. *Id.* at 510:22-511:3. Notably, while Mr. Bergman stated that these figures constituted his ultimate opinions on damages, he also opined that \$47.57 million would also have been reasonable. *Id.* at 508:8-19.

The jury returned a unanimous verdict finding in relevant part that ecobee infringed one or more of the asserted claims of the Asserted Patents, that the ’282 Patent was invalid, and that Ollnova was entitled to \$11,500,000.00 as a lump sum reasonable royalty.

II. LEGAL STANDARD

A. Judgment as a Matter of Law

“Judgment as a matter of law is proper when ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify “substantial evidence” to support its positions. *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). “Substantial evidence is more than a mere scintilla. It means such relevant

evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

“The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury’s verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must “resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations.” *Gomez v. St. Jude Med. Daig. Div. Inc.*, 442 F.3d 919, 937–38 (5th Cir. 2006).

B. New Trial

Rule 59 provides that a new trial may be granted on all or part of the issues on which there has been a trial by jury for “any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). Notwithstanding the broad sweep of Rule 59, “courts do not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.” *Metaswitch Networks Ltd. v. Genband US LLC*, 2017 WL 3704760, at *2 (E.D. Tex. Aug. 28, 2017); *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 276 F. Supp. 3d 629, 643 (E.D. Tex. 2017). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985); *see also Laxton v. Gap Inc.*, 333 F.3d 572, 586 (5th Cir. 2003) (“A new trial is warranted if the evidence is against the great, and not merely the greater, weight of the evidence.”). Furthermore “[u]nless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new

trial . . . the court must disregard all errors and defects that do not affect any party's substantial rights." Fed. R. Civ. P. 61.

III. DISCUSSION

A. Mr. Bergman's Damages Calculation

ecobee contends that Mr. Bergman's market approach cannot support the jury's damages award "because it failed to apportion the value of that agreement to reflect the value of the asserted patents." (Dkt. No. 246 at 10.) Specifically, ecobee contends that Mr. Bergman did not compare the technical differences of [REDACTED] patents in the [REDACTED] Agreement, and he erred by assuming that all of the patents in the [REDACTED] Agreement were of equal value. (Dkt. No. 146 at 11 (quoting *Golden Bridge Tech. v. Apple Inc.*, No. 5:12-CV-04882-PSG, 2014 WL 2194501, at *6 (N.D. Cal. May 18, 2014))). ecobee argues that Mr. Bergman's assumption makes "too crude a generalization and lacks factual ties to the case." (*Id.* at 11-12 (internal quotations omitted)).

Second, ecobee argues that Mr. Bergman erred in his analysis by multiplying the value of the [REDACTED] agreement by [REDACTED]. (*Id.* at 12.) First, ecobee notes that Mr. Bargman arrived at this number by analyzing market data from Amazon from 2019-2022 when the hypothetical negotiation would have been in 2012. (*Id.*) Second, ecobee contends that even if these shares could inform the hypothetical negotiation, the data still would only reflect one product category (thermostats) and one sales channel (Amazon). (*Id.*) Since the Asserted Claims were not limited to the thermostats and [REDACTED] sales were not limited to Amazon (as it [REDACTED]), ecobee contends that Mr. Bergman's market share multiplier is arbitrary. (*Id.* at 12-13.)

In response, Ollnova contends that Mr. Bergman's analysis of the [REDACTED] Agreement provided the jury a sufficient basis to conclude that the license, when properly adjusted, equates to \$47.57 million for the purposes of a hypothetical negotiation involving the four Asserted

Patents. (Dkt. No. 259 at 10.) According to Ollnova, the jury's decision to invalidate one of the four Asserted Patents (the '282 Patent) would entail a corresponding reduction of one quarter—given Mr. Bergman's estimate that all of the patents were of equal value—yielding an adjusted royalty of \$35.67 million. (*Id.*) Thus, Ollnova argues, the jury's ultimate award of \$11.5 million falls well within the range of the supported evidence at trial. (*Id.* (collecting cases)).

Ollnova disagrees that Mr. Bergman treating all of the patents in the [REDACTED] Agreement as equal constituted a failure to apportion for the value of the Asserted Patents. (*Id.* at 11.) First, Ollnova argues that ecobee is rehashing arguments that it raised in its failed *Daubert* motion (Dkt. No. 124), and it argues that the Court should again reject ecobee's arguments. (*Id.*) Second, Ollnova notes that Mr. Bergman apportioned by accounting for the unasserted patents in the [REDACTED] Agreement and excluding them from the analysis. (*Id.*) Further, Mr. Bergman testified that his assumption that [REDACTED] were equal was, in fact, a conservative estimate because “[Ollnova] specifically pointed out three of [the four Patents-in-Suit] [REDACTED],” meaning that it would have been “reasonable to assume that those patents are worth more than the other . . . [REDACTED] patents.” Trial Tr. at 508:18-509:9.

The remainder of ecobee's complaints, Ollnova argues, constitute mere dissatisfaction with Mr. Bergman's comparability analysis and are not cognizable grounds for overturning the jury's verdict. (Dkt. No. 259 at 13.) Ollnova argues that ecobee does not explain why it would be inappropriate to focus on market data for [REDACTED] and ecobee's smart thermostat products, since those are the products at issue in this case. Ollnova notes that Mr. Padian, Ollnova's executive, testified that the negotiations for the [REDACTED] Agreement was “limited to smart thermostats,” (Trial Tr. at 241:18-242:6), and thus, Ollnova argues the comparison of [REDACTED] thermostat market share to ecobee's thermostat market share was appropriate. Ollnova also argues that Mr. Bergman

explained why Amazon.com was an appropriate channel for comparing the market shares of [REDACTED] and ecobee:

And so it represents those sales on Amazon.com, which is obviously a very big retailer.... So this information is on Amazon.com. Right? Obviously this is not all of ecobee's sales, this is not all of [REDACTED] sales, but what's really important as part of this analysis is to figure out the relative difference between them. So the question is can sales on Amazon.com sort of serve as a benchmark for the market as a whole, and given the size of Amazon.com it's my opinion that it can[]. And so when we look at this, what we're really concerned about or what we're really looking at is the relative difference in these percentages to reflect market share.

Id. at 504:7-25. Accordingly, Ollnova contends that Mr. Bergman's market approach was supported by the evidence, and ecobee fails to show that the jury's verdict should be overturned.

In reply, ecobee contends that the Federal Circuit has expressly rejected Mr. Bergman's approach of assuming that all patents in an agreement are of equal value. (Dkt. No. 264 at 2.) Specifically, ecobee compares this case to *Omega Pats., LLC v. CalAmp Corp.*, 13 F.4th 1361 (Fed. Cir. 2021). In *Omega*, an expert assumed that "no patent [in an agreement] was any more valuable than the others," and the Federal Circuit found that "generic testimony simply does not 'account[] for the technological and economic differences between th[e] licenses' and a hypothetical negotiation over a single, specific patent." *Id.* at 1378-81. ecobee argues that Mr. Bergman's market approach similarly failed to account for any differences among the patents in the [REDACTED] agreement. According to ecobee, "calling out" the patents in connection with the [REDACTED] Agreement is not enough to satisfy apportionment. For example, ecobee asserts that in *Apple Inc. v. Wi-Lan Inc.*, 25 F.4th 960, 973-74 (Fed. Cir. 2022), an asserted patent was discussed during negotiations for an allegedly comparable agreement, but the Federal Circuit nonetheless rejected the expert's reliance on the agreement because he "failed to address the extent to which the[] other patents contributed to the royalty rate in the" agreement. *Id.*

In sur-reply, Ollnova argues that ecobee misunderstands the holding in *Omega* by claiming that the Federal Circuit blanketly criticized patent counting. (Dkt. No. 274 at 1.) According to Ollnova, the Federal Circuit simply held that “absent evidence of a comparable license or comparable negotiation to support an identical \$5.00 rate for a one-patent license to the ’278 patent, we fail to see how this patent/claim-independent approach accounts for apportionment.” *Omega*, 13 F.4th at 1379. Further, Ollnova argues that ecobee misconstrues Mr. Bergman’s analysis of the █████ Agreement by attempting to draw a comparison with *Apple v. Wi-Lan*. (Dkt. No. 274 at 1.) Specifically, Ollnova notes that in *Apple*, the plaintiff did not meaningfully attempt to account for the value of the non-asserted patents, which is why the Federal Circuit found that the expert had “failed to address the extent to which the[] other patents contributed to the royalty rate in the” agreement. *Apple*, 25 F.4th at 973-74. In contrast, Ollnova notes that Mr. Bergman subtracted the value of the non-asserted patents from his calculation. (Dkt. No. 274 at 2.)

The Court agrees with Ollnova. First, Mr. Bergman did not fail to apportion the value of the █████ Agreement to determine the value of the Asserted Patents. Mr. Bergman accounted for the fact that the █████ Agreement included unasserted patents and excluded their value from his calculations of the damages. While ecobee disagrees with the actual value that Mr. Bergman assigned to the asserted patents and unasserted patents, that is a separate issue. ecobee’s own Motion acknowledges that Mr. Bergman apportioned the value of the agreement by excluding unasserted patents from his calculations.¹ Such distinguishes this case from *Apple v. Wi-Lan*.

¹ Additionally, in a footnote of an unrelated section, ecobee criticizes Mr. Bergman for not accounting for the differences in the license term for the █████ Agreement and the term of a license resulting from the hypothetical negotiation. (See Dkt. No. 246 at 14 n.15.) This argument has no merit as Mr. Bergman accounted for the differences in the license terms, effectively halving the royalty under the hypothetical negotiation because the term would be approximately █████ of the term of the █████ Agreement. Trial Tr. at 505:14-22.

Second, while it is true that Mr. Bergman assumed *for his calculations* that all of the patents in the [REDACTED] Agreement were of equal value, he explained to the jury that this was likely not the case in reality. In fact, Mr. Bergman testified that three of the Asserted Patents in this case, [REDACTED], likely contributed to *more* of the value of the [REDACTED] Agreement than the other [REDACTED] patents in that agreement. Accordingly, while Mr. Bergman did not actually believe all of the patents to be of the same value, this provided an easier calculation and was, if anything, a conservative estimate. Such facts distinguish this case from *Omega*, where the expert provided no more than “generic testimony” that “no patent [in a license agreement] was any more valuable than the others.” 13 F.4th at 1381. Here, Mr. Bergman provided a basis in fact to conclude that the Asserted Patents were more valuable than the other patents in the [REDACTED] Agreement, which in turn allowed him to conservatively assume that all of the patents were equally valuable for the purposes of his damages calculation.

ecobee complains that Mr. Bergman did not substantively analyze the other [REDACTED] patents in the [REDACTED] Agreement or compare the “technical scope” of that license with the scope of the hypothetical license. The Court is not persuaded that Mr. Bergman, a damages expert, was required to perform an analysis of the technical scope of [REDACTED] patents in the [REDACTED] Agreement in order to opine as to their relative value. Mr. Bergman provided a basis in fact for valuing the four Asserted Patents as more valuable than the average patent in the [REDACTED] Agreement: namely, the fact that the [REDACTED] Agreement granted a license to [REDACTED] and the fact that the Asserted Patents were [REDACTED]. This valuation was simple and involved a certain degree of approximation, but it is well established that calculating damages, inherently “involve[] an element of approximation.” See *Wordtech Sys. v.*

resulting in a maximum royalty of \$35.67 million. The jury's award of \$11.5 million was well within the range supported by the evidence at trial.² *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 519 (Fed. Cir. 1995) (“a jury’s choice simply must be within the range encompassed by the record as a whole”). Since Mr. Bergman’s market approach alone supports the jury’s verdict, the Court need not address whether his income approach likewise supports the verdict. ecobee has failed to show that it is entitled to JMOL or new trial based on Mr. Bergman’s methodologies.

B. Pre-Complaint Sales

ecobee further argues that JMOL or new trial is warranted because Ollnova included pre-complaint sales in the damages figures it proposed to the jury. (Dkt. No. 246 at 13.) This argument is premised on ecobee’s contention that no reasonable jury could find that Ollnova satisfied the marking requirement. It is undisputed that Ollnova did not notify ecobee of its infringement prior to filing this case, and thus, pre-complaint damages for the ’887 Patent, the ’282 Patent, and ’371 Patent are precluded if Ollnova or its licensees failed to mark their products.

ecobee identified Siemens’ “APOGEE system” as the product that required marking. According to ecobee, Ollnova never offered any evidence that the APOGEE system was marked, but instead argued that the APOGEE system did not need to be marked. (Dkt. No. 246 at 14.) Yet, ecobee argues, Ollnova offered no more than Dr. Madisetti’s testimony that he was not “aware” of any APOGEE component that practices certain claim limitations. Trial Tr. at 363:5-364:3. Accordingly, ecobee argues that the inclusion of pre-complaint sales in its royalty base alone warrants JMOL of no damages, as it provided no way to limit damages to post-complaint sales if, as the jury found, the ’282 Patent claims were invalid. (Dkt. No. 246 at 15.)

² Using Mr. Bergman’s \$46.5 million figure, the reduced maximum damages would be approximately \$34.8 million.

In response, Ollnova first argues that the jury sided with ecobee's position that the damages award should be a lump sum. (Dkt. No. 259 at 17.) According to Ollnova, "[t]he consequence of the jury's decision to go with ecobee's lump-sum royalty structure means that the damages amount is not tied to units sold or time frame." (*Id.* at 18.) In other words, Ollnova argues that "the \$11,500,000 amount paid at the hypothetical negotiation is invariable regardless the outcome of the jury's decision on Ollnova's satisfaction of its marking obligation" since, according to Ollnova, "the lump sum awarded rendered moot any consequences from a failure to mark." (*Id.*)

Alternatively, Ollnova argues, the jury was entitled to weigh the evidence put forth in determining whether Dr. Madisetti had sufficiently shown that the APOGEE system did not practice the Asserted Patents, or whether an APOGEE product ever even existed that could be marked. (*Id.*) Ollnova argues that Dr. Madisetti explained that there is no APOGEE product to mark because, after reviewing APOGEE documents and comparing them to the Asserted Patents, he concluded that that the Siemens APOGEE system does not practice the '887, '282, and '371 Patents. Trial Tr. at 355:5-11.

Ollnova also notes that Mr. Bergman adjusted his royalty value based on the fact that the [REDACTED] agreement term was "[REDACTED] [REDACTED]," while Mr. Bergman calculated damages as a running royalty. Trial Tr. at 505:14-22 ("so I took a downward adjustment to the [REDACTED] license to take into account the fact that the hypothetical license would have a shorter period"). According to Ollnova, this adjustment for the differences in license term ([REDACTED] agreement versus 90 months for the damages period) translated to an effective [REDACTED] of the license amount. (Dkt. No. 259 at 19.) Ollnova argues that "temporal adjustments to licensing analysis matter only to running royalty structures, so removing this adjustment would more than [REDACTED] the amount resulting from Mr. Bergman's analysis." (*Id.*)

Finally, Ollnova notes that Mr. Bergman testified that damages starting after the complaint in March 2022, would be \$11.8 million in the form of a running royalty. Trial Tr. at 512:23-514:17. Ollnova argues that “[a]lthough ecobee suggests that this amount is dependent on a valid ’282 Patent, ecobee never elicited such testimony,” and the \$11.8 million figure is an independent basis to support the jury’s award of \$11.5 million.

In reply, ecobee argues that Ollnova improperly seeks to relitigate ecobee’s initial burden under *Arctic Cat* by suggesting that the “APOGEE product [n]ever even existed.” (Dkt. No. 264 at 5 (quoting Dkt. No. 259 at 18)). According to ecobee, “[t]he only relevant question at this stage is whether Ollnova introduced sufficient evidence that APOGEE was in fact marked or that APOGEE was not covered by the Asserted Patents.” (*Id.*)

Additionally, ecobee argues that “a failure to mark is not somehow ‘rendered moot’ by a lump sum damages award.” (*Id.*) ecobee notes that the Court instructed the jury that Ollnova satisfying the marking requirement determined the start date for damages irrespective of whether the jury determined damages in the form of a running royalty or lump sum.

The Court finds that a reasonable juror could find that Siemens was not required to mark the APOGEE products, and thus it was not improper for Ollnova to include pre-complaint sales in its damages calculation. Without objection from either party,³ the Court instructed the jury as follows:

If you determine that Ollnova did not substantially comply with the marking requirement and if you find that any of the ’282, ’887, and ’371 patents are valid and infringed, you should calculate damages for those patents beginning on March the 21st, 2022.

³ Ollnova objected to the inclusion of the name “APOGEE” in the instructions, but otherwise did not object. Trial Tr. at 1210:15-18.

If you find that Ollnova did substantially comply with the marking requirements, then you should calculate damages for the '282, '887, and '371 patents beginning on March the 8th, 2016.

Trial Tr. at 1257:1-9.⁴ According to ecobee, “[t]he only relevant question at this stage is whether Ollnova introduced sufficient evidence that APOGEE was in fact marked or that APOGEE was not covered by the Asserted Patents.” The Court finds that Ollnova introduced sufficient evidence that Siemens was not required to mark the APOGEE products because the APOGEE system was not covered by the Asserted Patents.

Specifically, Dr. Madisetti testified that the APOGEE *system* is not a product but rather a broad family of products that are typically customized for specific clients or organizations (Trial Tr. at 355:24-356:4); that ecobee had not identified which specific components and/or combinations or configurations of the APOGEE system infringed (Trial Tr. at 355:24-356:4); that he reviewed all of the APOGEE documents in this case, (Trial Tr. at 355:5-11); and finally, that “having looked through all these documents,” it was his “opinion that these components and their combinations do not practice the asserted claims of the patents at issue.” (Trial Tr. at 356:5-7). Further, Dr. Madisetti identified which limitations the APOGEE system did not practice. For example, Dr. Madisetti testified that after reviewing all of the APOGEE documents, he was not aware⁵ of any combination of the APOGEE components that could possibly satisfy the limitation

⁴ Both here and in its response to ecobee’s Motion for New Trial Based on the Improper Infringement Question in the Verdict Form or, in the Alternative for an Amended Judgment Setting the Appropriate Start Date for Prejudgment Interest (Dkt. No. 247), Ollnova seems to argue that the statutory limits to damages under 35 U.S.C. § 286 and 287 somehow do not apply when the jury awards damages in the form of a lump sum. This interpretation seems to be born out of the misunderstanding that the jury awards what was “owed . . . as of the [] hypothetical negotiation” (Dkt. No. 260 at 9) and that the amount is “not tied to units sold or time frame” (Dkt. No. 259 at 18). However, the jury’s award of \$11.5 million does not necessarily represent the “amount paid at the 2012 hypothetical negotiation” (*id.*) as Ollnova contends, but rather is the amount of money “to compensate Ollnova for any infringement that [the jury] may find” *during the damages period*. Further, a lump sum award differs from a running royalty in that compensates Ollnova for future damages in addition to past damages. It does not allow Ollnova to reach beyond the statutory limits for its past damages, and it does not moot the requirements of the marking statute.

⁵ ecobee criticizes Dr. Madisetti’s use of the word “unaware,” as opposed to an affirmative statement that no APOGEE component practiced the limitation. The Court notes that at trial, ecobee successfully prohibited Dr. Madisetti from testifying affirmatively that no combination of these components, in fact, practiced the limitations due to the fact that

of the '887 Patent, “wherein the transceiver is configured to transmit a most recent reading of the indicator.” Trial Tr. at 363:5-21.

Despite this testimony, ecobee did not confront Dr. Madisetti with any combination of APOGEE components that would practice the claims. Instead, ecobee relied exclusively on statements in the patent specifications concerning the APOGEE system. *See e.g.*, Trial Tr. at 418:11-22. The fact that ecobee presented competing evidence is not a basis for JMOL. The jury was entitled to accept Dr. Madisetti’s analysis.

The Court is also not persuaded that Ollnova attempts to relitigate ecobee’s initial burden under *Arctic Cat*. Dr. Madisetti’s statements that “ecobee [had] not identified any specific components and/or configurations of the APOGEE system” (Trial Tr. at 355:24-356:1) was an accurate identification of the “universe of products for which [the patentee] would have to establish compliance with, or inapplicability of, the marking statute.” *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350 (Fed. Cir. 2017). “Once the alleged infringer meets its burden of production, . . . the patentee bears the burden to prove *the products identified* do not practice the patented invention.” *Arctic Cat*, 876 F.3d at 1368. Dr. Madisetti merely pointed out what products ecobee had identified—and, importantly, what products it had not identified. As Dr. Madisetti testified, ecobee never identified specific APOGEE products or a combination of products that practiced the claims when it made its initial production under *Arctic Cat*, but instead identified the APOGEE system *generally* as practicing the claims. Consequently, Dr. Madisetti argued that the APOGEE system *generally* did not practice the claims.

his expert report was limited to statements that he was “unaware” of any product that practiced the limitations. Trial Tr. at 360:7-362:10. The Court agreed that Dr. Madisetti, in order to stay with in the scope of his report, was confined to opining that he was not “aware” of any product that satisfied these limitations. *Id.* However, Dr. Madisetti was permitted to testify that he reviewed all of the products identified by ecobee, and based on this review, he was permitted to testify that it was his opinion that “the APOGEE system doesn’t practice the claims.” Further, the jury was entitled to accept or reject Dr. Madisetti’s opinions as presented.

Further, since the patents are directed to specific configurations and combinations of products, rather than any single product alone—*i.e.*, the claims would not be infringed by a thermostat alone (*see e.g.*, Trial Tr. at 272:13-273:2; (Dkt. No. 244 at 6-7))—it was reasonable for Ollnova and Dr. Madisetti to argue that ecobee’s failure to point to any combination of products was fatal to its marking theory. Had ecobee identified any specific combinations of products under the APOGEE system, then Ollnova may have been required to address those combinations. However, since ecobee satisfied the burden by pointing to the system generally, the Court is not persuaded that Ollnova’s rebuttal was improper.

Since Ollnova introduced sufficient evidence that Siemens was not required to mark its APOGEE products because such did not practice the claims, Mr. Bergman did not err in including pre-complaint damages in his calculation of a reasonable royalty. As previously explained, Mr. Bergman’s calculations, considering the invalidation of the ’282 Patent, yields a maximum royalty of \$35.67 million. Accordingly, the jury’s award of \$11.5 million was within the range of the evidence at trial.

IV. CONCLUSION

For the foregoing reasons, the Court finds that ecobee’s Motion should be and hereby is **DENIED**.

The parties are directed to jointly prepare a redacted version of this Order for public viewing and to file the same on the Court’s docket as an attachment to a Notice of Redaction within five (5) business days of this Order.

So ORDERED and SIGNED this 5th day of September, 2024.

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

OLLNOVA TECHNOLOGIES LIMITED,

Plaintiff,

v.

ECOBEE TECHNOLOGIES ULC d/b/a
ECOBEE,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00072-JRG

MEMORANDUM OPINION AND ORDER

Before the Court is the Motion for Judgment as a Matter of Law or, in the Alternative, a New Trial, Regarding Invalidity Under 35 U.S.C. § 101 of the Asserted Claims of U.S. Patent No. 7,860,495 (the “Motion”) filed by Defendant ecobee Technologies ULC d/b/a/ ecobee (“ecobee”). In the Motion, ecobee moves for judgment as a matter of law (“JMOL”) on the grounds that no reasonable juror could have found the asserted claims of U.S. Patent No. 7,860,495 (the “’495 Patent”) to be not ineligible under 35 U.S.C. § 101. Alternatively, ecobee moves for a new trial. For the following reasons, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

Plaintiff Ollnova Technologies Limited (“Ollnova”) alleged that ecobee infringes claims 1 and 2 of the ’495 Patent. On May 10, 2022, ecobee filed a Renewed Motion to Dismiss Pursuant to Fed. R. Civ. P. 12(b)(6) (the “Motion to Dismiss”) arguing *inter alia* that the asserted claims of the ’495 Patent were invalid as being drawn to patent-ineligible subject matter under 35 U.S.C. § 101. (Dkt. No. 25.) In ruling on the Motion to Dismiss, the Court found that claim 1 of the ’495 Patent was directed to an abstract idea. Specifically, the Court found that claim 1 “recites, at a high level, conventional wireless networks for controlling building components,” and found that the

claims were directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (i.e., information from two separate networks).” (Dkt. No. 63 at 16.) However, the Court found that fact issues with respect to Step Two precluded dismissing the complaint. The Court specifically noted that Ollnova had argued that “[t]he ’495 Patent claims a wireless building automation control system comprising two different wireless communication protocols that was not conventional as confirmed by the prosecution history.” (*Id.* at 17 (quoting Dkt. No. 38 at 21.)) The Court found that “ecobee [did] not address Ollnova’s argument that the claimed ‘different wireless networks utilizing different wireless communications protocols’ was not conventional.” (*Id.* at 17-18.) Accordingly, dismissal was inappropriate.

ecobee later moved for summary judgment that the ’495 Patent is ineligible pursuant to § 101. (Dkt. No. 123.) In its motion for summary judgment, ecobee argued that there was no factual dispute that “different wireless networks utilizing different wireless communications protocols” was conventional. (*Id.*) In response, Ollnova argued that the *combination* of elements was not conventional because it addressed “two different wireless networks within a building.” (Dkt. No. 148 at 6) (emphasis in original). Ollnova argued that its contentions, supported by Dr. Madisetti’s expert report created at least a fact issue that precluded summary judgment. The Court ultimately agreed with Ollnova, finding that fact questions concerning Step Two precluded summary judgment. The Court further commented that “Doctor Madisetti’s opinions that the combination of the elements were not well-understood, routine, and conventional is part of why there remain material fact questions that should go to the jury on this issue.”¹ (Dkt. No. 212 at 69:5-13.)

¹ The parties also re-argued their positions with respect to Step One of the *Alice* analysis. The Court reaffirmed that the new arguments presented at the summary judgment stage did not alter its previous findings concerning *Alice* Step One.

After a jury trial, on October 5, 2023, the jury returned a verdict, finding in relevant part that ecobee had not proven by clear and convincing evidence that the limitations of the '495 Patent, when taken individually or when taken as an ordered combination, involve only technology which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional as of April 9, 2024. ecobee now contests the jury verdict, moving for JMOL or a New Trial on the grounds that the '495 Patent is ineligible under § 101.

II. LEGAL STANDARD

A. Judgment as a Matter of Law

“Judgment as a matter of law is proper when ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify “substantial evidence” to support its positions. *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). “Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

“The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury’s verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must “resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations.” *Gomez v. St. Jude Med. Daig. Div. Inc.*, 442 F.3d 919, 937–38 (5th Cir. 2006).

B. New Trial

Rule 59 provides that a new trial may be granted on all or part of the issues on which there has been a trial by jury for “any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). Notwithstanding the broad sweep of Rule 59, “courts do not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.” *Metaswitch Networks Ltd. v. Genband US LLC*, 2017 WL 3704760, at *2 (E.D. Tex. Aug. 28, 2017); *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 276 F. Supp. 3d 629, 643 (E.D. Tex. 2017). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985); *see also Laxton v. Gap Inc.*, 333 F.3d 572, 586 (5th Cir. 2003) (“A new trial is warranted if the evidence is against the great, and not merely the greater, weight of the evidence.”). Furthermore “[u]nless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new trial . . . the court must disregard all errors and defects that do not affect any party’s substantial rights.” FED. R. CIV. P. 61.

III. DISCUSSION

ecobee argues that the Court should grant JMOL that the ’495 Patent is invalid under § 101 because (1) the uncontroverted evidence establishes that the Asserted Claims contain no inventive concept and fail *Alice* Step Two, and (2) the jury did not decide the only relevant question to the Step Two inquiry. The Court addresses each in turn.

A. Evidence Concerning an Inventive Concept in the Claims of the '495 Patent

ecobee argues that JMOL should be entered because the claim limitations of the '495 Patent were indisputably conventional, and thus they fail *Alice* Step Two. (Dkt. No. 243 at 7.) According to ecobee, Ollnova did not introduce any evidence that the '495 Patent contained an inventive concept because Ollnova only attempted to establish unconventionality by invoking the abstract idea itself. (*Id.*) To support its arguments, ecobee primarily relies on the Court's decision on ecobee's Motion to Dismiss concerning *Alice* Step One. The Court found the following:

Rather than specific improvements to wireless building control architecture, the Court finds that the claim recites, at a high level, conventional wireless networks for controlling building components. The Court agrees with ecobee that claim 1 of the '495 Patent is directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (i.e., information from two separate networks).” (Dkt. No. 25 at 17.)

(Dkt. No. 63 at 16.) Further, ecobee contends that the Court determined that the only factual dispute for *Alice* Step Two was whether “‘different wireless networks utilizing different wireless communication protocols’ was not conventional.” (Dkt. No. 63 at 17.) According to ecobee, the undisputed evidence at trial showed that different wireless networks using different wireless communication protocols was, in fact, conventional. Thus, ecobee argues, there was no basis for the jury to find that the patent contained an inventive concept.

ecobee contends that its own expert, Dr. Martens, squarely addressed the issue flagged by the Court as to Step Two by testifying that the non-abstract elements of the asserted claims were conventional. (Dkt. No. 243 at 4) For example, Dr. Martens purported to identify well-known examples of two networks utilizing different communication protocols such as an in-house WiFi network connected to a modem and a modem's connection to the internet. Trial Tr. at 921:25-922:16. ecobee argues that Dr. Martens explained how the non-abstract elements—*i.e.*, using different wireless networks utilizing different wireless communication protocols—was

conventional at the time of the invention of the '495 Patent, and that this testimony was effectively un rebutted.

ecobee argues that Ollnova's expert, Dr. Madisetti, never disputed that different wireless networks with different communications protocols were conventional, but instead testified that the patent's unconventional feature was the abstract idea itself: controlling generic components using information from two networks. (Dkt. No. 243 at 5, 7.) ecobee also contends that Dr. Madisetti never opined that the ordered combination of elements was unconventional, and that even he had, "[c]obbling together multiple well-known components cannot confer eligibility where, as here, the components operate according to their 'expected' capabilities." (*Id.* at 9.) Thus, ecobee argues, the jury lacked sufficient evidence to find that the asserted claims—without the abstract idea—do not contain only conventional technology. (*Id.* at 8.)

In response, Ollnova argues that ecobee recycles arguments that the Court rejected on summary judgment and otherwise summarizes the evidence presented at trial but asks the Court to reach a contrary result from the jury. (Dkt. No. 257 at 6.) According to Ollnova, there was ample evidence presented at trial to support the jury's finding concerning eligibility. Specifically, it notes that Dr. Madisetti opined that the inventive concept of the '495 Patent was implementing two wireless networks in a building's automation system, wherein the first network was "free of communication" from the second network, so that if one system failed, control was not lost over the building's systems. (*Id.* at 7); Trial Tr. at 268:18-24. For example, Dr. Madisetti explained that if there is a "communication failure in WiFi" (one network), the other network ensures that "you don't lose control over your HVAC [] and your equipment." *Id.* at 269:20 – 270:3. Ollnova notes that Dr. Madisetti explained that the use of two wireless networks—specifically for building automation—was inventive because it solved an important technical problem pertaining to the

control of building components, rather than merely solving problems pertaining to communications (the conventional use of multiple networks). Trial Tr. at 1074:3-15. In other words, according to Dr. Madisetti, the '495 Patent claims a technological improvement to how the technology (wireless building architecture) operates. (Dkt. No. 257 at 8 (citing *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1302 (Fed. Cir. 2016))).

Ollnova also argues that none of ecobee's prior art references rendered the '495 Patent obvious because they did not teach that the first wireless network was "free of communications" with the second wireless network. Trial Tr. at 1067:20–1073:22; 1128:2–1135:18; 1151:12–21; 1151:22–1152:24. According to Ollnova and its expert, ecobee's asserted prior art for the '495 Patent lacked key aspects of the claims, which supported Dr. Madisetti's opinion that the ordered combination of the '495 Patent was not well-understood, routine, and/or conventional. The jury found that ecobee had not proven the '495 Patent to be obvious, which, according to ecobee, was consistent with the jury's eligibility findings.

Finally, Ollnova asserts that "[t]here was never a dispute that the existence of two wireless networks using different communications protocols was generally known at the time." (Dkt. No. 257 at 9.) Rather, Ollnova argues that "the '495 Patent teaches, and Dr. Madisetti explained, that the inventive concept is rooted in the use of two different wireless networks within the same building automation system such that one network is operable to control building components free of communications with the second wireless network." (*Id.* at 9-10 (emphasis in original).)

In reply, ecobee argues that the Court specifically identified a single factual dispute for the jury to resolve at Step Two: whether the claimed "different wireless networks utilizing different wireless communications protocols" were conventional. (Dkt. No. 266 at 1 (citing Dkt. No. 63 at 17-18.)) Ollnova's concession that "[t]here was never a dispute that the existence of two wireless

networks using different communications protocols was generally known at the time” is—in ecobee’s mind—sufficient for the Court to find the ’495 Patent ineligible as a matter of law. (Dkt. No. 266 at 1; *see* Dkt. No. 257 at 9.)

ecobee further argues that Ollnova pointed to an alleged inventive concept in the third limitation of claim 1, but that the third limitation is essentially the abstract idea itself. Specifically, Ollnova, at trial, identified “two different wireless networks within the same building such that *one network is operable to control building components free of communications with the second wireless network,*” as the inventive concept.² ecobee, however, argues that the italicized portion is the abstract idea that the Court identified at Step One, and that nothing remaining in this third limitation provides an inventive concept. (Dkt. No. 266 at 3.) ecobee further notes that, although the Court’s original Step One analysis did not consider the “free of communications” limitation, at the pretrial conference the Court reaffirmed its prior ruling on Step One “noting that consideration of the . . . ‘free of communications’ limitation, which was not previously argued, does not somehow disturb the Court’s prior conclusion.” (Dkt. No. 212 at 69:14-22.)

ecobee also argues that “local control” cannot supply the inventive concept because there are no geographic or distance (i.e., local vs. non-local) limitations in the claims, and that the existence of the networks in the context of building automation cannot be inventive because “limiting the claims to [a] particular technological environment . . . is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.” (Dkt. No. 266 at 3 (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016))). Finally, ecobee contends that “building” automation is only mentioned in the preamble, which is not automatically limiting. (*Id.*)

² The underlined portion is emphasis by Ollnova in Dkt. No. 257 at 10. The italics are ecobee’s emphasis in Dkt. No. 266 at 2-3.

In sur-reply, Ollnova argues that ecobee selectively picks quotes from prior Court orders to stretch their meaning and ignores the evidence presented to the jury concerning the unconventionality of the '495 Patent. (Dkt. No. 271 at 1.) Specifically, Ollnova disagrees that the Court identified the conventionality of “different wireless networks utilizing different wireless communications protocols” as the sole fact issue to be decided by the jury at Step Two. (*Id.*) Ollnova argues that ecobee, by selectively quoting the Court’s Order on the Motion to Dismiss, ignores the Court’s findings in ruling on the motion for summary judgment “[t]here are factual disputes related to whether various elements of claim 1 of the '495 Patent, alone or in combination, were conventional and well understood at the time the patent was filed.” (*Id.* (quoting Dkt. No. 63 at 17.)) Specifically, when the Court denied ecobee’s motion for summary judgment, the Court explained that “Doctor Madisetti’s opinions that the combination of the elements were not well-understood, routine, and conventional is part of why there remain material fact questions that should go to the jury on this issue.” (*Id.* (quoting (Dkt. No. 212 at 69:5-13.))

Finally, Ollnova disagrees that the only mention of the “building” is in the preamble. Ollnova notes that the claim requires “a first wireless network in a *building*” and “a second wireless network in a *building*.” (Dkt. No. 271 at 2.) Further, the claims require that the first network be “operable to control, free of communications with the second wireless network, *building* components in response to sensors operable within the first wireless network.” Accordingly, Ollnova argues that it developed sufficient facts at trial for the jury to conclude that the claims recite an inventive concept beyond the Court’s identified abstract idea.

The Court agrees with Ollnova. ecobee’s reliance on selected quotes from the Court’s Order on ecobee’s Motion to Dismiss, to the exclusion of other rulings and instructions both within that Order and without, leads ecobee to incorrectly conclude that the Court limited the Step Two

inquiry to a single factual dispute. The Court denied the Motion to Dismiss because ecobee “[did] not address Ollnova’s argument that the claimed ‘different wireless networks utilizing different wireless communications protocols’ was not conventional.” (Dkt. No. 63 at 17.) The Court did not—at the motion to dismiss stage—limit all future Step Two issues to that single, exemplary fact issue. When the Court denied ecobee’s motion for summary judgment as to the same issue, the Court explained that “Doctor Madisetti’s opinions that the combination of elements were not well-understood, routine, and conventional is part of why there remain material fact questions that should go to the jury on this issue.” (Dkt. No. 212 at 69:5-13.) ecobee ignores this ruling.

Second, even assuming Step Two is limited to the single fact issue identified by Ollnova at the motion to dismiss stage, ecobee still takes a narrower view of that dispute by limiting the question to whether the use of two wireless networks was conventional *generally*, rather than whether such was conventional *in building automation*. ecobee argues that JMOL is appropriate based solely on Ollnova’s concession in the briefing that “[t]here was never a dispute that the existence of two wireless networks using different communications protocols was generally known at the time.” (Dkt. No. 257 at 9.) However, Ollnova is correct. Reading ecobee’s selective quotes in their proper context, there never was a dispute concerning the use of two wireless networks *generally*. In response to ecobee’s Motion to Dismiss, Ollnova argued that there was a factual dispute over whether “a wireless building automation control system comprising two different wireless communication protocols . . . was not conventional.” (Dkt. No. 63 at 17 (quoting Dkt. No. 38 at 21.)) The Court specifically quoted this argument and agreed that such a factual dispute precluded dismissal. ecobee, however, ignores this portion of the Court’s Order, choosing instead a quote from a few sentences later in the Order that, devoid of context, better suits its arguments. Viewing ecobee’s selective quotes in context, it is clear that Ollnova never argued that different

networks using different protocols was unconventional generally, and the Court never limited the Step Two analysis to an inquiry of whether such was unconventional generally or as applied to anything but building automation.

Third, ecobee incorrectly argues that there is nothing in the third limitation of claim 1 except the abstract idea itself. The third limitation recites:

[3] wherein the first wireless network is operable to control, free of communications with the second wireless network, building components in response to sensors operable within the first wireless network, and wherein the first wireless network is also operable to control the building components in response to data from the second wireless network.

'495 Patent claim 1. While ecobee argues that this third limitation is the abstract idea itself, or that it recites no more than the abstract idea, the Court has never made such a finding. The Court found that the patent was directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources.” (Dkt. No. 63 at 16.) Nowhere in the Court’s identification of the abstract idea is there any mention of “building automation,” or the requirement that the first network must be “free of communications” with the second network, both of which are present in this limitation. Further, the “free of communications” requirement undermines ecobee’s argument that this is an attempt to “circumvent” the prohibition on patenting abstract ideas “by attempting to limit the use of [the idea] to a particular technological environment.” *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759 (Fed. Cir. 2019) The ordered combination of elements requires more than merely implementing two networks in the technological field of building automation. It requires that they be free of communication with one another, which according to the evidence presented to the jury, purportedly solves technical problems pertaining to control of a building’s wireless architecture in an unconventional way. ecobee focuses only on the presence of using two different wireless networks with different wireless communications protocols in this limitation,

but it fails to account for the other features of this limitation, the other elements in claim 1, and their ordered combination.

There was ample evidence presented at trial for the jury to conclude that claim 1 of the '495 Patent contained an inventive concept, or at the very least, that ecobee failed to meet its clear and convincing burden to show that there was not an inventive concept. Dr. Madisetti opined that conventional building automation systems at the time of the invention utilized a single wireless network. Trial Tr. at 267:2–270:3. He explained that the patent's inventive concept was the application of multiple wireless networks that were free of communication from each other, not to resolve communications issues, but for more reliant control of a building's automation systems. Trial Tr. at 1074:3-15.

Further, Dr. Madisetti opined that although ecobee had identified prior art references showing the use of multiple networks in operating building control, none of them included a first wireless network that was operable to control the building components “free of communications” with the second wireless network. Trial Tr. at 1067:20–1073:22; 1128:2–1135:18; 1151:12–21; 1151:22–1152:24. Finally, Dr. Madisetti explained to the jury that the failure of the prior art references to teach this limitation was consistent with the fact that this limitation was not conventional at the time of the patent. The jury was entitled to consider and agree with Dr. Madisetti's opinions. Ultimately, the jury's findings concerning eligibility and obviousness of the '495 Patent were in fact consistent with his opinions. The jury found that the '495 Patent was not anticipated or rendered obvious by ecobee's identified prior art and that the limitations of the '495 Patent, alone or in combination, recited more than conventional, well-understood, and routine elements.

In sum, there was sufficient evidence presented at trial upon which a reasonable juror could have concluded that the invention of the '495 Patent claimed an inventive concept beyond the abstract idea of “controlling generic ‘components’ using information from two separate sources.” Accordingly, JMOL is inappropriate.

Further, ecobee makes no argument that the jury’s finding was against the great weight of the evidence, and altogether fails to even articulate the appropriate legal standard for a new trial. Accordingly, ecobee has failed to meet its burden in moving for a new trial.

B. The Jury Instructions and Verdict Form

ecobee argues that JMOL or a new trial is warranted because the jury “must have decided that the asserted claims’ unconventional technology was found in the abstract idea.” (Dkt. No. 243 at 10.) Specifically, ecobee argues that the Court failed to instruct the jury on what the abstract idea was in both the jury instructions and the verdict form. ecobee relies on *BSG Tech LLC v. Buyseasons, Inc.*, in which the Federal Circuit explained that “a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept.” 899 F.3d 1281, 1290 (Fed. Cir. 2018). The Federal Circuit further explained that the “relevant inquiry is *not* whether the claimed invention as a whole is unconventional or non-routine.” *Id.* ecobee argues that the Court’s instructions to the jury should have informed it what the abstract idea was, and the lack of such an instruction means that the jury did not answer the “relevant inquiry” identified in *BSG Tech*.

In response, Ollnova disagrees that the jury “must have decided that the asserted claims’ unconventional technology was found in the abstract idea” for the same reasons articulated in its opposition to ecobee’s first argument. Specifically, Ollnova maintains that there was sufficient evidence for the jury to find that the inventive concept of the '495 Patent was the implementation

of two wireless networks free of communications from each other for the purposes of building automation, which is not the abstract idea identified by the Court.

According to Ollnova, ecobee also fails to demonstrate how express inclusion of the abstract idea could have had any bearing on the jury's Step Two determination. Ollnova argues that the Court properly delineated the jury's role as to *Alice* Step Two in its jury instructions:

To succeed on its claims for patent ineligibility, ecobee must establish two things. The first is whether the claims are directed to an abstract idea. That issue is one for the Court to decide and not the jury. It is not something you will have to decide in this case.

However, you, the jury, will decide the second question related to patent eligibility. Specifically, and in that regard, ecobee must show that the claims involve nothing more than the performance of activities which a person of ordinary skill in the art would have considered well-understood, routine, and conventional at the time the patent application was filed. You, the jury, will determine this issue.

To meet its burden on this issue, ecobee must show by clear and convincing evidence that the asserted claims of the '495 patent involve only technology which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional as of April the 9th, 2004. The mere fact that something was known in the art at the time does not necessarily mean that it was well-understood, routine, and conventional. Rather, the test is whether, in view of all the evidence, a person of ordinary skill in the art would have considered the claim to involve only technology that was well-understood, routine, and conventional as of April the 9th, 2004.

You should consider all the evidence presented during this trial, including the testimony of the witnesses as well as the exhibits introduced, including the specifications within the patents-in-suit. If the evidence shows by clear and convincing evidence that the elements of the asserted claims, when taken individually or when taken as an ordered combination, involve only technology which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional, then this element of patent ineligibility has been established.

Trial Tr. at 1240:4-1241:12. Ollnova contends that an inventive concept may arise in one or more claim limitations or in the ordered combination of the limitations, and that an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional piece.

(*Id.* (citing *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016))). Accordingly, the jury was entitled to consider every claim limitation, individually and their ordered combination. Ollnova argues that ecobee does not explain how the Court could have done this and still allowed the jury to consider every claim limitation while also “distinguishing the abstract and non-abstract elements,” and excluding the abstract elements from the analysis. (*Id.*)

The Court agrees with Ollnova. While ecobee complains that the verdict form did not separate the claim into “abstract and non-abstract elements,” the Court never determined that there were “abstract elements and non-abstract elements” at *Alice* Step One. Indeed, such would be contrary to the law. At Step One, the Court assesses the claims *as a whole* to determine whether the claims are directed to an abstract idea. *Diamond v. Diehr*, 450 U.S. 175, 188 (1981). Accordingly, the Court determined at Step One that the invention, *as a whole*, was directed to an abstract idea, not that some elements were abstract and others were not. As explained above, ecobee misinterprets the Court’s prior rulings to conclude that the third limitation is the abstract idea itself. Accordingly, ecobee would have the Court instruct the jury in such a way that would have prevented Ollnova from arguing that the inventive concept was found in the third limitation. However, ecobee does not explain how the Court could “distinguish[] the [alleged] abstract and non-abstract elements” without taking a knife to the claims, allowing the jury to assess some limitations and not others. Step Two requires a search for an inventive concept in all elements of the claim, individually and as an ordered combination.

Second, the Court disagrees with ecobee’s interpretation of *BSG Tech*. While it is true that the “application of an abstract idea *using only conventional and well-understood techniques*” cannot supply an inventive concept, this does not mean that the Court should divide the claim into

“abstract” and “non-abstract” elements and excise the non-abstract elements from the jury’s consideration of the subsidiary questions of fact under *Alice* Step Two. “[A]n application of an [abstract idea] may well be deserving of patent protection.” *Diehr*, 450 U.S. at 187. Indeed, that is the entire Step Two inquiry: “to determine whether the claim, as a whole ***with all of its limitations***, in effect covers a patent ineligible abstract idea or a patent eligible application of that idea.” *Alice*, 717 F.3d at 1298. The Court is not persuaded that dissection of the claims into “abstract and non-abstract limitations” and removal of the “abstract” from the jury’s consideration was intended by the Federal Circuit in *BSG Tech*.

Third, even if the Court did agree with ecobee’s interpretation of *BSG Tech*, ecobee fails to explain why the jury “must have” decided that the asserted claims’ unconventional technology was the abstract idea itself when there was no evidence presented at trial that the inventive concept was “controlling generic ‘components’ using information from two separate sources.” Dr. Martens opined that there was no inventive concept at all, and Dr. Madisetti opined that the inventive concept was the implementation of two wireless networks that were free of communication for the purposes of building automation control, not simply communication. The Court instructed the jury to consider all of the evidence presented—including Dr. Madisetti’s testimony—to determine whether the invention involves only well-understood, routine, and conventional elements. It is therefore unclear how the jury would have found the inventive concept to be the abstract idea itself when such was never presented to the jury.

As with ecobee’s previous argument, ecobee does not rely on the evidence presented at trial, or lack thereof, but on its misunderstanding of the Court’s Step One determination at the motion to dismiss stage. The Court determined that the abstract idea was “controlling generic ‘components’ using information from two separate sources.” Dr. Madisetti, on the other hand,


opined that the inventive concept was a building automation system with “two modes” of control, “one where both networks work together to control and one where the first wireless network is operable to control free of communications [with the second network].” Trial Tr. at 1074:10-14. With the correct understanding of what the Court found to be the abstract idea, it becomes clear that no one presented evidence to the jury that the abstract idea itself supplied the inventive concept. Accordingly, ecobee is incorrect that the jury “must have” determined that the “asserted claims’ unconventional technology was found in the abstract idea. (*See* Dkt. No. 243 at 10.)

The Court finds that JMOL is inappropriate. Further, ecobee has not shown that the jury’s verdict was against the great weight of the evidence, and thus new trial is likewise inappropriate.

IV. CONCLUSION

For the reasons stated herein, the Court finds that ecobee’s Motion should be and hereby is **DENIED**.

So ORDERED and SIGNED this 5th day of September, 2024.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE

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

OLLNOVA TECHNOLOGIES LIMITED,

Plaintiff,

v.

ECOBEE TECHNOLOGIES ULC d/b/a
ECOBEE,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00072-JRG

MEMORANDUM OPINION AND ORDER

Before the Court is the Motion for New Trial Based on the Improper Infringement Question in the Verdict Form or, in the Alternative for an Amended Judgment Setting the Appropriate Start Date for Prejudgment Interest (the “Motion”) filed by Defendant ecobee Technologies ULC d/b/a/ecobee (“ecobee”). (Dkt. No. 247.) In the Motion, ecobee moves for a new trial on the basis that “the verdict form improperly combined the issues of infringement of thirteen claims . . . into a single question that asked whether ecobee infringed any claim of any of the four patents.” (*Id.*) Further, ecobee moves to amend the judgment under Fed. R. Civ. P. 59(e) so prejudgment interest accrues from no earlier than March 8, 2022. For the following reasons, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

Plaintiff Ollnova Technologies Limited (“Ollnova”) alleged that ecobee infringes claims 1, 11, 12, and 20 of U.S. Patent No. 7,746,887 (the “887 Patent”); claims 1 and 2 of U.S. Patent No. 7,860,495 (the “495 Patent”); claims 1, 3, 6, and 21 of U.S. Patent No. 8,224,282 (the “282 Patent”); and claims 1, 5, and 17 of U.S. Patent No. 8,264,371 (the “371 Patent”) (collectively, the “Asserted Patents”). After a jury trial, the jury returned a unanimous verdict finding that ecobee

infringed one or more of the asserted claims of the Asserted Patents, and that Ollnova was entitled to \$11,500,000.00 in a lump sum royalty.

II. LEGAL STANDARD

A. New Trial

Rule 59 provides that a new trial may be granted on all or part of the issues on which there has been a trial by jury for “any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). Notwithstanding the broad sweep of Rule 59, “courts do not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.” *Metaswitch Networks Ltd. v. Genband US LLC*, 2017 WL 3704760, at *2 (E.D. Tex. Aug. 28, 2017); *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 276 F. Supp. 3d 629, 643 (E.D. Tex. 2017). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985); *see also Laxton v. Gap Inc.*, 333 F.3d 572, 586 (5th Cir. 2003) (“A new trial is warranted if the evidence is against the great, and not merely the greater, weight of the evidence”). Furthermore “[u]nless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new trial . . . the court must disregard all errors and defects that do not affect any party’s substantial rights.” Fed. R. Civ. P. 61.

III. DISCUSSION

A. Whether the Verdict Satisfied the Requirements for a Valid Verdict

ecobee argues that the verdict form in this case failed to satisfy the requirements for a valid verdict form. (Dkt. No. 247 at 4.) First, ecobee argues that since Ollnova raised four separate

causes of action for infringement as to four asserted patents, the general verdict form should have at least included separate infringement questions for each patent. (*Id.*) ecobee’s argument is based on Ninth Circuit and Tenth Circuit caselaw stating that a general verdict must, at a minimum, “announce[] the ultimate legal result of each claim.” *Zhang v. Am. Gem Seafoods, Inc.*, 339 F.3d 1020, 1031 (9th Cir. 2003); see *Johnson v. ABLT Trucking Co.*, 412 F.3d 1138, 1142 (10th Cir. 2005). ecobee contends that the single infringement question in this case failed to announce the result of each of Ollnova’s four distinct claims for infringement and each of ecobee’s four counterclaims. (*Id.*)

Second, ecobee argues that the verdict form violated its right to a unanimous verdict. According to ecobee, the verdict form “permitted—and, in fact, instructed—the jury to find ecobee liable for infringement regardless of whether all jurors agreed that ecobee was infringing the same patent claim.” (*Id.* at 5.) Specifically, ecobee contends that asking whether Ollnova proved that ecobee infringed any of the claims would “erroneously require[] an affirmative answer even in a situation where all jurors did not agree that *the same* patent was being infringed.” (*Id.* at 6.) As ecobee interprets the verdict form, “[a]s long as each juror believed *some* claim of *some* patent was infringed, the jury would have been required to answer ‘Yes’—even if the various jurors believed that ecobee was infringing a *different* asserted patent.” (*Id.*) ecobee argues that the Court’s references to unanimity in the jury instructions did not remedy this alleged error. According to ecobee, the jury could abide by the Court’s instruction that “your answers and your verdict must be unanimous,” find different patents infringed, and answer “Yes” as to infringement. (*Id.* at 6-7.)

In response, Ollnova contends that these same arguments were advanced and rejected by this Court in *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-00066-JRG, Dkt. No. 667 (E.D.

Tex. Aug. 9, 2021). Further, Ollnova argues that ecobee's Ninth and Tenth Circuit caselaw are inapposite in light of the applicable Federal and Fifth Circuit caselaw that ecobee largely ignores. Ollnova notes that both the Federal Circuit and the Fifth Circuit hold that "[t]he specificity of the verdict is within the discretion of the trial judge." (Dkt. No. 260 at 3 (quoting *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996))). Ollnova argues that the Federal Circuit has further confirmed that "a trial court may, with proper instructions, present a patent case to a jury for a general verdict encompassing all of the issues of validity and infringement." (*Id.* at 4 (quoting *Structural Rubber Prod. Co. v. Park Rubber Co.*, 749 F.2d 707, 720 (Fed. Cir. 1984) (citation omitted))).

Concerning unanimity, Ollnova argues that ecobee waived its arguments by failing to object before or during trial that the verdict form would violate its right to a unanimous jury verdict. (*Id.*) According to Ollnova, ecobee simply argued that the single question would be "confusing to the jury and incomplete." (*Id.* (quoting Trial Tr. at 1212:12)). On the merits, Ollnova argues that ecobee's unanimity arguments fail because the jury was repeatedly instructed that its answers must be unanimous, and it was instructed to assess infringement on a claim-by-claim basis. (*Id.* at 5.) Ollnova argues that "[t]he only reasonable way for the jury to understand these instructions is that the jury was required to assess each patent claim individually ('claim-by-claim') and to unanimously agree on which claim or claims were infringed." (*Id.*) Finally, Ollnova argues that ecobee's unanimity arguments cannot be squared with its own proposal that the verdict form should have a single infringement question about each patent, and not a separate question for each asserted claim. (*Id.*)

In reply, ecobee contends that Ollnova never meaningfully disputes its central argument: that the verdict form was deficient because it did not announce a result for each individual cause

of action and counterclaim. (Dkt. No. 265 at 1.) ecobee argues that the fact that its supporting case law comes from the Ninth Circuit Court of Appeals is not a reason for its arguments to fail because the Tenth Circuit Court of Appeals also reiterates the same principles. (*Id.*)

According to ecobee, it did not waive its unanimity objection because it generally objected to the verdict form's inclusion of only a single infringement question that encompassed all four asserted patents. (*Id.* at 2.) On the merits, ecobee argues that the mere use of the words "unanimous" and "claim-by-claim" in the jury instructions did not cure the alleged error because "neither the instructions nor verdict form required unanimity on the requisite element for liability." (*Id.*) Further, ecobee contends that its own proposed jury instruction with a question for each patent, but not for each claim, "would not have run afoul of the requirement that each cause of action and counterclaim be addressed on the verdict form," since there would be a separate question for each count of infringement. (*Id.*)

In sur-reply, Ollnova notes that ecobee does not dispute that this Court in prior cases has rejected substantially similar arguments. *Optis*, No. 2:19-cv-00066-JRG, Dkt. No. 667; *Solas Oled Ltd. v. Samsung Display Co.*, No. 2:19-cv-00152-JRG, 2021 WL 4950308, at *23 (E.D. Tex. Oct. 25, 2021). Further, Ollnova argues that ecobee rests its arguments entirely on Ninth and Tenth Circuit caselaw involving non-patent cases but fails to cite any Federal Circuit and Fifth Circuit cases rejecting forms like the verdict at issue here. (Dkt. No. 272 at 1.) Finally, Ollnova argues that ecobee fails to meaningfully rebut that its unanimity arguments are waived and fail on the merits. (*Id.* at 1-2.)

The Court agrees with Ollnova. ecobee contends that to comply with Rule 48(b)'s requirement of jury unanimity, a general verdict must "at a minimum, 'announce[] the ultimate legal result of *each claim*.'" (Dkt. No. 247 at 4 (citing *Zhang v. Am. Gem Seafoods, Inc.*, 339 F.3d

1020, 1031 (9th Cir. 2003)). *Zhang*—an employment law case from the Ninth Circuit—does **not** state that the jury should return a separate verdict as to each claim, as ecobee contends. Rather, *Zhang* states: “A jury **may** return multiple general verdicts as to each claim, and each party, in a lawsuit, without undermining the general nature of its verdicts.” *Zhang*, 339 F.3d at 1031 (emphasis added). ecobee’s Ninth and Tenth Circuit caselaw is inapposite, especially in light of the Federal Circuit and Fifth Circuit caselaw that ecobee largely ignores.

“The specificity of the verdict is within the discretion of the trial judge.” *Hoechst Celanese Corp. v. BP Chemicals Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996). Indeed, as the Federal Circuit has stated, “a trial court may, with proper instructions, present a patent case to a jury for a general verdict encompassing **all of the issues of validity and infringement.**” *Structural Rubber Prods.*, 749 F.2d at 720 (emphasis added). It follows that if it is proper to present a case to a jury for a general verdict “encompassing all of the issues of validity **and** infringement,” then presenting a single question for infringement is also proper.

Concerning ecobee’s arguments related to unanimity, the Court finds that ecobee has waived its objections. During the Court’s formal charge conference with the parties—at which time the parties were to lodge all objections they had to the verdict form and jury instructions—Defendants provided only the following objection to the Court’s infringement question (Question No. 1):

ecobee objects to Question No. 1 as presented as **confusing to the jury** and **incomplete** in view of the instructions and evidence regarding patent-by-patent analysis. Moreover, Ollnova’s theories, both for infringement and damages, differ amongst the four patents as previously stated. A single question as presented is **likely to cause significant prejudice for the parties in post-trial proceedings**, including Rule 50(b) motions and appeal, if necessary. ecobee further notes that **the parties’ proposed questions separately listed the four asserted patents**. Accordingly, ecobee respectfully submits Question 1 should list each patent separately.

Trial Tr. at 1212:11-23. Notably, ecobee did *not* argue, as they do now that “[t]he verdict form . . . deprived ecobee of its right to a unanimous decision.” (Dkt. No. 247 at 6.) It is well-established that “a party may not object to an instruction on one ground at trial and then attempt to rely on a different ground on appeal.” *Wright v. Ford Motor Co.*, 508 F.3d 263, 272 (5th Cir. 2007) (citing *Coastal Distributing v. NGK Spark Plug Co.*, 779 F.2d 1033, 1039 (5th Cir.1986)). The same applies for motions for new trial, as ecobee seeks here. ecobee’s objection that the verdict form’s infringement question should be split into four, separate questions wholly failed to inform the Court as to any concerns regarding jury unanimity regarding any given claim. *See Palmer v. Hoffman*, 318 U.S. 109, 119, 63 S. Ct. 477, 483, 87 L. Ed. 645 (1943) (“In fairness to the trial court and to the parties, ***objections to a charge must be sufficiently specific to bring into focus the precise nature of the alleged error.*** Where a party might have obtained the correct charge by specifically calling the attention of the trial court to the error and where part of the charge was correct, he may not through a general exception obtain a new trial.”). Indeed, ecobee’s own proposed verdict form—proposing patent-by-patent instead of claim-by-claim infringement questions—would seem to run into the same concerns regarding jury unanimity now raised, further underscoring ecobee’s waiver.¹ *See Hoechst Celanese Corp. v. BP Chemicals Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (finding that plaintiff, “by its acquiescence in and indeed by its proposal of the verdict form [question disputed on appeal,] waived objection to the verdict form”). As such,

¹ ecobee’s argument that its own proposal “would not have run afoul of the requirement that each cause of action and counterclaim be addressed on the verdict form” is not persuasive. (*See* Dkt. No. 265 at 2.) By ecobee’s logic, even submitting the questions of infringement to the jury on a patent-by-patent basis could result in some jurors concluding that one claim of a patent was infringed with other jurors concluding that a different claim was infringed—resulting in the jurors answering “Yes” for infringement of that patent when the jury did not agree on which asserted claim was infringed. Again, given the Court’s instructions, the Court disagrees that this scenario was bound to occur in either scenario, whether infringement was presented as a single question or on a patent-by-patent basis. However, following ecobee’s logic to its natural conclusion does not avoid the concerns it raises regarding unanimity, thereby highlighting that these arguments are both unpersuasive and waived.

the Court finds that ecobee has waived the materially broader objection it now brings regarding jury unanimity.

Even if ecobee has not waived this objection by failing to raise it during trial, the Court finds that its concerns regarding the unanimity of the verdict form fail on the merits. It is black-letter law that “[a] jury always and necessarily makes findings (albeit unwritten) before it reaches its general verdict,” and that “a jury necessarily reaches a legal conclusion, *presumably in accord with the judge’s instructions on the law*, before it reaches its general verdict.” *R.R. Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1514 (Fed. Cir. 1984). ecobee completely ignores that the jury is presumed to have followed this Court’s jury instructions, which repeatedly make it clear that infringement is decided on a claim-by-claim basis and that the jury’s determinations must be unanimous.

For example, the Court instructed the jury that their verdict had to be unanimous:

A verdict form has been prepared for you, and you’ll take this verdict form with you to the jury room. And when you have reached a ***unanimous agreement*** as to your verdict, you will have your foreperson ***fill in the blanks in that form reflecting those unanimous decisions***, date it, sign it, and then advise the Court Security Officer that you have reached a verdict. Answer the questions as directed in the verdict form from the facts as you find them to be. Do not decide who you think should win this case, ladies and gentlemen, and then answer the questions to reach that result. Again, ***your answers and your verdict must be unanimous***.

Trial Tr. at 1220:11-21.

Answer each question in the verdict form based on the facts you find them to be, following the instructions the Court has given you on the law. Again, do not decide who you think should win this case and then answer the questions to reach that result. One more time let me remind you that ***your answers and your verdict in this case must be unanimous***.

Trial Tr. at 1303:24-1304:4.

The Court further instructed the jury that they were to go claim-by-claim and agree as to which claims were infringed. Trial Tr. at 1236:8-9 (“Now, you must determine ***separately for each***

asserted claim whether or not there is infringement”); Trial Tr. at 1232:7-8 (“The coverage of a patent is assessed on a claim-by-claim basis”); Trial Tr. at 1237:13-15 (“As with direct infringement, you must determine whether there has been active inducement on a claim-by-claim basis”).

To avoid any reasonable doubt, the verdict form specifically instructed the jury that damages could be awarded “ONLY as to any Asserted Claim that you [the jury collectively] have found to be infringed . . . AND not ineligible . . . AND not invalid.” (Dkt. No. 226 at 7.) The Court provided similar instructions in its charge to the jury:

Now, if you decide that any asserted claim has been infringed and is neither ineligible for patent protection or invalid, you’ll then need to decide what amount of money damages, if any, to be awarded to Ollnova to compensate it for that infringement.

Trial Tr. at 1229:8-12. Thus, ecobee’s argument that the jury could have answered “Yes” as to infringement “as long as each juror individually believed at least one . . . patent was infringed—absent the required . . . agreement as to the specific infringed patent(s)” is without merit.

B. Whether the Verdict Form Prejudiced ecobee

ecobee also contends that it was prejudiced by the verdict form, and thus it argues that a new trial is warranted. (Dkt. No. 247 at 7.) First, ecobee argues that the verdict form obscures the basis for the jury’s liability finding, forcing ecobee to approach post-trial arguments without knowing which patents formed the basis for the jury’s infringement and damages decisions. (*Id.*) According to ecobee, Ollnova has an “unfair advantage” in post-trial briefing because it may attempt to overturn the jury’s invalidity finding concerning the ’282 Patent with precision, while ecobee is forced to address every patent to overturn the infringement finding. (*Id.* at 7-8.) Second, ecobee contends that the verdict form vitiates estoppel protections by failing to identify which issues were decided as part of the jury’s infringement finding. (*Id.* at 8.) For example, ecobee

contends that the jury might have decided that ecobee infringed the '495 Patent, but not the '371 Patent, in which case, ecobee would be entitled to estoppel, but would not know on which points. Finally, ecobee argues that the verdict form violated its Due Process Rights under the Fifth Amendment of the Constitution. (*Id.* at 8-9.) Specifically, ecobee contends that it has been deprived of its property without notice because it does not know which acts constituted infringement.

In response, Ollnova argues that ecobee fails to identify any prejudice that would warrant a new trial. (Dkt. No. 260 at 6.) It argues that Ollnova was not given an “unfair advantage” to overturn the invalidity findings and further that ecobee’s concern about Ollnova’s “unfair advantage” is moot because Ollnova is not seeking to overturn the invalidity of the '282 Patent. Ollnova also asserts that ecobee’s argument is contrary to well-settled law that a general verdict will be upheld “if there was sufficient evidence to support any of the plaintiff’s alternative factual theories,” on the assumption that “the jury considered all the evidence and relied upon a factual theory for which the burden of proof was satisfied.” (*Id.* (quoting *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 849 (Fed. Cir. 2010))). In other words, Ollnova argues that ecobee having to address all patents in a JMOL motion is not a basis for a new trial. Ollnova also notes that ecobee does not identify any authority supporting an award of new trial based on a purported “unfair advantage” created by a general verdict. (*Id.*)

Ollnova further argues that ecobee does not identify any authority that would support a new trial based on a general verdict purportedly undermining collateral estoppel effects or for allegedly violating Due Process rights. (*Id.* at 6-7.) These arguments, according to Ollnova, are “novel,” “contrary to the well-settled law approving of general verdicts,” and should be rejected for the same reasons as ecobee’s previous arguments. (*Id.*) ecobee does not address any of these

arguments in its reply, instead focusing exclusively on its unanimity and prejudgment interest arguments.

The Court agrees with Ollnova. As explained, “[t]he specificity of the verdict is within the discretion of the trial judge,” (*Hoechst Celanese Corp. v. BP Chemicals Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996)), and it is well-settled that general verdicts may be used in patent cases. First, the Court is not persuaded that the verdict form gives Ollnova an “unfair advantage.” *ecobee* notes the differences between validity and infringement on the verdict form but ignores the fact that both parties have an incentive to overturn the jury’s validity findings and are both equally “advantaged” with respect to the validity question. While the ’282 Patent was found to be invalid, the ’495 Patent was not. Further, while *ecobee* makes its so-called “advantage” argument as to the specificity of the validity question concerning the ’495 Patent, Ollnova declines similarly to challenge the invalidity of the ’282 Patent. Accordingly, it is unclear exactly how Ollnova has an “unfair advantage.” Regardless, *ecobee* does not provide any legal basis for overturning the verdict and requiring a new trial based on “prejudice.”

Next, *ecobee* fails to support its argument with any legal authority that the Court should overturn the verdict in this case on the grounds that it denies *ecobee* estoppel protections and violates its Due Process rights. As previously explained herein, general verdicts like the one used in this case may be used in patent cases. The Court finds no compelling reason to order a new trial on these grounds.²

C. *ecobee*’s Remaining Arguments for New Trial

ecobee argues that granting any one of its three JMOL/New Trial Motions (Dkt. Nos. 243, 244, and 246), in whole or in part, will require a new trial on any surviving infringement and

² *ecobee*’s decision to drop these arguments entirely from its reply brief in the face of Ollnova’s arguments that *ecobee* could not support its arguments with any authority is a testament to the weakness of these arguments.

damages issues. (*Id.* at 9.) For example, ecobee argues that “if ecobee were to prevail on JMOL or appeal on its patent ineligibility argument for the ’495 patent, but not prevail on its other JMOL motions, it would be necessary to conduct a new trial on infringement and damages on the ’887 and ’371 patents, since it is possible that the jury verdict on infringement was based on the damages figure that Ollnova’s expert, Mr. Bergman, presented for the ’495 patent alone. (*Id.* at 10.) Further, ecobee contends that retrying damages alone without retrying infringement would not be possible, as the damages jury would not know which patent(s) were infringed. (*Id.*)

In response, Ollnova argues that ecobee is incorrect that a new trial is needed on all issues if the Court grants any single issue raised by ecobee. (Dkt. No. 260 at 7.) Since “[t]he critical question is whether the evidence, taken as a whole, was sufficient to support the jury’s verdict,” *see Northpoint Tech., Ltd. v. MDS Am., Inc.*, 413 F.3d 1301, 1310-11 (Fed. Cir. 2005), Ollnova argues that the Court may uphold the verdict so long as there was sufficient evidence to support a finding of infringement of “any” patent. (*Id.*) Accordingly, Ollnova contends that even if the Court were to grant JMOL of noninfringement of any asserted claim, there is substantial evidence to uphold the jury’s verdict as to the other asserted patent claims such that a new trial is not warranted. (*Id.* (citing *Walther v. Lone Star Gas Co.*, 952 F.2d 119, 126 (5th Cir. 1992))). Concerning ecobee’s argument that a retrial on damages would require a retrial of infringement, Ollnova argues that its damages theory presented at trial based on comparable licenses could be supported even if the jury found infringement of just a single patent. (*Id.*) The parties’ reply and sur-reply briefs do not substantially add to these arguments.

This argument by ecobee is conditioned on the Court granting at least one of its Motions for JMOL, at least in part. However, the Court has not granted any of ecobee’s motions for JMOL, and this issue is moot.

D. Prejudgment Interest

Even if a new trial is not granted, ecobee argues that the judgment should be amended to set the start date for any prejudgment interest as of March 8, 2022, the filing of Ollnova's complaint. (Dkt. No. 247 at 11.) According to ecobee, damages did not begin to accrue until this date. ecobee notes that Ollnova alleged only indirect infringement for the asserted claims of the '495 Patent and one asserted claim of the '371 Patent, and since Ollnova did not provide notice of these patents prior to this litigation, its damages for indirect infringement of these claims cannot begin to accrue prior to the filing of the complaint. (*Id.*) Concerning Ollnova's claims for direct infringement, ecobee contends that Ollnova's failure to mark precludes pre-complaint damages and interest.

In response, Ollnova argues that the Final Judgment should not be modified because it correctly stated that prejudgment interest accrues "from the date [] the infringement began." (Dkt. No. 260 at 8 (quoting Dkt. No. 237 ¶¶ 3, 4)). Ollnova notes that this language from the Final Judgment tracks Federal Circuit caselaw. For example, Ollnova notes that in *Comcast IP Holdings LLC v. Sprint Commc'ns Co., L.P.*, 850 F.3d 1302 (Fed. Cir. 2017), the jury awarded a lump sum royalty running from a 2006 hypothetical negotiation, and defendant Sprint complained that, because two of the three infringed patents did not issue until six years after the 2006 hypothetical negotiation, it was improper to award prejudgment interest starting from 2006. However, the Federal Circuit disagreed and considered that the jury of was told to use the book of wisdom, "looking forward in time from the date of the first hypothetical negotiation to account for 'all information that would have been relevant to the parties in coming to and arriving at a deal.'" *Id.* at 1314. Accordingly, Ollnova argues, the Federal Circuit's ruling concerning prejudgment interest was identical to this Court's ruling in the Final Judgment: "Prejudgment interest runs from the earliest date infringement for any patent issued at the time of the hypothetical negotiation." *Id.* at

1315. Ollnova notes that the jury here decided to award the damages in the form of a lump sum royalty, meaning that ecobee owed Ollnova \$11.5 million as of the April 2012 hypothetical negotiation. Since the April 2012 hypothetical negotiation coincides with when infringement began, *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 76 (Fed. Cir. 2012), Ollnova argues that interest properly accrues starting in April 2012, when ecobee was to have fully paid the lump sum amount of \$11.5 million.

In reply, ecobee argues that Ollnova now seeks interest for periods prior to the statute of limitations' cut-off (March 8, 2016). (Dkt. No. 265 at 4.) According to ecobee, Ollnova overreaches by misinterpreting the *Comcast* decision. (*Id.*) ecobee contends that *Comcast* is inapposite because it did not involve any disconnect between the damages period/statute of limitations and the hypothetical negotiation (i.e., damages there began accruing within the six years prior to the filing of the complaint). (*Id.*) Since interest runs from the dates that the damages started to accrue, ecobee argues that the earliest date from which interest can run is the date that damages started to accrue (March 8, 2016). (*Id.*)

While, the Court finds that it is not necessary to amend the Final Judgment, the Court does not embrace fully Ollnova's interpretation of the relevant authority on damages and interest. The Patent Act does not expressly provide the time period for calculating interest. *See Transmatic, Inc. v. Gulton Indus., Inc.*, 180 F.3d 1343, 1347 (Fed. Cir. 1999) (holding that 35 U.S.C. § 284 "only prescribes damages and interest as a remedy for patent infringement" and does not state "[w]hen interest beings or ends"). Instead, 35 U.S.C. § 284 awards a patentee "damages adequate to compensate for the infringement . . . together with interest and costs as fixed by the court." The Supreme Court has held that § 284 thus "gives a court general authority to fix interest and costs." *Devex*, 461 U.S. at 653. Typically, this general authority should "ensure that the patent owner is

placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement.” *Id.* at 655; *see also Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986) (acknowledging that the award of prejudgment interest should be from the date of infringement to the date of final judgment, “since only such award will satisfy ‘Congress’ overriding purpose [in section 284] of affording patent owners complete compensation” (quoting *Devex*, 461 U.S. at 655)). However, the purpose of prejudgment interest is to compensate the patent owner for infringement and “can apply only to the actual damages portion of the judgment.” *Imperium IP Holdings (Cayman), Ltd. v. Samsung Elecs. Co., Ltd.*, No. 4:14-CV-00371, 2017 WL 1716589, at *3 (E.D. Tex. Apr. 27, 2017) (citing *Beatrice Foods Co. v. New Eng. Printing & Lithographing Co.*, 923 F.2d 1576, 1580 (Fed. Cir. 1991)).

Actual patent infringement damages are limited by 35 U.S.C. § 286. This statute provides that “no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action.” Accordingly, the Court instructed the jury that the damages in this case began no earlier than March 8, 2016. Trial Tr. at 1257:1-9. Prejudgment interest cannot extend prior to the damages period. The Court also finds that whether or not the jury awarded a lump sum or a running royalty does not control.³

Nonetheless, the Court is not persuaded that the Final Judgment should be amended as ecobee contends. The Final Judgment provides the following:

³ Here, and in its response to ecobee’s Motion for Judgment as a Matter of Law of No Damages or, in the Alternative, for a New Trial Regarding Damages (Dkt. No. 246), Ollnova seems to argue that the statutory limits to damages under 35 U.S.C. § 286 and 287 somehow do not apply when the jury awards damages in the form of a lump sum. This interpretation seems to be born out of the misunderstanding that the jury awards what was “owed . . . as of the [] hypothetical negotiation” (Dkt. No. 260 at 9) and that the amount is “not tied to units sold or time frame” (Dkt. No. 259 at 18). However, the jury’s award of \$11.5 million does not necessarily represent the “amount paid at the 2012 hypothetical negotiation” (*id.*) as Ollnova contends, but rather is the amount of money “to compensate Ollnova for any infringement that [the jury] may find” *during the damages period*. Further, a lump sum award differs from a running royalty in that a lump sum award compensates Ollnova for future damages in addition to past damages. It does not allow Ollnova to reach beyond the statutory limits for its past damages, and it does not moot the requirements of the marking statute.

Pursuant to 35 U.S.C. § 284 and Supreme Court guidance that “prejudgment interest shall ordinarily be awarded absent some justification for withholding such an award,” the Court awards pre-judgment interest to Plaintiff to be recovered by Plaintiff from Defendant and *applicable to all sums awarded herein*, calculated at the five-year U.S. Treasury Bill rate, compounded monthly, adjusting the effective rate with each and every change in said five-year U.S. Treasury Bill rate from the date [] the infringement began;


(Dkt. No. 237 at ¶ 4.) “[F]rom the date [] the infringement began” does not mean the agreed upon hypothetical negotiation date. It refers to the infringement for which the “sums [were] awarded”—*i.e.*, the infringement during the applicable damages period, as instructed by the Court. Accordingly, the Court finds that prejudgment interest accrues from March 8, 2016. The Final Judgment sufficiently ties the prejudgment interest to the damages accrued in this case. Given this language, and the Court’s guidance, there is no need to amend the Final Judgment.

Concerning ecobee’s contentions that interest could not have accrued prior to March 2022, the Court finds that ecobee merely repeats arguments that the Court has already rejected in ecobee’s Motion for Judgment as a Matter of Law of No Damages or, in the Alternative, for a New Trial Regarding Damages (Dkt. No. 246). Accordingly, the Court will not amend the Final Judgment on these grounds for the same reasons as stated in the Court’s Order denying that motion.

IV. CONCLUSION

For the foregoing reasons, the Court finds that ecobee’s Motion should be and hereby is **DENIED**.

So ORDERED and SIGNED this 5th day of September, 2024.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE

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

OLLNOVA TECHNOLOGIES LIMITED,	§	
	§	
<i>Plaintiff,</i>	§	
	§	
v.	§	CIVIL ACTION NO. 2:22-CV-00072-JRG
	§	
ECOBEE TECHNOLOGIES ULC d/b/a ECOBEE,	§	
	§	
<i>Defendant.</i>	§	

ORDER ON PRETRIAL MOTIONS AND MOTIONS *IN LIMINE*

The Court held a Pretrial Conference in the above-captioned matter on Thursday, August 10, 2023 regarding pending pretrial motions and motions *in limine* (“MILs”) filed by Plaintiff Ollnova Technologies Limited (“Ollnova”) and Defendant Ecobee Technologies ULC d/b/a ecobee (“ecobee”) (collectively with Ollnova, the “Parties”). (Dkt. Nos. 122, 123, 124, 125, 127, 128, 129, 130, 191, 192, and 193.) This Order memorializes the Court’s rulings on the aforementioned pretrial motions and MILs as announced from the bench and into the record, including additional instructions that were given to the Parties. While this Order summarizes the Court’s rulings as announced into the record during the pretrial hearing, this Order in no way limits or constrains such rulings from the bench. Accordingly, it is hereby **ORDERED** as follows:

PRETRIAL MOTIONS

- 1. ecobee's Motion for Partial Summary Judgment as to Pre-Notice Damages (Dkt. No. 122) and Ollnova's Motion for Partial Summary Judgment on Defendant's Marking Defense (Dkt. No. 127)**

The motions were **DENIED**. (Dkt. No. 212 at 42:21.) The Court found that Ollnova had not shown ecobee failed to meet its burden under *Arctic Cat*, and ecobee had not foreclosed all factual disputes as to the Siemens APOGEE system practicing the patents. (*Id.* at 42:9–20.)

- 2. ecobee's Motion to Exclude Portions of Expert Testimony of Dr. Vijay Madisetti Pursuant to *Daubert* (Dkt. No. 125)**

The motion was **DENIED**. (Dkt. No. 212 at 51:2.) ecobee's complaints as to Dr. Madisetti's opinions are adequately addressed through robust cross examination. (*Id.* at 50:18–51:1.)

- 3. ecobee's Motion for Summary Judgment of Invalidity of U.S. Patent No. 7,860,495 Under 35 U.S.C. §101 (Dkt. No. 123)**

The motion was **DENIED**. (Dkt. No. 212 at 69:9.) The Court found that there are outstanding issues of material fact that preclude a grant of summary judgment. (*Id.* at 69:5–13.) The Court also found that the Court's prior ruling that claim 1 of the '495 Patent is directed to an abstract idea should not be disturbed. (*Id.* at 69:14–22.)

- 4. ecobee's Motion to Exclude Portions of Expert Testimony of Jim W. Bergman Pursuant to *Daubert* (Dkt. No. 124)**

The motion was **DENIED**. (Dkt. No. 212 at 91:9–11.) The complaints with Mr. Bergman's opinions are adequately addressed through robust cross examination. (*Id.* at 91:9–16.)

- 5. Ollnova's Motion to Strike Evidence and Exclude Opinions of Shoukri Souri (Dkt. No. 128)**

The motion was **GRANTED** and the Court **STRUCK** paragraphs 107–111 of Dr. Souri's rebuttal expert report. (Dkt. No. 212 at 117:5–118:4.) Both ecobee and Ollnova argued, in

essence, a claim construction dispute regarding the proper scope of claim 1 of the '282 Patent. (*Id.* at 113:22–114:1, 116:13–18.) The Court, having confirmed the existence of an actual dispute regarding the proper scope of the recited term “[a]n automation component” in the preamble of claim 1, construed the term. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360–62 (Fed. Cir. 2008). The Court finds that, had this matter come before the Court during the claim construction process, the Court would have held (and now holds) that the general rule under *Baldwin* applies, such that the article “a” or “an” means “one or more.” *See Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008). Accordingly, the Court found paragraphs 107–111 of Dr. Souri’s rebuttal expert report inconsistent with that construction. Further, ecobee’s Cross Motion to Strike Evidence and Exclude Opinions of Dr. Vijay Madiseti (Dkt. No. 150), contained within its opposition to Ollnova’s motion, was **DENIED**. (Dkt. No. 212 at 118:5–21.)

6. Ollnova’s Motion to Strike Evidence and Exclude Opinions of Shoukri Souri and Todd Schoettelkotte (Dkt. No. 129)

The motion was **DENIED**. (Dkt. No. 212 at 129:13–15.) The Court found that Dr. Souri’s opinions offered in rebuttal to Ollnova’s allegations of specific non-infringing alternatives did not constitute an improper late disclosure. (*Id.* at 128:17–129:12.)

7. Ollnova’s Motion for Partial Summary Judgment of No Invalidity of U.S. Patent No. 7,746,887 (Dkt. No. 130)

The motion was **DENIED**. (Dkt. No. 212 at 136:7.) The Court found there to be underlying issues of fact that preclude granting summary judgment. (*Id.* at 135:16–136:2.)

MOTIONS IN LIMINE

Further to the Court's Standing Order on Motions *In Limine* issued May 19, 2023, it is **ORDERED** that the Parties, their witnesses, and counsel shall not raise, discuss, or argue the following before the venire panel or the jury without prior leave of the Court:

I. PLAINTIFF'S MOTIONS *IN LIMINE* (Dkt. No. 193)

Plaintiff's MIL 1 **Confidential documents restrict by protective order in other litigation.**

The MIL was **GRANTED** as clarified in the record. (Dkt. No. 212 at 142:1–9.) The Court will be an active gatekeeper as to inquiries of Mr. Bergman about his participation, available access to information, or related role in the Carrier litigation. (*Id.* at 142:10–14.)

Plaintiff's MIL 2 **No evidence, testimony, or argument regarding comparison of ecobee non-accused products to the patents-in-suit or accused products.**

The MIL was **GRANTED AS AGREED**. (Dkt. No. 212 at 138:4–6.) The MIL, as agreed, was announced into the record and counsel for both parties confirmed this agreement. (*Id.* at 137:21–138:3.)

Plaintiff's MIL 3 **Other litigation.**

The MIL was **DENIED**. (Dkt. No. 212 at 148:6–8.) The Court noted that the MIL is subsumed by the Court's standing MIL no. 13. (*Id.* at 146:3–147–19.)

Plaintiff's MIL 4 **No evidence, testimony, or argument regarding a party's prior or current law firm's or the party's retention of the same expert in other litigation.**

The MIL was **GRANTED AS AGREED** and as clarified in the record. (Dkt. No. 212 at 149:10–12.) The MIL, as agreed, was announced into the record and counsel for both parties confirmed this agreement. (*Id.* at 149:1–9.)

II. DEFENDANT'S MOTIONS *IN LIMINE* (Dkt. No. 191)

Defendants' MIL 1 **Preclude evidence, testimony, argument, or other comments concerning IPR proceeding No. IPR2023-00082 involving U.S. Patent**

No. 7,860,495, including any opinion, finding, or decision by the PTAB in such proceeding.

The MIL was **DENIED**. (Dkt. No. 212 at 154:8–9.) The Court noted that the MIL is subsumed by the Court’s standing MIL no. 6. (*Id.* at 153:6–154:13.)

Defendants’ MIL 2 **To preclude evidence, testimony, argument, or other comments concerning the “Patent Rights Fee” set forth in the document titled “Escrow Agreement” produced by Ollnova bearing Bates numbers Ollnova-Eco-0001588–00001618.**

The MIL was **DENIED**. (Dkt. No. 212 at 159:11–12.)

Defendants’ MIL 3 **To preclude evidence, testimony, argument, or other comments concerning the actual or apparent subjective intent, motivations and/or state of mind of any third party, including, without limitation, such third party’s subjective intent, motivations and/or state of mind in connection with any contract.**

The MIL was **DENIED**. (Dkt. No. 212 at 163:2–3.) The Court noted that this MIL is subsumed by the Federal Rules of Evidence. (*Id.* at 162:12–22.)

III. JOINT MOTIONS *IN LIMINE* (Dkt. No. 192)

Agreed MIL 1 **No evidence, testimony, or argument directed to the law firms retained by the parties, including Russ, August & Kabat LLP’s (“RAK”) prior retention by Ollnova, RAK’s subsequent withdrawal from this action as counsel of record for Ollnova, the fact that BC Law Group, P.C.’s attorneys in this matter were previously employed by attorneys at RAK or any speculation about the circumstances surrounding these events, or ecobee’s current or prior retention of Venable LLP and/or its attorneys.**

Agreed MIL 2 **No evidence, testimony, argument, or suggestion that any ecobee accused product is covered by any Generac or ecobee patent. For clarity, this does not preclude ecobee from generally discussing the fact that it has been issued patents or the general subject matter covered by Generac’s or ecobee’s patents.**

Agreed MIL 3 **Neither the parties, their witnesses nor their counsel shall present evidence, testimony, attorney argument, or other comments concerning Generac Holdings Inc., including without limitation the acquisition of ecobee by Generac Holdings Inc., and the amount of money and/or other consideration involved in such acquisition. For clarity, the parties are permitted to ask jurors during voir dire**

questions about their knowledge and potential relationship to Generac Holdings Inc., but the parties shall not reference the amount of money and/or other consideration involved in the acquisition of ecobee by Generac Holdings Inc. during voir dire.

The Court **ACCEPTED** and **ADOPTED** the agreed-upon MILs set forth in the Parties' submission to the Court (Dkt. No. 192). (Dkt. No. 212 at 164:6–8.)

If the Parties desire to introduce any evidence or argument or otherwise raise or mention any of the foregoing subjects addressed by the MILs set forth herein and before the jury, they must first approach the bench and obtain leave from the Court. This also includes all MILs in the Court's Standing Order on Motions *In Limine*.


All remaining MILs not addressed herein or otherwise addressed by the Court on the record are **DENIED-AS-MOOT**.

RESOLUTION OF REMAINING PRETRIAL ISSUES

As for trial exhibits, the Parties represented that they had reached resolution on disputed exhibits whereby Ollnova withdrew its objections to ecobee's exhibits DTX-40, 41, 42, 67, 69, 75, 78, 79, 80, 86, 109, 137, and 201. (Dkt. No. 212 at 164:12–17.) The Court **PRE-ADMITTED** ecobee's exhibits without objection from Ollnova. (*Id.* at 165:7–10.) Ollnova represented that it is withdrawing exhibits PX-14, 26, 76, and 79. (*Id.* at 165:12.) The Parties agreed that PX-15 would be split into seven individual exhibits, subject to the Court's approval, which the Court **GRANTED**. (*Id.* at 168:20–23.) ecobee withdrew its objections to Ollnova's remaining exhibits, except for PX-35. (*Id.* at 168:14–19, 169:2–5.) Concerning PX-35, the parties agreed that Ollnova does not seek pre-admission of schedules 1 through 3 of the Bergman expert report as exhibits, and that schedules 8 through 12 can be presented to the jury as exhibits as summaries of voluminous information. (*Id.* at 169:18–25.) The Court **DENIED** Ollnova's

request to pre-admit schedules 4 through 7, finding the same appropriate for use as demonstratives but not as exhibits. (*Id.* at 174:19–22, 175:14–19.)

So ORDERED and SIGNED this 22nd day of August, 2023.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE

of the § 101 analysis or that claim construction is not required to resolve the question of eligibility.

(See Dkt. No. 45 at 3.)

II. LEGAL STANDARD

A. Rule 12(b)(6)

Under Federal Rule of Civil Procedure 12(b)(6), a court can dismiss a complaint that fails to state a claim upon which relief can be granted. To survive dismissal at this early stage, a complaint must state enough facts such that the claim to relief is plausible on its face. *Thompson v. City of Waco*, 764 F.3d 500, 502 (5th Cir. 2014) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). A claim is facially plausible when the plaintiff pleads enough facts to allow the Court to draw a reasonable inference that the defendant is liable for the misconduct alleged. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). The Court accepts well-pleaded facts as true and views all facts in the light most favorable to the plaintiff, but is not required to accept the plaintiff's legal conclusions as true. *Id.*

The Court must limit its review “to the contents of the pleadings.” *Collins v. Morgan Stanley Dean Witter*, 224 F.3d 496, 498–99 (5th Cir. 2000). However, documents attached to a defendant's motion to dismiss are considered a part of the pleadings if they are referred to in the complaint and are central to the claim. *Id.*

B. Patent Eligibility

The Court will grant a motion to dismiss for lack of patent eligibility under 35 U.S.C. § 101 only where “there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 765 (Fed. Cir. 2019).

The Court determines whether patent claims cover ineligible subject matter using a two-step analytical framework set out by the Supreme Court of the United States in *Alice Corp. v. CLS*

Bank Int'l, 573 U.S. 208 (2014). At the first step, the Court evaluates whether the claims are directed to ineligible subject matter, such as an abstract idea. *Id.* at 217. To do so, the Court looks to the claims’ “character as a whole.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). While all claims embody abstract ideas and other ineligible subject matter at some level, the Court’s task is to examine “whether the claims [] focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).

At *Alice* step two, if the claims are directed to ineligible subject matter, the Court then determines whether the claims contain an “inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Alice*, 573 U.S. at 217–18 (internal citations and quotes omitted). “[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces,” *BASCOM Glob. Internet Svcs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–50 (Fed. Cir. 2016), but must be more than mere “well-understood, routine, conventional activit[ies].” *Alice*, 573 U.S. at 225 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012)). “While the ultimate determination of eligibility under § 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1127–28 (Fed. Cir. 2018). “The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

III. DISCUSSION

ecobee contends that the Asserted Patents are ineligible under 35 U.S.C. § 101 because they fail both steps of the *Alice* framework. The Court proceeds under the two-part test outlined in *Alice*.

A. The '282 Patent

The '282 Patent is entitled “Method and Device to Manage Power of Wireless Multi-Sensor Devices” and was issued on July 17, 2012 from an application filed March 18, 2009 and claiming priority to a provisional application filed March 19, 2008. Claim 13 of the '282 Patent recites:

An automation component configured for wireless communication within a building automation system, the automation component comprising:

a multi-sensor package configured to detect a plurality of variables and generate sensor data for each detected variable;

a wireless communications component;

a processor in communication with the wireless communications component and the 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 a wake-up command from a second automation component;

communicate stored sensor data related to the sensor data in control at a second automation component;
and

receive a power-down command from the second automation component.

(Dkt. No. 19-1 at 15; '282 Patent at 11:57-12:12².)

First, ecobee argues that claim 13 of the '282 Patent recites the abstract idea of “receiving a request for information from a source, communicating information in response to the request, and then ending the communication.” (Dkt. No. 25 at 16.) ecobee contends that this abstract idea can be performed in the human mind or by a human using pen and paper, providing the analogy of “one person (‘a second automation component’) calling a friend to ask about the weather (‘receive a wake-up command’), receive the requested information from the friend who knows the current weather (‘communicate stored sensor data’), and then letting the friend know nothing else is needed (‘receive a power-down command’).” (*Id.*)

Ollnova argues that the claims of the '282 Patent are directed to concrete improvements to an automation component comprising a multi-sensor package and wireless communications component. (Dkt. No. 38 at 4.) Ollnova identifies the claim elements of a “multi-sensor package” and “wireless communications component” as important to the operation of the claimed building automation component. (*Id.* at 5–6.) Ollnova also identifies specific issues that the '282 Patent endeavors to address, including “power consumption and bandwidth efficiency,” noting that “some of the sensors within the sensor package 220 may require a great deal of power to operate,” and to this end, “the '282 Patent provides that ‘[i]n order to increase the life of the battery 222, the high power requirement sensors within the sensor package 220 may be configured to operate periodically or on a set schedule.’” (*Id.* at 6.) Ollnova then points out that “claim 13 recites that the processor of the building automation component is configured to: (1) ‘receive a wake-up command from a second automation component’; (2) ‘communicate stored sensor data related to the sensor data in control at a second automation component’; and (3) ‘receive a power-down

² The '282 Patent is attached to the original Complaint as Dkt. No. 1-1 and the Amended Complaint as Dkt. No. 19-1, but will hereinafter be cited as “'282 Patent.”

command from the second automation component.” (*Id.* at 7.) Ollnova argues that such communications enable the claimed automation component to change its functioning state, and that this “is directly tied to the ’282 Patent’s aim at improving power consumption for the claimed automation component and improving bandwidth capacity for the overall building automation system.” (*Id.* at 7–9; Dkt. No. 48 at 4.)

The Court agrees with Ollnova that claim 13 of the ’282 Patent is not directed to an abstract idea at *Alice* step one, and instead is directed to technological improvements to building automation systems. Examining the “focus” of the claims and their “character as a whole” reveals that claim 13 is directed to specific issues of wireless communications in a building automation system where an automation component having a multi-sensor package is operable to receive a wake-up command, communicate stored sensor data, and receive a power-down command.

The claim language governs § 101 analysis—however, the specification can assist in determining whether claims are directed to an abstract idea. *See In re TLI Commc’ns LLC Patent Litigation*, 823 F.3d 607, 611 (Fed. Cir. 2016). Indeed, the patent specification can be considered on a motion to dismiss. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1129 (Fed. Cir. 2018). Considering the specification, claim 13 of the ’282 Patent embodies technology-based solutions that improve the power conservation of devices communicating wirelessly in building automation systems. (Dkt. No. 38 at 6–9.) The specification of the ’282 Patent recognizes that wireless devices can be used in building automation systems instead of wired devices “without incurring additional wiring or installation costs,” but that “[w]ireless devices for use within the building automation system must operate for an extended period on a limited battery charge.” (’282 Patent at 2:14–28.) The ’282 Patent teaches that “[w]ireless devices and/or automation components may be configured to optimize radio and/or data communications

to extend battery life,” and the “wake-up” and “power-down” commands as recited in claim 13 are tied to “power saving.” (’282 Patent at 10:11–29.)

ecobee’s human-based analogy oversimplifies the technical elements recited in claim 13. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).³ ecobee characterizes the claimed “wake-up” command as generic, and faults Ollnova for not identifying anything in the specification specifying what this command must be while at the same time casting Ollnova’s illustration of power savings and freeing of bandwidth discussed in the specification as an attempt to read in embodiments from the specification into the claims. (Dkt. No. 45 at 3–5.) However, the language of the claims themselves (“receive a wake-up command . . . communicate stored sensor data related to the sensor data in control . . . and receive a power-down command”) clearly relate to power conservation and freeing of bandwidth. Rather than importing embodiments from the specification into the claims, Ollnova’s discussion of “low-power” and “active” states serve to provide further details of how the claimed invention solves the technical problem of extending operating life of wireless devices. (Dkt. No. 38 at 7; Dkt. No. 48 at 3–5.) For example, based on the plain language of the claim (“power-down command”), the component could turn off completely, or, based on the specification’s description of that term, the component could simply enter a “low-power” state, but in either case would conserve power.

ecobee argues that Ollnova improperly shifts the focus from patent eligibility to novelty by referencing the prosecution history of the ’282 Patent to demonstrate that the claimed “multi-sensor package” was a key distinction over the prior art. (Dkt. No. 45 at 4.) While “[t]he search for a § 101 inventive concept is [] distinct from demonstrating § 102 novelty,” *Synopsys, Inv. v.*

³ ecobee’s analogy also ignores the claim requirement that the communicated sensor data is “in control at [the] second automation component,” further diminishing the usefulness of its analogy to “a friend who knows the current weather,” but the weather at the friend’s location is not controlled by that friend. (*See* Dkt. No. 25 at 16.)

Mentor Graphics Corp., 839 F.3d 1138, 1151 (Fed. Cir. 2016), the search for an “inventive concept” does not control the *Alice* step one inquiry. “Under *Alice* step one, we consider ‘what the patent asserts to be the “focus of the claimed advance over the prior art.”’” *CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091, 1097 (Fed. Cir. 2021). The prosecution history can be considered in this regard. See *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1372–73 (Fed. Cir. 2020). And to this end, the claim is to be read as a whole, considering all the claimed elements and the interactions between them. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). The Court is persuaded that, when considered as a whole, including the “multi-sensor package” and wireless communications of the claimed automation component (e.g., being programmed to “receive a wake-up command . . . communicate stored sensor data related to the sensor data in control . . . and receive a power-down command”), claim 13 is “directed to” the non-abstract use of “wake-up” and “power-down” commands for a building automation component with a multi-sensor package and wireless communications capabilities. (Dkt. No. 48 at 5 (citing *Enfish*, 822 F.3d at 1335).)

Also, to resolve the § 101 inquiry, it is helpful “to examine earlier cases in which similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.” *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016). Ollnova argues that claim 13 of the ’282 Patent is analogous to *CardioNet LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1368 (Fed. Cir. 2020) and *Google LLC v. EcoFactor, Inc.*, No. 21-CV-03220-HSG, 2022 WL 1443235, *4–11 (N.D. Cal. May 6, 2022). (Dkt. No. 38 at 4–8.) ecobee points out that Ollnova “fails to provide a direct comparison of its claims to those at issue in *Google*.” (Dkt. No. 45 at 2.)

While at first glance the subject matter of the claims at issue in *Google* and claim 13 of the '282 Patent are similar because they relate to building automation systems, we agree with *ecobee* that claim 13 of the '282 patent is not analogous to *Google* because unlike “requiring the determination of whether to **direct the . . . system to pre-cool** the structure based on thermal mass calculation[s],” and “us[ing] geo-positioning data . . . to determine if a building is occupied and **readjust the system’s temperature** as needed,” (Dkt. No. 45 at 2 (emphases added)), claim 13 only requires an automation component be programmed to “receive a wake-up command . . . communicate stored sensor data . . . and receive a power-down command . . .” *Ollnova* analogizes the claimed “wake-up command” and “power-down command” to only one part of the claims at issue in *Google* (the ability to “receive mobile device geolocation data signals to detect and predict occupancy and adjust the HVAC system”). (Dkt. No. 38 at 8.) However, this analogy is strained, and claim 13 of the '282 Patent lacks elements similar to other important parts of the *Google* claims, such as calculating a predicted rate of change based on stored temperature, status of the HVAC system, and outside temperature and then determining whether to direct the HVAC to pre-cool the structure.⁴

However, the Court finds *Ollnova*’s analogy to *CardioNet* more appropriate. (See Dkt. No. 38 at 4; Dkt. No. 48 at 7.) In *CardioNet*, the Federal Circuit found that the claim at issue was directed to an improved cardiac monitoring device and not to an abstract idea because it “focus[ed] on a specific means or method that improves’ cardiac monitoring technology” and the claim was not “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *CardioNet*, 955 F.3d at 1368 (quoting *McRO*, 837 F.3d at 1314). Like

⁴ In *Google LLC v. EcoFactor, Inc.*, No. 21-CV-03220-HSG, 2022 WL 1443235 (N.D. Cal. May 6, 2022), that district court found that claim 1 of the '186 patent was directed to the non-abstract improvement of using thermal mass calculations and predicted rate of change in the technological process of directing programmable HVAC thermostats, not an abstract result that merely invokes generic processes or machinery.

the claims in *CardioNet*, claim 13 of the '282 Patent does not merely invoke generic processes and machinery, but instead is directed to specific issues of wireless communications in a building automation system where an automation component having a multi-sensor package is operable to receive a wake-up command, communicate stored sensor data, and receive a power-down command.

In sum, the Court finds that claim 13 of the '282 Patent is not directed to an abstract idea at *Alice* step one. Since claim 13 of the '282 Patent is not directed to an abstract idea under *Alice* step one, and the Court need not reach *Alice* step two.

B. The '887 Patent

The '887 Patent is entitled “Dynamic Value Reporting for Wireless Automated Systems” and was issued on June 29, 2010 from an application filed April 12, 2006. Claim 1 of the '887 Patent recites:

A wireless automation device, comprising:

a transceiver operable to wirelessly communicate packets of information over a wireless network;

a sensor operable to generate a[n] indicator for a sensed condition;

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

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,

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 chan[g]e in the sensed condition within the predetermined range.

(Dkt. No. 19-3 at 13–14; '887 Patent at 14:48–15:4⁵.)

ecobee argues that claim 1 of the '887 Patent recites the abstract idea of “communicating information if a change in conditions is detected within a predetermined criteria, or not communicating information if the change is not within the predetermined criteria.” (Dkt. No. 25 at 17.) ecobee contends that this abstract idea can be performed in the human mind or by a human using pen and paper, providing the analogy of “one person may call a friend and ask that the friend let them know if the outdoor temperature drops below 70° F . . . [i]f the temperature does drop below 70° F, the friend may call the person and let them know (“transmit a most recent reading of the indicator . . . in response to detecting a change in the sensed condition outside a predetermined range’). . . [and] [i]f the friend sees that the temperature stays above 70° F, then the friend need not call the person with any updates on the weather (“transmission of the most recent reading . . . is suspended in response to detecting a change in the sensed condition within the predetermined range’).” (*Id.*)

Ollnova argues that the claims of the '887 Patent are directed to tangible improvements to building automation system components. (Dkt. No. 38 at 9.) Ollnova identifies the claim elements of a controller “configured to poll the sensor at a polling interval . . . and to selectively operate the transceiver to communicate information,” a memory that “stores at least one prior reading of [an] indicator,” and a transceiver “wherein transmission of the most recent reading of the indicator

⁵ The '887 Patent is attached to the original Complaint as Dkt. No. 1-3 and the Amended Complaint as Dkt. No. 19-3, but will hereinafter be cited as “'887 Patent.”

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.” (*Id.* at 9–11.) Ollnova contends that claim 1 recites a “specific improvement to the functionality of the automation device itself that reduces the amount of information reported by a sensor and can thereby save bandwidth and power.” (*Id.* at 11.)

The Court agrees with Ollnova that claim 1 of the ’887 Patent is directed to a specific improvement in the functionality of an automation device’s communication system, and not to an abstract idea. (Dkt. No. 38 at 12.) Contrary to ecobee’s argument that Ollnova “fails to cite anything in the claim or specification describing an actual improvement to a physical device” (Dkt. No. 45 at 6), Ollnova directs the Court to the elements of claim 1 of the ’887 Patent including a controller of a wireless automation device that “is configured to poll the sensor and selectively operate the transceiver to communicate information” (Dkt. No. 38 at 11; Dkt. No. 48 at 6), which relates to the technical effect of reducing “the amount of wireless traffic in the system,” and “minimizing or reducing the amount of information reported by a sensor.” (Dkt. No. 38 at 10.) This makes sense against the backdrop of the ’887 Patent’s explanation that “[w]ireless networks are limited by the amount of available bandwidth,” and “[t]he continuous monitoring of conditions and broadcast of information consumes large amounts of power” (*Id.*; ’887 Patent at 1:34–62.) Claim 1 of the ’887 Patent addresses these technical problems in a particular way—by providing a controller “configured to poll [a] sensor at a polling interval . . . and to selectively operate [a] transceiver to communicate information” and “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 . . . is suspended in response to detecting a chan[g]e

in the sensed condition within the predetermined range”—so-called “dynamic value reporting.” ’887 Patent at 1:34–2:28, 14:48–15:4.

ecobee’s analogy to a phone conversation between a person and their friend overly downplays key elements of the claim, including “a transceiver operable to wirelessly communicate packets of information over a wireless network,” and “a controller configured to poll the sensor at a polling interval . . . and to selectively operate the transceiver.” (See Dkt. No. 38 at 11–12.) It also fails to consider what the claim is “directed to.” To resolve the eligibility question, it is not enough “to merely trace the invention to some real-world analogy.” *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018). Instead, the Court must determine whether the claim is “directed to” a patent-ineligible concept. *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016). ecobee fails to appreciate the improvement achieved by selectively operating the transceiver (e.g., suspending transmission so as to reduce wireless traffic and power consumption in some situations, such as a “ramp-up condition” (see ’887 Patent at 12:51–63), while polling the sensor at a “polling interval” so that important information can still be captured (e.g., “to identify whether an extreme condition may be present, such as a large temperature increase d[ue] to a fire”). (See *id.* at 10:22–30.)

In sum, the Court finds that claim 1 of the ’887 Patent is not directed to an abstract idea at *Alice* step one. Since claim 1 of the ’887 Patent is not directed to an abstract idea under *Alice* step one, and the Court need not reach *Alice* step two.

C. The ’495 Patent

The ’495 Patent is entitled “Wireless Building Control Architecture” and was issued on December 28, 2010 from an application filed August 9, 2004. Claim 1 of the ’495 Patent recites:

A control system for wireless building automation control, the control system, comprising:

a first wireless network in a building having first wireless communications protocol; and

a second wireless network in the building having a second wireless communications protocol, the first wireless communications protocol different than the second wireless communications protocol;

wherein the first wireless network is operable to control, free of communications with the second wireless network, building components in response to sensors operable within the first wireless network, and wherein the first wireless network is also operable to control the building components in response to data from the second wireless network.

(Dkt. No. 19-5 at 13; '495 Patent at 19:21–35⁶.)

ecobee argues that claim 1 of the '495 Patent recites the abstract idea of “controlling generic ‘components’ using information from two separate sources (i.e., information from two separate networks).” (Dkt. No. 25 at 17.) ecobee contends that this abstract idea could be carried out by “one person adjusting the temperature in a room (‘control ... building components’) based on their own comfort level (‘in response to sensors operatable [sic] within the first wireless network,’ and ‘free of communications with the second wireless network’), as well as based on how comfortable a friend in the same room says he or she is (‘in response to data from the second wireless network’).” (*Id.*)

Ollnova argues that the '495 Patent is directed to improvements in a wireless building control architecture for HVAC, security systems, fire systems, and other related building automation systems. (Dkt. No. 38 at 12.) Ollnova highlights problems discussed in the '495 Patent specification with conventional wired building automation systems as having “substantial installation and maintenance costs.” (*Id.* at 12–13.) Ollnova contends that “[w]ith these problems

⁶ The '495 Patent is attached to the original Complaint as Dkt. No. 1-5 and the Amended Complaint as Dkt. No. 19-5, but will hereinafter be cited as “'495 Patent.”

in mind, the '495 Patent provides a control system for wireless building automation control comprising two different wireless communications protocols.” (*Id.* at 13.) Ollnova asserts that the benefits associated with “this wireless building automation control system with different levels for the wireless architecture” include maximized “control capabilities,” “[c]ommunication redundancy,” and “distributed control processing” that “allows for more convenient room level integration.” (*Id.*)

For the reasons set forth below, the Court agrees with *ecobee* as to *Alice* step one but disagrees with respect to step two. The Court now turns to this claim for additional analysis in light of this initial conclusion:

1. Claim 1 of the '495 Patent Is Directed to an Abstract Idea

Regarding step one of the *Alice* framework, Ollnova asserts that the claimed control system’s “first wireless network” and “second wireless network” that use different wireless communications protocols are key aspects of the invention of the '495 Patent, citing the prosecution history. (Dkt. No. 38 at 14.) Ollnova attempts to tie this to the alleged benefit of “allow[ing] for the communications processing load on the network to be minimized.” (*Id.*) According to Ollnova, “[t]he '495 Patent teaches that the use of two different wireless networks allows for the communications processing load on the network to be minimized. (*Id.* (citing '495 Patent at 5:52–57).)

The Court agrees with *ecobee* that rather than focus on the claims, Ollnova is improperly attempting to supplement the required elements in the claims with optional features discussed in the specification. (Dkt. No. 45 at 7.) The alleged improvements discussed in the specification are not embodied by claim 1 of the '495 Patent. For example, the '495 Patent states that “[b]y dividing up portions of the network, the communications processing load on the network may be

minimized.” ’495 Patent at 5:55–57. However, claim 1 says nothing about “distributed control processing” or “dividing” the processing load among the first wireless network and the second wireless network. It simply recites that the first wireless communications protocol is different from the second wireless communications protocol. Furthermore, the aim of “redundancy” appears to contradict that of “distributed control processing.” For example, the ’495 Patent describes that to provide processing redundancy and act as a “fail-safe,” “the devices 16, 18, 20 of the lower level wireless network 14 are provided with a default binding for local control” that is implemented in the event of “a communications failure with the controllers 22” (the controllers 22 being part of the “high level wireless network 12” and are operable to assign bindings to specific devices 16, 18, 20). (’495 Patent at 13:46–14:8.) That is, both the high level (first) wireless network 12 and the lower level (second) wireless network 14 must have “bindings” to control the devices 16, 18, 20, thereby increasing the overall number of “bindings” needed, which appears to run counter to the alleged benefit of minimizing the processing load on the network.

While Ollnova argues that claim 1 of the ’495 Patent “is directed to a tangible and specific improvement to building automation control components by using two different wireless networks that allows for the communications processing load on the network to be minimized” (Dkt. No. 48 at 8), Ollnova has not shown that the claim describes how to achieve the alleged minimization of communications processing load on the network. Rather than specific improvements to wireless building control architecture, the Court finds that the claim recites, at a high level, conventional wireless networks for controlling building components. The Court agrees with ecobee that claim 1 of the ’495 Patent is directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (i.e., information from two separate networks).” (Dkt. No. 25 at 17.)

2. There are Disputed Issues of Fact as to Whether Claim 1 Contains an Inventive Concept

Regarding *Alice* step two, ecobee asserts in a blanket fashion that all Asserted Claims of all the Asserted Patents “are broadly generic and do not contain meaningful limitations that would restrict [them] to a non-routine, specific application of the [respective] abstract idea.” (Dkt. No. 25 at 21.) According to ecobee, there is nothing in the ordered combination of components in the claims that would supply an inventive concept, asserting that “[i]ndeed, the claims just direct the use of conventional components in an intended manner to communicate and use certain observable information.” (*Id.* at 23.)

Ollnova also lumps together the Asserted Claims and asserts that they “are eligible under Step Two because they recite new wireless building automation components and systems.” (Dkt. No. 38 at 20–21.) Ollnova contends that “at a minimum, there are factual disputes related to whether various elements of the asserted claims, alone or in combination, were conventional and well-understood at the time the patents were filed.” (*Id.* at 21.)

The Court agrees with Ollnova. There are factual disputes related to whether various elements of claim 1 of the ’495 Patent, alone or in combination, were conventional and well-understood at the time the patent was filed. For example, Ollnova argues that “[t]he ’495 Patent claims a wireless building automation control system comprising two different wireless communication protocols that was not conventional as confirmed by the prosecution history.” (*Id.*) ecobee argues that “[c]laim 1 recites the basic idea of using information from two separate wireless networks, and the specification makes clear that those can be any wireless networks ‘now known or later developed.’” (Dkt. No. 45 at 8; *see also* Dkt. 25 at 8.) However, ecobee does not address Ollnova’s argument that the claimed “different wireless networks utilizing different wireless

communications protocols” was not conventional, a notion that the prosecution history appears to support. (Dkt. 38 at 14.)

These are the types of factual questions directly “underlying [] the § 101 inquiry.” *Berkheimer*, 881 F.3d at 1368–69. At the motion to dismiss stage of the case, these types of disputes must be presumed to favor the non-movant (i.e., Ollnova). *BASCOM*, 827 F.3d at 1347, 1350. Dismissal under Fed. R. Civ. P. 12 is therefore not appropriate. Further development of these issues through discovery and motion practice may directly benefit the Court as to step two.

D. The '371 Patent

The '371 Patent is entitled “Method and Device for Communicating Change-of-Value Information in a Building Automation System” and was issued on September 11, 2012 from an application filed January 3, 2008. Claim 13 of the '371 Patent recites:

An automation component configured for wireless communication within a building automation system, the automation component comprising:

a wireless communications component;

a processor in communication with the wireless communications component;

a memory in communication with the processor, the memory configured to store computer readable instructions which are executable by the processor;

wherein the computer readable instructions are programmed to:

receive at least one change-of-value update via the wireless communications component, wherein the change-of-value update includes a plurality of change-of-value messages received from a plurality of devices;

storing the at least one change-of-value update corresponding to at least one wireless device; and

communicate the at least one change-of-value update in response to a polling request and repeat the at least one change-of-value update at regular intervals according to a schedule or until a change-of value acknowledgement is received.

(Dkt. No. 19-7 at 11; '371 Patent at 9:39–10:10⁷.)

ecobee argues that claim 13 of the '371 Patent recites the abstract idea of “receiving information about a change, storing that information, and then communicating that information upon request until receipt of the information has been acknowledged.” (Dkt. No. 25 at 18.) ecobee contends that this abstract idea could be carried out by a person who “may look at thermostat and humidity sensor devices and notice that the temperature and humidity in their house has changed (‘receive at least one change-of-value update [that] includes a plurality of change-of-value messages received from a plurality of devices’).” (*Id.*) ecobee continues the analogy, “[t]hat person may write down the new temperature and humidity readings (‘storing the at least one change-of-value update’), and when a friend leaves a message with the person asking what the temperature and humidity in the house are like (‘polling request’), the person can repeatedly attempt to contact the friend to give them the recorded readings until the friend acknowledges receipt (‘communicate the at least one change-of-value update ... at regular intervals ... until a ... acknowledgement is received’).” (*Id.*)

Ollnova argues that the '371 Patent is directed to concrete improvements to building automation system components capable of wireless communications and that exchange change-of-value (“COV”) messages and updates. (Dkt. No. 38 at 15.) Ollnova highlights issues discussed in the '371 Patent specification that the invention seeks to address, such as using change-of-value messages to “ensure that all components within the automated building system are operating

⁷ The '371 Patent is attached to the original Complaint as Dkt. No. 1-7 and the Amended Complaint as Dkt. No. 19-7, but will hereinafter be cited as “'371 Patent.”

properly.” (*Id.* at 16.) Ollnova notes that “[t]he ’371 Patent also discusses the benefits and impediments between continuous ‘polling’ for change-of-value messages versus the use of ‘push’ change-of-value messages in recognizing that the use of push change-of-value messages utilizes ‘less wireless bandwidth’ and whereby ‘system end to end delays [are] shortened.’” (*Id.* at 16–17.) To this end, claim 13 of the ’371 Patent recites a “change-of-value update” that “include[es] a plurality of change-of-value messages received from a plurality of devices,” which Ollnova alleges “is key to the invention and far from conventional.” (*Id.* at 17.) Ollnova cites the prosecution history and alleges that the patent examiner recognized the distinction between the prior art, which “only contained a change-of-value mechanism as a ‘singular change report message containing the updated value’,” unlike the ’371 Patent which “requires that the change-of-value update ‘includes a plurality of change-of-value messages received from a plurality of devices.’” (*Id.*)

The Court agrees with Ollnova that claim 13 of the ’371 Patent is directed to specific improvements to building automation components capable of wireless communications, and not to an abstract idea. (*Id.* at 15; Dkt. No. 48 at 8.) The specification of the ’371 Patent describes certain issues in building automation systems, such as communication failures, and that these may be addressed by aspects of the invention reflected in the claims, including “repeating communication attempts a predetermined number of times” and “the COV-related messages may still be aggregated and stored pending the reestablishment of communications.” (’371 Patent at 8:15–25.)

ecobee’s human-based analogy disregards certain elements that the claimed automation component is configured to perform, including “communicate the at least one change-of-value update in response to a polling request and repeat the at least one change-of-value update at regular


intervals according to a schedule *or* until a change-of value acknowledgment is received.” (See Dkt. No. 38 at 15–16 (emphasis added).)

In sum, the Court finds that claim 13 of the ’371 Patent is not directed to an abstract idea at *Alice* step one. Since claim 13 of the ’371 Patent is not directed to an abstract idea under *Alice* step one, and the Court need not reach *Alice* step two.

IV. CONCLUSION

In light of the foregoing, and for the reasons stated herein, the Court finds that ecobee’s Motion to Dismiss (Dkt. No. 25) should be and hereby is **DENIED**. Since ecobee’s Motion to Dismiss Pursuant to Fed. R. Civ. P. Rule 12(b)(6) (Dkt. No. 11) was superseded by the filing of Ollnova’s Amended Complaint (Dkt. No. 19), it is hereby **DENIED AS MOOT**.

So ORDERED and SIGNED this 21st day of September, 2022.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE